

EXCHANGE PROGRAM - CHICAGO

by Felix M. Barends



Felix Barends in front of fountain and Chicago skyline. Photos: Felix Barends

My name is Felix M. Barends and I am a qualified horticulturist/urban forester with 30 years experience for the City Of Cape Town, South Africa.

I departed from my hometown Cape Town, South Africa on the 15th August 2003 to start an epic journey of twenty-six hours to the City of Chicago in the United States of America. Due to the power outage in the USA, I had to phone my host Shirl McMayon, with the Chicago Park District, several times from Newark airport, New York to inform her of my flight time changes to O'Hare airport where she was to pick me up. This however did not dampen my excitement to see the City of Chicago and what made the Park District of that City tick and how I could broaden my knowledge.

The day after I arrived, which was the Sunday, Shirl invited me to go on a boat trip to see the famous air show over Lake Michigan that was quite spectacular.

On Monday I was introduced to some of the City of Chicago staff members and was made to feel at home. Driving to her office I complimented her on the clean state the parks were in and she explained that they have a night crew whose job it is to clean the parks overnight. This notion of staggered working hours is an option that our Parks Department has not explored.

At the time of my arrival the Chicago Park District hosted a three-day seminar for the Chicago Greening Symposium and it became part of my itinerary. The seminar included a tour of the Garfield

Conservatory, various parks and the City Hall rooftop garden. On the tour I was impressed with the exuberant color display of plants that could be seen along the centre medians and the hanging baskets on overhead bridges. This trend was copied by businesses that turned the open spaces in front of their establishments into beautiful displays with the aid of planter boxes.

The Garfield Conservatory, which is managed by Dr. Lisa Roberts, sees thousands of visitors annually as they come to enjoy the beautiful panorama made up of a collection of plants from different parts of the world. Some of their remarkable displays are the Chapungu African art forms and, in association with Chapungu Sculpture Park, Harare, Zimbabwe, the association of the Chicago Botanic Garden and Garfield Park Conservatory are joining forces to co-present this major exhibition in the Chicago area, between May and October 2003.

The tour of the garden on the roof of City Hall, which few people get to see, was another highlight of the tour. This project was pushed by Mayor Richard M. Daley, who noticed this concept being used successfully in Europe and wanted Chicago to be the first in the United States to boast a rooftop garden. These gardens are supposed to bring down energy costs by cooling a building during summer, extend the life span of a roof by 50% to that of a traditional roof, have storm water retention capabilities and encourage biodiversity in the City.

The Chicago Park District has more than 7,300 acres of parkland, over 560 parks, a number of beaches and museums, two "must see" conservatories, lagoons and wildlife gardens. Buckingham Fountain is a popular landmark and tourist attraction that is turned on at the start of summer. Visitors can enjoy dazzling music, lights and a water show.

I was able to visit a park partnership project where one of the parks was being cared for by a group of senior citizens. Parks in this area used to be problematic for the Park District to maintain and the success of this grass root level park was proof that the community was starting to get a sense of pride in their environment.

Also notable was the memorial garden where a tree planting ceremony is held every time a police officer or a fireman of the Chicago Park District dies in the line of duty. I see this type of event as enhancing the importance of trees in the urban environment.

As a result of budgetary constraints the Park District has privatized a considerable amount of core business. According to Shirl it was not an easy task at first to convince staff that their jobs would not be in jeopardy and also the Trade Unions were not very supportive of the idea. She discovered that it was going to be quite a challenge to try and change the culture of her department and convince staff that not all park functions delivered to the local communities needed to be done in-house.

She overcame the problem by getting the consultant to work with the City's staff in order to win over their trust. Once they realized that the consultant's job was to get the work done more effectively without endangering their jobs, they become more supportive.

I was also taken to Washington Park where storms in July wreaked havoc on the Windy City and the district had applied for federal disaster relief aid to help pay for the cleanup of storm damage to city parks which is going to cost millions of dollars. More than 750 trees in four parks were damaged and the storms destroyed the roof of a park field house built in the early 1900's.

At the Grant Park, I was shown how the Dutch elm disease had destroyed the American Elm trees as the fungus plugged up the vascular system of healthy elm trees. Originally there were more than 2000 Elm trees planted. Some were lost through construction but the disease destroyed the majority and today only 661 are still growing in Grant Park. The Chicago Park District Forestry Operations are currently using a fungicide called Dutch Trig to try and halt the spread of the disease. Although it is showing promising results, it is too early to say whether the product will be able to control the disease effectively. This method of systematic injection with fungicide is however an expensive and cumbersome operation and timing is very important, as the infected trees only suck up the fungicide when conditions are favourable. As a long term solution the Park District has been planting alternative shade trees and hybrid Elm trees which are resistant to the disease.

I was also introduced to Joseph McCarthy, ALB Project Manager who works for the Department of Streets and Sanitation, Bureau of Forestry and who has for the last five years been tasked full time to deal with the Asian longhorn beetle (ALB) pest. The pest prefers maple trees such as boxelder, red, silver, sugar and sycamore maples. The infected trees are usually removed and thereafter the



Public support by Senior Citizens provides valuable assistance to the Chicago Park District.

materials either chipped or burned. Because the pest can spread so easily quarantines are established to prevent it being transported elsewhere through infested trees and branches.

