CONSERVATION WISE

Conserving Biodiversity for Future Generations

Table Bay Nature Reserve: Milnerton Racecourse Section **ANNUAL REPORT FOR 2012**



What is the Milnerton Racecourse Section of the **Table Bay Nature Reserve**

It is the area that was, and still is to some degree the centre of the Gold Circle horse track within Milnerton. The area is approximately 19ha in size and is separated into a northern and southern area. It is recognised as being of exceptionally high conservation value due to the number of Red Data (endangered) plant species and its high biodiversity. This site is one of the City's core botanical areas and has been included in the Biodiversity Network.

The City owned land is managed by the Royal Ascot Environmental Management Committee (EMC). This committee consists of representatives from local home owners/residents interest groups, associations, the City of Cape Town, the Royal Ascot Master Property Association, Gold Circle and conservation / environmental consultants. On-theground management and facilities are coordinated by the Environmental Conservation Managers, WET-LAND Solutions, as appointed by the EMC.

Ecological Burn

On the 7th March the 3rd ecological burn was undertaken at Milnerton, this time in the northern area of the Reserve. 3.9 hectares of the Reserve's Critically Endangered Cape Flats Sand Fynbos was burnt very successfully in less than 30 minutes.



Much preparation for the burn was undertaken following the granting of the permit. This consisted of clearing a 5m firebreak along The Met, Stable Yard, Sandown Crescent and the Gold Circle grass track. Carpobrotus edulis (Sour Fig), a fire resistant succulent was planted in the Stable Yard fire break. Much of the Searsia lucida (Blinktaaibos) was cut down to spread fuel load and prevent intense fires in certain areas. Vegetation around infrastructure was cleared to prevent them from burning.

And lastly some monitoring data on plants and the resident Grysbok population was collected. Royal Ascot residents, members of the public and the Fire Department were notified well in advance.

On the day of the burn 3 bakkie sakkies, 2 unimogs and approximately 40 personal from the City of Cape Town's Biodiversity Management and Fire Department were on hand to assist.





Before the burn a drive out was undertaken to push the resident male Cape Grysbok into the southern area.

On the day weather conditions were cooperative and once the veld had dried out, the eastern, western and then southern boundaries of the area were lit. A lot of smoke was generated due to the high grass content, but as smoke is one of the main driving forces of fynbos regeneration it was positively from a considered biodiversity perspective, if not by local residents.

Ecological burns are a vital management priority in fynbos ecosystems as fire removes old plant material, stimulating new growth. This renewed growth results in more available, choices, of food sources for fauna within the Reserve keeping it healthy by reducing pressure on limited resources. Controlled burns also reduce available fuel loads lowering the risk of an uncontrolled fire becoming unmanageable and damaging property.

Burns are a vital driving force in the fynbos biome, which has adapted to fire and relying on it to remain healthy. Many of these species require fire stimulation of seeds and cones to allow for seed dispersal and germination. So over time without fire many species may be lost from the area.

Fynbos fauna species are adapted to survive fires. Grysbok, birds and other mammal species flee the area, chameleons, snakes and other reptiles burrow underground and tortoises lay their eggs underground as a way of protecting them.







































The Plastic Bag Story

500 billion and a trillion plastic bags are consumed worldwide each year. No above sounds weird to me Less than 1% of bags are recycled because it costs more to recycle a bag than to produce a new one. "There's harsh economics behind bag recycling: It costs \$4,000 to process and recycle 1 ton of plastic bags, which can then be sold on the commodities

Then...Where Do They Go?

A study in 1975, showed oceangoing vessels together dumped 8 million pounds of plastic annually. The real reason that the world's landfills weren't overflowing with plastic was because most of it ended up in an ocean-fill.

Bags get blown around...

market for \$32". Quote?

- ... to different parts of our lands
- ... and to our seas, lakes and rivers.

Bags find their way into the sea via drains and sewage pipes.

