

BOTANIC GARDEN
CREATION AND MANAGEMENT:
THE FEASIBILITY AND DESIGN OF
NEW BRITISH COLLECTIONS
[On-line Edition]

PhD Thesis
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Abstract

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Introduction

This project originated with a partnership between the University of Reading in Berkshire, and Carymoor Environment Trust (Carymoor or CET) in Somerset. Carymoor is a charitable organisation responsible for the management of 10ha of capped landfill. They use the land for education and research by encouraging universities and other groups to run long-term trials on some of the land as well as running their own courses on biodiversity and waste management for school groups. To supplement their existing facilities Carymoor wanted to create a botanical collection and approached the University of Reading for a student to investigate the feasibility and develop a design for a botanical collection specialising in native flora for their site to be called the Somerset Plant Collection.

For the purposes of this thesis the objective of the study was expanded to review more generally the feasibility, and design, of a new native-species botanical collection in Britain. Thus the following chapters examine various aspects concerned with this. Whilst this study discusses setting up a botanic garden, it focuses primarily on the living collection. Discussion of associated herbaria or other research facilities is kept to a minimum.

Before launching a new product into the market place it is wise to investigate who provides similar products and how well they are doing. In the last five years two new botanical gardens have been created in Britain, namely the Eden Project in Cornwall and the National Botanic Garden of Wales in Carmarthenshire. Of these, one appears to be faring well, presently entering a second stage of development, whilst the other, at the time of writing, is threatened with closure. What has caused these two different fates for what appear to be the same products in the same market?

With this question in mind, the first three chapters will concentrate on establishing what botanic gardens exist in Britain and whether they really are “the same product”, how they originated and what the present threats to them are. In order to help with the subsequent design of a garden each component that can make up a botanic garden is identified and examined, as is its impact on the management and roles of a garden (chapters 4 & 5). Chapter 6 is an in-depth case study of what appears to be the most successful of the recently created botanical collections, the Eden Project in Cornwall. It examines how the various components described in chapters 4 & 5 have been brought together. Assessment of the potential market for a product will affect the design of the product as well as its success. Market research for a botanical collection at Carymoor was conducted and the results are described and discussed in chapter 7. The development of a design for the Somerset Plant Collection (SPC) is documented and discussed in chapter 8. By bringing together a series of models, Chapter 9 addresses how the original aim to create a collection of British plants in Britain could best be achieved if the constraints associated with the SPC at Carymoor did not have to be considered. Chapter 10 concludes this thesis by summarising its findings.

Researching this project has illustrated a noticeable absence of papers emanating from British botanic collections for other British botanic gardens. PlantNet, the network organisation established for British botanical collections, does produce a magazine but this usually contains short items of news rather than more in-depth articles. The Royal Botanic Gardens, Edinburgh, have made some progress in redressing this situation by publishing a new journal called ‘*Sibbaldia*’, which aims to disseminate the horticultural knowledge held by individuals throughout the botanic garden community. Conversely, botanic gardens in the United States of America are very good at this inter-garden communication. The American Association of Botanic Gardens and Arboreta (AABGA) publishes the journal ‘*Public Garden*’, which includes numerous articles on aspects of botanic garden design and management. Even though these articles focus primarily on American gardens many of the basic principles are applicable to a botanic garden in Britain.

Botanic Gardens Conservation International (BGCI) is the global network organisation for botanic gardens. It produces two journals; '*BGCI News*' (recently renamed *BGJournal*), which contains general articles about botanic gardens, whilst the other publication, '*Roots*', concentrates specifically on issues to do with education in botanic gardens. In addition to these, BGCI has published the only book that deals solely with designing and managing botanic gardens, '*The Darwin Technical Manual for Botanic Gardens*' (Leadlay & Greene 1998). This manual, produced under the Darwin Initiative, is primarily focused at botanic gardens that are being created in developing countries and as a generalist publication it does not go into great detail when discussing issues such as finance.

The other major source of information on contemporary botanic gardens is David Rae's '*Botanic Gardens and their Live Plant Collections Present and Future Roles*' (1996), which aims to offer a "synoptic review of the world's botanic gardens; examine their present roles and projects their future". It contains many useful data on botanic gardens in the worldwide context.

Following on from Rae, this thesis aims to provide an updated review focussing specifically on British botanical collections, including a review of their financing, but before doing this it is necessary to consider what is meant by a 'botanic garden'.