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JULY – SEPTEMBER 2012
JACOBUS JOHANNES RETIEF
TABLE BAY NATURE RESERVE
QUARTERLY REPORT FOR THE MILNERTON AREA
CITY OF CAPE TOWN – BIODIVERSITY MANAGEMENT



All photographs by the author, unless otherwise stated.



Figure 1. A portion of Table Bay Nature Reserve (TBNR) – aerial view (photo by Bruce Sutherland)

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Figure 2. TBNR sections.

1 AREA MANAGER'S SECTION

This quarterly report summarises the activities of the Biodiversity Management Branch in the **Milnerton Area**, specifically in and around the **Table Bay Nature Reserve (TBNR)** for the period from **1 July to 30 September 2012**.

This report is designed to meet the basic internal reporting requirements, while at the same time being written in such a way that stakeholders and role-players can refer to it for information purposes. The more detailed reporting data and statistics are collated in separate spread sheets that are not part of this report.

The staff presently consists of the **TBNR team** and three **Expanded Public Works Programme (EPWP) teams**. This quarter was characterised by increased rain and flooding of the wetland.

2 HIGHLIGHTS AND CHALLENGES

Some highlights at TBNR included an **aerial photographic survey** during which many images of TBNR were obtained, as well as the completion of the replacement of 86 old nature reserve signs with **new signs** bearing the new reserve name.



Figure 3. CIVAIR helicopter used in aerial survey.

2.1 An aerial photographic survey was conducted by Koos Retief and Bruce Sutherland (City photographer) in a CIVAIR helicopter (Figure 3). The survey was paid by Transport, Roads and Major Projects (TRAMP) to monitor progress in the construction of their Integrated Rapid Transport (IRT) system between the Cape Town City Centre and Atlantis. The flight took 30 minutes and partially covered Rietvlei and the Milnerton Lagoon sections of the Table Bay Nature Reserve (TBNR). Some of the photographs taken during this flight of TBNR (see Figure 1 above), can be used by the City for marketing material as well as in the planning of work on the ground. Biodiversity Management did not pay any costs of this survey.

2.2 Signage installations at TBNR (phase 1 and 2) have been concluded, resulting in 86 new reserve sign boards being installed throughout the reserve (see Figure 4). These signs are now aligned to the City's signage standards as they were approved by the City Corporate Communications Department. They are also standardised across all the City's nature reserves. At TBNR the new "Table Bay Nature Reserve" name was used as the main heading of the signs, and the specific reserve section was used as the subheading. Once the Rietvlei office is on-line, the switchboard telephone number will be added to the sign to advise the public how to call reserve management. A third phase will be rolled out shortly.



Figure 4. One of the TBNR signs being installed.

2.3 Electricity provision to the new Rietvlei office has been delayed extensively due to lengthy processes at Eskom. The lack of power provision is holding up the network connections for the computers in the offices as well as the phones that are reliant on City network connections. The offices would be using City network phones and not Telkom phones. Once the power is connected, the computer connections and telephones will be installed. The landline numbers will then be made known to the public. In the interim the offices rely on other sources of power.

2.4 Spring season has welcomed many with spectacular shows of wildflowers (Figure 5) and nesting birds (Figure 6). The continued removal of invasive vegetation and rehabilitation work seems to be paying off.



Figure 5. Spring wildflowers in the Diep River Section.



Figure 6. Yellowbilled duck nest at Milnerton Racecourse.

3 BIODIVERSITY MANAGEMENT

3.1 Management Effectiveness Tracking Tool (METT) review: The City of Cape Town conducts externally audited METT reviews of its nature reserves every five years. METT is a standardised tool that is used internationally to review management of conservation areas.

During the City's first five-year METT review, Rietvlei Wetland Reserve, Diep River, and Zoarvlei were reviewed as separate sites and received individual scores. During this year's review the TBNR was reviewed as a single site (Figure 7), therefore comparison with the previous reviews is not possible.

This year, however, TBNR's score is 9% higher than Rietvlei Wetland Reserve's score was at the first review, indicating an improvement in management effectiveness. This improvement is partly attributed to the consolidation of the sites into a single reserve, the drafting of an integrated reserve management plan, and the construction of office and workspace on site.



Figure 7. Paul Britton and Adele Pretorius during a site meeting at Milnerton Racecourse section as part of the METT review.

Paul Britton and Howard Langley have been appointed by the City to form the external auditing committee. Site meetings are conducted to verify the information in the review forms.

3.2 Protection status: Full Council approved the process for proclamation applications for the nature reserves in the City. Table Bay Nature Reserve (TBNR) is part of the batch of reserves. A **Conservation Development Framework (CDF)** was submitted to the Rietvlei Management Working Group for comment. The comments on the CDF will be used to amend it accordingly. The integrated reserve management plan is also completed. The only outstanding work is the survey diagrams that have to be amended for subdivided properties to be included in the nature reserve estate. Cliff Dorse is undertaking this work.

4 CONSERVATION

4.1 Flora Management

4.1.1 Invasive vegetation management during this quarter was focused on (1) woody invasive plants, (2) emergent weeds, (3) kikuyu grass, (4) prickly pear, and (5) water hyacinth. This work was undertaken with TBNR and EPWP staff in the bird hide block, Rietvlei north shore, Rietvlei water area, Table View boundary, Milnerton Lagoon, Milnerton canal, Zoarvlei North block, and the Diep River section (see Table 1 below).

Table 1. Summary of invasive vegetation clearing work.

TEAM	FOCUS	SITE(S)
Kader Asmal Projects	Woody invasive plants and emergent weeds	Diep River Section
		Table View boundary
	Woody invasive plants, kikuyu grass and emergent weeds	Rietvlei North Shore
		SANCCOB block
	Woody invasive plants, kikuyu grass, prickly pears and emergent weeds	Zoarvlei north block
	Water hyacinth	Milnerton Lagoon
Milnerton canal		

Invasive perennial and annual weeds emerge by the end of winter and spring (see Figure 8 below). These include plants such as Lupins, Vicia species, Paterson’s curse, Lavateria’s, and Nasturtiums. These are hand-pulled or lopped off before they set seed, and bagged for removal. The availability of staff is essential, as any plants that remain will produce hundreds of new seeds.



Figure 8. EPWP workers removing invasive weed species from the bird hide block.



Figure 9. Kikuyu grass dying after herbicide application.

Kikuyu grass is one of the most invasive plants in TBNR (see Figure 9 above). These invasions occur from the edges of private properties and road verges. TBNR and EPWP staff have been using herbicide to combat these invasions. Cleared areas will be treated, where possible, with controlled fire after which indigenous plants will be reintroduced.

Port Jackson is still prevalent in the Diep River section where much work has been done to eradicate this plant. TBNR and EPWP staff have cleared the railway reserve on the northern edge of the Diep River section (see Figure 10 below) to prevent the spread of seed into the TBNR. This work is the Railways’ responsibility, but TBNR has had no response from the Railways about this work.

Water hyacinth was removed from the Milnerton Lagoon section (see Figure 11 above) by an EPWP team. This work is on-going and is aimed at clearing the entire Diep River of water hyacinth. The team is working under the supervision of Louise Stafford (Invasive Species Unit).



Figure 10. Clearing of Port Jackson on railway line near Diep River section.



Figure 11. Removal of water hyacinth in Milnerton Lagoon by an EPWP team.

4.2 Fauna Management

4.2.1 Monitoring of Wildlife: Game counts and sightings

A **Coordinated Waterbird Count (CWAC)** at TBNR was scheduled for 2012/07/20, but for various reasons it was postponed to 2012/08/17. The census was attended by North Region staff Elzette Krynauw, Elzanne Burger, Monwabisi Varoyi, as well as TBNR staff Koos Retief, Christopher Singo, Sakhile Luhani, Rob Slater, Cassandra Ricketts, and volunteer Helm van Zyl.

The **waterbirds** numbered a total of 1,365 birds, comprising 41 species, including Dabchick 35, White pelican 4, Whitebreasted cormorant 35, Reed cormorant 36, African darter 34, Grey heron 18, Blackheaded heron 2, Purple heron 2, Little egret 6, Yellowbilled egret 3, Cattle egret 9, Blackcrowned night heron 23, Sacred ibis 18, Glossy ibis 25, Hadeda ibis 5, African spoonbill 6, Egyptian goose 74, Southern pochard 78, Yellowbilled duck 109, Cape teal 10, Hottentot teal 5, Redbilled teal 23, Cape shoveller 68, Spurwinged goose 4, African fish eagle 2, African marsh harrier 1, Purple swamphen 3, Common moorhen 38, Redknobbed coot 178, African black oystercatcher 5, Threebanded plover 1, Blacksmith lapwing 36, Greenshank 2, Blackwinged stilt 26, Water thickknee 13, Kelp gull 65, Hartlaub's gull 340, Caspian tern 1, Malachite kingfisher 3, Cape wagtail 3, and Mallard 16. See Table 2 and Figures 12-13 below.

The **terrestrial birds** were surveyed by Helm van Zyl. These birds comprised an additional 19 species, including Cape Turtle Dove, Rock Dove, Laughing Dove, Cape Spurfowl, Helmeted Guineafowl, Brown Throated Martin, Rock Martin, Common Starling, Crowned Lapwing, Pied Crow, Cape Robin-Chat, Common Waxbill, Levillant's Cisticola, Karoo Prinia, Little Rush Warbler, Lesser Swamp Warbler, Red Bishop, Cape Sparrow, and Cape Weaver.

Table 2. Summarised data from CWAC census of 2012/08/17.