Plastic bags have been found floating north of the Arctic Circle near Spitzbergen, and as far south as the Falkland Islands.

Plastic bags account for over 10 percent of the debris washed up on the U.S. coastline.

Plastic bags photodegrade: Over time they break down into smaller, more toxic petro-polymers which eventually contaminate soils and waterways. As a consequence microscopic particles can enter the food chain.

The effect on wildlife can be catastrophic. Birds become terminally entangled. Nearly 200 different species of sea life including whales, dolphins, seals and turtles die due to plastic bags. They die after ingesting plastic bags which they mistake for food.

So...What do we do?

If we use a cloth bag, we can save 6 bags a week.

- ... That's 24 bags a month.
- ... That's 288 bags a year.
- ... That's 22,176 bags in an average life time.

If just 1 out of 5 people in our country did this we would save 1,330,560,000,000 bags over our life

Plastic shopping bags are made from polyethylene: a thermoplastic made from oil.

Reducing plastic bags will decrease foreign oil dependency. Ck Accuracy below?

China will save 37 million barrels of oil each year due to their recent ban of free plastic bags.

> It is possible... Make a change, Make a difference

Looking Forward

2013 Management Objectives & Events

- Monthly bird counts, water level monitoring, vegetation monitoring, litter cleanups and infrastructure maintenance.
- Bimonthly path maintenance and alien clearing
- Grysbok re-introduction
- July School Holiday Programme
- Spring Walk
- Regular CREW visits (Custodians of Rare and **Endangered Wild Flowers)**
- Fauna monitoring
- Reserve proclamation

Critters to be on the look out for in the Reserve





Cape Dwarf Chameleon

Cape Grysbok

Yellow Billed Duck







Four Striped **Grass Mouse**

Sand Toad

Fynbos Blue







Mole snake

Citrus Swallowtail

Black Winged Stilt







Heady Maiden

Cape Skink

Red Knobbed Coot

For more information visit

www.royalascot.co.za





































School Holiday Programme

The Table Bay Nature Reserve: Milnerton Racecourse Section held its 3rd winter school holiday programme on the 3rd & 4th July at the Rietvlei Environmental Education centre.

On the first day 25 children attended the Wetland Adventure where they were educated about wetlands and their importance. A fun wetland experiment, amazing race and ecological food web taught the children the importance of wetlands for humans, animals and plants. The 2nd days' programme highlighted the Reserves "Little Five" comprised of the Cape Dwarf Chameleon, Cape Grysbok, Water Mongoose, Black-headed Heron and Angular Tortoise. A jig saw puzzle and scavenger hunt made the children environmentally aware about the little gems found at the Milnerton Racecourse Section of the Reserve.



Chameleon Research

Cassandra Ricketts, student of the Table Bay Nature Reserve, undertook part of her research project at Milnerton. Her research was entitled "A comparison of Bradypodion pumilum (Cape Dwarf Chameleon) abundance in three different vegetation types within Table Bay Nature Reserve".



Research entailed searching a 1ha area for three consecutive nights for Cape Dwarf Chameleons. Perch height, perch diameter, plant species, snout to vent length, tail length, GPS location, age and sex of each sighted Chameleon was recorded.

In total 37 Cape Dwarf Chameleons were found in the Milnerton Racecourse Section, the highest abundance for the Table Bay Nature Reserve. Of the 37, 31 were juveniles, 4 males and 2 females proving that there is successful reproduction and survival rates of the Cape Dwarf Chameleon at the reserve and breeding is healthy and stable. This research also indicates that the Cape Flats Sand Fynbos is the preferred vegetation type for this species and that the veld is in a good condition to support this sensitive reptile.

Fire & Fynbos Guided Spring Walk

On the 13th of October the annual spring walk was undertaken in the northern and southern areas of the reserve. It was the best attended yet, with a turnout of approximately 30 people young and old.



