Bedfordshire and Luton Species Action Plan:
Great Crested Newt

Updated December 2018
Biodiversity Action Plans Overview

The **UK Biodiversity Action Plan** (BAP) was created in response to a commitment at the 2002 Convention on Biological Diversity. It summarises the status of the most threatened habitats and species in the UK and then sets out a series of actions to halt their decline and then reverse it. There are National Action Plans for 1150 species and 65 habitats. The last meeting of the Convention on Biological Diversity took place in Nagoya, Japan during October 2010. During the convention, the BAP was replaced by the **Aichi Targets**, which were signed by 192 governments. These 20 Targets aim to halt the loss in biodiversity worldwide by 2020. Within the targets there are a range of challenges, from protecting our best habitats and rarest species, to restoring the services our natural environment provides and tackling climate change. The **UK Post-2010 Biodiversity Framework** (July 2012) describes how the Aichi Targets will be implemented across the UK and is underpinned by a Biodiversity Strategy for each Country. In England, this is **Biodiversity 2020: A strategy for England’s wildlife and ecosystem services** (August 2011).

Although the Aichi Targets are the focus from the most recent Convention on Biological Diversity, the BAP is still a very valuable reference nationally and locally. It has been used to draw up statutory lists in some of the more recent Acts of Parliament which aim to protect and enhance biodiversity. In 2006 the **Natural Environment and Rural Communities Act** (NERC) came into effect. In Section 41 of the Act there is a list of habitats and species which are “of principal importance for the purpose of conserving biodiversity”. This lists all the BAP habitats and species which are still regarded as priorities for conservation under the **UK Post-2010 Biodiversity Framework**. The list includes 56 habitats and 943 species. It was included to assist public bodies with the statutory duty placed on them by Section 40 of the Act. This is often referred to as the ‘Biodiversity Duty’ and states that public bodies have to:

“In exercising their functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.”

The aim of the Act is to embed nature conservation within all the relevant policies and decisions that public bodies make. Public bodies include a range of organisations from the Borough and Ward Councils to bodies carrying out functions of a public character under a statutory power. There is a Guidance Document that accompanies this Act to assist local authorities to implement the Biodiversity Duty.

Priority species and habitats are also recognised in the **National Planning Policy Framework** (NPPF), which came into effect in early 2012 and has been recently updated in 2018. The NPPF replaced most of the planning guidance which was previously available. It promotes the preservation, restoration and re-creation of priority habitats and ecological networks as well as the protection and recovery of priority species (paragraph 117). This was revised in July 2018 to include a bigger emphasis on developments providing net gain for biodiversity (paragraph 170).

Although the BAP is no longer promoted nationally it is written into legislation and policies which are currently being used. To support this locally, the BAP is still in use to inform and guide many projects and is kept relevant.
The great crested newt (GCN) is the UK’s most striking amphibian as well its largest newt. Average adult length is 14 cm with a maximum of 17 cm. During the breeding season the male has a high jagged crest which dips at the rear of the abdomen and then increases in height on the tail. There is a white flash on the side of the tail but this, and the crest, become much less visible outside the breeding season. Females lack the crest but have an orange or yellow line running continuously along the underside of the tail.

Like other amphibians GCN require both terrestrial and aquatic habitat. Adults arrive in breeding ponds in the early spring, during which time a female lays up to 300 eggs singly on folded leaves of water plants. After breeding the adults leave the pond and spend the summer on land, though some occasionally return to the water. The larvae take three weeks to hatch and about three months to metamorphose. They leave the water between late August and early October. They take two to three years to become mature. Hibernation of both young and adults occurs from mid-October to mid-February.

**Current status**

**National status**

The GCN is found in at least 23 countries in central and northern continental Europe but the UK is one of its strongholds. It may be numerous locally in parts of lowland England and Wales but is absent or rare in Cornwall and Devon. It has a limited range in Scotland and is absent from Northern Ireland. In 2005/6 the baseline figures for GCN were estimated as a total of 100,000 occupied ponds in 904 10km squares in Britain (Wilkinson et.al, 2011).

