

ARBORIST EXCHANGE PROGRAM – CAPE TOWN SOUTH AFRICA

Eucs, Figs, and Fynbos: Cape Town's Urban Forest – By Shirl McMayon



Shirl with Table Mountain and the Atlantic Ocean in the background. All photos: Shirl McMayon.

I arrived in Cape Town, South Africa, on November 9, 2003. My host, Felix Barends, greeted me at the airport. I settled into Felix's home, taking over the oldest daughter's room for the week. As a welcoming celebration, the Barends hosted a large family braai (local term for barbeque) and I quickly learned that family is very important to most South Africans.

Cape Town has a dry Mediterranean climate (very similar to southern California) moderated by the effects of two oceans – the warm waters of the Indian Ocean to the east and extremely cold waters of the Atlantic to the west. Summer is from November to April, with temperature highs of 85 to 90 and lows in the 60's. There is a prevailing southeasterly wind. The coldest winter month is August, with lows in the 30's and 40's.

We began Monday morning with a quick tour of Company Gardens, an historic downtown park lined with *Eucalyptus globulus* (*Eucalyptus* are hereafter 'eucs') and *Ficus* spp. Recent reallocation of funds has resulted in a reduced level of tree maintenance throughout the park system. Felix and I identified a couple of trees that were in danger of failure. The park supervisor sadly explained that he was managing as best he could under such restrictions, that removal of dead trees was the top priority, and any remaining funds were then directed to correcting and removing remaining trees at risk of failure.

Felix showed me where the city had received a call from a new homeowner requesting the removal of some large eucs blocking their view of the ocean (sound familiar?). The city denied the request. Two weeks later, a neighbor called reporting that five eucs were showing signs of herbicide damage. All five trees had small drill holes around the base. The matter was still under investigation when I left.

Later that day we arrived at Arderne Park. We enjoyed a pleasant walk in the shade of some of Cape Town's tallest and grandest trees. The trees were brought to the park 200-300 years ago as seedlings and gifts of Dutch royalty ships passing through. Many of the trees in this park, including an Amur Corktree (*Phellodendron amurense*) and a Moreton Bay fig (*Ficus macrophylla*), are candidates for the Champion Trees program where residents and tourists can follow a brochure to see the "Champion Trees of Cape Town".

The day ended at a local cemetery where one finds the nicest and healthiest trees within the urban setting. Cemeteries are not subject to compaction, foot traffic, recreational sports, and subsequent damage as are park trees. I also noticed what I thought were anthills but were in fact mole-hills. The moles in Cape Town lack natural predators and have become a menace to public open space and homeowner turf areas.

Another day was in the Southern Cape area (locally called Cape Peninsula National Park). The most common vegetation is known as fynbos. This low-growing shrubby vegetation includes heaths (Ericaceae), reeds (Restionaceae), and proteas (Proteaceae). In 2000, a forest fire burned 9,000 acres of the 30,000 hectares on the Cape Peninsula. There are approximately 7,000 hectares of privately owned land within this reserve area and the fire spurred a regional initiative to adopt a new ordinance that requires land owners to prevent fires.



Felix examining a hole bored into a euc.



Gall wasps were introduced to control the spread of *Acacia longifolia*

There are three predominant species of Acacias in the Cape area – one native (*Acacia cyclops*), the others terribly invasive – *Acacia longifolia* and *Acacia saligna*. A biological control such as Gall Wasp was introduced to control the spread of *Acacia longifolia*, and Gall Rust is used on *Acacia saligna*. The spores of Gall Rust are gathered from infected trees and spread around the reserve to infect and control this invasive species.

The Western Cape Arboricultural Association often performs duties such as helping local contractors to discourage developers from removing trees during site development. This organization is also working on a Champion Tree/National Protected Tree Program consisting of heritage and cultural trees, such as the tree in nearby Mussel Bay that once served as the local Post Office; townspeople would bring mail sacks to the tree and wait for pickup by postal authorities. Currently, 300 trees are being considered in this program.

We also visited a classic “wrong tree – wrong place” site – an entire street planted with *Ficus nitida*. The 100-year old trees are lifting driveways, fences, and sidewalks, and have become a serious community and political issue. One homeowner cut down the tree in his immediate parkway area. The city then held this resident responsible for replacing the tree with a comparably large tree (approximately 18" diameter). The resident protested, appealing to city council members who then granted permission for the resident to plant a much smaller tree on the site, along with planting another tree of the same size elsewhere in the park system. The replacement trees were a one-inch caliper size, years away from providing shade and habitat benefited from the original planting. The City is now reconsidering their responsibility in resolving the issue, in hopes of discouraging future community action.