Bird \ TBNR site	Total	Diep River	North Vlei	South Vlei	Central Pan	Dolphin Beach	Milneron Channel	Lagoon North	Lagoon South	Zoarvlei North	Zoarvlei South	Potsdam WWTW
TOTALS	1365	212	96	50	117	75	211	212	68	6	36	282
Dabchick	35	3		5	14	5					1	7
White pelican	4		4									
Whitebreasted cormorant	35		21		9	1	3	1				
Reed cormorant	36	4		7	4	1	17		2			1
African darter	34	2	3	2	17	1	7	1				1
Grey heron	18	2			5		1	5	2			3
Blackheaded heron	2						1	1				
Purple heron	2							2				
Little egret	6						3	1	2			
Yellowbilled egret	3		1		2							
Cattle egret	9	7						2				
Blackcrowned night heron	23	16					7					
Sacred ibis	18	13		2			2	1				
Glossy ibis	25	11		1			4	9				
Hadeda ibis	5						2	3				
African spoonbill	6						6					
Egyptian goose	74	13	3	3	7	2	26	6	5	2		7
Southern pochard	78											78
Yellowbilled duck	109	20	4	13	21	6	8	25			4	8
Cape teal	10	2										8
Hottentot teal	5	5										
Redbilled teal	23	12			6		1	4				
Cape shoveller	68					6	7	27		2		26
Spurwinged goose	4							4				
African fish eagle	2	2										
African marsh harrier	1	1										
Purple swamphen	3							2				1
Common moorhen	38	3		16	8	4		3				4
Redknobbed coot	178	36	2		15	17		98			3	7
African black oystercatcher	5						5					
Threebanded plover	1											1
Blacksmith lapwing	36	10	4				8	4		2		8
Greenshank	2						2					
Blackwinged stilt	26	13			7			6				
Water thicknee	13						11					2
Kelp gull	65	1	27		1				34			2
Hartlaub's gull	340	33	26	1	1	31	81	1	22		28	116
Caspian tern	1		1									
Malachite kingfisher	3	1						1				1
Cape wagtail	3	2				1						
Mallard	16						9	5	1			1

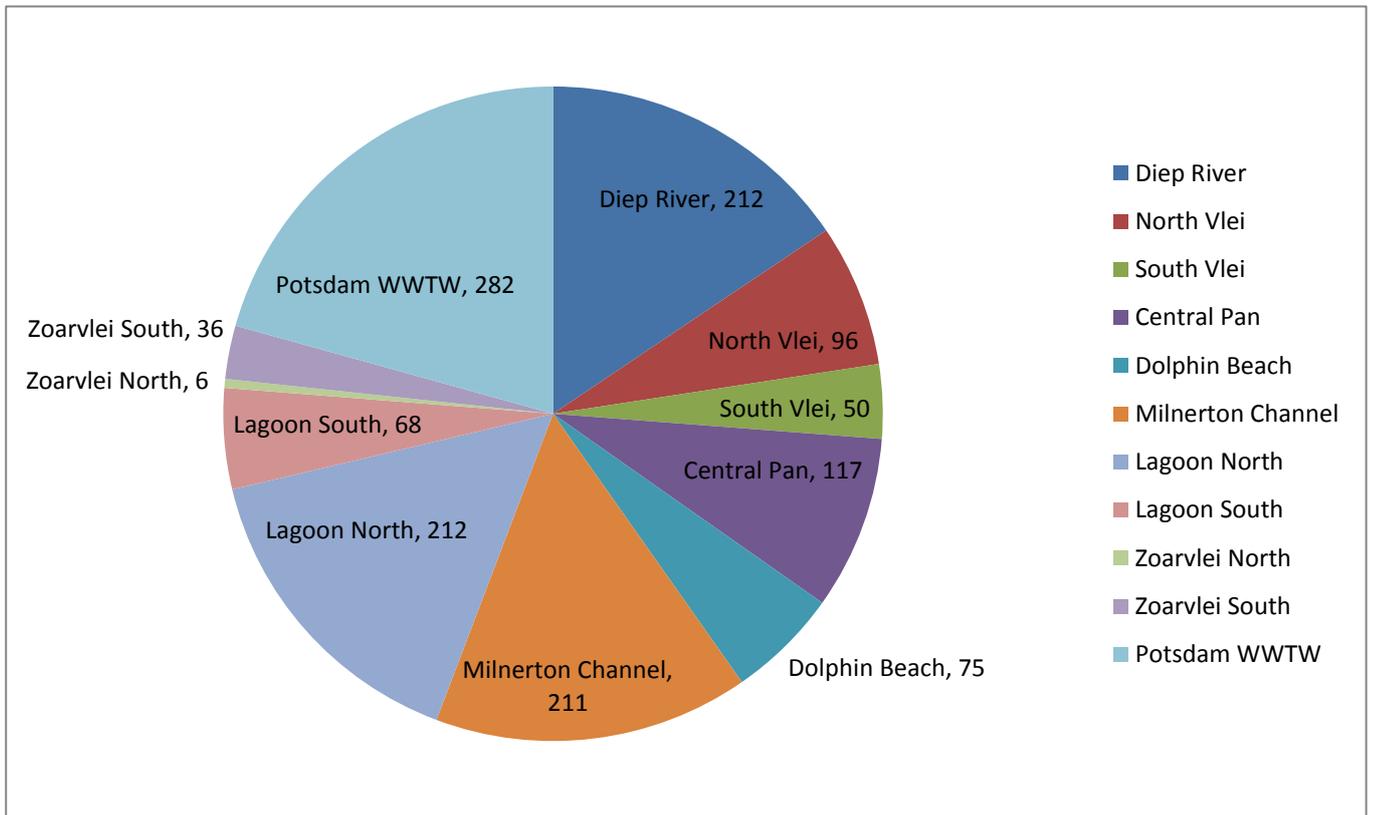


Figure 12. Pie chart of numbers of birds in various survey sections of CWAC 2012/08/17.

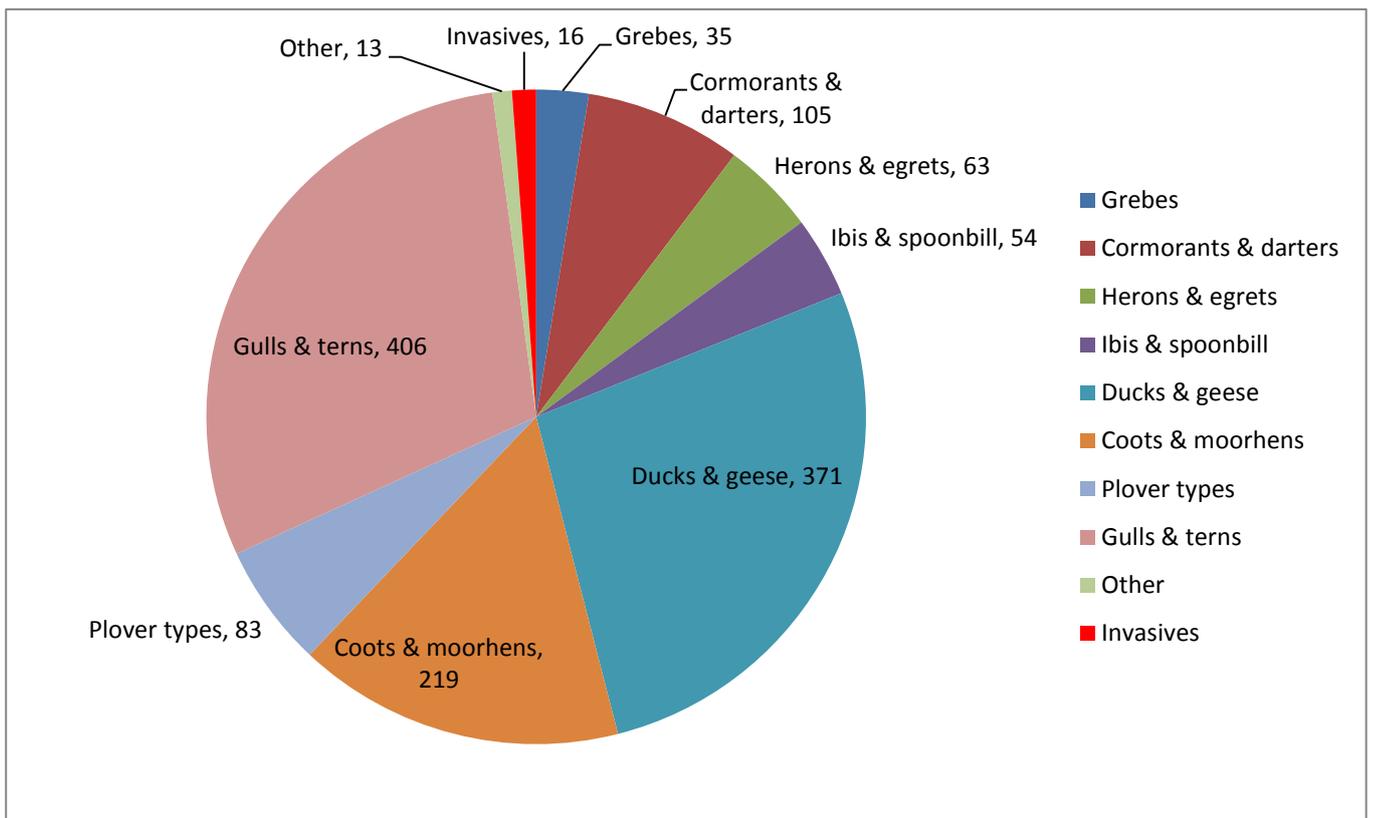


Figure 13. Pie chart of groups of birds of CWAC 2012/08/17.

Invasive bird species like the Mallard (which includes the white Dutch Quaker) are a major concern at TBNR. Mallards are known to interbreed with indigenous ducks species, affecting their conservation. Residents are strongly discouraged from keeping Mallards and Quakers as pets. Invasive Mallards comprised 1% of this quarter's CWAC census at TBNR.

Road kills: Though speed controls and fence developments have drastically reduced the number of roadkills in and around the TBNR, some deaths still occur. In previous years several Cape clawless otters and grysbok were recorded killed on the R27 between Rietvlei and the coastal section. This is now not so prevalent anymore. It is impossible to completely prevent roadkills, but reduced speed, public awareness, and careful driving can help much in limiting such deaths. This Barn owl (Figure 14) and small grey mongoose (Figure 15) are some of very few isolated roadkills reported by the public. Other animals spotted crossing roads around Rietvlei during this quarter were freshwater crabs (Figure 16). Motorists are asked to please drive within speed limits and be on the lookout for animals. The public can report killed animals to reserve management.



