

Landscape assessment and development plans

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Abstract

Botanic gardens are generally very focussed on developing the quality and content of their living collections to ensure that they can contribute as effectively as possible to research, education and conservation. The development of a collection in this respect is normally governed by a Collection Policy that describes the driving principles behind the collection, presents targets for the future and lists of plants to concentrate on. While this concentration on plant content is right given the purpose of most botanic gardens, it is important also not to lose sight of the overall quality and cohesion of the landscape. The Royal Botanic Garden Edinburgh (RBGE) is now producing Landscape Assessment and Development Plans for each of its four gardens to sit alongside their Collection Policy (Rae et al, 2006). The Plan for Benmore Botanic Garden is complete (Daniel and McDermott, 2006) and Plans for Dawyck and Logan Botanic gardens are currently in production. The content starts by describing the history and development of the landscape, then assesses the strengths and weaknesses of each garden area, articulation and path/road networks, views in and out of the garden, focal points, and ends by making recommendations for future development.

Introduction

Most horticultural staff in botanic gardens are understandably concerned mostly with the quality of the living plant collection. They want to ensure that the content of the collection reflects the guidance given in their Collection Policy and that they are growing the plants that are required by various user groups such as science, conservation and education. They need to ensure that species representation is correct, that there are no gaps, that they have accessions from as many localities as possible and that propagation, cultivation, labelling and plant records are all under control. Evidence that the 'right' plants are being grown and that the Collection policy is being adhered to comes in the form of a plant catalogue. RBGE, for instance, produces a catalogue of this type approximately every five years (Rae, 2006).

While the content and quality of the living collection is indeed the main focus for curators and the horticultural staff it is important also to take care of the quality of the landscape. While this could focus on the quality of the turf, hedges and general weediness of the garden which of course are important, what is being referred to here is the quality of the design, layout, articulation within the landscape, views in and out, access, the network of paths, location of information points and much more.

When the Director of Horticulture at the Royal Botanic Garden Edinburgh (RBGE) was appointed in 2000 he thought it would be a good idea to review the quality of the landscape, even if the conclusion was that everything was alright. He reviewed the literature and spoke to various landscape architects to see if there was an 'off-the-shelf' system or process that could be adapted to review a botanic garden landscape for the issues listed above. He was surprised to find that there was little or nothing written up in the botanic garden literature and that, while there were various ideas about how to review designed landscapes in general, there was no readily known process for helping to review the landscape in the way that was envisaged or that would be helpful in the Edinburgh context. The only possible exception to this was the publication *An inventory of gardens and*

designed landscapes in Scotland (Land use consultants, 1987). After the history, a description of the site and noteworthy comments about design, each property is categorised against criteria such as work of art, architectural value or horticultural interest. Table 1, below shows the summaries for Edinburgh's four gardens. However, while interesting and relevant, the scope of review was not sufficiently in-depth and the purpose was to catalogue existing designed landscapes with a view to protection rather than looking towards improvement and development as envisaged here.

	Benmore	Dawyck	Edinburgh	Logan
Work of Art	Outstanding	Outstanding	Outstanding	Outstanding
Historical interest	Some	Outstanding	Outstanding	High
Horticultural interest	Outstanding	Outstanding	Outstanding	Outstanding
Architectural value	High	High	Outstanding	High
Scenic value	Outstanding	Outstanding	Some	Little
Nature conservation	Some	High	Little	Little

Table 1. The Royal Botanic Garden Edinburgh's four gardens ranked by design criteria in An inventory of gardens and designed landscapes in Scotland (Land use consultants, 1987)

Following some initial discussions with colleagues from the family of gardens that come within the title of the National Botanic Gardens of Scotland (RBGE and Benmore, Dawyck and Logan Botanic Gardens) it emerged that there were a few ideas about how one might start the process and it seemed that the work could be done internally. However, following careful reflection it was decided that it would be better to have the work done by people from outside the garden (but with good cooperation from garden staff) as they would be seeing each garden with a 'fresh pair of eyes'. It is very much the case that garden staff become used to flaws or inadequacies in the landscape after a while and genuinely don't see aspects of the landscape that require improvement.

