

19.1 Introduction

The Great Crested Newt Triturus cristatus usually spends most of its life within about 200-500 metres of its breeding pond and requires a suitable mix of habitats to support a viable population. The newts feed on land and in water eating a variety of invertebrates. Ponds are used for breeding and the development of eggs and tadpoles and are typically occupied between early spring and late summer. They favour a breeding pond with a pH of 6.0 or above, usually more than 100 square metres in size, over 50 cm depth and with well developed aquatic and emergent plant communities. Great Crested Newts are more likely to be found where there is a cluster of ponds and it is a species often associated with ponds which periodically dry out completely. This is probably because of the effect this has on predators of this species, particularly fish and waterfowl.

The requirements of this species on the surrounding habitat are the most exacting of all the native amphibians. The main habitat requirements are that it should contain a variety of vegetation under different management regimes, especially lightly grazed pasture and scrub or woodland. Gardens, derelict industrial sites and town parks may also provide suitable habitats. These habitats provide the invertebrate food source that forms the bulk of the adult Great Crested Newts diet. Other essential features include secure frost-free conditions for hibernation and a lack of fertilizers and pesticides, which the newts are particularly sensitive to.

Adult Great Crested Newts spend the majority of the year on land and immature newts remain on the land until they reach sexual maturity at between two and four years. They will then find a breeding pond, often the one they were hatched in.

19.2 Current status

19.2.1 UK status

This species is a lowland animal in Britain, widespread over most of England (although rare in the south-west) and much rarer in Scotland and Wales and absent from Ireland. The British population is estimated to be amongst the largest in Europe, where it is threatened in many countries.

The loss of this species has been dramatic over the last 50 years. Studies in the 1980s indicated a national rate of colony loss of 2% over five years. It is estimated that there are a total of 18,000 although only 3000 of these have been identified.

The Great Crested Newt is listed on Annexes 11 and 1V of the Bern Convention. It is protected under Schedule 2 of the Conservation (Natural Habitats, etc.) Regulations, 1994 (Regulation 38) and Schedule 5 of the Wildlife and Countryside Act 1981.

19.2.2 Hertfordshire status

In Hertfordshire, the species shows a widespread distribution. Since 1980, fifty breeding ponds have been identified, but many of these sites may no longer support a viable population. Of a small sample of pond sites (10) revisited during may 1996, only five still supported Great Crested Newts and of the ponds where their presence was confirmed, only one area supported a reasonable population. The indication from this small sample is that the population of Great Crested Newts in Hertfordshire is in severe decline. A total of 18 ponds have had the presence of newts confirmed since 1990.

A more recent report in nearby London, suggests that 42% of Great Crested Newt populations in the London area have been lost in 20 years. From these figures a rate of 0.4-2% annual loss of ponds can be assumed.

If Hertfordshire has an estimated 250 populations (applying the same ratio as that found nationally, i.e. identified sites representing 20% of estimated existing populations, para 1.2) then between one and five populations are being lost each year.

19.3 Current factors causing loss or decline

19.3.1 Habitat loss

Many breeding ponds and or the suitable habitat surrounding them have been destroyed by drainage schemes, over abstraction of groundwater, agricultural intensification, management, neglect and development.

The Hertfordshire Pond Report (1987) revealed that in just one hundred years the total number of ponds in the County had almost halved to an estimated total of 3595 in 1978. Work in the early 1980s documented a 2% national decline in the number of ponds every five years.

The largest known local population at Berkhamsted Castle moat is severely threatened due to the recent drought and over-abstraction. No breeding has been recorded in either 1996 or 1997, with the moat completely dry.

19.3.2 Management

Where ponds still exist, the pond itself or the surrounding habitat has often changed to such an extent that there is too little food or shelter for the newts to survive. Less than half a hectare, even of ideal habitat is unlikely to sustain a viable population (English Nature).

However, because of the threatened status of all the diverse forms of pond habitats in Hertfordshire it is important that ponds are properly managed for all species present and not just the requirements of a 'Flagship Species' such as the Great Crested Newt. Where possible management should be designed around the rotational management of several (at least two) closely spaced ponds allowing the full range of successional stages to be experienced by each pond

in turn and so allowing for the needs of other species reliant on these habitats.