Cape Town has started an innovative program for park maintenance contracts. The Community Park Maintenance Contracts enacted a process called Informal Tender, where citizens and abutters of the

park bid maintenance services. The three base criteria of the program state that:

- 1) *park maintenance must be performed in underserved neighborhoods*
- 2) *the bidder must be unemployed*
- 3) *the bidder must live within eyesight of the park.*

These criteria promote ownership of the site and also help to solve the unemployment issue. Basic tasks (except mowing) include watering, debris removal, sweeping, weeding. The City loans the community contractors the necessary tools – garden hoses, trash bins, shovels. Currently, there are 50 parks in the program with 60 community contractors. The cost is approximately half of in-house or regularly contracted services. Other benefits include reduced vandalism due to the presence of a community watch of the park and an improved appearance in local properties adjacent to the community-contracted sites. The program was recently extended to include bidding of street tree maintenance, where the community contractors are paid per tree and can bill only for trees that *thrive* under their care. Surprisingly, there have been no union issues thus far—a problem I would surely encounter in Chicago.

We ended the day with a visit to Manyanani Peace Park, originally built by the city council and destroyed over the years by community misuse and abuse. The park was renovated by Peace Trees of South Africa in 1995 and sustained through the efforts of wonderful community partnerships. Through dedication and tenacity, they have accomplished nothing short of miracles in this blighted and underserved area, even managing to convince City Council to install a public swimming pool within the park, a previously unheard of luxury for park patrons in poorer neighborhoods.

East of downtown Cape Town is Somerset West, an affluent ‘resort’ community. A recent political issue here involves efforts to replant the downtown main street median. The new plantings allegedly interfere with a very popular local event, the Holiday Light Festival. The local electricians and politicians have requested the Parks Department to top the trees in order to lower the branches out of the sight line of the decorations. Park officials have so far refused to accommodate the request, offering instead to prune to direct branches away from the ornaments. The issue had not been resolved as of this writing.

An historic and magnificent row of eucs along a narrow public roadway obstructs plans for future widening of the road. With the support of the World Wildlife Federation, a street-widening issue was defeated. The original eucs along what was then Main Street have reached a great size. Trees of this height are atypical for indigenous South African trees, creating a maintenance problem for in-house staff not properly trained to work in and around such trees. Contracted private tree care companies currently manage these giant eucs.

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The Helderberg Nature Reserve was started from a farm in 1916 by Hot 'n Tots, a local native people similar to aborigines. Within the reserve, the Environmental Education center is run by the Friends of Helderberg. The reserve also has several memorial tree plantings for various patrons and citizens, including local white citizens killed during the apartheid struggles.

No trip to South Africa would be complete without a trip to the wineries. We were given a private tour of Ver Verlagen, a 2100-hectare winery and garden. We were shown a magnificent 300-year old planting of camphor trees that is listed on the National Heritage Registry. Showing stress from foot traffic, the trees are now protected and fenced off. A team of specialists from Johannesburg observes and monitors the trees on a regular basis for nutrient deficiencies or pest problems. Private contractors perform maintenance pruning.

We spent our final day at Cape Town's crowning jewel, Kirstenbosch Gardens. Considered one of the world's great botanical gardens, it is on the hot, dry northern slopes of Table Mountain, a 1000-meter mountain right in the heart of the city. A local supply of timber grew on the eastern slopes of the mountain and after an access track was built, the trees were felled and used in Cape Town. In 1657, the task of protecting the forest from indiscriminate wood cutting became the first recorded act of conservation in South Africa's history. The area became known as Leendertsbos and formed a large part of what is now Kirstenbosch. In 1895, Kirstenbosch was left to the

people of South Africa. Impressive Moreton Bay figs and camphor trees line the avenue that lead to Kirstenbosch. The gardening and horticulture staff performs all tree care work. Within the garden, the Dell has a character all of its own and is probably the most popular feature of Kirstenbosch. Permanent springs provide the clear water that flows into Colonel Bird's bath and then out around stepping-stones down through the Dell to the small pond at the corner of the main path. Large yellowwood trees (*Afrocarpus falcatus*, *Podocarpus latifolius*, and *P. henkelii*) shade the Dell. A fourth species (*P. elongatus*) stands next to the stone bridge over the stream below the Dell, making up the collection of all four southern African yellowwood species. Colonel Bird's bath is surrounded by tree ferns (*Cyathea dregei* and *Dicksonia antarctica*) and a huge Cape holly (*Ilex mitis*). Finally, Kirstenbosch contains a unique collection of South African plants and provides a gateway to trails along and up the mountain's eastern face.

I would like to thank the SMA and ACRT, Inc. for providing the opportunity to participate in this educational experience of a lifetime. I encourage fellow SMA members to fill out the application and continue the journey!

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