It had always been agreed that all four gardens would be assessed but since there was no agreed methodology the decision was made to run a trial at Benmore Botanic Garden (see Figure 1) to see how such a process might work and also to assess the value of the exercise. After discussing the idea with various landscape architects Peter Daniel and Siobhan McDermott were contracted to undertake the work. Choice of landscape architect was vital and they proved to be ideal for the job. It was important that they wanted to collaborate with the Curator and that they were prepared to take their time and work over a period of a year or more rather than rush things through. Finally, it was important to ensure that they were meticulous and had a somewhat academic and considered approach to their work rather than being ultra modern theorists who were more interested in, say, urban planning than garden or park planning.



Figure 1. Plan of Benmore Botanic Garden showing path network and main landscape features.

Initial work

Before even going to Benmore meetings were held to discuss possible approaches and desired outcomes. It was agreed, for instance that the title should be *Landscape Assessment and Development Plan* and so the work should analyse and assess the landscape and then make suggestions for development and improvement. However, it was agreed that detailed plans for improvements should not be made at this stage- those could come as part of a separate contract if necessary. At present all that was required as far as any improvements or changes were concerned were some simple sketches of how those improvements might be made for problem areas. Then, once they had fully understood what was wanted they travelled to Benmore to meet Peter Baxter, the Curator, and walk over the garden. They spent a considerable amount of time at the garden discussing the history of the site, its climate, soils and staff views about what might be achieved from the project. They inspected paths, views, individual areas, access, orientation- indeed all aspects of the design and layout. Over an 18 month period they visited several times, met with the Curator frequently, discussed progress during interim meetings with the Director of Horticulture at Edinburgh and amassed photographs, plans, maps and archival material.

Structure of the report

The report was published in May 2006 and is presented as a well illustrated landscape format booklet of 54 pages containing 13 sections.

Geography, topography, climate and soils

This is very much an introductory section that deals with background information and the ways in which they have a bearing on the collection and landscape. The hilly terrain, thin acid soils and rainfall of 2000-3000mm per year, coupled with the warming influence of the Gulf Stream all combine to have a very direct and obvious impact on the site.

History and the garden today

The report includes much more of the history of the site and includes more early maps of the garden than had been expected. Indeed, during the process of visiting the garden and gathering information it began to seem at times that the landscape architects were spending too much time on historical matters to the detriment of future developments. However, as the process progressed and now having seen the full publication it has been a valuable lesson to appreciate that this was a fundamentally important piece of work. Not only does it make interesting reading but it also explains why the garden looks the way it does and how options for the future are constrained by the actions of the past.

Development plan and landscape zones

In order to describe the plan of assessment and development the landscape architects divided the garden into ten zones or areas (see Figure 2) which were based partly on physical attributes and partly on their own subjective interpretation of the different landscape characters within the Garden. For each zone they have commented on both good and poor characteristics and, for the latter, have described what the problems are how they could be improved (an example is shown in Figure 3). Simple plans and sketches have often been included to show how the design could be improved. Two examples of text from this section are shown below.

“The Redwood Avenue and the Ground skirting it.

There has always been a significant conflict between visitors crossing the road to enter the Garden and vehicles using the estate road. The present clutter of warning signs is crude. A traffic calming system would be more acceptable and also more visually pleasing. At present the vista up the Redwood Avenue is belittled by a deer fence. You are not really aware of its majesty from the other side of the River, at least until one gets to the centre of the bridge. We propose that a simple contemporary railing be designed here, which would allow visitors having crossed the road to stand within the Avenue at this new viewpoint. The repositioned entrance would become part of the Avenue railing design, which would also allow a realignment of the paths so that the visitor may be directed to the different routes within the Garden....”

“The Rhododendron Avenue to the Golden Gates

Apart from the enormous size of its mature trees, this area tends to be overshadowed in the afternoon and is therefore quite dark. It holds an exceptional collection of rhododendrons so there is much to see for those who love the genus but also for the visitor making his way to see the ornate ‘Golden Gates’, now in isolation without the South Lodge. It is unfortunate that the first view of the gates is from end on. They look less than impressive. We suggest that this view is screened off and that the visitor is forced to first see the gates as they were intended- as James Duncan’s grand entrance to his estate. We suggest a shelter be made here and a more formal setting be made for the gates...”