Figure 14. A dead barn owl found on the R27 in TBNR (photo by Rolf Spaeth).



Figure 15. Small grey mongoose found at Diep River.



Figure 16. Freshwater crabs walking on road in Rietvlei.

4.3 Erosion Management

4.3.1 Shore line stabilisation methods were used to protect the northern shore of Rietvlei against erosion. Near the **Al Mare residential area**, *Phragmites australis* was planted against the shoreline to add to the reedbed that was already established there by TBNR staff previously. Figure 17 indicates new growth out of the transplanted *Phragmites* stalks.

And at the **fishing sites** the kikuyu grass invaded banks are being rehabilitated by planting buffalo grass, sourfigs and *Cyperus* plants (Figures 18-19). Future plans to protect the fishing shoreline includes building fishing plantforms which would prevent further transpling of the shoreline.

TBNR staff are watering the plants with vlei water to prevent them from dying. Figure 20 is an example of a successful shoreline stabilisation project. A similar successful project is underway at the **Milnerton Golf Course**, where the golf course management team is doing the work.



Figure 17. *Phragmites australis* was planted on northern shore of Rietvlei to protect the shoreline.



Figure 18. EPWP workers planting buffalo grass.



Figure 19. EPWP team planting sourfigs and *Cyperus*.



Figure 20. Example of successful shoreline stabilisation at Rietvlei north shore.

5 WATER MANAGEMENT

5.1 Water quality monitoring was done on 2012/07/31, 2012/08/28, and 2012/09/25. The August water sampling was done by the Scientific Services laboratory staff due to TBNR staff not being available on that day.

5.2 Rainfall at Rietvlei during this quarter was similar to the previous quarter. A 178 mm were recorded, taking the total for this year up to 360 mm. See Table 3 and Figures 21-23 for graphic representations of the rainfall data below. The graph bars indicate a slightly higher-than-average record over the average line.

Table 3. Rietvlei rainfall data: Updated 2012/10/04

RAINFALL DATA: Updated on 2012/10/04														
	Ave	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
January	10.658		16.0	57.9	3.5	8.0	16.0	1.0	1.5	4.0	4.00	1.00	10.00	5.00
February	5.7833		2.0	10.0	6.0	0.9	4.0	7.0	19.5	6.0	9.00	5.00	0.00	0.00
March	7.9		0.0	10.1	32.2	7.0	14.5	4.0	15.0	4.0	0.00	1.00	7.00	0.00
April	31.838	5.0	18.9	29.9	10.9	79.5	69.5	27.2	45.5	10.0	32.50	9.00	20.00	56.00
May	50.646	26.1	48.7	38.6	22.2	2.3	54.1	104.0	42.5	44.0	94.00	84.00	34.00	64.00
June	64.473	51.6	36.4	62.8	13.1	66.8	83.3	25.5	127.7	67.0	83.00	71.00	93.00	57.00
July	67.213	46.1	175.7	69.5	27.3	65.8	38.0	64.2	96.0	116.0	57.00	38.00	13.00	72.00
August	63.579	24.3	108.7	66.9	81.1	45.5	74.0	45.0	86.0	68.5	79.00	30.00	54.00	67.00
September	31.154	49.3	61.5	19.5	53.8	17.8	30.0	12.0	34.0	4.0	47.00	12.00	33.00	39.00
October	25.646	5.3	31.2	33.7	25.3	119.0	9.8	20.5	22.0	2.0	29.00	0.00	10.00	
November	20.8	8.8	22.5	13.2	2.8	3.0	9.8	31.0	30.0	46.0	62.50	12.00	8.00	
December	11.3	2.5	10.5	20.1	15.5	6.5	0.0	4.5	22.0	19.0	7.00	10.00	18.00	
TOTAL		219.0	532.1	432.2	293.7	421.9	402.9	345.9	541.7	390.5	504.0	273.0	300.0	360.0

NB: Open Spaces = No DATA (RED) indicates insufficient DATA

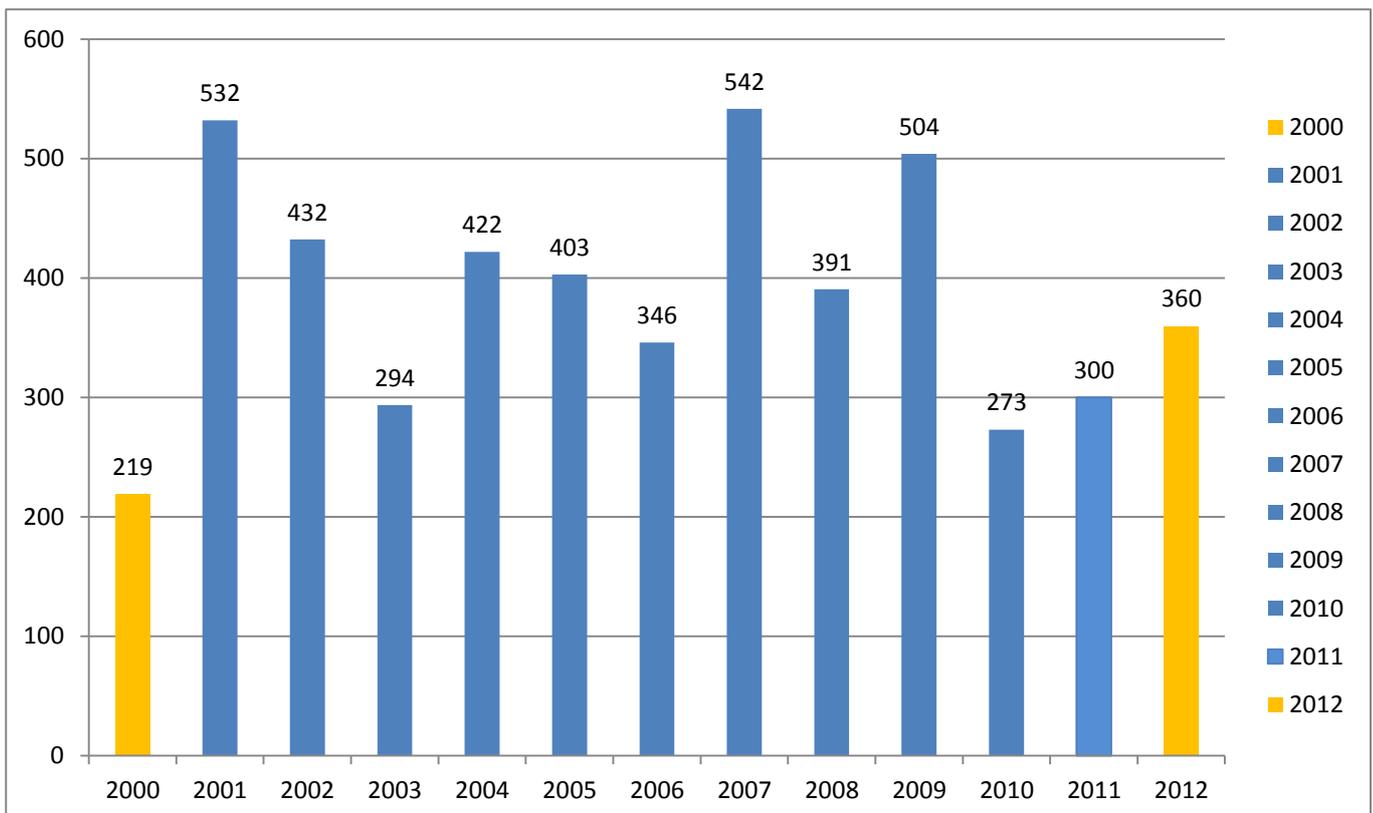


Figure 21. Annual totals of rainfall at Rietvlei.

