



REVISED PLAN MARCH 2022

GREAT CRESTED NEWT

Triturus cristatus

1. INTRODUCTION

The great crested newt is the largest of our three native newt species (up to 20cm long) and males in breeding condition have a well developed, jagged crest along the back which is indented at the base of the tail; this is more jagged and less continuously formed than in the commoner smooth newt. The skin is also more uneven than the smooth newt and often appears black. The belly pattern of black spots on a yellow - orange background is unique to an individual which can live for 17 years but is more usually just 7 or 8.



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Most of the life cycle is spent on land, adults returning to their breeding sites, typically ponds (but including canals, open air swimming pools etc.), as early as February. During the winter, adult and immature newts hibernate in frost-free areas such as well-drained soil, hedgerow bases, old walls and piles of rubble. Newts are particularly sensitive to environmental change as they require two types of habitat in close proximity – woodland, pasture, hedgerow, scrub and rank grassland providing good cover and foraging in summer and hibernation sites in winter, and suitable freshwater sites for breeding during spring. This species of newt prefers relatively large (50-750m²), unshaded, fish-free ponds retaining a depth of water throughout the year and with open water and a good macrophyte flora. Intensively farmed arable land is therefore the least hospitable to crested newts but pond clusters within accessible locations within 500m of each other that have similar pond characteristics can support meta-populations of many thousands of adult great crested newts and such areas could qualify as Special Conservation Areas (SAC).

Eggs are laid singly on submerged leaves (although in the absence of aquatic vegetation will use a variety of material including dead leaves, plastic bags (Moffatt, 1991) and similar rubbish), which the female encloses by folding the leaf and holding it together with her hind feet until an excretion around the egg sets like an adhesive. This process is repeated, often on the same plant, many times during the evening and the enclosing of every egg laid requires about five minutes before the egg has been enclosed by the folded leaf.

The great crested newt can travel up to 0.5km from ponds so it is important to conserve both the aquatic and terrestrial habitat. Creating log/brush piles around the ponds provides places for newts to secrete themselves and hibernate and management around ponds must be carefully planned to minimise the risk of disturbance and other negative impacts. However, conservation of the species lies mainly in the preservation and maintenance of breeding ponds. These animals are capable of replacing even a relatively high juvenile mortality rate through its longevity, their strategy of protecting eggs during gestation and the large number of viable eggs produced by the female in any single year of up to 400. Despite a 50% mortality in the first stages of embryonic development because of a bizarre chromosome system (Beebee, 2015), after a prolonged period of

population decline at a breeding pond, there may be emergence levels of several thousand animals in a single season immediately following restoration. Obviously, such peaks of population expansion are not sustainable as they are likely to deplete foraging opportunities within the pond (great crested newt breeding ponds are generally associated with relatively small populations of other amphibian species) and surrounding terrestrial habitat in subsequent years. It is also likely that such population increases will ultimately lead to an increase in predatory species.

Many breeding ponds have disappeared since 1900 owing to neglect, drainage, infilling, eutrophication from fertilizers and the introduction of fish but loss as a result of infilling is an increasingly rare event. However, ponds in agricultural land or those that have become enclosed by urban expansion are still at risk from the introduction of fish or wild fowl. While the effect upon great crested newt populations as a result of these two acts can be disastrous, the greatest cause of decline is neglect. As ponds become increasingly shaded by surrounding scrub and trees, particularly those in woodland, summer water temperatures are reduced and this eventually prevents juvenile development. Ultimately, the numbers of adults inhabiting the pond will become depleted as a result of natural mortality.

2.	OBJECTIVES	TARGETS
Associated Action Plans are: 'Woodland', 'Lowland Grassland (all types)', 'Old Parkland & Veteran Trees', 'Lakes & Reservoirs', 'Parks & Public Open Spaces', 'Ponds', 'Canals', 'Quarries & Gravel Pits', 'Hedgerows' and 'Gardens'		
PLEASE CONSULT THE ' GENERIC SPECIES ' ACTION PLAN IN CONJUNCTION WITH THIS DOCUMENT FOR OBJECTIVES COMMON TO ALL SPECIES PLANS		
A.	Emphasise the legal protection that exists for the species and for both its aquatic and the terrestrial habitats to landowners and land managers, including local and national designations.	ongoing
B.	Identify opportunities for the restoration and enhancement of ponds and terrestrial habitat for great crested newts.	ongoing
C.	Ensure monitoring of great crested newt populations across the sub-region.	ongoing
D.	Establish a strategic, spatial approach to pond creation for great crested newt to develop resilience to climate change and meet connectivity requirements and other habitat threats.	2025

3. NATIONAL BAP OBJECTIVES & TARGETS

The great crested newt is on the current UK Biodiversity Action Plan (BAP) Priority Species list published in 2007 ([Joint Nature Conservation Committee](#)). The targets and objectives for the [Great Crested Newt BAP](#), updated in 2013, may be seen online.