19.3.3 Fragmentation of populations and isolation

Clusters of ponds have been shown to be important in supporting a viable population of Great Crested Newts (Swan and Oldham, 1993). In Hertfordshire, ponds are becoming increasingly isolated with the result that local extinctions are more likely to occur. For example, Norton Pond (an ancient pond) on the outskirts of Letchworth has become surrounded by development. Great Crested Newts are still present but numbers are small (observations of only 1-2 animals).

Where possible creation of new ponds should be near existing sites to compensate for local losses and increase chances of successful colonisation of Great Crested Newts and other pond wildlife.

In some areas the low populations or total absence of Great Crested Newts will mean that translocation or reintroductions are the only option for conserving the species. Where such programmes are undertaken, they must be done in accordance with accepted scientific criteria and there must be a commitment to ongoing management and monitoring by the landowner/manager.

19.3.4 Pollution

Pollution and toxic effects of agrochemicals, or run-off from roads, may make breeding ponds unsuitable, preventing the healthy growth of tadpoles.

19.3.5 Predation

Fish (even small species such as sticklebacks) eat the eggs and tadpoles of Great Crested Newts. Stocking of a pond with fish is likely to be a severe threat to the newt population. Ducks can also cause problems, as they eat the waterweed and may also eat tadpoles. Predation by released terrapins may also be a problem in some areas.

19.4 Current action

The Joint Nature Conservation Committee (JNCC) has published a five-year framework (1994-1999) for the conservation of amphibians and reptiles in the UK, in collaboration with statutory nature conservation organisations and voluntary bodies.

The Countryside Commission for Wales, English Nature and Scottish Natural Heritage support a post within the NGOs to develop further local amphibian and reptile local groups, and support surveys and conservation initiatives.

All known breeding sites for Great Crested Newts have been designated as important Wildlife Sites and entered onto the Geographical Information Alert System by the Hertfordshire Biological Records Centre. Some of these sites have been incorporated into District Local Plans.



19.5 Great Crested Newt Action Plan (draft)

Objectives, actions and targets

Objective 1: To ascertain and maintain the distribution, status and viability of existing Great Crested Newt (GCN) populations

Target: Establish a countywide pond survey and monitoring programme by 2010 and promote measures to protect GCN breeding ponds and their surrounding terrestrial habitat

Action code	Action	Target start date	Target end date	Lead partner	Other partners
GCN/A/1.1	Collate current survey information and map onto GIS. Make information on the distribution of great crested newts available where needed for conservation purposes	Jan 2000	Annual reports	HBRC	HAR, GCN licence holders
GCN/A/1.2	Ensure all records are sent to the County Amphibian Recorder	Jan 2000	Ongoing	HAR	HBRC, HNHS, Froglife, EN, HMWT, CMS, GCN licence holders
GCN/A/1.3	Ensure that all GCN habitat qualifying as Wildlife Sites are identified in district local plans and protected through the development control processes	Nov 2000	Annual reports	HBRC	HMWT, EA, EN, LA's
GCN/A/1.4	Notify appropriate owners and site managers of GCN Wildlife Sites of their conservation importance and legal protection	Jan 2001	Ongoing	WSO	LEHART, GCN licence holders, WSP
GCN/A/1.5	Ensure all landowners and managers of Great Crested Newt sites are offered site management advice and sources of grant aid	Jan 2001	Ongoing	WSO	HMWT, CMS, LEHART, HARG*, GCN licence holders
GCN/A/1.6	Survey all remaining ponds within a 500 m radius of known sites	Jan 2007	Jan 2013	HBRC	GCN licence holders, LEHART, HARG*, HAR, landowners
GCN/A/1.7	Identify and survey key areas in the County with high pond densities with previously unsurveyed ponds	Jan 2007	Jan 2013	HBRC	GCN licence holders, LEHART, HARG*, HAR, landowners
GCN/A/1.8	Undertake GCN monitoring before and after pond management work	Jan 2001	Ongoing	EN	LEHART, HARG*, HAR, GCN licence holders
GCN/A/1.9	Re-survey all ponds where data is known to be 10 years old	Jan 2006	Jan 2013	HBRC	LEHART, HARG*, HAR, GCN licence holders

