



Ponds

Scottish Biodiversity List habitat:	Yes
UK Biodiversity List of Priority Habitats:	Yes

Habitat Profile

Ponds are rich habitats for wildlife, in particular amphibians, aquatic invertebrates and aquatic plants. Whether man made or natural, ponds are an important habitat. There are thought to be around 500,000 ponds in our wild landscape in Great Britain, plus around three million ponds in our gardens. In Scotland there are approximately 198,000 ponds (Countryside Survey, 2007). The structural diversity of ponds through aquatic and bankside vegetation provides a wide range of species with food, shelter and breeding habitat.

Ponds, for the purpose of UK BAP priority habitat classification, are defined as permanent and seasonal standing water bodies up to 2 ha 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 macroinvertebrate species).
- Ponds of high ecological quality: Ponds classified in the top PSYM category ("high") for ecological quality (i.e. having a PSYM score $\geq 75\%$). [PSYM (the Predictive SYstem for Multimetrics) is a method for assessing the biological quality of still waters in England and Wales; plant species and / or invertebrate families are surveyed using a standard method; the PSYM model makes predictions for the site based on environmental data and using a minimally impaired pond dataset; comparison of the prediction and observed data gives a % score for ponds quality].
- 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.

For this Local Biodiversity Action Plan, ponds are defined as permanent and seasonal standing water bodies up to 2 ha in size. They are valuable habitats on a local level, being important in wetland creation but also providing stepping-stones for aquatic species associated with ponds to disperse and colonise new areas. The historical decline of pond habitats, not only in the UK but also in Europe, has led to the decline of associated species, in particular amphibians. Ponds provide habitat for UK and North Lanarkshire Biodiversity Action species, Great Crested Newt (*Triturus cristatus*), Otter



(*Lutra lutra*) and Water Vole (*Arvicola amphibious*).

Sustainable Urban Drainage Systems (SUDS) are used as an alternative to conventional urban drainage systems and are designed to reduce pollution and flood risk in watercourse and water bodies. They are man-made structures and receive water run-off. Detention basins, retention ponds or swales are a few examples of SUDS. The primary function of SUDS is to deal with water quality and flood prevention but can be designed to enhance biodiversity without detriment to its primary function. To maximise SUDS ponds, a key consideration should be the landscape context which within they sit. SUDS ponds have the potential to be very valuable habitats in themselves or as part of a network of habitats and wildlife corridors.

Current Status

Scotland has many small waterbodies: over 150,000 in total, representing about half of the ponds and pools in the British countryside as a whole.

Ponds may be isolated, or may occur as parts of pond complexes, or form important parts of wetland ecosystems. Ponds have been lost through intensive agriculture, infilling as a result of development and urbanisation as well as through natural processes. Many ponds are also in a degraded state as a result of pollution caused by factors such as agricultural run-off and roads. Ponds are particularly vulnerable to pollution because of their small size and the small volumes of water available to dilute pollutants. Poor management of ponds is also a factor for its reduction in numbers. At times clearing out practices or preventing ponds from drying out may adversely affect aquatic flora and fauna. Creation of new ponds alongside a pond undergoing natural succession is an effective method of ensuring no adverse effects on pond wildlife. They are a dynamic habitat and in a landscape context, the loss of this habitat has led to a loss of pond dependant biodiversity as they become isolated in the landscape. Many ponds were lost or degraded during the 20th Century, but a 6% increase in pond numbers occurred between 1998 and 2007, with a considerable number of new ponds being noted in lowland areas.

Key pond habitats in North Lanarkshire include Gartcosh Local Nature Reserve, home to one of Scotland's largest population of Great Crested Newt.

The Pond mud snail (*Omphiscola glabra*) is found in a pond and wetland at Auchinvalley. A population were also released at Nether Croy. Pond mud snail is nationally scarce, listed as vulnerable in the UK Red Data Books, and is a UK Biodiversity Action Plan species. It is only known to inhabit 7 sites across Scotland so or populations are very important.

Current Actions

- Updated guidance from SEPA on good practice in the management and creation of small waterbodies in Scotland (June2020)
- Promote the retention and enhancement of existing ponds within planning application responses.



- Encourage the inclusion of above ground Sustainable Urban Drainage ponds into new developments. Designed and landscaped for wildlife.
- The greenspace Development Team have created over 20 new ponds within the last 5 years, with 10 of these ponds at Gartcosh Local Nature Reserve. They have also maintained over 30 within this time period. The maintenance has usually been in the form of excessive vegetation clearance.

Current Factors Affecting This Habitat

- Development and in-filling of ponds
- Agricultural run-off and sewage causing eutrophication.
- Succession.
- Drainage as a result of agricultural intensification.
- Invasive species such as New Zealand pygmy weed. Often unknowingly introduced by people emptying their ponds or aquatics.

Proposed Objectives, targets and actions

Objectives

1. Creation of new ponds to form connecting habitats.
2. Identify extent and condition of ponds in North Lanarkshire
3. Undertake positive management of ponds

Action	Meets Objective Number	Action by	Target
Site safeguard and management			
1.1 Create 10 new ponds	1	NLC	Identify 10 council owned and private land owned sites by 2023 to undertake pond creation. Enhancement of existing wetland and habitat connectivity must be a key consideration during implementation stage. Project to be delivered by 2026.
1.2 Restore 10 ponds in poor condition	3	NLC	Identify 10 ponds in poor condition by 2024 and restore by 2028.
1.3 Implement bio-control procedures to prevent spread of aquatic invasive non native plant species and the spread of	2	NLC	Make sure all staff and contractors follow ARG-UK guidance.



disease. .			
Monitoring and research			
2.1 Implement a management programme to ensure that ponds in all North Lanarkshire Local Nature Reserves are under positive management.	2,3	NLC	Produced by 2024
2.2 Identify extent of pond habitat in North Lanarkshire	2	NLC	Mapping exercise to be complete by the end of 2023
Communication and publicity			
3.1 Encourage and promote the construction of wildlife friendly SUDs ponds as part of any development	1	NLC	Raise awareness of wildlife friendly SUDs ponds within the planning authority. Aim to deliver 10 high quality wildlife friendly SUDs ponds through planning consultations.
3.2 Offer advice and promote best practice on pond creation and restoration.	1	NLC	Engage in proactive outreach work with private homeowners and landowner to encourage pond creation.

SEPA- Ponds, pools and lochans – Guidance on good practice in the management and creation of small waterbodies in Scotland

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