

Olympic Park Wetlands



Salix were involved in making the Olympic Park a reality.

We were awarded the prestigious Tier 2 Contract in 2009 to grow all the wetland and wet wildflower plants for the parklands.

This represents the UK's largest ever wetland plant procurement order for the largest bioengineering project ever undertaken in the UK.

Key Facts

- Largest bioengineering project in the UK ever
- 400,000 wetland and wildlife plants grown
- 23,000-metres of coir rolls and pallets
- Over 2 million tonnes of contaminated soils were cleaned on site and reused.
- 264 hectares of brownfield land
- 8km of restored riverbanks
- 560 acres of parkland
- Largest new UK parkland in living memory
- Rare wet woodland, and amphibian pond installations completed
- 30 species of water plants

Background

The area that became home to the Olympic Park and the largest new urban park for 100 years, was bisected by a series of interconnected industrial waterways and forgotten rivers known as the Bow Back Rivers – all backwaters of the River Lea.



Olympic venue construction work included the need to remove large areas of alien invasive plants, like Japanese Knotweed and Himalayan Balsam, and decontaminate over 2million tonnes of soil.



River Banks Before

The river was cut off from human interaction with no access and steep banks.

It was acting as a physical barrier between communities.

It was ecologically degraded and often hard edged, with mismatch of concrete and other industrial detritus and debris.

Key Objective

Restoring the network of watercourses and the River Lea was a key objective of the new parklands.

The restored channels and a series of new reedbeds, wetlands, ponds, wildflower meadows and wet woodland habitats would become the key landscape features around which the stadiums would be located.

On Site Planting Trials

As part of the work to prepare the Olympic Park for the 2012 Olympic & Paralympic Games and its legacy, Salix was commissioned to plant 400,000 wetland plants.



Design Advisers

As one of the most experienced bioengineering (soft engineering) and wetland plant establishment experts in the UK, Salix's Technical Director.

David Holland provided general design advice on the wetland creation including bioengineering techniques and plant species selection during and after the trials and throughout the construction process to ensure optimum successful plant establishment.

30 different planting combinations were trialled.

The trials showed that only pre-established vegetation grown off site for a minimum of one year survived.

It was the only way to establish successful growth, as standard plug planting failed due to a number of factors including fluctuating water levels and high sediment loads.



Phragmites rhizome establishment underneath mature pre-established coir

The UK's Largest Ever Wetland Plant Growing Project

Thirty species of water plants, including reeds, rushes, irises, grasses, sedges and wild flowers, were grown at our nursery in Thetford Forest.

Salix planted 400,000 wetland plants into 11,000 mattresses and rolls made from coir fibres.



From contract award to planting on site Salix had 10 months to propagate and grow all of the plants.

Many of the plants grown from seed were collected from the park area before construction.

During the propagation and pot growing phase, we built a new 15 acre acre nursery to house the 23,000 metres of coir rolls and pallets that were pre-established off site.



Close-up of coir plant beds

Planting Phase

In all over 23,000 metres of pre-established coir pallets and rolls were installed to ensure that the parklands were a vibrant and viable ecological environment both at the opening ceremony and into the future legacy phase.

It took 120 articulated lorries to deliver the plants from Salix's nurseries.



Olympic wetland bowl during works



Coir pallets installed on site

Impact and Legacy

Wildlife is benefiting from the new wetlands established. Habitat has been created for invertebrates, amphibians, fish, birds and eventually, waterway mammals like otters and water voles.



Aerial view of wetlands

Studies are underway to assess the success of this major habitat enhancement project, including an invertebrate report and eel survey.



Pre-established Coir Pallets creating an immediate effect