

# Tudor Grange Park Pond & Brook Enhancements

Improvements to the watercourses in Tudor Grange Park were included in two successful applications made by Solihull Council in 2021 to Wildlife Ways Small Habitats Grant Programme, part funded by the European Regional Development Fund (ERDF); this programme supports a wide range of habitat and nature improvements across the borough and beyond. The applications, titled *Frogs & Logs* and *Alder Brook Enhancements*, included the proposed restoration of the pond and the extent of Alder Brook in the park, which together will create a total of 1.65 hectares of enhanced habitat to the pond, brook and associated bankside vegetation.

The main works are programmed for autumn 2022, and some reinstatement may need to follow in early 2023 (all time periods subject to change dependent on contractor's programme and weather conditions).

The Alder Brook through Tudor Grange Park has been historically canalised with concrete lining both the bed and banks. As a result the brook in this location offers little in the way of habitat condition or shelter for fish or invertebrates and there is minimal bed substrate for aquatic plants to establish.



Concrete lined Alder Brook (upstream of the pond) prior to restoration

An associated pond (*pictured below*) within the park is currently heavily shaded, limiting the range and diversity of submerged, emergent and marginal plants growing around the pond. The issue is further compounded as the pond is currently heavily silted with marginal areas of stagnant pond water creating unpleasant conditions for park users.






Tudor Grange Park Pond

A long list of options to improve the pond and brook corridor and ultimately address these pressures was identified as part of a feasibility study conducted by consultants from APEM Ltd. between September and December 2021. Following input from Solihull Council's ecologists, tree officers, drainage officers and parks department, a restoration design was chosen with consideration for the environmental benefit, capital cost, constructability and future maintenance. The final Environment Agency approved design included the following elements:

- Alder Brook upstream of Tudor Grange Park pond: Due to topography, dense tree cover and proximity to park infrastructure, works in this location restricted to the removal of concrete pre-cast paving slab lining, associated concrete foundation and introducing aggregates (gravels and cobbles) where needed to improve conditions for spawning fish and macroinvertebrates;
- Alder Brook downstream of Tudor Grange Park pond: Removing pre-cast concrete paving slabs, associated concrete foundation and existing weirs (between the pond outlet weir and the downstream culvert). Introducing sinuosity to the watercourse using cut and fill/grading/reprofiling with the addition of gravels where needed;
- De-silting of the pond to add depth, create more open water habitat, improve water quality and conditions for emergent and submerged pond plants;

- Creating marginal planting areas around the perimeter of the pond – sections of “fence” will be created in the water body using a porous membrane called Nicospan. Silt removed from the pond bottom will be deposited behind this fence to create new banks. The silt is nutrient rich and makes an ideal planting medium in which marginal aquatic plants can thrive;
- Reedbed (*Phragmites australis*) creation zones within the pond to provide new and more varied aquatic habitat, to improve oxygenation and water filtration, enhancing biodiversity;
- Necessary coppicing of trees and pruning overhanging branches to allow access for the works and also increase sunlight levels to encourage wetland plants to establish; and
- Interpretation panels to educate members of the public about how to maintain good pond health / highlight biodiversity enhancements.

The collaborative project, funded by the Environment Agency and ERDF, and delivered by Solihull Council, helps to deliver biodiversity benefits for local users, visitors and wildlife.

If you would like to find out more, please contact us at  [landscape@solihull.gov.uk](mailto:landscape@solihull.gov.uk) .

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