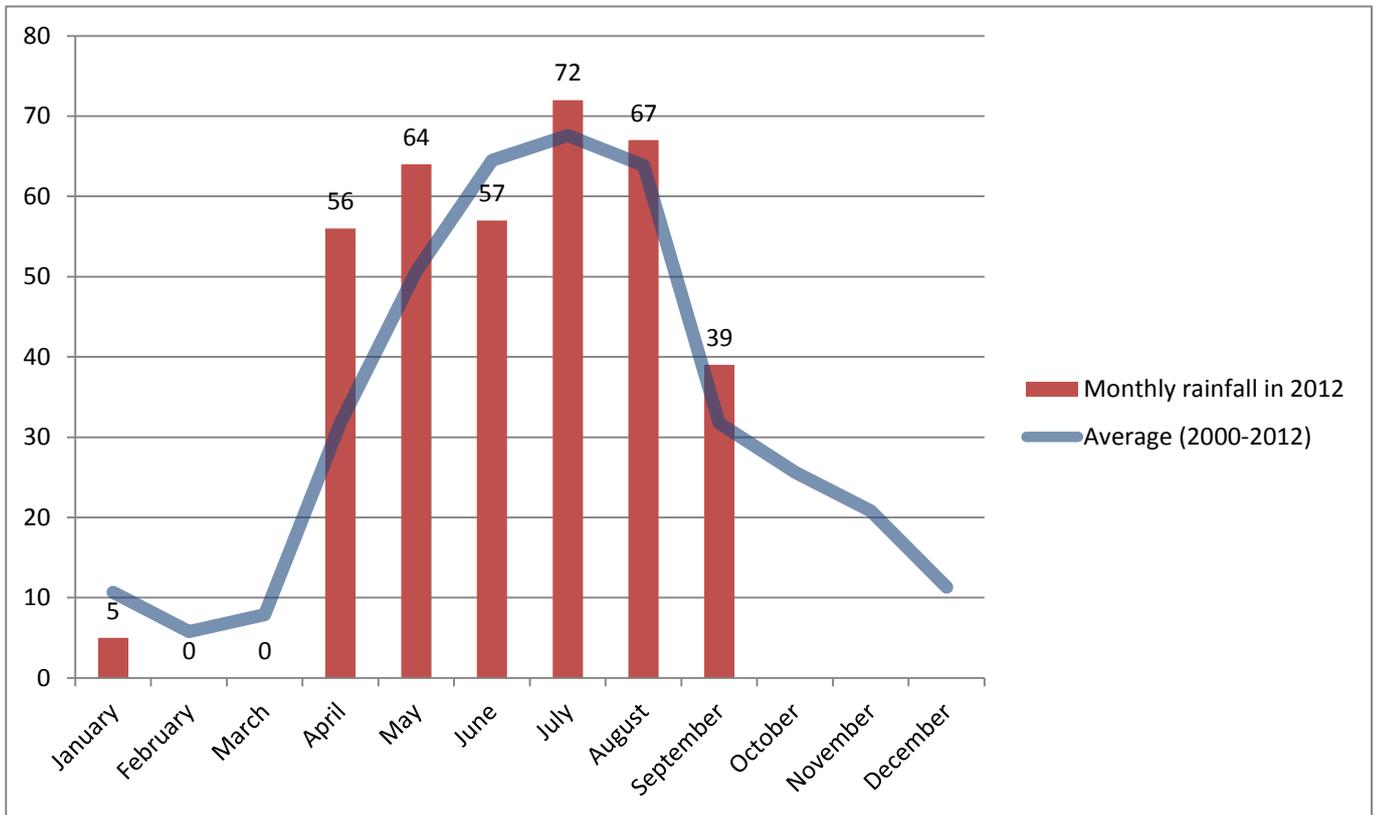


Figure 22. Rainfall trends in 2012 over averages per month.

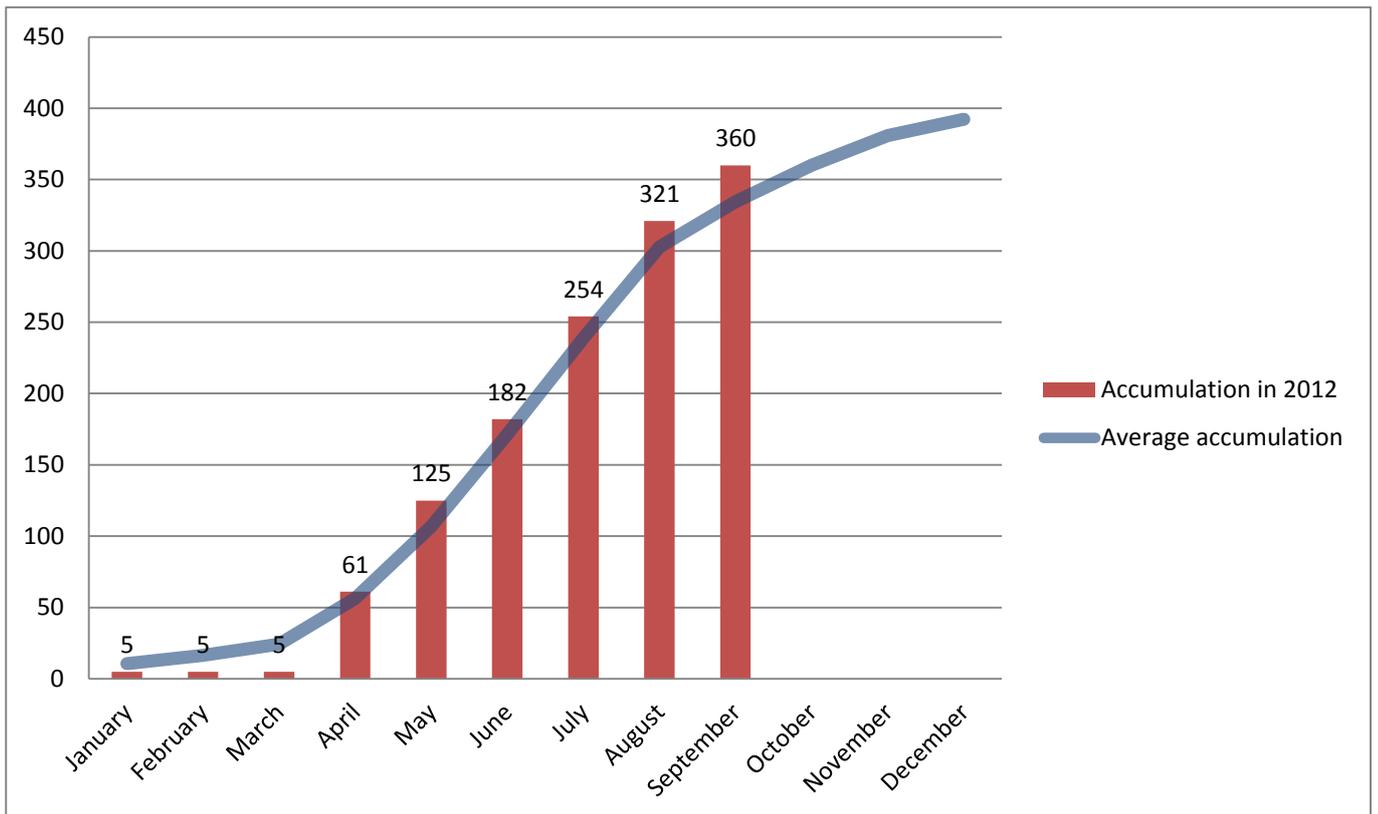


Figure 23. Rainfall accumulation in 2012 vs overall average accumulation.

5.3 Water levels and flow rates have increased due to the higher rainfall this quarter. Some water hyacinth in the lower Diep River system has washed out to sea (Figures 24-25), but much still remains behind in canals and reed beds. Many temporary seasonal wetlands have filled up and some internal roads have been flooded (Figures 26-27). The media have reported on large amounts of litter that washed down with floods (Figure 28) and ended up at the Milnerton Lagoon. This situation will unfortunately persist as long as there is a culture that littering is acceptable.



Figure 24. Water hyacinth clumps in the Milnerton Lagoon.



Figure 25. Water hyacinth washed up at the estuary mouth.



Figure 26. Temporary seasonal wetlands at Rietvlei section.



Figure 27. Flooding of visitor roads at Rietvlei.

Beach litter the norm after heavy rains, says City

AGELA CASAUAY

After a heavy downpour, don't be surprised if you find Lagoon Beach or nearby beaches littered with massive amounts of plastic pollution, despite regular clean-ups in the area.

Concerned Milnerton resident Elizabeth Dallman sent in pictures of Lagoon Beach taken on Sunday July 29 after heavy rains brought piles of artificial pollution entangled with natural refuse, such as kelp and drift wood.

"What I found very strange was that the trash consisted only of bottle caps and other small pieces of plastic on Sunday July 22 and mostly of empty bottles on July 29," she wrote in a letter to Tabletalk.

"As a visitor, I am appalled and hope that no foreign visitors see this," she added.

When Tabletalk visited Lagoon Beach on Thursday August 2 at 4.30pm, it was noticeable that the large amount of plastic bottles and kelp were gone, although the shore was still littered with various kinds of items, including gym bags, shoes, and plastic wrappers.

The City's mayoral committee member for utility services She-haam Sims said the City was aware of the incident and such occurrences are to be expected after a bout of heavy rain.

"When the lagoon is full and there has been a period of heavy rainfall, it is expected that a range of items will wash up onto the

beach area," Ms Sims said.

Two kinds of litter can be found on the shore: natural litter, such as kelp and drift wood, and artificial pollution, such as plastic bottles.

"Even though kelp may be a nuisance to some, it is actually a natural phenomenon. Beach-cast kelp serves various functions, such as refuge and nesting habitat for some organisms, as well as encouraging dune formation," said Tandeka Gqada, mayoral committee member for community services.

Gregory Player of the volunteer group Blouberg Beach Clean-up said the most common artificial rubbish found on beaches are plastic bottles, bottle caps, chip packets, straws and sucker sticks.

Although it is relevant to track down the source of the rubbish, Mr Player said it is more important for beach-goers to change their behaviour and take responsibility for their shores.

"It's easy to sit back and wonder and argue where all the litter comes from but it's much harder to get down to the beach and actually do something about it," he said.

That's what the Blouberg Beach Clean-up would like to promote – a family orientated fun day out on the beach doing something positive for the environment and getting some exercise at the same time," he added.

After conducting independent investigations, Mr Player said he believes that Salt River, which leads into the sea at Paarden Eiland, is the main contributor of plastic pol-



Large amounts of litter washing up ashore can be expected after heavy rains, the City said.

lution into the sea. The river runs up to the old Energy Station past the M5 on the N2.

Mr Player also offered another theory, saying that ships were also guilty of dumping rubbish.

The group has procured video evidence of the one incident, aside from finding foreign packaging on the shores with labels indicating that they were made in China and Brazil. The City, however, said that the exact source of litter cannot be determined.

"Plastic bottles and caps come from various sources and the specific source cannot be determined," Ms Sims said.

Lagoon Beach resident Pat Cole-

man, who goes to the beach twice a day, said the beach is usually pristine in the morning but the high tide that comes in during the afternoon brings garbage from other parts of the city with it.

Mr Coleman is quick to add that he is satisfied with the clean-up efforts conducted on the beach.

"I must say that as a resident, I am very impressed with the energy that the City has given to clean up the beach every day.

"There is definitely visible cleaning that happens," he said, adding that residents should have noticed the clean-ups "unless they are blind."

Asked how often cleaning crews

are dispatched to the area, Ms Sims said: "The area will be inspected daily and Solid Waste Management staff will be allocated on a daily basis to clean and remove litter." Litter and beach rubble collected from Lagoon Beach are removed in bulk and taken to the City's Visser-shok landfill site while kelp is removed only on "select high intensity-nodal beaches."

On the rest of the coastline, kelp is left on the beach.

"The City does not have a contract in place to handle beach waste separation," Ms Sims said.

How much the City and councils pay for the whole process cannot be provided, said Ms Sims, as "the work is carried out by a team and is not budgeted separately."