It was amazing to learn about the amount of money, effort, and public awareness spent on the ALB, and how the number of different agencies pooled their resources together in an effort to control this pest.

The Park District uses the GPS and GIS system whereby they are able to locate their trees. The City of Cape Town has for years been trying to map trees within the urban setting without much success. It is however obvious that an agency must have the necessary resources to update the system regularly. In order for my City to decide on introducing such an expensive system it will need to weigh this up against other pressing needs within the community of Cape Town.

I found the more affordable, practical, and accurate statistical method for the rapid sampling of urban street trees used by the Bureau of Forestry quite interesting and worthwhile for putting to test in Cape Town. According to Joseph McCarthy, they have been using this method and were able to accurately estimate the number of street trees in the City with a relative error of less than 10 percent.

The Chicago Park District is very strict where construction sites impact on existing trees. By-laws lay down severe penalties and contractors are careful that they do not transgress tree protection conditions imposed on them by the Park District.

Vital Statistics, Chicago Park District

- **Population 3 million**
- **Tree population: 200,000 park trees, 500,000 street trees**
- **Full-time park forestry staff: 60**
- **Department structure: the Chicago Park District forestry program is a separate entity from the City of Chicago Forestry Operations, in charge of the city's street trees.**
- **Management plan: yes**
- **Ten most common trees: *Acer rubrum*, *Crataegus spp.*, *Celtis occidentalis*, *Fraxinus pennsylvanica*, *Ginkgo biloba*, *Gleditsia triacanthos*, *Quercus macrocarpa*, *Populus deltoides*, *Tilia americana*, *Ulmus americana***
- **Unique programs: CPD's internal ISA Certification Training Program Landscape Awards Program (for staff recognition)**
- **Biggest challenge: Managing union crews.**
- **Source of pride: A successful Dutch Elm Disease control program. Grant Park, in downtown Chicago, is home to the largest remaining stand of American elms in the United States, with over 600 healthy specimens.**

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Vivid examples of the ravages Dutch Elm Disease can cause. Grant Park is home to the largest stand of American Elms (over 600) in North America.

I was very interested in the tree appraisal system used by the Park District as my City has always been using the Helliwell system of Britain, which was adapted to our local conditions. Our legal department is of the opinion however that should it be contested in court we could find ourselves on shaky ground and for this reason we are currently developing our own local tree appraisal system which will stand up to legal scrutiny.

The Department of Streets and Sanitation, Bureau of Forestry is responsible for the management of all shade and ornamental trees growing along city streets and boulevards and which constitute approximately 520,000 trees of the estimated 4.1 million trees growing in the City of Chicago. A minimum of 5,000 new trees are planted each year by the City of Chicago. On average the Bureau of Forestry trims about 100,000 public trees annually.

An exciting project that was pointed out to me by the Bureau was the experiment with Cambistat. Other projects consisted of growth retardant for trees, improving a tree's tolerance to insects and diseases, improving heat and drought resistance, and enhancing tree root systems. They are also testing a porous recycled rubber product from SAFDEK No Fault Industries Inc. Los Angeles. The recycled rubber is poured around the tree on granules that is bonded by a special type of adhesive. The idea is that the product will act as a mulch, prevent weed growth, whilst allowing water to penetrate into

the soil.

I was also impressed with their internal ISA certification-training programme for City staff.

I noted during my visit that two departments were responsible to care for the City's tree stock, the Park District is responsible for the trees in parks and parkland and the Bureau of Forestry for the management of all shade and ornamental trees growing along city streets and boulevards. This arrangement encourages duplication and adoption of different tree management strategies. In Cape Town the responsibility for trees in parks and roadsides is vested in one department, namely the City Parks and Nature Conservation.

In an effort to overcome this dilemma the City Parks has employed a consultant to address this issue. The consultant's brief has been to survey, inventory, and analyze the current state of tree planting in the city and make broad policy and specific technical

recommendations regarding how tree planting can be increased, improved, and enhanced throughout the city. All departments responsible for tree management are represented at the workshops.

I can honestly say that I learned quite a bit from my experience, especially the professionalism displayed in the field of arboriculture by the people I met, with the result that professionals from other disciplines treated them with the respect they deserved. It also showed that having a City Mayor who understands and supports the work of officials who are responsible for tree management of the city is a tremendous advantage. As I mentioned earlier, what I discovered to be a best practice I would like to apply in my department back home.

Finally I want to take this opportunity to thank the Society of Municipal Arborists and ACRT for making it possible for me to partake in this exciting exchange programme and for broadening my knowledge and experience. I intend on remaining a member and hope to write an occasional article for the journal to share some news about tree issues in Cape Town.

The SMA and ACRT, Inc. have teamed up to sponsor the highly successful Arborists Exchange Program.

