

Wild and wet!

by Jane Forrester, Harold Porter National Botanical Garden



ABOVE: A wheelchair friendly boardwalk links the wetland with the fynbos higher up on the wonderful Four Ecosystems Walk in the Harold Porter National Botanical Gardens in Betty's Bay.

'Wetlands are areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed 6 metres.'

*Ramsar definition of a wetland
Ramsar Convention, Cowan, 1995*

Wild and wet – and you thought this was about riding the rapids! No! The wild refers to indigenous plants and the wet refers to a soggy spot in the Harold Porter National Botanical Garden. This soggy wetland spot hasn't been accessible, except to view it from the edges, and the nature of the terrain meant that a pair of gumboots and a good deal of high foot lifting was necessary if staff needed to slog through the dense vegetation. A boardwalk through the wetland was therefore required to provide the last link to complete a circular route for visitors known as the Four Ecosystems Walk.

This easy circular walk, accessible also for wheelchairs and prams, has slowly been taking shape in the Harold Porter NBG. It is 500 m in length and starts and ends at the entrance to the Garden. The four ecosystems making up the walk are forest, dune, wetland and fynbos. The Dunes, sponsored by the Rowland and Leta Hill Trust and administered by Syfrets, were written

about in the September 2003 issue of *Veld & Flora* and have proved a popular area with our visitors.

Permission was granted to use savings made on the Dune Project from the Rowland and Leta Hill Trust to put towards the wetland section of the Four Ecosystems Walk. An additional amount sourced by WWF-SA, from the Pallet Supply Company was added to a donation in memory of Janet Wanless in order to build a section of exposed aggregate pathway, put in directional signage and develop a number of storyboards on the importance of wetlands, as well as some 'interprelabels' for specific plants.

Stepping-stones have been laid through a portion of the wetland and are being enjoyed by children of all ages! A temporary boardwalk has also been built, using old planking saved from the refurbished Olive May Porter Bridge in the Garden, and various other recycled materials. The stepping-stones and the boardwalk now link the

dunes with the path through the fynbos section (in the process of being developed) to complete the circular route. The boardwalk however needs to become a permanent feature and we would very much like to use polywood for this as it is a maintenance free material and further supports the whole concept of recycling. Unfortunately the funding we have received to date is not sufficient to build a boardwalk of this nature to the required standards. So...if you know of any rich uncles or grannies out there, please get them to talk to us!

Although there are many areas of wetland in the Harold Porter NBG (according to the Ramsar definition of a wetland above), the specific area which we call the Wetland on the Four Ecosystems Walk has been chosen for its location near the Dunes and because it makes a circular route possible. This area has been cleared once or twice in the last fifteen years to allow some areas of open water to be seen.

However a number of species, such as golden sceptre or bloodroot *Wachendorfia thyrsiflora* and *Carpha glomerata*, plus several other sedges and a few restios are extremely vigorous growers and tend to smother just about everything else in this particular area. Masses of plant material including dead and deadly stuff such as devil's tresses *Cassytha ciliolata* were removed to make way for the boardwalk. Heaps of *Wachendorfia*, *Carpha*, *Ischyrolepis subverticillata* (a real thug in this garden), *Platycaulos*, more dead material and a number of other common plants were cleared to make way for a greater diversity of species to be planted.

The areas in the wetland include a small open area of water, 600 mm deep, in which true aquatics such as yellow water onion *Nymphoides indica* and blue water-lily *Nymphaea nouchali* are growing. Towards the edges of this open water, bulrush *Typha capensis* and common reed *Phragmites australis* have been planted in bidum-lined plastic baskets (to limit their growth and take-over of the pond) to represent two common plant species growing in the shallower zones. Other areas include running water, permanently wet places, seasonally wet spots and those which remain damp. Each of these particular areas has a complement of plants that favour the local conditions and will grow there. Unfortunately as

this is a system in which we are trying to display a greater diversity of plants and have therefore cleared some of the natural growth, and also being an area in which the water regime tends to vary from year to year, the choice of planting site for the different species is somewhat experimental. Hopefully many of the plants will be very tolerant of a range of conditions! Time will tell if we have chosen a good match between species and locality.

Some of the species we have planted in the wetland include some of our local rare and endangered plants including bokmakieriestert *Witsenia maura*, vlei pagoda *Mimetes hirtus* (see photo on p. 4), channel-leaved haemanthus *Haemanthus canaliculatus*, mealie heath *Erica patersonii* and *Satyrium hallackii* subsp. *hallackii*, a magnificent summer-flowering pink orchid whose habitat is being totally decimated by housing here in Betty's Bay (see photo on p. 12). Planted round the stepping-stones are flat growing *Lobelia anceps*, yellow lobelia *Monopsis lutea* and *Chironia jasminoides* which will not smother the stones. Rooistompie *Brunia stokoei*, coffee bush *Brunia albiflora* and kolkol *Berzelia lanuginosa*, together with *Elegia capensis* add height and drama to the scene.

Swamp daisy *Osmitopsis asteriscoides*, elegant Prince of Wales heath *Erica perspicua*, that beautiful fern

Blechnum capense with its young copper coloured fronds, aromatic wild mint *Mentha aquatica* and many others make up a marvellous mosaic of plants that enjoy varying degrees of wet feet.

Looking at the definition of a wetland at the top of the page, Harold Porter is rich in wetland areas. We have a whole catchment system within the boundaries of the garden, with seeps, springs and marshy areas flowing into streams, which become rivers and then continue their journey to the sea via a braided river system. The southern boundary of the garden ends 20 m above the high water mark and encompasses the Dawidskraal River where it empties into the sea. There are waterfalls and weirs, rapids and rocky pools. We even have artificial ponds, which have settled sufficiently to become the home of many self-sown aquatic plants, frogs, water snakes, whirligig beetles and other interesting aquatic and semi-aquatic life. And if you note the last portion of the Ramsar definition, then within a hop and a skip beyond the garden borders you will find the exciting world of marine wetlands, with wave washed rock pools, sandy shores and the masses of fascinating life forms which make up these specific environments.

So for a wonderful wild and wet experience you just cannot do better than visit the Harold Porter National Botanical Garden in Betty's Bay!



LEFT: Well-designed interpretive labels enhance your wetland experience.

BELOW LEFT: The golden sceptre *Wachendorfia thyrsiflora* is one of the dominant species in the wetland.

BELOW: Stepping stones and a boardwalk form a circular route through the wetland section of the Four Ecosystems Walk in the Harold Porter National Botanical Gardens at Betty's Bay.