4. CURRENT STATUS

The global distribution of great crested newts extends throughout much of the northern and central parts of Europe, the more southern sections of Scandinavia and a significant central area of Russia (although the exact extent is not known). The UK population is amongst the largest in Europe but even here its distribution is largely restricted to lowland areas within England and Wales. It is absent from the south west peninsula as well as being absent from central and western Wales and the whole of Ireland. In Scotland the distribution is extremely restricted and disjointed, being found in the south-west, Midland belt and around the lowlands of Inverness.

The known distribution of great crested newt is widespread in the sub-region, but there are areas in the extreme south, north-west and north-east where few pond surveys have been carried out. A recent survey in the north of the sub-region, which had previously been under-recorded revealed nearly a quarter of the ponds visited contained great crested newt populations, and there appear to be several significant meta-populations. But recent studies in and around Coventry reveal that a high proportion of ponds there have either been lost or become highly degraded in recent decades, with evidence of significant losses of newt breeding ponds. Some efforts to counter these losses through a combination of dredging and scrub removal resulted in total recoveries of great crested newt population strength. The sub-region has made a significant contribution towards the [Million Ponds Project](#) run by the [Freshwater Habitats Trust](#) and new ponds are being dug and recorded on an annual basis.

Significant amphibian mortality has been recorded from road traffic and in roadside drains (gully pots), where roads crossed amphibian migration routes. Any new road developments should not disrupt amphibian migration routes. Where possible, construction of roads close to water bodies should be avoided. In new developments the use of [Sustainable Urban Drainage Systems](#) (SuDS) should negate the need for roadside drains (gully pots). If gully pots need to be installed on roads near a pond or along a migration route, these should be fitted with a 'wildlife kerb'. 'Amphibian ladders' should be used as a last resort, as this is not a long-term solution and requires maintenance.

4.1 Legal and Policy Status

A wide range of species and habitats are protected under international and domestic laws, including the [Wild Birds Directive](#) (1979), the [Wildlife and Countryside Act](#) (1981), the [Conservation Regulations](#) (1994) and [EC Habitats Directive](#) (1992). Protection of sites is afforded nationally through [Sites of Special Scientific Interest](#) (SSSI), [Special Areas of Conservation](#) (SAC) and [Local Nature Reserve](#) (LNR) statutory status. Other sites are offered recognition of their value through LWS status Local Character Areas and identified Landscape Scale Areas. The [National Planning Policy Framework](#) (2021) paragraph 180 states conditions with regard to any development negatively affecting biodiversity, including protected sites, ancient woodland and other irreplaceable habitats. The Wildlife & Countryside Act and schedule 2 of the [Conservation of Habitats & Species Regulations](#) (EU exit, 2019) make it an offence to intentionally kill, injure, take, possess, sell, buy or transport a range of species.

The EU Directives for Habitats and Birds, leading to the creation of Natura 2000 sites of SAC's and SPA's respectively, have been translated into UK law through the [Conservation](#)

[of Habitats & Species Regulations](#) (EU exit, 2019). These will remain post-Brexit unless those Regulations are themselves updated or modified.

Great crested newts are strictly protected under European law (annexes II & IV of the EC Habitats Directive & Appendix II of the [Bern Convention](#)) from injury / killing / capture and destruction or deterioration of their habitat. Strictly protected under Schedule 2 of the Conservation of Habitats & Species Regulations (2017, as amended) (regulation 40) and the Wildlife & Countryside Act (Schedule 5) from trade, injury / killing, capture, disturbance and damage / destruction to their habitat. A licence is needed to handle them or to carry out any works which may involve disturbance, destruction or deterioration of their habitat. Legislation includes the provision for clusters of ponds to be designated as Sites of Special Scientific Interest (SSSI) and as SACs on the basis of great crested newt population strength.

The current national licensing system for great crested newts has been revised. This means that an alternative licensing approach, known as a [District Level Licensing](#) scheme (DLL), is being rolled out across the country, on a district-by-district basis. In Warwickshire, this is being developed by the Warwickshire County Council (WCC) Ecology Team. A network of connected ponds will be restored and/or created in advance of potential development which will be in strategic areas for the expansion and increase of the overall great crested newt population. These areas have been identified through advanced modelling and species surveying. The scheme aims to provide an opportunity for the growth of the population by increasing numbers within the existing species range and by expanding its range. Developers can opt into this DLL approach by making a payment through a charging system. The target date for obtaining Warwickshire's DLL licence is the end of 2022. The target date for commencement of DLL with viable developments is early 2023. During the planning application process, applicants will be able to design landscape schemes that include positive mitigation measures for amphibians. This should include engineered features, e.g. gully pots, and careful design layouts where access to ponds for breeding is available.