The City also could not give information on whether the amount of rubbish that has been polluting Lagoon Beach and other shores has increased or decreased over the years.

"This sort of data is unfortunately not recorded due to the nature of the operations, where trucks and cleaning crews work in various locations attending to different problems in the course of any given period," Ms Sims said.

Mr Player called on Capetonians to be more proactive in taking care of their beaches.

"Are we fighting a losing battle? No. Our love for the beach, the environment, and children's future is much stronger than our inquisitive nature as to wondering where the litter comes from," he said.

Figure 28. Article in local press regarding the washing out of litter by winter floods.



Figure 29. Planning session with Roads and Stormwater.

5.4 Stormwater Management: Koos Retief and Christopher Singo assisted Mr Luviwe Nogqala (Transport Roads and Stormwater) with planning for future litter traps in the catchment area. A planning session and site meeting was conducted to assess the major sources of water-borne litter problems in the catchment (Figure 29). The first litter traps were inserted at the culverts under Marine Drive on the Zoarvlei side (Figure 30). It is hoped that these litter grids will prevent the buildup of unnecessary litter and rubble in the culverts and help to keep them unblocked. Machines were used to open the Zoarvlei stormwater outfalls and clear accumulated sand in front of the pipes to prevent flooding upstream (Figure 31).



Figure 30. Litter grid inserted at Zoarvlei outlet.



Figure 31. Maintenance at the Zoarvlei stormwater outfalls.

6 FIRE MANAGEMENT

6.1 Fire response preparedness: The TBNR is represented on the local Fire Protection Association, and all fire preparedness is reviewed at this committee. Fire management in this quarter was primarily controlled brush pile burning.



Figure 32. One of about 200 brush piles burnt by TBNR and BBNR teams at Tydstroom Fynbos Broilers.

6.3 Future planned controlled burns:

Applications will be submitted for permits to conduct controlled burning of reedbeds in Zoarvlei and Wave's Edge. A permit was awarded for Wave's Edge, but during the winter season no burning could take place, and therefore the application was resubmitted.

6.4 Fire History mapping:

The Environmental GIS Section assisted in compiling a fire history map for the TBNR (Figure 33). The historic records were scrutinised as far back as possible to enable mapping of all fires in the reserve. The extent of any future fires would also have to be recorded with a GPS. The data must be submitted to the GIS technicians so that the fire history map can be updated accordingly after ever burn.

Detailed knowledge on the fire history of a reserve is essential to planning preventative as well as responsive measure to wildfires. Furthermore, the appropriate fire history and age of vegetation can help to plan controlled burns in areas that are reliant on fire.

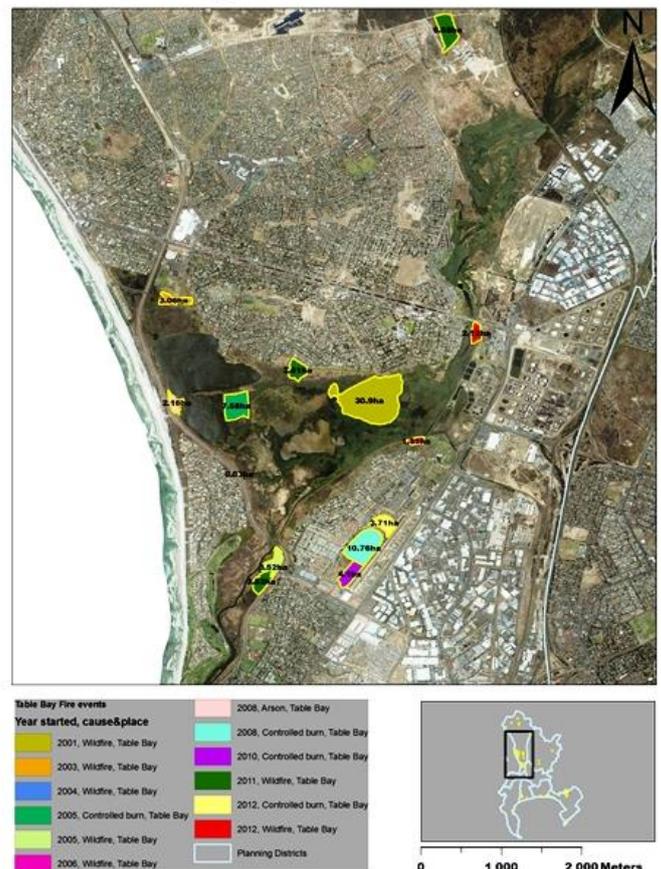
The public are requested to report all fires in the TBNR to reserve management.

Figure 33. Draft fire history map of TBNR (opposite).

6.2 Controlled brush pile burning was conducted by the TBNR team and the Blaauwberg Nature Reserve (BBNR) team at a Stewardship Conservation Area in Atlantis called the **Tydstroom Fynbos Broilers**.

The farm was cleared of invasive alien trees about a year and a half ago. The Branch agreed to assist the landowner with the brush burning operations in order to assist the regeneration of the indigenous Fynbos vegetation on site.

The farm conserves several Red List endangered plant species and forms part of the City's Biodiversity Network in the Atlantis Area. The brush piles were burnt individually, but it is envisaged that the farm will burnt as a block format in about five to six years' time.



7 COMPLIANCE MANAGEMENT

7.1 Boundary management at TBNR is often complicated and involves several hundred private landowners as well as open access systems (Figures 34-39). Vibracrete walls at the backs of properties often receive dumping, graffiti and other illegal activities. TBNR staff responds to illegal dumping by putting up signage and solid barriers to prevent vehicle access as well as removing the material. Graffiti is also removed from walls facing the reserve. Private properties often illegally allow dogs and cats to move into the TBNR (Figures 38). New visually-permeable wall designs in new developments such as Parklands (see Figure 35) eliminate most of these problems.



Figure 34. Wooden bollards at Donegal Rd, Zoarvlei.



Figure 35. New wall design in Parklands is desired standard.



Figure 36. Dumping over a vibracrete wall at Zoarvlei.



Figure 37. Graffiti on a wall facing Zoavlei.



Figure 38. A dog illegally wandering in a fire break.



Figure 39. Poles inserted under fence line to stop dogs.

7.2 Displaced people in Zoarvlei section have taken up residence in at least five known locations. Law enforcement staff are liaising with the Displace People’s Unit (DPU) to remove their structures and relocate the people. The sites of illegal structures are often a mess of litter and pollution (Figures 40-43). Most of these people repeatedly return after their structures are removed.



Figure 40. Illegal structure in Zoarvlei section.



Figure 41. Displaced peoples’ clothes in Zoarvlei section.



Figure 42. Illegal structure in Zoarvlei section.



Figure 43. Illegal structure in Zoarvlei section.

7.3 The demolition of Maisel’s Cottage in Zoarvlei section was funded by a Ward allocation and executed by a contractor appointed by the City (Figures 44-45). Maisel’s Cottage was inhabited by illegal occupants and the City obtain an eviction order so the the structuwer could be demolished.



Figure 44. Demolition of Maisel’s Cottage in Zoarvlei section.



Figure 45. The cleared site of Maisel’s Cottage.

7.4 Illegal plant collection in the Diep River has reduced since permanent staff patrol the area. Normally waterblommetjies and arum lilies are collected illegally. These plants are confiscated by TBNR staff when the collectors are apprehended. The man in the below picture has been apprehended for arum lily collection previously (Figures 46-47). Future transgressions will result in charges. The public may report sightings of harvester to the reserve management.



Figure 46. A 209 arum lily flower heads confiscated from the man opposite.



Figure 47. The man apprehended for being in possession of stolen arum lily flower heads.

7.5 Graffiti on walls facing the Zoarvlei section was covered with cream paint. Figures 48-49 are at Festival Street, and Figures 50-51 are at the Italian Club.



Figure 48. Graffiti on wall at Festival Street.



Figure 49. Graffiti removed by TBNR team.



Figure 50. Graffiti on wall at Italian Club.



Figure 51. Graffiti removed by TBNR team.

7.6 Illegal cattle grazing in Diep River section contributed to the historic degradation of that part of TBNR. Recent efforts to remove alien vegetation and to restore the natural habitat is still hampered by occasional illegal entry of cattle. On 2012/08/08 about 50 cattle and two herders with about 12 dogs were apprehended in the Diep River. The compliance officers were not available to attend to the matter. Koos Retief, Clinton Roux and Robert Slater chased the cattle and dogs out of the reserve (Figures 52-53). An interpreter was used to explain to the herders that they are not allowed to graze their cattle in TBNR. In future cattle may be impounded by the City.



Figure 52. Cattle found illegally grazing in Diep River section.



Figure 53. Cattle being chased out of TBNR.

7.7 Other miscellaneous crimes included an **off-road motor-biker** that tried to ride to the seasonal pans in the Rietvlei section. Koos Retief personally apprehended this rider and removed him from the reserve (Figure 54).

Figure 55 indicates how **vandals** tried to cut through a sign post with a hacksaw. The pole was however filled with solid concrete, making it impossible to be cut through.

Figure 56 indicates **illegally planted aloes** being removed from the Rietvlei section at the Milnerton Ridge boundary. Residents are not allowed to plant any plants in a nature reserve, especially not plants that are alien to this area.



Figure 54. Off-road motor-bike rider apprehended.



Figure 55. Vandals not able to cut through sign post.



Figure 56. Illegal plants removed (Photo: Clinton Roux)

7.8 Oil pollution from the Seli-1 wreck continued to fall out on the coast line at Blouberg Strand, and this was widely reported in the media (Figure 57). Oil control booms were placed at the Milnerton Lagoon as a precaution, but no threat of oil pollution occurred at the estuary. Some penguins however suffered from oil contamination in Table Bay and most of these birds ended up for treatment at SANCCOB. Refer to "People and Conservation" section for more details.

■ The Seli 1 shortly after she ran aground on September 8 2009.

■ On June 3 2010 fire, started by salvors' oxy-acetylene torches gutted the ship's bridge and living quarters.

