

PONDS AND OPEN WATER

Introduction

Open water habitats can be defined as all areas of fresh water with little or no flow. This includes natural systems such as lakes and pools, together with man made structures such as reservoirs, canals and garden ponds. Habitats that contain moving open water will be covered in the separate Rivers and Rhines Habitat Action Plan.

Most of the larger open water habitats within Bristol (e.g. Avonmouth Pools) are examples of the UK priority habitat Eutrophic Standing Water. Eutrophic water bodies are those that contain high levels of nutrients. They can contain very high levels of biodiversity providing they are not swamped by algal blooms.

Standing open water provides important habitat for a variety of wildlife including amphibians, invertebrates, birds, mammals and plants. In Bristol, UK priority species associated with this habitat include the great crested newt and water vole.

Standing open water does not always occur in isolation but can form part of a network. These networks allow several populations of, for example, great crested newts to exist close enough to one another to allow some movement of individuals between the populations – this is known as a metapopulation. Metapopulations are more able to resist threats such as habitat destruction that may cause the loss of smaller, more isolated populations.

Today, a number of these open water habitats in Bristol are managed for conservation, benefiting both wildlife and people.

Current Status

Throughout Bristol there is a wide range of open water habitat from the Floating Harbour and pools and reservoirs in Avonmouth, to stretches of canal, garden ponds and formal park lakes. The precise amount of open water habitat is unknown, mainly due to the difficulty in assessing the number of ponds in gardens.

The largest area of open water in Bristol is the Floating Harbour and connecting Feeder Canal. This area contains a large number of fish, including pike and bream and supports several species of birds including swans, cormorants, herons, moorhens and kingfishers. Over the years, waterfront development has led to the loss of nesting sites for many of these species.

Many of the other larger areas of open water (large ponds, lakes and reservoirs) are designated as Sites of Nature Conservation Interest (SNCIs) eg. Henleaze Lake, Hoar Gout Reservoirs and Avonmouth Sewage Works, or form part of larger SNCIs eg. ponds at Stockwood Open Space and Lawrence Weston Moor.

Many of these SNCIs provide valuable habitat for wildlife. For example, the pools and lagoons at Avonmouth Sewage Works – despite being located in a heavily industrial area – support many species of waders and wildfowl. The deeper lagoons attract diving ducks such as pochard and tufted duck. Both these and ponds at Stockwood Open Space also provide important habitat for amphibians including great crested newt.

Other ponds of all sizes are found across Bristol – the number and extent of garden ponds is unknown, but it is thought that these are vital in supporting Bristol's amphibian population and are likely to support a range of dragonflies and damselflies.

Current Threats

- I Neglect

- I Loss through infilling

- I Inappropriate management

- I Pollution

- I Conflicting use (eg. recreational activities)

- I The release of non-native species

- I Direct and indirect effects of development

Objective 1: To monitor the extent and condition of standing open water habitats and ponds

Target:

- I Determine the extent and distribution of standing open water habitat and ponds within Bristol by 2013

Objective 2: To maintain and enhance the condition of existing standing open water habitats

Target:

- I Ensure that council owned SNCIs containing open water habitat are in favourable condition by 2020
- I Ensure that development does not result in the loss of, or harm to, open water habitat
- I Seek to ensure ponds and open water are enhanced for wildlife

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Objective 3: Promote the creation of standing open water habitats

Target:

- Encourage and facilitate the creation of wildlife ponds in school grounds and gardens
- Ensure that the creation of ponds is considered in all new developments as appropriate (for example as part of Sustainable Urban Drainage Systems (SUDS))

Objective 4: To raise awareness and appreciation of the biodiversity value of open water and pond habitats and promote good management and habitat creation

Target:

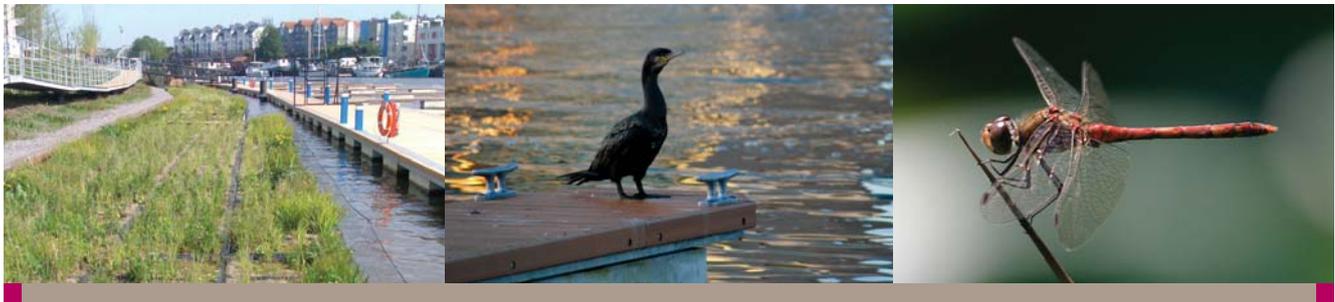
- Run annual public events to encourage creation of ponds and to raise awareness of their value to wildlife
- Run training days for parks staff, planners and other relevant personnel

PONDS AND OPEN WATER HABITAT ACTIONS	OBJECTIVE	DATE	IMPLEMENTORS
Determine the extent, quantity and condition of open water habitats in Bristol through survey and review of existing data	1	2010 – 2011	AWT, BCC, AVON PONDWAYS PROJECT, EA
Run Citizen Science project to determine extent of garden ponds and value to amphibians	1	2011	AWT, BCC, ARAG
Review conservation status of parks ponds and lakes and investigate options for habitat enhancement	2	2012 – 2013	BCC, BRERC
Seek to develop programme of habitat management on BCC SNCI open water habitat to bring into favourable conservation status	2	2009 – 2013	BCC, AWT
Ensure developments do not negatively impact open water habitats and their associated species and take opportunities to create new open water habitats e.g. through SUDS	2, 3	2008 – 2013	BCC, AWT, EA

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PONDS AND OPEN WATER HABITAT ACTIONS	OBJECTIVE	DATE	IMPLEMENTORS
Establish project to enhance the Floating Harbour for wildlife, working with users and projects such as Bristol Living Rivers e.g. by provision of floating rafts, reedbeds and nesting sites	2, 4	2008 – 2009	BLRP, AWT, BCC
Provide training to planners, parks staff and other relevant personnel on the value of ponds and open water habitat	4	2009, 2011	BCC, BLRP, AWT
Develop awareness raising programme to encourage the management and creation of ponds by local people	4,3	2010 – 2012	AWT, BCC



Photography: Bristol docks floating reed bed: BCC. Cormorant: Helen Hall. Ruddy darter dragonfly: Darin Smith