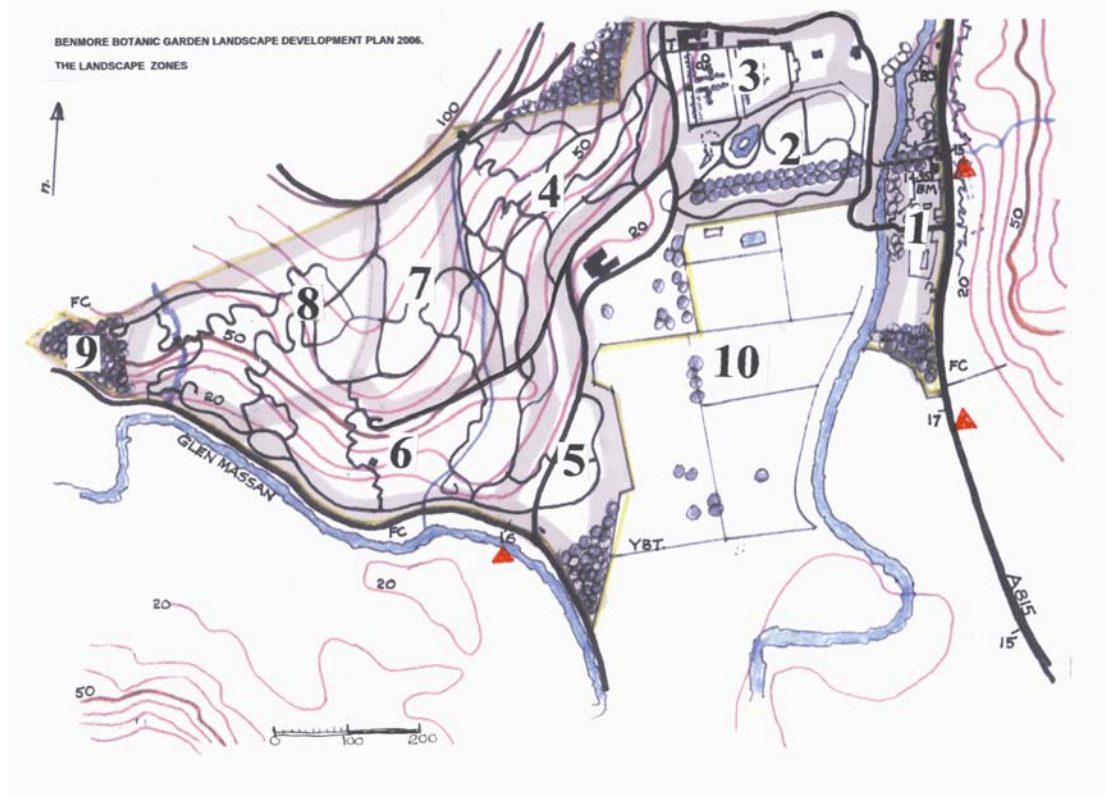


Figure 2. Plan showing Benmore Botanic Garden subdivided into landscape areas prior to an analysis of the design within each area.

