

NIGEL DUNNETT

UNIVERSITY OF SHEFFIELD II UK PROFESSOR OF PLANTING DESIGN & VEGETATION TECHNOLOGY II



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Planting Design as an art form: ecologically-tuned, aesthetically aware.
Planting Design as an essential: creating healthy cities and liveable places

Nigel Dunnett is a professor of Planting Design and Vegetation Technology and director of The Green Roof Centre, University of Sheffield. His work revolves around innovative approaches to planting design and the integration of ecology and horticulture to achieve low-input, dynamic, diverse, ecologically-tuned designed landscapes, at small and large scale. Major areas of focus include green roofs, rain gardens, pictorial meadows, and naturalistic planting design.

Recent Works:

Lead horticultural and planting design consultant for the London 2012 Olympic Park, with Professor James Hitchmough (consultants to the scheme landscape architects: LDA/Harqueaves Associates)

The Royal Bank of Canada Rain Garden at The London Wetland Centre Main Show Gardens for The Chelsea Flower Show, 2009 and 2011

http://www.nigeldunnett.info/Raingardens/



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RAIN GARDEN LONDON OLYMPIC PARK, 2012

The Sustainable drainage and rainwater management system in the Olympic Park represents the most comprehensive application of these ideas in a UK park to date.

The use of the landscape to manage excess rain water runoff following severe storms is integral to the design of the North Park in the London Olympic Park. Contrary to standard practice whereby all runoff is fed into drains and then into buried pipes, and transported away from site as quickly as possible, the aim of the drainage system in the North Park is to retain as much water on site as possible, and to allow to return slowly to the river network. In so-doing, the aim is to reduce the risk of flash flooding on site, or downstream, as a result of large quantities of rain water runoff overloading the conventional drainage system, by both slowing down the rate of flow of water off site, but also by reducing the total amount that leaves the site in the first place.

An important concept in this approach is to make the water cycle visible, through design features that show how water moves through the park. The most obvious features that achieve this are the 'bioswales' – linear elements that capture and transport water through the site in exactly the same way that a buried pipe might, but instead the water runs along the ground surface. In so-doing, a proportion of the water will evaporate back into the atmosphere, or infiltrate into the soil, thereby reducing the total amount of water running off the site.

