



Ponds

Local Biodiversity Action Plan

Associated Species Action Plans:

- [Great Crested Newt](#),
- [Lesser Silver Water Beetle](#)



Ecology

What is a pond? Ponds are defined by the UKBAP as small, man-made permanent or seasonal water bodies up to 2ha in extent. In Cheshire large numbers of ponds or marl pits were excavated and now collectively form a significant feature of the landscape. These ponds are associated with lime-rich soils. Many ponds were created prior to industrialisation and the fertiliser industry due to small pits being dug for marl or boulder clay extraction, which then filled with water. Whilst ponds have been created for other reasons such as for amenity or brick clay wining, more recently it has become popular to create ponds for wildlife reasons.

Ponds at all successional stages are important for wildlife. The new national pond action plan specifically recognises ponds of high conservation value. These ponds are those, which have either international importance, species of high conservation value present or support exceptional assemblages of species as well as those that are of high ecological quality.

Why are ponds important?

Ponds are important for many invertebrates including the broad bodied chaser (*Libellula depressa*), the red-eyed damselfly (*Erythromma najas*) and the protected lesser silver water beetle (*Hydrochara caraboides*).



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The vegetation in ponds varies depending on their depth. For example, plants like spiked water milfoil (*Myriophyllum spicatum*), rigid hornwort (*Ceratophyllum demersum*) and yellow water lily (*Nuphar lutea*) are all characteristic of deeper water. Whereas the following; Soft rush (*Juncus effusus*) creeping bent (*Agrostis stolonifera*) and yellow flag iris (*Pseudacorus*) are more characteristic of typical marginal areas.

In Cheshire ponds are particularly important as home to the protected great crested newt (*Triturus cristatus*) (1 in 3 ponds in Cheshire contain populations of great crested newts). Ponds also provide habitat for other amphibians such as, common toad (*Bufo bufo*), smooth newt (*Triturus vulgaris*), palmate newt (*Triturus helveicus*) and common frog (*Rana temporaria*). Water voles (*Arvicola terrestris*) and white-clawed crayfish (*Autopotamobius pallipes*) can also be found in ponds.

Current status

The loss of pond habitats and the consequent effects on a range of species has been recognised at a variety of spatial scales, from continental, through national, to regional and more local levels. Of nearly 42,000 ponds identified on Ordnance Survey maps of the Cheshire region in the 1870s, 61% had disappeared by the early 1990s. Pond loss has taken place across the county and is associated with a number of different replacement land-uses; loss rates are highest in areas of urban development, but numbers have declined most rapidly on farmland.

From aerial photography, only 45% of those ponds remaining show areas of open water, many being completely overshadowed by trees or with substantial emergent vegetation. The effects of pond loss are now being felt in increasing fragmentation of the pond landscape; the density of wet ponds over the county has fallen 17.8 per sq.km. (c. 1870) to 3.25 per sq.km. (1992/3), and the 'connectedness' of the pond landscape has been similarly reduced. Nevertheless, the county of Cheshire still has the densest pond landscape in lowland Britain and probably has no equivalent elsewhere in northwestern Europe.

Threats

- * Loss and fragmentation due to natural succession, urban and industrial development, and in-filling as a result of agricultural intensification and diversification.
- * Decline of water quality due to eutrophication.
- * Lack of appropriate management, and little or no financial incentive to create new ponds in the wider agricultural landscape.
- * Failure to consider surrounding terrestrial habitats and the wider pond landscape.



How are we helping to conserve ponds in the Cheshire region?

Awareness of the importance of ponds and pond landscapes as important wildlife habitats

* Inclusion of pond refurbishment and creation as mitigation proposals within new development schemes

* Pond Community Officer - negotiations in progress

* Pond Warden network in place.

Objectives, targets and actions

Objectives, targets and actions to help conserve ponds in the Cheshire region can be found on the [Biodiversity Action Reporting System \(BARS\)](#) along with full details of our progress so far.

How to find out more about ponds

Pond Trust website - www.pondstrust.org.uk

Pond Conservation website - www.pondconservation.org.uk

[UK BAP Definition](#)

Contact details

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References and Glossary

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