The species appears to have suffered a decline in recent years although a lack of historic data makes the exact extent of the decline difficult to assess. Work in the 1980s indicated a national rate of colony loss of approximately 2% over five years (Nicholson and Oldham 1986). A more recent report (Atkins and Herbert 1995) suggests that 42% of GCN...
populations in the London area have been lost in 20 years. Assuming a 0.4-2% annual loss of ponds, and assuming 18,000 populations, then between 72 and 360 populations are being lost each year (Swan and Oldham 1993).

Local status
The Victoria County History of Bedfordshire (1904) states that GCN are ‘found in ponds all over the county’ but there is no more detailed information either there, or in any of the older literature.

The 1993 National Amphibian Survey noted approximately 60 site records for the county but many of these go back to the early 1980s. No attempt was made to verify the grid references and only 16 records give numbers of animals present. The only published distribution map (Bedfordshire Naturalist 41 (1986)) shows records from 27 tetrads mostly located in a band across the centre of the county with occasional records from the county peripheries. This probably reflects sampling bias rather than actual distribution. A current distribution map is included within this plan (page 9 Fig. 1 Great Crested Newt Distribution (June 2018) by the Bedfordshire & Luton BRMC) and shows similar findings to the 1986 distribution, showing a band across the centre of the county.

During 2017/18 a group set up by the Environment Bank, NatureSpace UK have completed a range of surveys throughout the South Midlands (including Bedfordshire) to determine GCN presence/absence. Using the results of these surveys together with data from Local Environmental Record Centres, a much more comprehensive record of GCN sites and breeding ponds has been compiled. This information will be used to enable a district wide approach to GCN conservation by using national character areas and conservation areas to support and enhance populations making them more robust against future pressure.

Current factors affecting the great crested newt

- Pond losses in agricultural areas are probably of key significance in the decline of GCN. The species has not benefited greatly from the creation of garden ponds and remains largely dependent on ponds associated with farmland or those created by quarrying activity.
- Loss of ponds and suitable terrestrial habitat to development or other land use change. Development pressure is significant in parts of Bedfordshire especially through the centre of the county due to housing and transport government pressure.
- Poor or absent pond management leads to ecological successional changes that reduce the suitability of ponds for newts.
- Chemical pollution from agrochemicals and nutrient enrichment can lead to eutrophication of ponds meaning a loss of breeding sites thus reducing the suitability of the sites for GCN.
- Larval newts are sensitive to predation and stocking ponds with fish can eradicate newt populations, as well as high presence of birds such as wildfowl and herons.
Unsympathetic terrestrial habitat management destroys hibernation sites and removes the habitat required for adult and juvenile newts in their terrestrial phase.

Degradation, loss and fragmentation of terrestrial habitat. Populations require suitable terrestrial habitat adjacent to their breeding ponds and long-term survival may depend on movement between neighbouring populations (or breeding ponds). GCN dispersal abilities are limited (the maximum dispersal distance being little more than 1 km) so that closely-spaced ponds, or pond clusters (ponds within 500 m of each other), supporting meta-populations are important to long-term survival. A viable meta-population requires a minimum of five ponds.

Poorly thought out and disjointed site based mitigation schemes associated with developments, including severance or isolation of GCN populations and suitable habitat, inappropriate aquatic to terrestrial habitat ratios, lack of appropriate planning and time needed to establish replacement/enhanced habitat (minimum of six months required).

Poor management, monitoring and enforcement of statutory obligations regarding these mitigation schemes often leads to poor quality GCN habitats that replace those being lost.

Large areas remain un-surveyed or info not processed or distributed sufficiently well, so could be under threat through a lack of knowledge.

Current action

Legal

The GCN is listed on Appendix II of the Bern Convention and Annexes II and IV of the EC Habitats Directive. It is protected under UK legislation through listing on Schedule 5 of the Wildlife and Countryside Act 1981 and its amendments, and Schedule 2 of the Conservation (Natural Habitats, etc) Regulations 1994 (Regulation 38) (as amended), and the Conservation of Habitats and Species Regulations 2010. The legislation makes it an offence to intentionally injure, kill or take a great crested newt or to intentionally or recklessly disturb, damage, destroy or obstruct access to its breeding or resting place. It is also an offence to possess or control any live or dead specimen, or part thereof. It is also a National Priority Species in the UK Biodiversity Action Plan.