The topic of the day was Fire and Fynbos. visitors were informed about why fynbos needs to burn, the adaptations of plants and animals to fire and why reserves undertake control burns. Visitors also learnt about the plant and animals found in Cape Flats Sand Fynbos, the history of the reserve and the proposed redevelopment of Gold Circle horse training facilities.



Cape Bird Club Walk

On the 12th of June Helm van Zijl guided the Cape Bird Club through the northern area of the reserve sighting 20 different bird species including the Cape Teal, Spotted Thick Knee and the Lanner Falcon.



Helm has undertakn monthly bird surveys in the Reserve for the past three years and at present has sighted 65 species in the northern area and 70 in the southern area. New sightings for 2012 are the Red Faced Mousebird and the African Snipe.







































Cape Grysbok

During the year, two Cape Grysbok drive counts were undertaken in the northern and southern areas of the reserve. The aim of the census was to determine the current population and if management interventions are required. The outcome of the census revealed that at present there is an estimated population of four Cape Grysbok, three males and one female. The reserve can accommodate a healthy population of 12 individuals and therefore the EMC has decided to reintroduce an additional two Cape Grysbok (one male and one female) into the reserve within the following year. This reintroduction will not only increase the population size but also increase genetic variability to prevent longterm damage to the population through genetic bottle necks.

Weed Free

Purple Vetch (Vicia benghalensis) is one of the invasive annual weeds which grows in the Reserve. This species germinates in spring and continues to flower through October, forming seed pods in November which set seed in December. Vetch is a creeper growing over other species thus inhibiting growth. Eight days were spent handpulling and bagging these invasive plants from the northern and southern areas. Due to the high seed banks it is estimated that it will take approximatly 7 years to eradicate this invasive plant species.



Kikuyu Under Control

Kikuyu grass (Pennisetum clandestinum) is one of the most detrimental alien grass to the biodiversity of the Reserve as it out competes other species in the vicinity. It originates from housing developments and horse training facility bordering onto the In 2011 a 1m barrier of Sour Fig Reserve. (Carpobrotus edulis) was planted along the Gold Circle Kikuyu grass track. This has prevented the ongoing intrusion of kikuyu into the northern area of the Reserve. It was decided that after the ecological burn the window period before the indigenous plants began to grow would be used to erradicate the The area was sprayed using a Kikuyu selective herbicide called Focus Ultra which proved to be very successful. Any regrowth will be sprayed.

Vegetation

Historically Cape Flats Sand Fynbos (CFSF) used to be the most widespread vegetation type in Cape Town. Today one of the last few remnants of this Critically Endangered vegetation type is found within the Milnerton Racecouse Reserve.



Due to urbanisation 85% of the CFSF in Cape Town transformed by urban sprawl and has been cultivation. Of the 15% which is left only 5% is in a good condition, and of that only 1% is conserved.

The Milnerton Racecourse Section of the Table Bay Nature Reserve currently conserves 232 recorded plant species of which 12 have "Red Data" status.



Many monitoring methods are undertaken annually in the Reserve to identify new and old species. These methods include using vegetation transects, monthly veld surveys of post burn vegetation, ad hock sightings and vegetation census's undertaken by Botanists.

During 2012 Hedi Stummer from the Custodians of Rare and Endangered Wildflowers (CREW) and Clive Mc Dowell, a well known and respected botanist, undertook site visits in the Reserve. Their main focus was the northern area which was burnt during March of this year.

2012 has been an exiting year from a flora persepctive, as it has revealed many new species sightings due to the ecological burn.

Reserve Escapees

Residents living on the boundary of any natural area do experience the beauty of nature. But this does mean however, that both wanted and unwanted animals could be encountered. Historically indigenous Cape animals roamed free from Table Mountain to the Hottentots Mountain Range and further. Presently the animals which are left are confined to natural areas due to urbanisation. Any unwanted animal big or small found in your house or garden can be removed and released back into the reserve. Please contact the Table Bay Nature Reserve on 021 444 0315 for assistance. Please help to keep our ecosystems functioning.



































