

Habitat Action Plan: Ponds



1. Introduction

Ponds of high ecological quality are defined as permanent and seasonal standing water bodies which meet one or more of the following criteria: ponds of high conservation importance; species of high conservation importance; exceptional assemblages of key biotic groups.

Ponds vary in size from a few square metres to water bodies up to 2 hectares in extent. Ponds and other standing open waters are usually classified according to their nutrient status. There are three main types: nutrient-poor (oligotrophic); nutrient-rich (eutrophic) and intermediate (mesotrophic).

Ponds support many species of conservation importance, including a range of invertebrates, plants, amphibians and mammals. An exceptional number of BAP priority species (at least 65 species) are dependent on either temporary or permanent ponds, and six pond species are listed on Annex II of the Habitats Directive. The UK has clear international obligations to conserve the habitat and associated species, under both the EC Habitats and Water Framework Directive.



Roadford Lake pond

Ponds are generally recognised as being functionally important, complementing other semi-natural habitats (including watercourses, other water bodies and wetland habitats), and act as a resource for conserving wider-ranging species, including a range of amphibians. Typical plants include Water Lobelia, Alternate Water-milfoil and Bog Pondweed. Mayflies and caddis flies dominate close to the shore while fish such as Brown Trout can be found in the larger waters. Nutrient-rich waters are typical of lowland Britain often cloudy-looking due to the amount of plankton and algae. Characteristic plants include: duckweeds; yellow water-lily; spiked water-milfoil and fennel pondweed. Fish include roach, bream and pike, while invertebrates include snails and crustaceans. Waters of intermediate nutrient status potentially have the highest biodiversity of any standing waters. They are also at substantial risk from the spread of alien invasive species.

2. Current status

2.1 National

Although ponds are widespread in the UK high-quality examples are highly localized. In certain areas high quality ponds form particularly significant elements of the landscape, e.g. Cheshire Plan marl pits, the New Forest ponds, pingos of East Anglia, mid-Wales mawn pools, the North East Wales pond landscape and the forest and moorland pools of Speyside.

2.2 SWLT

Sites that host pond habitats	Designations
Roadford Lake	
Burrator Arboretum	Dartmoor National Park
Lower Tamar Lake	County Wildlife Site



Palmate Newt (Burrator)



Broad-bodied chaser (Roadford)

3. Legal tatus

There is a network of standing water Sites of Special Scientific Interest in the UK, some of which are also National Nature Reserves. Several sites have been proposed as Special Areas of Conservation under the EC Habitats Directive. There is limited protection for ponds through existing legislation directly through planning, pollution control and waste management legislation or indirectly through protection of features or species associated with ponds such as trees, protected species and hedgerows.

4. Current actors affecting the habitat

- Eutrophication caused primarily by sewage or agricultural run-off
- Acidification may occur locally in areas with sensitive geology and soils, as a result of atmospheric deposition of pollutants
- Pollution from organic matter, silt, heavy metals
- Lowering of water levels caused by over-abstraction of surface or ground water, or by drainage

- Urbanisation and in-filling of ponds
- Poor management on multiple use water bodies where activities (e.g. recreation, fish farming) are not sensitively managed (e.g. by zoning), and where surrounding habitats are inappropriately managed or neglected
- Changes in surrounding land use that alter the water table, change the pollution load, or degrade or remove valuable adjacent habitat

5. SWLT action plan objectives and targets

Objectives

- Obtain quantitative data on the extent of pond condition and assessment, of all known sites and work towards setting targets relevant to national and regional objectives
- Ensure pond habitats are not lost due to lack of management
- Introduce management prescriptions to enhance and restore pond habitats
- Halt the degradation of biodiversity value of ponds due to the spread of invasive alien species, i.e. Australian swamp stonecrop (*Crassula helmsii*), parrot's feather (*Myriophyllum aquaticum*) and water fern (*Azolla filiculoides*)

Targets

- Undertake surveys of marginal and submergent vegetation of pond habitats at Roadford Lake, Burrator and Lower Tamar Lakes.
- Surveys for faunal component (i.e. insects, amphibians, and invertebrates) of pond habitats, and together with floral survey data implement management prescriptions for management and restoration.
- Initiate removal of predatory fish from ponds where appropriate.
- Undertake active management of aquatic emergent vegetation, such as *Typha*.
- Achieve favourable condition, or recovering condition of ponds on all significant sites by 2010.

Current ction

- Ponds are on of the target habitats within the Biodiversity Project
- Roadford, Burrator and Lower Tamar have each been surveyed twice in 2009
- Management recommendations to be drawn up based on findings
- New ponds/scrapes to be created at Roadford and also possible Upper Tamar and Burrator

6. SWLT actionplan

Action	Potential Partners	Target Date
Policy & Legislation		
1. Identify at least three ponds as suitable for LNR designation or designate areas as internal nature reserves and progress to implementation	LA's, SWW	2010
2. Ensure that all agri-environment projects know the location, extent, importance and management requirement of ponds as sites of nature conservation importance		On-going
Site Safeguard & Management		
1. Ensure that all suitable ponds are assigned internally as Nature Reserves, highlighting the		2010

importance of these habitats through education, the media and general public awareness.		
2. Develop a co-ordinated catchment approach to the removal of aquatic alien invasive species.	EA, SWW	2011
3. Implement management programmes to bring ponds into favourable condition <i>i.e.</i> scrub clearance to impede encroachment.		2010
Advisory		
1. Offer advice and promote best practise on restoration of pond habitats.		On-going
Future Research & Monitoring		
1. Obtain quantitative data on the extent of pond habitat condition and assessment, of all known sites and work towards setting targets relevant to national and regional objectives.		2010
2. Undertake National Vegetation Classification (NVC) surveys of SWLT sites that host pond habitats and monitor.		2010
3. Provide an inventory of ponds and make available through Environmental Records Centres.	SWT, DWT, CWT	On-going
Communications & Publicity		
1. Produce educational material on pond habitats. Highlight the importance of these habitats through education, the media and general public awareness.	SWW, NE, DCC, CCC, SCC, DNPA, WDBC	2010

7. Links with other action plans

- Pennyroyal
- Palmate newt
- Smooth newt
- Common frog
- Common toad
- Otter

8. Useful links

UK Biodiversity Action Plan for Ponds: Not available

Regional, District, National Park and Local BAPs:
http://www.swbiodiversity.org.uk/Home_LBAP.htm

South West Regional Biodiversity Partnership:
<http://www.swbiodiversity.org.uk/index.htm>