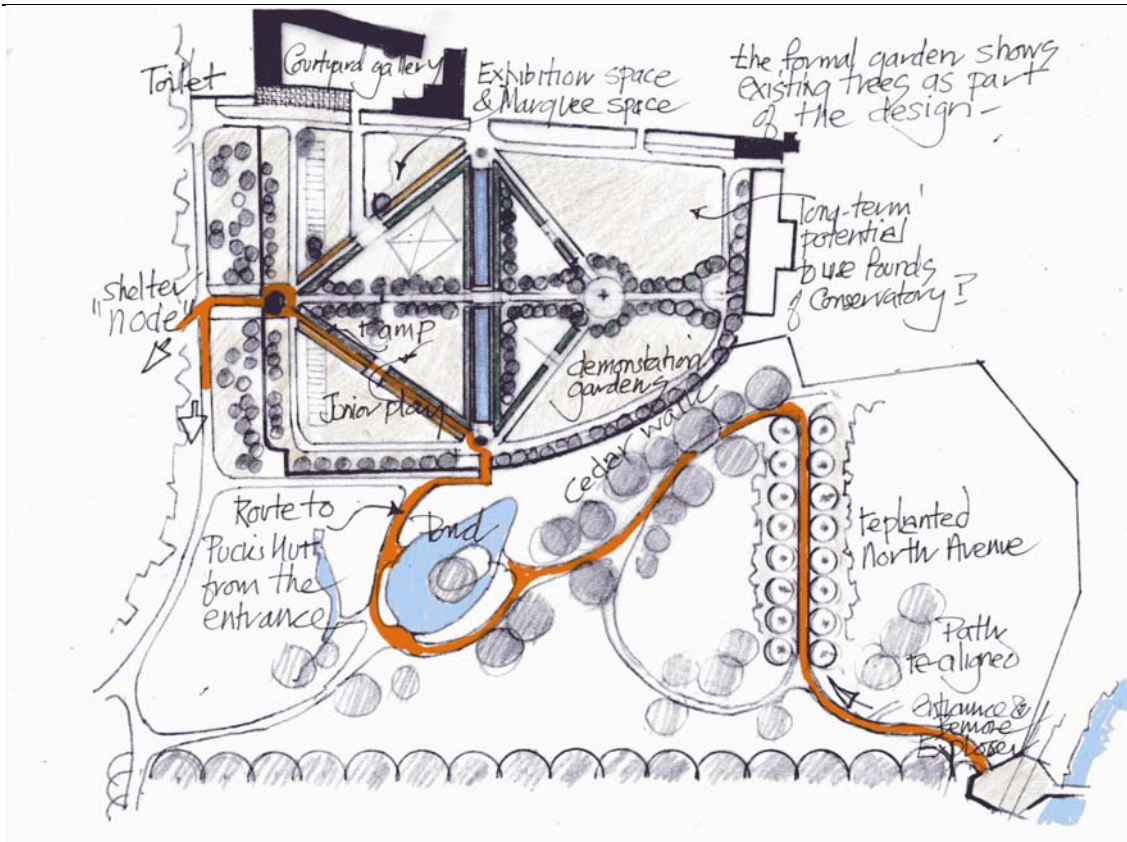


Figure 3. Sketch showing suggested improvements for access to and around the formal garden, including the replanting of the North Avenue

Proposals for improved access, orientation points, shelters, viewpoints and vistas

This section of the Plan reviews the framework of facilities and infrastructure of the site. Again, each of the topics listed above are scrutinised carefully and suggestions for improvements are made. A plan showing suggested orientation points, shelters, viewpoints and vistas was included in the report (see Figure 4) for reference and will be useful in the management of the site in the future. Parts of the section on access and shelters are shown below to illustrate the types of comment being made.

“Access

The visitor enters the garden by a single route, across the river. Once across the river we propose a more dignified entrance, with the conflict between the traffic on the estate road and the pedestrian visitor solved by narrowing the road into a single lane at the entrance, giving the pedestrian priority, and where it would be possible to have an electronic warning light system to warn of any approaching traffic. There is confusion as to where to go on entering the garden with a network of paths, none of them demonstrating a hierarchy, leading in various directions. The path system should be simplified to allow a choice between going to the Redwood Avenue and to the Pond and formal garden areas. We propose the replanting of the ‘North Avenue’ so that it would in time become a more significant feature and the centrepiece of a rejuvenated Eachaig Arboretum, creating a more grand approach to the wonderful Cedar Walk and Formal Garden and leading the visitor to the very popular and attractive planting around the pond.”