Strengthened GCN protection through re-interpretation of EU Habitats Directive, with the establishment of obligation to maintain newt populations at a favourable conservation status in their natural range i.e. ensuring the population is restored, maintained and enhanced.
Achievements since publication of first Action Plan – September 2008

1. Production of report: ‘A review: GCN Habitat Network in the Central and Western Marston Vale’ (Beds and Luton Biodiversity Partnership 2011).

2. Prosperous Ponds project led by BRCC with Greensand Trust – to May 2011. Funded by Grantscape. Involved pond survey, restoration and creation, for a range of species Inc. GCN.

Achievements:

- Creation of 7 ponds at Stotfold Mill Meadows LNR and 1 pond at Langford Meadows.
- Pond Management at Langford Meadows, Biggleswade, Billington, Flitton, Campton, Heath and Reach, Yeldon, Harlington, Chalgrave.
- Pond expansion at The Riddy LNR and Shambrook.
- GCN surveys at 3 sites including confirmation of new populations at Sandy Smith NR.

3. SITA trust funded project ‘Conservation of the GCN in Marston Vale’ project. Two year project 2013-2015, delivered by Natura International and FoMVT, with a broad range of partner organisations.

Achievements to date

- 116 ponds visited, with habitat assessment of 82 ponds
- 73 ponds surveyed for GCN, mainly focusing on egg searches during the day.
- GCN detection on 34 ponds, not detected in 39.
- Targeting of SW Marston Vale area (Cranfield/Brogborough) for further survey and initial habitat works.
- Volunteer training event at Forest Centre, organised by Froglife, covering GCN ecology and conservation, identification and survey methods attended by 24 participants.
- Habitat work winter 2013/14 – 3 new ponds created in Marston Thrift. Pond restoration of 1 pond on land adjacent to Marston Thrift. Major scrub/vegetation clearance around 2 ponds at Cople Pits Nature Reserve, Cople.
- Habitat work 2014/15 – 1 pond restored in Marston Thrift. 1 pond restored on Forestry Commission land at Wilstead. 1 pond created and 2 ponds restored on private small-holding in Wilstead. 1 pond restored on farmland at Ampthill. 1 pond created and 4 ponds restored at Holcott Wood/Reynolds Wood, Brogborough.
- 1 pond cleared of encroaching scrub on private land at Houghton Conquest.
9. End of project report produced (‘A spatial framework to evaluate landscape connectivity and improve conservation planning for the great crested newt in the Marston Vale area’)
   - Habitat modelling work for the Marston Vale area to identify existing areas of suitable habitat and areas where habitat improvement would bring the most benefit in strengthening populations and provide linkages between habitats.

10. Forest of Marston Vale woodlands
   - 2 new ponds have been created within new woodland plantations at Ridgeway and Wiles Woods, Kempston Rural.

Other notable developments across the county

11. Wixam’s development
   - Ecologists identified a number of GCN within fire ponds at the site. With a smaller population identified after the first translocation, individuals were moved to a purpose-built receptor site at Duck End Lane, Wilstead (1998 and 2004).
   - Translocation of individuals to another site under a licence from DEFRA, with a further smaller translocation undertaken to remove remaining individuals. A total of 541 newts were translocated in the first exercise.
   - The receptor site comprised of three purpose-built ponds, rough grassland, emergent vegetation and associated hibernacula (brick/log piles), surrounded by permanent newt fencing.
   - Monitoring has been carried out between 2001-May 2005.
   - GCN Survey November 2005, found 4 locations within 20 surveyed that held small non-breeding populations, likely remnants of the first population. A further three adult newts were translocated to the original receptor site.

12. Paddock Pond - Bromham
   - Pond was restored by the Bromham Conservation Volunteers group, who cleared a lot of debris and litter, restoring the pond.
   - GCN population has since colonised and GCN eggs have been found, as well as GCN records nearby.

