

PONDS (of high ecological value)

Nationally

Ponds, for the purpose of UK BAP priority habitat classification, are defined as permanent and seasonal standing water bodies up to 2ha in extent which meet one or more of the following criteria:

- Habitats of international importance: Ponds that meet criteria under Annex I of the Habitats Directive.
- Species of high conservation importance: Ponds supporting Red Data Book species; UK BAP species; species fully protected under the Wildlife and Countryside Act Schedule 5 and 8; Habitats Directive Annex II species; a Nationally Scarce wetland plant species; or three Nationally Scarce aquatic invertebrate species.
- Exceptional assemblages of key biotic groups: Ponds supporting exceptional populations or numbers of key species. Based on (i) criteria specified in guidelines for the selection of biological SSSIs (currently amphibians and dragonflies only), and (ii) exceptionally rich sites for plants or invertebrates (i.e. supporting ≥ 30 wetland plant species or ≥ 50 aquatic macro-invertebrate species).
- Ponds of high ecological quality: Ponds classified in the top PSYM category ("high") for ecological quality (i.e. having a PSYM score $\geq 75\%$).
- Other important ponds: Individual ponds or groups of ponds with a limited geographic distribution recognised as important because of their age, rarity of type, or landscape context e.g. pingos, duneslack ponds, machair ponds.



Dragonfly pools at Tittesworth Reservoir © Nick Mott

Extent in UK:
c. 400,000

In the Peak District

Of the c. 2000 - 2700 ponds in the Peak District approximately 75% are to be found in the White Peak where the vast majority are dewponds dating from the 19th century, principally occurring on the limestone plateau but with smaller numbers in the dales. Village ponds, fish ponds, millponds and ponds associated with old mineral workings (e.g. silica sand pits, limestone quarries) are also found locally. In the Dark Peak and South West Peak ponds are far fewer and occur in a variety of situations including millponds, coal bell pits, ornamental parkland ponds and farm ponds excavated in natural low-lying wet areas. Garden ponds add significantly to the overall resource and are probably of importance to individual species including frogs and newts, though they seldom support relatively natural communities.

Surveys in sample areas of the White Peak suggest that there were significant losses of dewponds in the 1970s and early 1980s, with perhaps as much as a 50 % loss of ponds over a 15 year period. More recent surveys suggest that losses have continued since then but perhaps at a slower rate. The dewponds of the White Peak have been particularly vulnerable not just to in-filling but also to neglect, leading to cracking of the clay (or more recent concrete) linings and consequent loss of the pond. More intensive management of surrounding farmland has also led to puncturing of clay linings by heavy livestock, eutrophication and contamination of ponds through fertiliser, slurry and herbicide application, and loss of surrounding habitat on which some of the important pondlife (such as newts) may depend. In the Dark Peak and South West Peak the number and condition of ponds has probably remained more stable, and may even have increased slightly due to pond creation through conservation schemes.

Perhaps the single most important feature of ponds in the Peak District is the great crested newt, a protected species for which Britain may hold up to 50% of the world population. Although few individual ponds support particularly large numbers, the total population across the network of White Peak dewponds is considered to be of high national importance. As a protected species, licences are needed for anything which might result in their disturbance. In addition dewponds collectively represent a substantial habitat resource for aquatic invertebrates (particularly beetles and bugs, including a few nationally scarce water beetles), commoner amphibians such as frogs, toads and other newt species; and locally scarce aquatic plants such as common water-crowfoot and pond

water-crowfoot. Water voles can also utilise ponds.

Evidence suggests that the wildlife interest of dewponds tends to be very dependent on the management of the pond at the time (e.g. when it was last desilted). There are therefore probably relatively few ponds which are of particular importance compared to others. It is the maintenance of a network of ponds relatively close together, allowing movement of plants and animals between ponds, which is probably of the greatest conservation importance.



Watervole © Paul Shaw



In addition to their wildlife interest, dewponds are a characteristic landscape feature of the White Peak plateau, associated with the historical enclosure of this area during the 18th and 19th centuries.

**Extent in PD:
>297 of high
ecological value**

Current Factors Affecting the Habitat & Habitat Condition

Ponds can be threatened by intensive use of the surrounding land leading to loss of associated habitat, which is particularly important for the movement of species such as great crested newts across the landscape. Damage to concrete and clay linings can be caused by livestock trampling, and water quality can be affected by eutrophication or run-off. Often ponds become neglected if they are no longer required for watering of livestock. These issues can often be addressed through agri-environment scheme agreements.

Increasingly, we may see threats from climate change, causing dewponds to dry out and the linings to crack, or from the increasing spread of non-native invasive plants such as New Zealand pigmyweed and Canadian pondweed.

Recent Work

External funding from the Aggregates Levy Sustainability Fund and SITA Trust has enabled three phases of the project entitled 'Proliferating Ponds in the Peak' to target dewponds for maintenance, restoration and creation in the White Peak. Through the project a network of ponds have been enhanced to support a meta-population of great-crested newts, for which the White Peak is generally recognised as being of national importance.

Recently, 100% funding for pond work through Higher level Stewardship has been negotiated within the Peak District.



Clay and stone sett pond restoration © PDNPA

Associated BAP Species in the Peak District

Water Vole	<i>Arvicola terrestris</i>
Otter	<i>Lutra lutra</i>
Noctule bat	<i>Nyctalus noctula</i>
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>
Reed bunting	<i>Emberiza schoeniclus</i>
Yellow wagtail	<i>Motacilla flava</i>
Tree sparrow	<i>Passer montanus</i>
Lapwing	<i>Vanellus vanellus</i>

Song thrush	<i>Turdus philomelos</i>
Common toad	<i>Bufo bufo</i>
Grass snake	<i>Natrix natrix</i>
Great crested newt	<i>Triturus cristatus</i>
White-clawed crayfish	<i>Austropotamobius pallipes</i>
Flat sedge	<i>Blysmus compressus</i>
Grass-poly	<i>Lythrum hyssopifolia</i>
Pennyroyal	<i>Mentha pulegium</i>
Marsh stitchwort	<i>Stellaria palustris</i>

NVC Communities

The principal vegetation types (and their associated sub-communities) included in this habitat are:

Various aquatic, swamp and fen communities; OV28-OV35; and others