

SKANSKA AND FROGLIFE

BIG Biodiversity Challenge Award category: Medium Scale Permanent

Project overview

A degraded pond area in South Norwood Country Park, Croydon, was restored to create a thriving wildlife habitat. The resulting facilities will be used to educate children from urban London schools about biodiversity. The 80m x 70m area, was restored through a collaboration between Froglife – a national amphibian and reptile conservation charity – and construction firm Skanska. A hibernaculum was also created, which will be a valuable resource for hibernating wildlife. To complete the work 23 volunteers collectively donated 115 hours of labour. The project cost an estimated £3,000

What were the biodiversity conditions on site, prior to the enhancement?

The ponds had completely dried out and were in early succession with grass, sedges and ruderal plants, such as stinging nettles and dock dominating the area. The site's value for wildlife was now minimal, having previously been a successful wildlife pond attracting a good range of dragonflies and damselflies as well as common frog, common toad and smooth newt.



The completed pond and hibernaculum (at rear of pond).

Were there any specific conditions that led to you carrying out this work?

As a thriving wetland habitat for wildlife, the ponds were a valuable education resource and provided an outdoor learning area for local school children. This site was next to the education centre and was also fully equipped with a pond-dipping platform and interpretation board. They also provided a first-hand wildlife experience for the local community and visitors from further away from the park. There were no other specific conditions that led to restoring the area.

What were the biodiversity measures taken?

The pond had become unusable due to water retention problems. Over the course of a week, the team excavated the soil, installed new pond liners on top of the old liners which they topped with clay. This clay will protect the liner and provide a good foundation to the bottom of the pond.

Once filled with water, aquatic plants were sourced from within the park and also bought in, including marsh marigold, yellow flag iris, lesser spearwort and a variety of oxygenating plants. Some of these species were historically on site, but have locally become extinct. Should these plants establish and spread, this will increase local biodiversity. The availability of permanent standing water on site is likely to result in a net increase of biodiversity, by boosting populations of invertebrates such as dragonflies, as well as increasing survival of frog tadpoles and newt efts to metamorphosis. It will also be a resource for local birds and mammals.

Surplus rubble from the pond excavation and previous works, as well as brash cuttings from habitat management activities, were reused to build a large hibernaculum. This will provide a vital hibernation area for animals and valuable microhabitats for invertebrates, as well as creating basking and foraging habitats for reptiles. South Norwood Country Park is a Site of Importance for Nature Conservation, which was listed as being of Grade I Borough Importance in a review carried out in 2014. By increasing and enhancing habitat types, particularly ones which are in decline nationwide, such as standing water, this initiative will help to maintain the status of this site in Croydon's Biodiversity Action Plan and help a number of (what were previously listed as BAP) target species.



Planting up the newly restored ponds:

What were the biodiversity measures taken?

As a result of this work, children can once again benefit from outdoor learning experiences, while aquatic wildlife will flourish again.

Froglife provided training sessions for local volunteers and the park rangers, enabling them to not only manage the ponds but also be able to survey and monitor the amphibian and reptile populations. Long term management of the pond will continue to be carried out by Quadron, who manage the site and advice will be on hand from Froglife if and when needed.

How would you best describe the project?

An enhancement of habitats for wildlife.

Further information

The team excavated the soil from the original pond area and placed a new bentomat liner on top of the old liner. This was then capped with clay to better protect the new liner from any potential damage. Following this, the pond was filled with water.

In the spring, with volunteers from Skanska's Lend a Hand Scheme, Froglife and the on site management a planting day was organised, where the pond was planted with a variety of native aquatic and marginal plants. During this session a hibernaculum (a habitat made of brash and stones for hibernating animals) was also built by the volunteers.

There will be long-term benefits for wildlife due to the enhanced habitats in the local area, in particular standing water. This is likely to result in a larger and more stable population of amphibians and aquatic invertebrates as many of the other wet areas in the park dry out over the summer. Tadpoles, dragonflies, damselflies and water beetles have already colonised the ponds and the area is also being used by some mallards.

The objectives of the project have been met. Ideally if we were to run a similar project again, we would do it earlier in the winter, so the pond could fill up with rainwater rather than tap water.

A good tip for similar schemes is if you have a poor quality of substrate (in this case the soil beneath the pond area contained a lot of glass), cap it with purer soil from another area.



June 2016 restored ponds are looking great

What was your personal motivation for carrying out the enhancement?

Froglife initiated the work as part of its Heritage Lottery funded London Dragon Finder project.

Several of Skanska's volunteers live in the area and use the park with their families, therefore they greatly value its ongoing improvement.