



Belasis lake @INCA

Tees Valley Biodiversity Partnership



Ponds, lakes and reservoirs Habitat Action Plan 2009-2013

Plan Lead Organisation	Tees Valley Wildlife Trust
Plan Coordinator	Rachel Jackson
Action Group	Wetland and Coastal
Associated Plans	Reedbeds, great crested newt, water vole, bats, farmland birds, saline lagoons
Latest version	Published January 2009

Description

A pond is defined as being a small body of water, between 1m² and 2ha that holds water for at least 4 months of the year. Ponds provide rich and complex habitats for wildlife supporting a vast array of freshwater plants and animals. Collectively our ponds are home to a third of our native plants and over 1,200 species of invertebrates such as mayflies, pond skaters, bugs and snails. All our amphibian species (frogs, toads, newts) depend on ponds in which to breed. Ponds are also valuable feeding locations for bats and provide water, feeding and breeding grounds for some bird species.

Some three-quarters (more than a million) of Britain's ponds have been lost over the last hundred years and due to their size and familiarity they are consistently undervalued. Ponds have been drained due to agricultural improvements or lost to make way for the expansion of our towns and cities. Many species that live in wetland areas have also been affected, to the extent that many, such as the great crested newt and even the common frog are now considered threatened. The creation of garden ponds, if well designed, is now recognised as providing a valuable refuge for pond wildlife, especially the common frog.

Lakes and reservoirs include both natural and man-made water bodies, such as lakes, reservoirs, flooded quarries and gravel pits that are over 2ha in size. Water bodies smaller than this are described as 'ponds'. The plant and animal communities depend on the nutrient status of the water, which can range from nutrient poor (oligotrophic) through to nutrient rich (eutrophic).

Current factors causing loss and decline

- ◆ Pollution and nutrient enrichment caused by agricultural chemicals, urban runoff or illegal dumping of rubbish.
- ◆ Infilling, draining or lack of management of rural ponds due to changes in agricultural practices where ponds have no practical stock watering function.

- ◆ Losses through natural succession are not being replaced by creation of new ponds.
- ◆ Spread of invasive non-native plant species which limit plant diversity and can reduce oxygen availability for invertebrates and amphibians.
- ◆ Inappropriate stocking of fish.
- ◆ High populations of domestic waterfowl.
- ◆ Direct infilling or drainage for urban developments.
- ◆ For lakes, nutrient enrichment, erosion, acidification, water abstraction and fisheries management are the main issues affecting their biodiversity.

Conservation Status

Mesotrophic lakes and eutrophic standing water– UK BAP Priority Habitat (2004).
 Ponds – UK BAP Priority Habitat (2007).
 Great crested newt legal protection under the Wildlife and Countryside Act (1981).

The Habitat in the Tees Valley

Ponds are scattered through the Tees Valley, occurring in rural, urban and industrial sites. A comprehensive survey of rural ponds in the borough of Redcar and Cleveland (Sexton 2004) showed 57% loss of ponds on the ground compared with O.S map data.

Many of the larger standing open waters in the Tees Valley are man-made and eutrophic, resulting from industry, and include flooded quarries, clay pits and reservoirs. Key sites include Scaling Dam, Lockwood Beck Reservoir.

Current Activity in the Tees Valley

In 2008 the Wetland and Coastal Action Group of the Tees Valley BAP produced a initial spatial inventory of known ponds. A public pond survey of North East England was carried out by the EYE (Exploring your Environment) in 2008. Data from this and a Tees Valley Wildlife Trust public postcard amphibian survey in 2007 have been collated and added to the Tees Valley Ponds database.

The Tees Valley Biodiversity started a “Tees Valley Pondscape” project in November 2009. This project will qualify and quantify the pond resource in the Tees Valley to produce a pondscape database, that will identify ponds that meet national priority pond status. It will create a strategic framework for pond designation, creation and management that is based on principles of managing ponds as ecological clusters in a landscape setting. It will begin to reverse the long-term trend of pond loss in the Tees Valley, by creating new high value ponds. This, in turn will increase the connectivity between ponds and other freshwater habitats and restore the ecological condition of ponds. This will benefit metapopulations of freshwater invertebrates, amphibians, birds, bats and other mammals. The project will bring an increased understanding of the conservation importance of the Tees Valley Pondscape.