“Shelters

In suggesting shelters we believe their function is quite simple- somewhere to rest and shelter from the elements- they need not be elaborate commemorative structures, nor must they look like bus shelters. We have in mind timber structures, perhaps with green roofs to help them merge into their woodland setting, at the orientation points. They should be able to shelter more than one or two people- small parties of visitors to the Garden”

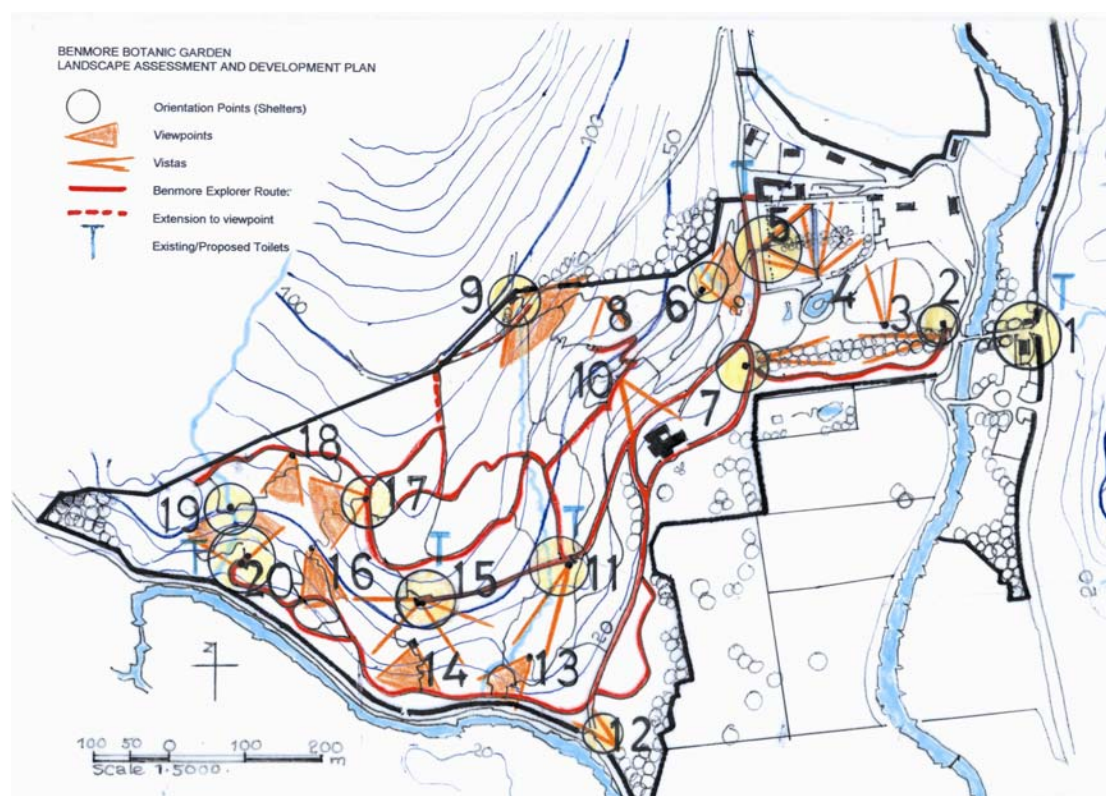


Figure 4. Plan summarising orientation points, viewpoints and vistas

Final sections

The plan ends with short sections on the types of interpretation found in the garden, a very brief overview of the collection, bibliography, list of maps used and notes on visitor numbers and garden equipment. These sections are not included with the intention of making any particular comments about changes or improvements. Rather, they have been included as background material to enable current and future readers to better understand the nature of the garden and its resources.

Conclusion

The process of commissioning the Plan, of speaking with the landscape architects and discussing landscape issues with the Curator at Benmore Botanic Garden has been interesting and worthwhile. Choice of landscape architect proved to be very successful and the nature of their investigations and assessments was very much a two-way discussion. They also brought a level of professionalism and experience to the project that we could not have found in-house and the importance of them seeing things with ‘a fresh eye’ proved to be important. Finally, they completed the task on time and on budget and their work continued right through to include designing and publishing the Plan in conjunction with staff from RBGE’s Publications Department. We now have a list of suggestions for improving the landscape some of which are small and can be implemented soon and without much cost and others which are larger and will require time to plan for. We now also have a template which can be used as a model for similar Plans at Edinburgh’s other three gardens.

References

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