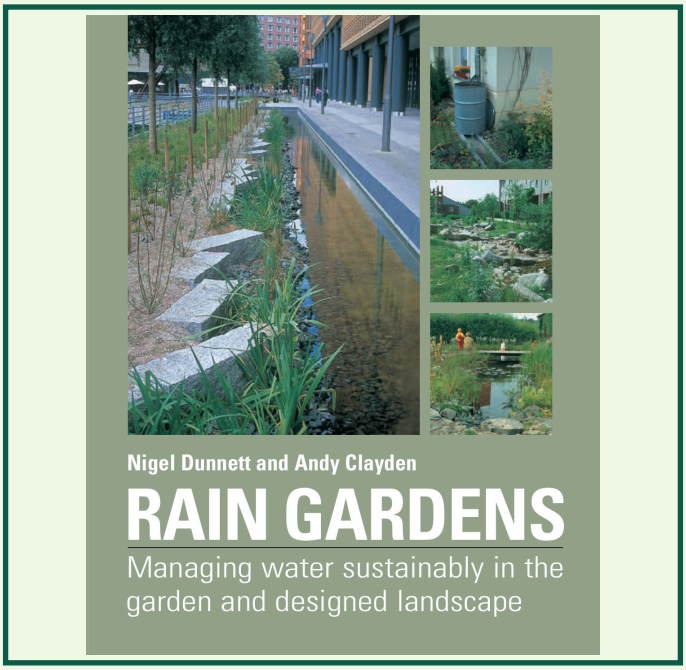
Sustainably in the Garden and Designed Landscape (Nigel Dunnett, Andy Clayden)



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Nigel Dunnett and Andy Clayden

RAIN GARDENS

Managing water sustainably in the garden and designed landscape

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Timber Press

The Aztec Business Park, Bristol, UK, makes use of ponds and naturalistic planting as part of its landscape. Not only does this make for an interesting and stimulating work environment, but swans have come in to nest alongside the office buildings.

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We also wish to acknowledge the generosity of others in supporting the book, in particular for donating pictures and advice. We are particularly thankful to Erin Middleton for her efforts in supplying details and pictures of the rain gardens created in Portland by Urban Water Works; John Little, of the Grass Roof Company, London; and Vaughn Wascovich and Vicky Ranney of Prairie Crossing for permission to use pictures of their environmentally-sensitive residential scheme.

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PREFACE

Our demand for water is growing dramatically at a time when in many areas of the world its supply can no longer be guaranteed. Even in the comparatively short time of writing *Rain Gardens* there has been an escalation in media coverage on issues relating to global warming and the increased probability of serious summer drought. Hosepipe bans are now common in the UK and in London there is a real prospect that drinking water will be supplied from street standpipes in exceptionally dry summers. Rain gardens represent a radical change in our thinking about how we manage rainfall. By capturing and using rainwater we not only significantly reduce our demand for treated water, we also have an opportunity to rethink how we design and manage public and private open spaces in order to improve their environmental and aesthetic quality.

Rain Gardens explores the many different ways in which rainfall can be captured from buildings and sealed surfaces and then stored and released within the landscape. Technical details explain how different design elements are constructed, while case studies from the United States and northern Europe show exactly how the concept has been applied to a range of settings, including residential developments, schools, public parks, city squares and private gardens. A key feature of each of these schemes is the enhanced role of planting and planting design. Rain gardens enable designers and those who enjoy working with plants to argue for their enhanced role in the design of our public and private spaces not just for their aesthetic qualities but also—and most importantly—for their environmental and economic contribution.



The gardens of the Generallife, Granada, Spain, include the classic elements of the Paradise Garden—water, shade, colour and scent.

INTRODUCTION

Without water we wouldn't have gardens. Water was a precious resource to the ancient cultures of the Middle East, where the concept of gardens designed purely for pleasure first originated. The original Paradise Gardens were stylized versions of the irrigation channels that brought life to parched desert lands, and the biblical Garden of Eden represents a lush green (water-fed) vision of perfection to peoples more used to arid surroundings. We are magnetically attracted to water—throughout history, pools, ponds, lakes, streams and fountains have been indispensable ornamental elements in gardens, and more recently the presence of water has been seen as essential to gardens that aim to attract wildlife as well as to provide pleasure for people. We have now come full circle, with water once again viewed as a finite and unpredictable resource, taking centre stage in the way we plan and manage our gardens and landscapes, not just because of its aesthetic and environmental value, but because its presence or absence ultimately dictates what is possible.

Our view of water is changing: it is no longer in unlimited, cheap supply, or under our control; it is instead a potentially destructive force, and certainly one that we can no longer subjugate or take for granted. With this new view has come a new way of working with water—a way that is about discovering how water might behave naturally in our surroundings, and working as hard as possible to allow and enable it to do so. This way of working is an environmentally-friendly and positive approach to tackling the seemingly increasingly frequent water-related problems that we hear about and experience, both at home and in distant countries.

These are big issues, and it may seem strange to be discussing them