# Interpretation and theme gardens within a South African National Botanical Gardens context

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# Introduction

Within the eight Gardens of the South African National Biodiversity Institute (SANBI), different stories are told that depict the rich diversity of South Africa. The aim of theme Gardens and interpretation is to bridge the gap between people and plants. Our rich biodiversity, local, cultural and natural heritage are displayed in manner to captivate the attention of local and international visitors.

Interpretation is 'making meaning' of different things and as interpreters we are the ones who make or the reveal those meaning, be it gardens, plants or places. Interpretation is an education tool and it is one of the ways we make the outdoor classroom (Gardens and natural areas), come alive. How these stories are told is of great importance, whether it is done through guided tours, signs, brochures or storyboards, it needs to captivate and inform your visitors, leaving them motivated, inspired and well informed.

# Theme Gardens

Theme Gardens within SANBI are planned and designed to display relevant issues in South Africa for example, Low Water Use Gardening / Water wise Gardening, Traditional Uses of Indigenous Plants and Conservation of highly Threatened Plants.

The Harold Porter National Botanical Garden (NBG), one of the eight Botanical gardens within SANBI, is located in the Kogelberg Biosphere Reserve. The Biosphere Reserve is a very special Reserve, as it does not have any boundaries, keeping plants and animal in and the people who live there out. Vast tracts of natural vegetation, wetland systems, towns and various settlements, agricultural lands, commercial forestry plantations and recreational resorts are found within the Reserve. The objective of the Reserve is to improve the relationship between the natural environment and the people that live, work and find recreation in the area (Mark & Amida Johns 2001).

The Biosphere has three different zones, the Core zone in which undisturbed and biologically rich areas are strictly protected, the Buffer zone which mostly comprises of privately owned farms and small holdings, this zone helps to cushion the core against the impact of development (Mark & Amida Johns 2001) and the Transition zones, this zone is made up of areas that are utilized such as towns, farmlands and planted forests. The Kogelberg Biosphere reserves spans over 100 000 hectares and is known as the heart of the Cape Floral Kingdom. It is home to some 1650 plant species of which 77 occurs nowhere else. The Biosphere is not just home to a rich animal and plant diversity, but it is home to a rich local and cultural heritage.

The Harold Porter (NBG) lies within the Core and Buffer zones of the Kogelberg Biosphere Reserve and is the window to the Kogelberg Nature Reserve. Our mission is to promote the sustainable use, conservation, appreciation and enjoyment of the exceptionally rich biodiversity of South Africa, for the benefit of all people.

The boundary of the Harold Porter NBG stretches from the peak of the Kogelberg Mountain range to the shores of the Atlantic Ocean and we are surrounded by 4 different ecosystems, the Dune, Forest, Fynbos and Wetland

ecosystems. As a Botanical Garden we felt that we needed to inform our visitors of the importance of our beautiful surroundings and the unique location we find ourselves in.

#### **The Fynbos Threatened Plants Ecosystem**

Due to the location of the garden and the importance of Fynbos and threatened plants within the Kogelberg Biosphere Reserve, we held discussions with Cape Nature Kogelberg Biosphere Reserve officials to get their input and ideas. It became clear to us that the emphasis of our threatened plant project should be on educating the public on the threats that affect the Fynbos flora. Through brainstorming the project with our partners we reached a point of consensus and identified five local species that are threatened and that can be collected and cultivated for display and educational purposes. The species are *Witsenia maura, Erica patersonii, Mimetes hottentoticus, Erica lowryensis* and *Nivenia stokoei* 

This section features a special potted display of the five selected species with accompanying interpretive signage detailing causes of their threatened status and conservation information.

The storyboards for this section depict the reason why plants in general are threatened, such as urbanisation, specific to a certain locality and unsustainable harvesting. A second board, "What you can do", tells the visitors/public what their role in conservation is, such as sustainable harvesting. We also tell the unique story which animals and fire has within a Fynbos ecosystem. The individual label informs the visitors the reason why that specific plant is threatened or rare.

#### The Wetland Ecosystem

This section along with a number of storyboards and individual plant interpretation labels, display the importance of Wetlands and the role plants has within such an ecosystem.

The areas in the wetland include a small open area of water, in which true aquatics are growing. Other areas include running water, permanently wet places and seasonally wet spots. Each of these particular areas has a complement of plants that favour the local conditions. Some of the species planted in the wetland include some of the local rare and endangered plants including *Witsenia maura* and *Heamanthus cnaliculatus*.

To emphasize the importance of conservation and the different ways in which it is practiced, a boardwalk made from polytimber (plastic wood) is erected in this area. Not only is it maintenance free, but it also supports the concept of recycling.

#### The Dune Ecosystem

As with the previous ecosystems, the emphasis is once again placed on educating the public on the importance of this particular ecosystem. Many residential homes are found along our beautiful coastlines and people are unaware of the profound damage being done to these very sensitive ecosystems. Coastal dunes need to be treated carefully and not damaged by off-road vehicles.

The dune ecosystem displays the fore and rear dunes along with the relevant plants and interpretation. Our visitors leave having learnt something about Dune ecology.

#### The KhoiSan Useful Plants Garden

The development of medicinal and useful plants demonstration gardens within the South African National Biodiversity Institute (SANBI) is of great importance, as it displays the rich cultural heritage of South Africans.

The first medicinal plants garden began as a muthi garden at the Pietermaritzburg NBG. A fully-fledged useful plants garden was later developed at the Kirstenbosch NBG and in 2004 a similar garden was started at the Harold Porter NBG.

The landscape design of the useful plants garden at the Harold Porter NBG is inspired by a rock art painting of a KhoiSan man. The paths are arranged to resemble the arms, legs, torso and body. The garden features plants that were used for food, medicine, craft, construction, tools and charms as well as different types of rock used by the KhoiSan people who once inhabited the area. Eleven storyboards with information about biodiversity and the KhoiSan people are displayed in this section.

## Interpretation

Interpretation should be simple, attractive, provocative, thematic, relevant, interactive, and purposeful and it must engage the mind and emotion of your audience. It must also 'make meaning' of what is being displayed or told.

Within SANBI different interpretation tools are used to communicate the displays. Standardized permanent and temporary boards are used within the Gardens and the languages used are generally English and Afrikaans and the local African language.

We use storyboards, brochures and other methods of interpretation as educational tools. Our aim is to share relevant information with our visitors and school groups.

# Conclusion

Interpretation and theme gardens are used in an innovative, creative and participative manner as a tool to inform our visitors of relevant conservation issues. Our visitors leave feeling well informed and inspired to become involved in local conservation programs.

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