4.2 Current Factors Affecting the Species

- **Infilling of ponds** for development, farming and waste disposal.
- **Changes in farming practice** that result in ponds becoming overgrown and silted up.
- **Introduction of fish**, much of which takes place without a licence from the Environment Agency.
- **Diseases** such as *Batrachochytrium salamandrivorans* (B.sal)
- **Introduction of alien species** such as alpine newts.
- **Water table reduction** especially through excessive water extraction and the effects of droughts.
- **Chemical pollution and nutrient enrichment** from road runoff and agricultural runoff of fertilizers.
- **Degradation, loss and fragmentation of terrestrial habitat** through development construction of new roads and the changes of land management especially where this involves the removal of hedges, scrub and tall grassland.

- **Creation of new breeding ponds** - through quarrying, quarry restoration and the creation of ponds in business parks, farmland and in nature reserves.
- **On-going pond management** undertaken by interested farmers under stewardship plans, by developers as part of mitigation strategies and as part of off-setting projects and by conservation organisations.
- **Directed survey work** is providing an increasing understanding of the distribution of great crested newts within the sub-region.
- **Legal protection** that has promoted greater awareness of pond conservation and increased our understanding of species distribution in the sub-region through an increase in the amount of pond surveys that are being carried out.

5. LOCAL ACTION

- All known records are stored electronically in the [Warwickshire Amphibian & Reptile Team](#) (WART) database and are passed to the [Warwickshire Biological Records Centre](#). Directed surveys have already provided encouraging evidence of great crested newt (GCN) breeding populations within areas where previously no records occurred.
- Planning applications are checked for potential impact on great crested newts by the dedicated officer at the Local Planning Authority Ecology Team of the WCC. According to [Natural England](#)'s Standing Advice, the requirement for survey of ponds as part of a planning application is their location within or up to 500m distance from a development.
- A significant number of planning applications do include this survey of ponds for the presence of GCN, due to the proximity of a pond to a proposed development site. This requirement also applies to smaller developments. In some cases, the mitigation for loss of habitat for GCN is the creation of new ponds, in addition to the installation of features such as gully pots. This should be monitored by the Local Planning Authority or WCC.
- [National Amphibian and Reptile Recording Scheme](#) (NARRS) training provided by WART, and supported by WWT, ensures that the number of volunteers capable of undertaking surveys to identify great crested newt populations is increasing within the sub-region.
- Warwickshire's Habitat Biodiversity Audit (HBA) is using the [Great Crested Newt Habitat Suitability Index](#) (GCN HSI, Oldham et al. 2000) which is based on 10 semi-quantitative aquatic and terrestrial features, including the presence of neighbouring ponds forming a 'cluster'. As there is usually a high correlation between a high HSI score and the presence of newts, the index can predict if newts are likely to be present. The index of suitability of a cluster (= 1 for 4 or more ponds per km²) is derived from dividing the number of ponds within 1km of the survey pond by 3.14 (pi).
- WCC and HBA mapped great crested newt favourable habitat and the likelihood of finding their presence in 2019. This modelling incorporates pond clusters (via pond density) in preparation for a WCC / GCN District Level Licence.

Warwickshire, Coventry and Solihull Local Biodiversity Action Plan

- **Pond restoration:**
 - WART: restoration of GCN ponds at 4 locations
 - DM Kineton: restoration of 2 GCN ponds.
 - Brandon Wood: restoration of 1 GCN pond.
- **Creation of ponds**, many of which now contain breeding populations of great crested newts (GCN) (for details see the GCN Progress Report on the [Warwickshire Wildlife Trust](#) (WWT) website):
 - WWT: several ponds have been constructed on 4 local reserves.
 - WART: construction of ponds at 8 locations.
 - DM Kineton: 3 ponds created for GCN relocation.
 - WCC: has granted planning permission for 2 ponds at Snitterfield, and 2 ponds and a scrape at Oversley Green, in preparation for GCN district licencing by WCC.
 - Stratford upon Avon: 3 ponds created and 2 ponds and a scrape planned in connection with WCC District Licensing work for GCN.
- [Rugby Borough Council](#) has incorporated amphibian – friendly design into two large residential developments in Rugby - Houlton Radio Mast site and Ashlawn Road - with amphibian-friendly gully pots, dropped kerbs and amphibian ladders; these need checking to check that they remain in place when the drains are cleaned out every year.