PICTURES: COLIN BROWN

■ In September last year, A kilometre-long oil slick, from the Seli 1 put Koeberg on high alert, led to booms being placed around the mouth of the Milnerton Lagoon.

■ The Seli 1 as it looks today. Recent storms have blown a rear-facing crane into a precarious-looking position.

Seli 1 wreck left to rot

It's been three years since the Seli 1 ran aground but, despite the threat of oil leakage, there's little sign it's likely to be removed or that anything has been done to avoid a similar fiasco in future.

KEITH GRIEVE

Next month, the Seli 1 will have been stranded on Bloubergstrand for three years: 9 000 tons of coal remains on the hulk, and possibly 85 tons of fuel oil. Now that everything of commercial value has been removed, the wreck has deteriorated to the point where it is three separate sections joined together below the waterline.

There remains an ongoing potential for oil leakage occurring during natural deterioration, especially during winter storms, as well as during future work done to remove the visible remains.

Dave Colly, regional manager of the South African Maritime Safety Authority explains that "the oil, being lighter than water, would be trapped at the top of the flooded fuel tanks and against frames".

Rough sea conditions may periodically result in localised contamination, but it appears increasingly likely that removal will not take place during 2012, and that if it is removed, the South African taxpayer will foot the bill.

Mark Schacht, manager of Milnerton Golf Club, complains that "eight metres of coastline was lost in one night" and that despite three proposals being submitted to provincial government over 18 months ago, no response has been received.

Whether these coastal changes are directly attributable to the pollution of the Seli 1 is unverified, but satellite pictures clearly show shoreline erosion to the north of the wreck and a developing sandbank to the south.

The lack of progress in evaluating and quantifying this, and in effectively removing the wreck, underscores the increasing apathy surrounding removal. This appears to have been compounded by the Department of Transport's apparent shift in policy – in an October 2011 meeting with representatives from the Maritime Law Association, it was minuted that due to limited resources, the DoT "...had decided to shift the department's immediate focus away from environmental and safety issues, although these clearly remain important, and to focus on commercial issues".

This shift in focus exacerbates any progress being made to address the Seli 1 wreckage, in particular, and effectively deal with future maritime catastrophes where insurers renege or where the vessel is uninsured, such as in the case of the recent Eihatsu Maru stranding on Clifton Beach in May and the Panos Earth engine failure in April.

Limited resources, as a result of insurers reneging on their coverage for repair or salvage costs, places an additional burden on already hard-pressed taxpayers and efforts to remedy this by amending relevant national legislation have been met with resistance.

There is no international legislation compelling the owners or insurers to remove a stranded vessel from our shoreline, but one national statute, the Admiralty Jurisdiction Regulation Act of 1983, facilitates the arrest of a ship by the sheriff should creditor costs not be covered.

Despite the Act being amended by four subsequent Acts between 1983 and 1998, it still does not address the costs associated with preservation of the vessel during arrest.

HW Hurter, the Sheriff of Cape Town, attempted to close the payment loophole in May 2011 by proposing legislative changes which would effectively prevent the vessel from being released until such costs had been settled, but some 16 months later, the sheriff's office say that "no further progress has been made in this regard".

In February, after the failure of the Departments of Transport and Environmental Affairs to attend meetings with the council regarding removal of the wreck, council indicated their intention to declare an intergovernmental dispute.

Mayoral committee member for safety and security JP Smith states that R40 million has already been incurred by SAMSA and that at least a further R30 million will be required for the removal of what presently remains on Bloubergstrand. Meanwhile, the Department of Environmental Affairs spokesman Zolile Ngayi, states that the department has no mandate for the removal of wrecks from the South African coast.

SAMSA has not been included in any subsequent communication between council and the Department of Transport, but they have requested the salvors, Smit Salvage to submit what amounts to a quotation for the piecemeal removal of the Seli 1 remains.

Dave Colly points out that "aside from the aesthetics, there is the erosion of the shoreline, the ongoing potential for localised pollution, the hazard presented to the public swimming and surfing in the immediate area, and of course the hazard presented to shipping".

Should Smit Salvage's proposals and costs be accepted, "how much is removed will ultimately be dependent on finances. The best compromise will have to be arrived at".

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Figure 57. Local media article about the Seli-1 wreck.

8 PEOPLE AND CONSERVATION

8.1 Stakeholder Engagement (external meetings)

TBNR staff attended at least 13 external stakeholder meetings during this quarter. Table 4 below summarises TBNR's involvement in these meetings.

Table 4. Records of external stakeholder meetings relating to the TBNR.

AREA	DATE	MEETING/WORKSHOP	PURPOSE
TBNR	2012/07/20	Zoarvlei Management Advisory Committee (ZMAC)	Feedback
	2012/07/20	Friends of Rietvlei regarding Rietvlei information boards	Feedback
	2012/08/10	EPWP and DEA regarding implementation of boardwalk constructions at Rietvlei	Feedback
	2012/08/14	Cape West Coast Fire Protection Association (FPA) meeting	Planning
	2012/08/14	C2C Consulting and MSD Construction regarding Rietvlei office waterproofing	Planning
	2012/08/29	Cape Peninsula University of Technology (CPUT) regarding student progress	Feedback
	2012/08/31	Cape Peninsula University of Technology (CPUT) student interviews for 2012	Planning
	2012/09/10	Pat Titmuss regarding Rivergate development	Planning
	2012/09/17	Rietvlei Management Working Group (RMWG)	Feedback
	2012/09/19	Subcouncil 15 (Pinelands) regarding Branch Annual Report	Feedback
	2012/09/20	Subcouncil 1 (Blaauwberg) regarding Branch Annual Report and Bongani Mnisi's presentation	Feedback
	2012/09/21	Zoarvlei Management Advisory Committee (ZMAC)	Feedback
	2012/09/25	Rietvlei Trust Fund meeting in Julia Wood's office	Planning

8.2 Stakeholder Engagement (internal meetings)

TBNR staff attended at least five internal stakeholder meetings this quarter. See Table 5 below summarised the TBNR's involvement in these meetings.

Table 5. Records of internal stakeholder meetings relating to the TBNR.

RESERVE	DATE	MEETING / WORKSHOP	PURPOSE
TBNR	2012/07/10	Meeting with ERMD regarding vacant Rietvlei intern position	Planning
	2012/07/13	Protect Area (PA) Reviews	Audit
	2012/08/13	Management Effectiveness Tracking Tool (METT) Reviews	Audit
	2012/09/11	Mfundo Wotsitsa regarding TBNR fire history map	Planning
	2012/09/13-14	Taiwanese Learner Exchange visit	Workshop

8.3 North District Meetings: Management and Health & Safety

TBNR staff attended two regional meetings this quarter. See Table 6 below for details

Table 6. Records of district meeting relating to the TBNR.

DATE	VENUE	MEETING
2012/08/31	Rietvlei Education Centre	North Region Management and Health & Safety meeting
2012/09/21	Eerstestein Cabin	North Region Management meeting

8.4 Environmental Resource Management / Branch Meetings / Fun Days

TBNR staff attended one Branch function this quarter. See Table 7 below for details

Table 7. Records of branch meetings relating to the TBNR.

DATE	VENUE	THEME
2012/08/30	Kristo Pienaar Centre	Branch meeting

8.5 Benefits, use of facilities, and media headlines

8.5.1 Rietvlei Boma Usage: The Rietvlei boma was used by about 117 people over five formal meetings this quarter. See Table 8 below for details of its usage

Table 8. Rietvlei boma usage and benefits to people in person days.

DATE	GROUP	ACTIVITY	PERSON DAYS
2012/09/03	CCT & EPWP Invasive Species Management	Herbicide applicator training	24
2012/09/04	CCT & EPWP Invasive Species Management	Herbicide applicator training	24
2012/09/05	CCT & EPWP Invasive Species Management	Herbicide applicator training	24
2012/09/26	CCT Environmental Compliance	Skippers training	25
2012/09/28	CCT Economic Development Department	Workshop	20
TOTAL			117

8.5.2 Rietvlei Education Centre Usage: The Rietvlei Education Centre was used by about 105 people over about 5 formal meetings this quarter. See Table 9 below for details of its usage.

Table 9. Rietvlei Education Centre usage and benefits to people in person days.

DATE	GROUP	ACTIVITY	PERSON DAYS
2012/09/12	CCT Atlantis Fire	Fire and life safety education	20
2012/09/19	CCT Atlantis Fire	Fire and life safety education	20
2012/09/26	CCT Atlantis Fire	Fire and life safety education	15
2012/09/27	CCT Environmental Compliance	Skippers training	25
2012/09/28	CCT Environmental Compliance	Skippers training	25
TOTAL			105

8.5.3 Environmental Education: TBNR staff reached about 169 people over five visits with environmental education messages this quarter. See Table 10 below for details.

Table 10. Environmental Education Statistics at TBNR.

DATE	GROUP(S)	LEARNERS	ADULTS	PD'S	PROGRAMME
2012/07/02	Holiday Programme	28	3	31	Bird Kingdom
2012/07/03	Holiday Programme	22	-	22	Wetland Adventure
2012/07/04	Holiday Programme	18	-	18	Little Five
2012/07/05	Holiday Programme	28	6	34	Ultimate Survivor
2012/09/04	Kenmere Primary School	62	2	64	YES – Arbour week programme
TOTALS	5	158	11	169	TOTALS

8.5.4 Various training courses took place around Rietvlei including Community Fire Safety, Fire Fighting Drills (Figure 58), and Skippers' Training (Figure 59). Rietvlei is a venue of choice for training in water-based activities such as boating and diving. These training activities are integrated with the recreational users of the reserve. Most of the skills developed at Rietvlei through these training courses are applied by City departments to better manage the City.



Figure 58. Fire fighting drills at Rietvlei.



Figure 59. Skippers' Training at Rietvlei.