Further Information

Sexton, J. (2004) Ponds of Redcar and Cleveland: quantitative evaluation of decline and qualitative assessment of condition. Durham University (unpublished BSc thesis).

Biggs, J., A. Corfield, D. Walker, M. Whitfield, and P. Williams. 1994. New approaches to the management of ponds. *British Wildlife* 5:273-287.

Bardsley, L. (2007). *The wildlife pond handbook: A practical guide to creating and maintaining your own wetland for wildlife*

www.pondconservation.org.uk For the latest information on the National pond Habitat Action Plan, toolkit worksheets on the creation and management of ponds and a range of downloadable research publications.

Vision Statement

To have a dynamic pondscape where sufficient new high quality ponds are created to replace natural successional processes and compensate for other pond losses. To increase connectivity of ponds and other freshwater habitats and for these to be managed in a way that maximises their value for associated wetland species.

Targets

- PLR.T1 To identify ponds of national and local conservation priority and collate geographical and ecological information about the distribution and quality of ponds in the Tees Valley
 Goal: Publish GIS data on the Tees Valley pondscape and identify those ponds that meet national “high priority” standard and identify local priority ponds.
- PLR.T2 To carry out landscape scale creation of high quality ponds to link and extend existing pond complexes, and to compensate for ponds lost by natural succession.
 Goal: To create 30 high quality ponds.
- PLR.T3 To increase the biodiversity value of ponds by undertaking practical conservation management.
 Goal: Restore 30 ponds to meet national high priority standard.

Actions

Code	Action	Organisational lead	Action contact	Partners	End date
PLR.A1	Create a pondscape data inventory of known pond sites.	Northumbrian Water Ltd	Allan Snape	Hartlepool BC Redcar and Cleveland BC Middlesbrough BC Stockton BC, INCA, Environment Agency	Jan 09
PLR.A2	Carry out desk and ecological surveys will identify ponds of national and local priority and provide landscape scale information to inform pond management, creation and protection.	Tees Valley Pondscape Project (TVWT)	Rachel Jackson	Hartlepool BC Redcar and Cleveland BC Middlesbrough BC Stockton BC, INCA, Wildflower Ark, Environment Agency	Dec 2010
PLR.A3	Annually update amphibian and reptiles database, sending records to regional records centre and NBN.	NERAG	Ian Bond	EYE project	Ongoing

PLR.A4	To establish criteria for the selection of ponds meriting Local Site status and ensure that the highest quality ponds are identified and protected by the Tees Valley Local Sites review.	Tees Valley Biodiversity Steering group	Jeremy Garside	Hartlepool BC Redcar and Cleveland BC Middlesbrough BC Stockton BC, Environment Agency	2011
PLR.A5	Strategically create 30 new ponds to link and extend existing pond complexes, and to compensate for ponds lost by natural succession.	Tees Valley Pondscape Project (TVWT)	Rachel Jackson	Public and private landowners throughout Tees Valley	Dec 2011
PLR.A6	Encourage the creation of new ponds as part of the landscaping of new developments by producing and promoting a best practice guide for planners and developers.	Tees Valley Pondscape project (TVWT)	Rachel Jackson	Redcar and Cleveland BC Middlesbrough BC Stockton BC, Environment Agency	Dec 2013
PLR.A7	Undertake management that will enhance the biodiversity of 30 ponds.	Tees Valley Pondscape Project (TVWT)	Rachel Jackson	Public and private landowners throughout Tees Valley	Dec 2011
PLR.A8	Increase appreciation, awareness and understanding of ponds and their conservation amongst the wider public by involvement in the EYE project regional pond survey and associated information pack and events.	EYE Project	Naomi Hewitt		Dec 2010
PLR.A9	Promote the value of garden ponds, their creation and management for wildlife through community and school events at countryside sites, and through TVBP website.	Middlesbrough BC	Richard Buckley	Hartlepool BC Redcar and Cleveland BC Stockton BC, TVWT	Ongoing
PLR.A10	Increase interest and awareness of the value of ponds by Industrial partners by producing dragon and damselfly information leaflet.	INCA	Robert Woods		Dec 2009
PLR.A11	Include the creation and management of ponds in site based Industrial BAPs.	INCA	Robert Woods	INCA business members	Ongoing
PLR.A12	Carry out practical conservation projects to retain and improve the biodiversity of lakes and reservoirs.	Tees Valley Pondscape Project (TVWT)	Rachel Jackson	Hartlepool Water, Environment Agency	2012