6. PROPOSED LOCAL ACTIONS

ACTION	Lead	Partners	By
PLEASE CONSULT THE '<i>GENERIC SPECIES</i>' ACTION PLAN IN CONJUNCTION WITH THIS DOCUMENT FOR ACTIONS COMMON TO ALL SPECIES PLANS			
Policy, Legislation & Protection			
PL1. Following restoration and creation of ponds through DLL, review the possible designation of clusters of great crested newt breeding ponds as Local Wildlife Sites (LWS), emphasising the importance of the significant numbers in Warwickshire in the context of lower populations in neighbouring counties.	LWSP	WWT NE LAs WART WCC/DLL	2030
PL2. Ensure that Local Authorities act in line with best practice guidelines as part of their statutory duties and of the planning process, e.g. the provision of amphibian-friendly gully pot kerb stones.	WCC/ DLL	WWT LAs WART	ongoing
Site / Species Safeguard & Management			
SM1. Identify clusters of GCN ponds that can be considered a “metapopulation” through the DLL project, where ponds are modelled using Contatis.	WCC/ DLL	WWT WCV LOs LAs	2025

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SM2. Implement a programme of pond creation within the pond clusters in priority areas through the DLL project identified by RM2 (see RM4).	WCC/ DLL	NE LAs WWT LOs HBA	2025
SM3. Implement a programme of pond restoration within the pond clusters in priority areas through the DLL project identified by RM2 (see RM4).	WCC/ DLL	NE LAs WWT LOs HBA	2025
Advisory			
A1. Promote incentives for pond creation and management (also including adjacent terrestrial habitats) on farmland under the agri-environment schemes.	NE	WWT WART LOs	ongoing
Research & Monitoring			
RM1. Continue to record ponds where great crested newts were found to be present and absent and survey methodology to be included. Record the presence of fish and wildfowl where achievable.	WBRC	NE LAs WCC WWT HBA WART LWSP LOs	ongoing
RM2. Identify areas of the county that have been under-recorded for great crested newts and prioritise for surveys.	WCC/ DLL	WWT WBRC HBA	2025
RM3. Initiate a programme of pond surveys to monitor the population of great crested newt in the prioritised areas (see RM2). Such surveys should include daytime visits to check for efts.	WCC/ DLL	WWT HBA WCC LA's WART LWSP WBRC	2025
RM4. Develop a programme of pond construction, identifying cost effective contractors and mechanisms for this work, in priority areas (see RM2).	WCC/ DLL	NE WCC WWT LAs LOs HBA	2027
RM5. Develop a programme of restoration of existing ponds to expand or restore the local range and to create robust populations.	WCC/ DLL	NE WCC WWT LAs LOs HBA	2027
RM6. Undertake surveys of pond clusters in yr. 5 of DLL to assess breeding success. Run the Habitat Suitability Index connectivity model for each cluster to measure suitability and connectivity for great crested newts.	WCC/ DLL	NE WWT Unis HBA SRNBG WART	2027

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RM7. Annually monitor the number of ponds created and gully pots installed through the planning application process and any other projects. Mapping where possible on shared layers.	WCC/ DLL	WART WWT NE HBA	annual
Communication & Publicity			
CP1. Develop links with large development companies, large employers, quarry operators and ecological consultants to promote pond construction and management as part of their working operations and mitigation for development.	WCC	NE WART WWT LAs	ongoing
CP2. Provide National Amphibian and Reptile Recording Scheme training annually to ensure a supply of volunteers to undertake surveys.	WART	WWT	ongoing
CP3. Develop and coordinate training and support for volunteer surveyors and those involved in the management and conservation of the great crested newt, working jointly with other delivery agents.	WCC/ DLL	WWT WBRC WART AAs AFN	ongoing

Abbreviations :AAs – Agricultural Advisors, AFN – Arden Farm Network, DLL – District Level Licensing scheme, EA- Environment Agency, HBA – Habitat Biodiversity Audit partnership, NE – Natural England, LAs – Local Authorities, LOs – Landowners, LWSP – Local Wildlife Sites Project, SRNBG - Sun Rising Natural Burial Ground, WART – Warwickshire Amphibian Reptile Team, WBRC – Warwickshire Biological Record Centre, WCC – Warwickshire County Council, WCV – Warwickshire Conservation Volunteers, WWT – Warwickshire Wildlife Trust.

7. PROGRESS WITH ACTIONS

From 2015–2020 there will be a rolling programme of reporting on progress, of 10 action plans per year with an annual summary of results. Progress with this plan up to 2020 can be seen at <https://www.warwickshirewildlifetrust.org.uk/LBAP>

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9. FURTHER INFORMATION

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[Amphibian & Reptile Groups of the UK](#) (ARG) – a group of volunteers working for the conservation of amphibians and reptiles.

Dewpond restoration for assisting dispersal of great crested newts. A joint project between English Nature and the Peak District National Park.

Email: philip.bowler@english-nature.org.uk

Freshwater Habitats Trust (2012): [Phase II of the national Million Ponds Project](#) in partnership with Natural England and other partners. This huge new pond creation programme will counter threats to freshwater wildlife from 'near universal' pollution and will see the creation of 30,000 clean water ponds over the next 7 years, up to 2020.

10. CONTACTS

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