13. Stagsden, Stevington and Sharnbrook have populations of GCN present in ponds within the village boundaries.

14. Marston Thrift (CWS) presence of GCN confirmed due to positive eDNA survey (2017).

15. 2017/2018 records of GCN found breeding at Sandhouse Lane pond, Quarry and King’s wood at Heath and Reach.
Action plan objectives and targets

**Objective**
1. Conserve and maintain the range and population of GCN in Bedfordshire and Luton.

**Targets**
1. Maintain the current geographical range and extent of existing GCN populations by 2020.
2. Improve the viability of existing GCN populations by improving habitat networks and connectivity by 2020.
3. Continue to compile a ‘complete picture’ of GCN distribution, abundance and habitat quality across the whole of Bedfordshire by 2020.
Fig. 1 Great Crested Newt Distribution (December 2018) by the Bedfordshire & Luton BRMC
**Proposed action**

**Partners**
Bedfordshire Local Nature Partnership members

**Action**

**Policy and legislation**

1. Ensure there is up to date information on GCN populations, conservation and legislation available to local authority policy makers and planners, Natural England, NGO’s, developers and other relevant groups to inform strategic documents and decisions which might impact on GCN populations and habitats within Bedfordshire and Luton.

**Site safeguard and management**

1. Maintain and safeguard connectivity and terrestrial habitat surrounding known GCN populations in Bedfordshire.
2. Restore or create ponds and terrestrial habitats to improve the connectivity of GCN populations to support long term viability of population.
   a. Restore to favourable condition ponds to a Habitat Suitability Index (HIS)> 0.7 (good habitat suitability), within areas known to have GCN meta-populations; to encourage recolonization, dispersal and longer-term conservation.
   b. Create a minimum of 25 new ponds by 2020 to expand useable habitat for existing GCN populations.

**Advisory**

1. By 2020 produce guidance for planners/developers within Bedfordshire, on where best to locate GCN mitigation works to benefit wider GCN populations (a strategic tool for planning that takes in to account landscape scale processes affecting GCN, rather than the current localised approach). This is facilitated under the district licence scheme that has been granted to Central Bedfordshire council and Bedford Borough council by Natural England.
2. Advise landowners and others involved in the management of GCN sites, about conservation best practice, policy and legislation.
3. Seek to ensure that GCN conservation is given due consideration by landowners within the new Countryside Stewardship Scheme, and Greening options.
Future research and monitoring

1. Seek to collate and maintain all existing GCN data, and where possible include data held by consultancies and private companies.
2. Where possible seek to complete survey work to ‘fill in gaps’ in baseline data for the County (including sites where current records are over 5 years old).
3. Identify key GCN meta-populations to inform the prioritising of resources for conservation (namely the Marston Vale area).
4. Continue to monitor existing known GCN populations and habitat suitability – where possible.

Communication and publicity

1. Ensure that awareness of GCN are published through available channels i.e. council websites/BRMC documents/leaflets.
2. Promote Bedfordshire as a nationally significant location for GCN and highlight the importance of species conservation to land owners and managers, planners and other decision makers, and the general public.
Monitoring the Action Plan

This action plan will be reviewed every five years.

Complementary plans

There is a UK national action plan for the GCN by the UK Biodiversity Steering Group. This action plan links to other Bedfordshire and Luton habitat action plans, in particular those for ponds, lowland meadow and lowland mixed deciduous woodland. Cambridgeshire and Hertfordshire have also written SAPs for the GCN. Northamptonshire and Buckinghamshire include GCN conservation in their Habitat Action Plans for ponds and lakes.

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Draft versions were commented on by Helen Muir-Howie (BNHS Herptile Recorder), Elizabeth Anderson (Central Bedfordshire Council), Jackie Ulliyett and Jennie Mitchell (Bedfordshire and Luton BRMC), Sue Raven and Phil Irving (The Greensand Trust), Steve Halton and Claire Wardell (Central Bedfordshire Council), James Russell (Forest Director of the FoMVT).

A draft version of the updated plan was commented on by members of the Bedfordshire Wildlife Working Group (September 2018).

References


Piec D. Natura International. 2015. A spatial framework to evaluate landscape connectivity and improve conservation planning for the great crested newt in the Marston Vale area.


Further reading


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