8.5.5 Taiwan Learner Exchange: TBNR hosted an exchange learner from Taiwan for two days. The programme took the Taiwanese delegate to various locations and projects in the TBNR (Figures 60-61), including the Diep River and Fynbos Corridor, the Milnerton Racecourse, the Milnerton Lagoon, the bird hide block restoration area, and the Rietvlei recreational water area. Spring wildflowers provided a great opportunity for assessing the benefits of habitat restoration and controlled burning in various locations, and visit to SANCCOB also highlighted the plight of the penguins oiled by the Seli-1 wreck. This exchange programme facilitated much learning between Cape Town and Taiwan and TBNR hopes to host future learners again.



Figure 60. Oiled penguins being washed at SANCCOB.



Figure 61. Simone Greveling pointing out rare and endangered vegetation to the Taiwanese exchange learner



Figure 62. A boat road at Rietvlei

8.5.6 The Milnerton Aquatic Club presented the Table Bay Nature Reserve offices with a replica of a postal stone artefact found at the location of excavations in the club grounds. The artefact is of great historical importance and the original stone is in safe keeping at the Iziko Museum. The replica will be displayed at the Rietvlei office, along with prints of old naval charts of Table Bay. A local newspaper reported on the matter in the press (Figure 63).



Figure 63. The replica of the postal stone handed over to the TBNR by Ms Pat Downing and Mr Ross Cowing.

8.5.7 The Seli-1's impacts continue to affect people's perception of the wreck, as well as wildlife, including penguins from oil contamination of oil. SANCCOB has been involved in rehabilitation the penguins and media has reported widely about this incident (Figures 64-66).



Figure 64. Article about the Seli-1 wreck.

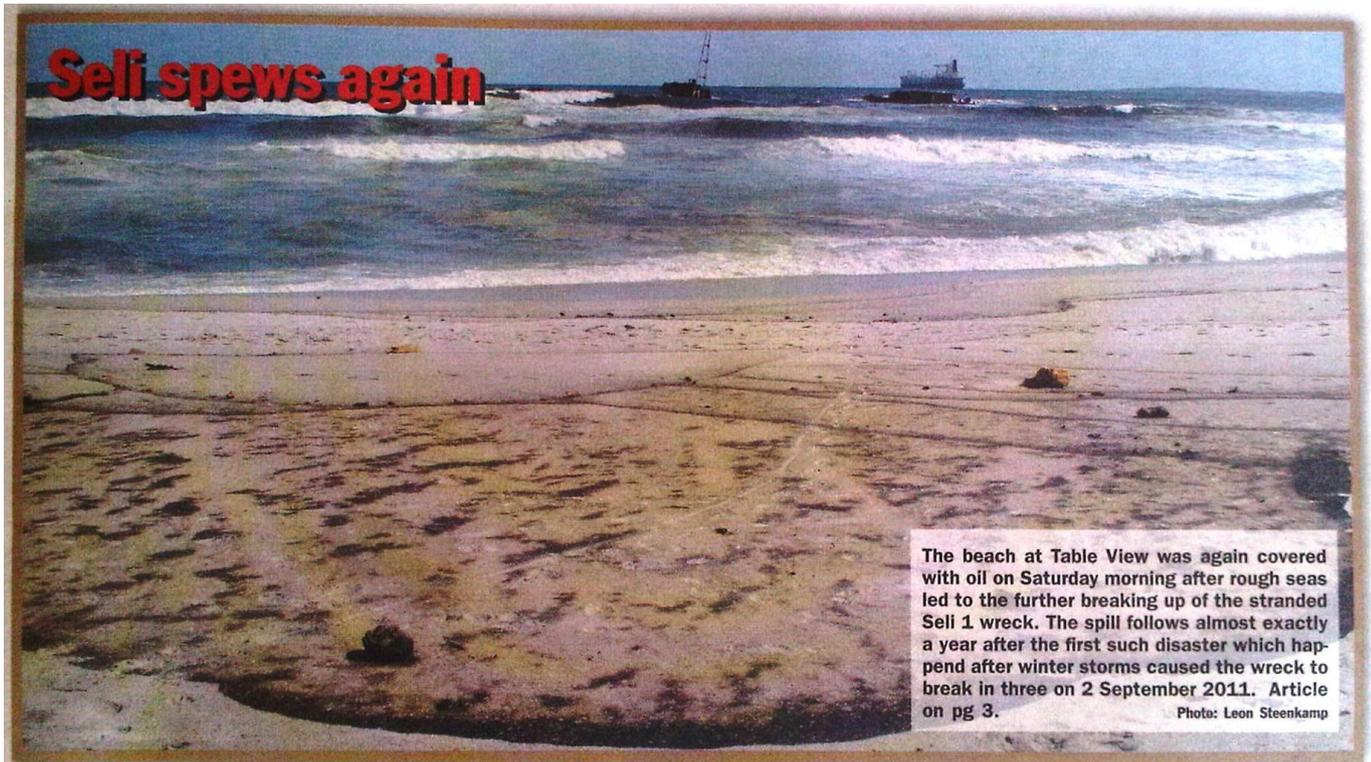
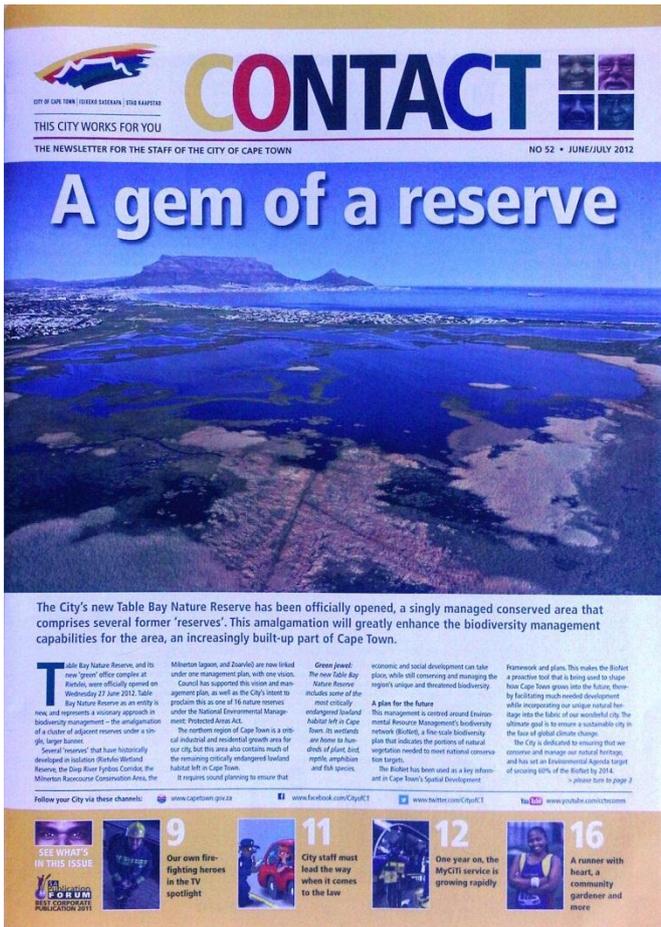


Figure 65. Article about the Seli-1 wreck.



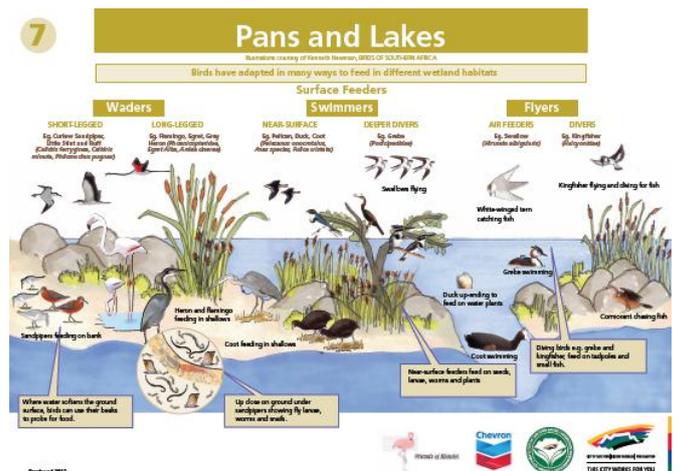
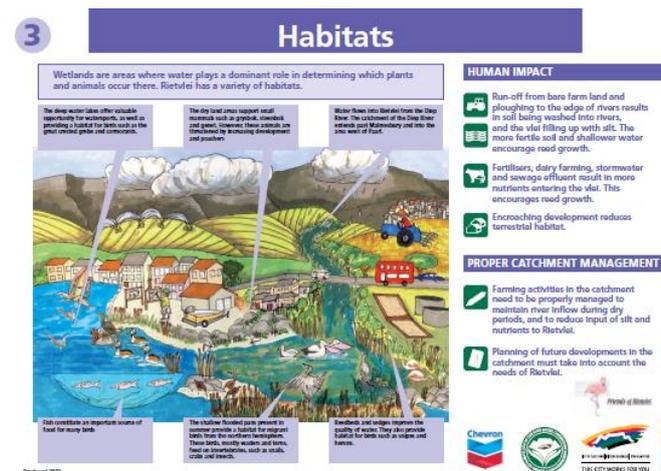
Figure 66. Article about SANCCOB's response to oiled penguins.

8.5.9 The TBNR office launch appeared in the City of Cape Town's CONTACT magazine is a two-page feature (Figures 71-72). The article highlights various benefits and values of the nature reserve, as well as projects being managed on the ground.



Figures 71-72. CONTACT magazine article on TBNR launch.

8.5.10 New Rietvlei information sign boards are being designed by the Friends of Rietvlei, Chevron, and City of Cape Town. The sign boards offer interpretive information over a series of eight sign boards in three languages. Once the boards are completed they will be put up at Rietvlei. Below are two examples of the boards in the design phase (Figures 73-74).



Figures 73-74. Examples of sign boards.

9 HUMAN RESOURCE MANAGEMENT

9.1 Staff Establishment

9.1.1 The staff at TBNR consists of 11 permanent staff members and about 71 non-permanent staff members of various types. See Table 11 below for details.