GCN/A/1.10	Set up a monitoring programme at high population sites (where counts are >100 since 1995)	Jan 2007	Ongoing	HARG*	LEHART, County licence holders, HAR
GCN/A/1.11	Identify sites where 500 m radius spans the County border and if required notify appropriate County contact	Jan 2003	Jan 2006	HAR	HBRC, County recorders, County Biodiversity Officers

Objective 2: Restore degraded ponds, ensure surrounding terrestrial habitats are favourable and create new ponds within the range of existing populations to allow for natural re-colonisation

Target: Restore/create five Great Crested Newt zone ponds per year on different sites by 2014

Action code	Action	Target start date	Target end date	Lead partner	Other partners
GCN/A/2.1	Identify ponds within existing GCN areas in need of restoration	Jan 2006	Jan 2008	HARG*	HBRC, CMS, HMWT, HAR, LEHART, GCN licence holders
GCN/A/2.2	Promote pond creation within existing GCN zones	Jan 2006	Ongoing	CMS	HMWT, HARG*, LEHART, FWAG, Gwk
GCN/A/2.3	Promote pond restoration and management through Agri Environment Schemes	Jan 2006	Annually	CMS	WSP, HMWT, FWAG
GCN/A/2.4	Report on number of ponds targeted for restoration advice	Jan 2006	Annually	CMS	HMWT, LEHART, HARG*, FWAG, Gwk, HBRC
GCN/A/2.5	Report on number of ponds created in GCN zones	Jan 2006	Annually	CMS	HBRC, LEHART, HARG*, FWAG, Gwk
GCN/A/2.6	Where existing populations still occur, restore former or degraded GCN sites	Jan 2006	Annually by 2014	CMS	LEHART, HARG*, land managers, HMWT, Gwk

Objective 3: Promote greater awareness, understanding and support for great crested newt conservation to key target audiences, particularly planners, developers, Police Wildlife liaison Officers and general public

Target: Develop volunteer involvement and provide at least one training event annually

Action code	Action	Target start date	Target end date	Lead partner	Other partners
GCN/A/3.1	Set up a local Herpetofauna group to	Jan 2006	Jan	HAR	Froglife, HMWT,

	develop volunteer involvement		2008		HNHS, HBRC,
					CMS
GCN/A/3.2	Continue to promote public pond survey and provide appropriate advisory leaflets	Jan 2006	Ongoing	HBRC	Froglife, LA's, HMWT, CMS, Gwk, EN, HAR
GCN/A/3.3	Provide occasional seminars on GCN issues to key audiences	Jan 2005	Ongoing	HAR	HBRC, EN, LEHART, CMS

Relevant Action Plans:

Hertfordshire Plans

Wetlands; Grassland and Heathland; Woodland; Farmland; Urban

National Plans

Great Crested Newt; Ancient and/or species-rich hedgerows; Eutropic standing waters; Lowland mixed deciduous woodland; Lowland calcareous grassland; Lowland dry acid grassland; Lowland heathland; Lowland meadows; Lowland wood-pasture and parkland; Wet woodland

Abbreviations (Partners)

CMS – Countryside Management Service

EA – Environment Agency

EN - English Nature

FWAG - Farming and Wildlife Advisory Group

Gwk - Groundwork Hertfordshire

HAR – Herts County Amphibian recorder

HARG - Herts Amphibian & Reptile Group* (group to be established)

HBRC - Hertfordshire Biological Records Centre

HMWT - Herts & Middlesex Wildlife Trust

HNHS - Hertfordshire Natural History Society

LA's - Local Authorities

LEHART - London, Essex, Hertfordshire, Amphibian and Reptile Trust

WSO - Wildlife Sites Officer

WSP - Wildlife Sites Partnership (HMWT, HBRC, CMS, FWAG, EA, EN, DEFRA, Chilterns AONB)

Contact:

The Lead for this plan is the County Amphibian Recorder (HNHS and Herpetofauna Groups for Britain and Ireland (HGBI)).

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