From Industrial Wasteland to Urban Idyll: London’s Olympic Park Landscape

Camilla Ween (LF 2008) and John Hopkins, former Project Director responsible for the external areas at the Olympic Development Authority, reflect on the challenges and achievements of restoring the natural environment in the Lower Lea Valley Olympic Park.

When we visited the Olympic Park a few weeks ago we were struck by the fact that this is a landscape rather than a park planting scheme. It is big – there are long vistas and open stretches of water and meadows. The wind ripples the water and rustles the reed beds. It looks like it must have been there forever, long before East London started its urbanization.

When London put together its bid for the Olympics, then-Mayor Ken Livingstone insisted that the Lower Lea Valley was the right place, even though this area presented a monumental challenge in terms of transformation. It had some of the worst indices of deprivation - not just for London but Britain as a whole - and therefore was an obvious target for regeneration. It was utterly polluted from a couple of centuries of industrial activity, and it was traversed by gigantic electricity pylons. It was grim. The River Lea and the associated watercourses were dead.
Now, in the northern half of the Park, the Central River Lea (there are several waterways) has been opened and is hence more ecologically diverse. It has been transformed into a wondrous wetland landscape that is beautiful, but also a fully “working landscape.” As part of an integrated water and flood management scheme, the northern parklands collect, absorb, cleanse and slowly release water into the river via porous paving, bio-swales, ponds and wet woodlands. This is a huge Sustainable Urban Drainage System (SUDS). Combined with the widening of the Waterworks River in the south of the Park, this landscape protects around 5,000 properties within the environs of the Park from flooding.

350 thousand wetland plants line the rivers and wetlands – many grown from seeds and cuttings collected on site before work commenced. Thousands of newts, toads and other species and habitats were also translocated. There are over 700 individual wildlife installations, ranging from loggeries, wormeries, bat and bird boxes, banks constructed for nesting kingfisher and sandmartins, to otter holts and “hotels” for swifts. Fish channels have been cut into the wetlands for spawning and as refuges during floods. Uniquely, perennial meadows have been sown throughout the north Park, which provide spectacular flower displays and are excellent for wildlife. Nearly 50 species of birds including kingfishers, cormorants, black redstarts and the rare cuckoo have been spotted in the Park.

The southern half of the Park is much more constrained by the 3 waterways, which have all been restored and dredged. The main concourse, where most visitors to the Games will arrive, is also the location of the cultural landscape jewel of the Park, the London 2012 Gardens. Stretching for half a mile along the bank of the Waterworks River, opposite Zaha Hadid’s Aquatic Centre, the Olympic ideal of bringing nations together is celebrated with four gardens representing Europe, North America, Asia and the Southern Hemisphere. They are also a time-line celebrating the British passion for collecting plants from around the world and using them in their gardens. They are designed to attract wildlife and the interactive “Garden Decoder” explains how urban gardens in London have been crucial to preserving and supporting wildlife.

How did this transformation happen? Mayor Livingstone insisted that if money was to be spent on the Olympics there had to be a lasting legacy for the people of East London. The premise was that the site would be transformed beyond recognition for the benefit of local people and would deliver much needed housing and employment after the games.

There was a long history of plans and policies to lift East London out of poverty and decline. The national government’s regional spatial strategy for the Thames Gateway, a 40 mile corridor along the Thames, had the Lower Lee Valley identified as a park, and the 2004 London Plan highlighted the area for regeneration. The bid to the IOC was won in 2005 and by 2006 the Greater London Authority had created the East London Sub-Regional Plan, which gave further priority to the opportunities created by the Olympics. By 2007 a robust Lower Lea Valley
Planning Framework had been prepared. Many subsequent plans and policies such as the East London Green Grid and the Blue Ribbon Network expanded on the principles of sustainability.

Shortly after winning the games, the UK government set up The Olympic Delivery Authority (ODA), which was charged with delivering Europe’s largest regeneration project on time (a year ahead of the Games to allow for test events). It had to be within budget and with very tough sustainability targets (all but one of these was achieved). The bid for the Games was predicated on the 10 crosscutting One Planet Living themes for sustainable development, and Mayor Livingstone’s vision was the creation of a new park that would be an exemplar of sustainable development. The master planning of the site was led by Jason Prior of EDAW (now AECOM) who, as a landscape architect, understood that ecology and biodiversity were critical to creating a sustainable landscape and public realm.

The restoration of Lea river valley, canals and flood channels and “washing” the contaminated soil was the starting point and a key principle was that existing neighborhoods and new development on either side of the river should all be properly reconnected to and across the valley. The landscape design was delivered by LDA Design with Hargreaves Associates. John Hopkins, as Project Director, worked with a huge number of statutory authorities, stakeholders and local communities to ensure that once the Games are over a new cohesive piece of city will have been created.

The bridges and the Concourse, which will carry 250,000 spectators during the Games, afterward will be reduced dramatically in size to a more local scale as part of the Olympic Legacy. The Concourse will be reshaped to designs by James Corner Field Operations into a truly public gathering place for Londoners and visitors - Legacy’s answer to the central London South Bank area, reviving the concept of the promenade.

The whole Park is an astounding gift for the local communities. Here are some ‘killer’ statistics for the landscape strategy:

- The Olympic Park site is the size of Hyde Park and Kensington Gardens combined (250 hectares or about 620 acres)
- 1.5 million cubic meters of soil have been treated
- 90% of materials from demolition were reused or recycled
- The area of parkland will double to 102 hectares (252 acres) as part of the Legacy, half of which is designated habitat for wildlife
- All projects achieved CEEQUAL (Sustainability Assessment and Awards for Civil Engineering, Infrastructure, Landscape and Public Realm) scores in excess of 90%
The Olympic Delivery Authority has published extensive material covering every aspect of its delivery of the Olympic Park. This can be found on the Learning Legacy Website.

**John Hopkins** is currently visiting professor of landscape architecture at the Universities of Pennsylvania and Greenwich. He has just completed *The Making of the Queen Elizabeth Olympic Park* with Peter Neal to be published by Wiley later this year. It tells the story of how the Park was conceived, planned, designed and delivered on time, within the budget of $9.3 billion, and the lessons learned. He is currently working on his next book, which will set out a new paradigm for ecological economics, planning and design based on One Planet Living and ecological footprinting.

**Camilla Ween** is an architect, urban planner and director of Goldstein Ween Architects. She is an author of books on urbanism and a regular lecturer at Harvard and other international institutions. She worked for Transport for London for 11 years, advising the Mayor of London on the implications for transport of land use policy and development, and developing planning policy for many of London’s key growth areas. Ween is Chair of the Trustees of the Spacelink Learning Foundation and Vice President of the London Chapter of the Women’s Transport Seminar. She was awarded the Harvard Loeb Fellowship in 2007-08 and is a regular contributor to the LOEBlog.