Table 11. TBNR staff complement.

Area	Position	Purpose	Permanent	Contract
Milnerton	Area Manager	Functional / Operational Management	1	
	Assistant Cons Off	Gate Control/Visitor Management/Law Enforcement	2	
	Assistant Cons Off	Conservation Compliance – Diep River	1	
	People & Cons Off	Environmental Education Officer	1	
	Foreman	Supervision of junior staff	1	
	Small Plant Operator	Chainsaw/Brushcutter/weed eaters etc	1	
	Senior Worker	Labour/field ranging	4	
	Students	Nature Conservation Diplomas		2
	Intern	EE Programme Management		0
External	EPWP	Labour		69
TOTALS			11	71

9.1.2 Various Expanded Public Work Program (EPWP) teams are working at TBNR. There are altogether about 69 EPWP workers reporting to Rietvlei office and they are managed on a daily basis by TBNR staff and/or EPWP appointed supervisors. The teams consist of 16 people for alien clearing in Rietvlei, eight people for alien clearing in Diep River, and 45 people for Biodiversity implementation projects.

9.1.3 Capacity building in the EPWP teams takes various forms. EPWP staff attends various types of training in formal short courses, daily health-and-safety talks, as well as on-the-job coaching. TBNR staff have also instituted a quarterly social get together during which EPWP staff interact with management over a digital presentation of the quarterly report (Figure 75). This interaction builds trust as well as encourages learning.

A recent success is Mr Monwabisi Varoyi (Figure 76) who was selected to fill a permanent position at the Witzands Aquifer Nature Reserve under the management of Charline Mc Kie. EPWP staff is encouraged to learn while they work and to practice essential skills for permanent employment.



Figure 75. EPWP staff at a quarterly gathering to discuss the quarterly report.



Figure 76. EPWP worker, Monwabisi Varoyi, was selected for a permanent position at Witzands Aquifer NR.

9.2 Staff Training

9.2.1 TBNR staff attended training over 94 person days this quarter. See Table 12 for details.

Table 12. TBNR staff training records.

AREA	DATE	TRAINING	ATTENDANCE	PDS
TBNR	2012/07/30	Health & Safety representative training	1	1
	Various	EPWP First Aid Training (2 days)	4	8
		EPWP Health & Safety (2 days)	5	10
		Herbicide applicator training (3 days)	25	75
TOTALS			94	

9.2.2 Nature Conservation Students: The Nature Conservation students, Robert Slater and Cassandra Ricketts, both attended the Fynbos Forum 2012. Robert Slater's project relates to overwintering trial of water hyacinth biological control agents. Cassandra Ricketts's project relates to populations of Cape Dwarf Chameleons. Below are the posters that they presented (Figures 77-78).

The effects of the biocontrol agent (*Neochetina bruchi*) on the Water Hyacinth (*Eichhornia crassipes*) during the winter within the Table Bay Nature Reserve.

Abstract
Water hyacinth (*Eichhornia crassipes*) has been a problem in South Africa for many years and has been classified as the world's most problematic aquatic weed. Mechanical and chemical control is the first choice when it comes to the removal of water hyacinth that is found in small areas. When it comes to large areas of water hyacinth, biological control has proven to be the best form of removal. The author, Robert Slater, has chosen to do research on the biocontrol, specifically weevils (*Neochetina bruchi*), of water hyacinth in the Table Bay Nature Reserve during the winter months. Previous biological control research has not been done along the West coast. Weevils have been released into the study site chosen and water hyacinth sampling has begun. Methodology involves capturing data from ten different representative plants once a week. All measurements are recorded on data capturing sheets. Data that is captured includes: measuring the tallest leaf, measuring the roots, measuring the second leaf, counting the leaves, counting the feeding scars on the second leaf and counting adult weevils and larvae found on and in the plants. No results can be seen at present but feeding has taken place on the leaves as there are feeding scars that have been recorded. The feeding scars that can be seen have been identified as weevil feeding scars which show that they are active in the study site. This research will contribute to present research being done on the water hyacinth biocontrol throughout South Africa and will become part of the management plan of the Table Bay Nature Reserve.

Hypothesis
Winter conditions within the TBNR can effect the survival rate of the Water Hyacinth biocontrol agent (*Neochetina bruchi*).

Null-Hypothesis
Winter conditions within the TBNR does not effect the survival rate of the Water Hyacinth biocontrol agent (*Neochetina bruchi*).

Objectives

- To determine whether the bio-control agent can survive the winter conditions found within the TBNR along the West Coast.
- To determine whether there is a difference in results between the controlled and uncontrolled environment.

Data captured during sampling

- Percentage plant cover.
- Number of plants per 1m by 1m plot.
- Fixed point and non-fixed point photographs.
- Weather on the day of monitoring.
- Take 10 random plants and measure:
 - Length of the 2nd leaf.
 - Length of the tallest leaf.
 - Root length.
 - Visible feeding scars.
 - Number of adult weevils.
 - Number of larvae.

Figure 77. Robert Slater's draft Fynbos Forum 2012 poster.



A comparison of the Cape Dwarf Chameleon (*Bradypodion pumilum*) population in three different vegetation types at Table Bay Nature Reserve.



CITY OF CAPE TOWN | ISIXEKO SASEKAPA | STAD KAAPSTAD

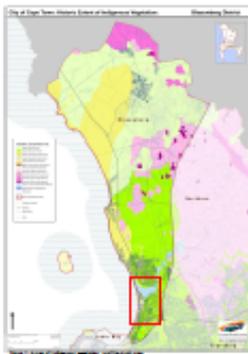
Cassandra Ricketts
Student
Table Bay Nature Reserve

INTRODUCTION

The Cape Dwarf Chameleons (*B. pumilum*) morphological adaptations, migration and plant preference has been vastly studied. Their distribution has also been studied in many areas. Their vegetation type preference along the West coast and Table Bay Nature Reserve has however not been researched. The Cape Dwarf Chameleon is endemic to the Western Cape and has a restricted distribution as well as having a high level of threat to their favoured habitats. There are 15 species identified in the *Bradypodion* genus. Several of these species have been classified as 'Threatened' by the International Union for Conservation (IUCN). The IUCN status of the Cape Dwarf Chameleon is still under investigation but their population numbers are expected to have decreased. The conservation and survival of the Cape Dwarf Chameleon in protected areas may be further aided if their vegetation type preference is discovered and taken into consideration.

OBJECTIVES

- To estimate the Cape Dwarf Chameleon population size at Rietvlei (Cape Lowlands Freshwater Wetlands)
- To estimate the Cape Dwarf Chameleon population size at Minerton Racecourse Section (Cape Flats Sand Fynbos)
- To estimate the Cape Dwarf Chameleon population size at Table Bay coastal section (Cape Flats Dune Strandveld)
- To compare the population sizes of the Cape Dwarf Chameleon within the three different vegetation types



RESEARCH METHODOLOGY

The population of *B. pumilum* was monitored in three sites within the Table Bay Nature Reserve. Each site was randomly selected in each vegetation type and a 1000m² area was marked out in each. A team of four collectors and assistants was used on each occasion. The equipment used for data capturing was a standard tape measure, a pair of metal callipers, grid paper, field data sheets, clipboards, pencils, torches, a global positioning system and a black non-toxic permanent marker. This study uses the method of Capture-Mark-Recapture (open population). Nocturnal surveys were conducted during the months of March 2012 to April 2012. The sampling was carried out for three consecutive nights in each of the three sites for two hours each night.



RESULTS

Vegetation Type	TOTAL no. OF chameleons	No. Juveniles	No. Adults	No. Of Recaptures
Cape Flats Sand Fynbos	37	31	6	1
Cape Flats Freshwater Wetlands	8	6	2	1
Cape Flats Dune Strandveld	0	0	0	0

Map of Cape Town, Western Cape, South Africa. Source: Google Earth. Table Bay Nature Reserve is highlighted in red.



DISCUSSION

The high population of Cape Dwarf Chameleons in Cape Flats Sand Fynbos is due to the dense vegetation and high canopy spread cover. The dominant plant species was *Elegia tectorum*, the Cape Dwarf chameleons favoured plant for perching and hunting. Lower populations are found in Cape Flats Fresh Water Wetlands due to the presence of many predators, the area is also much larger and the population may be highly dispersed and less isolated. The Cape Flats Dune Strandveld has low vegetation not suitable for the Cape Dwarf chameleon as they prefer vegetation from 0.4 m to 1.7 m high. The temperatures are also much lower on the coastal section.

Figure 78. Cassandra Rickett's final Fynbos Forum 2012.

Public Holidays: There was one public holiday this quarter (2012/09/24). The reserve was nevertheless still open to the public.

10 TOURISM AND VISITOR STATISTICS

10.1 Summary of this quarter: July – September 2012

10.1.1 Entrance and revenue: A total of **R32,699** was collected at the Rietvlei main gate during this quarter. This was R1,442 less than the **R34,141** of the previous quarter (see Table 13 below). See Figures 79-80 for pie charts relating to the income and visitors to the Rietvlei section.

Table 13. Visitor statistics: July 2012 - September 2012

DESCRIPTION	JUL	AUG	SEP	COST	QUANTITY	INCOME	TOTAL
Daily Entry							R 9 900
Adult (18+)	207	142	345	R 12.00	694	R 8 328	
Children (3 -17)	86	37	79	R 6.00	202	R 1 212	
Children (under 3)	1	4	5	R 0.00	10	R 0	
Senior (60+)	13	6	35	R 6.00	54	R 324	
Student (with Student Card)	3		3	R 6.00	6	R 36	
Friends of Reserves							R 0
Friends of Rietvlei	8	9	41	R 0.00	58	R 0	
Environmental Education							R 200
Learner (all other schools)	40			R 5.00	40	R 200	
Vehicles and Craft							R 10 211
Vehicles	127	88	176	R 17.00	391	R 6 647	
Power boats	27	16	38	R 44.00	81	R 3 564	
Season Tickets							R 1 048
Seniors Season tickets (60+)	1		1	R 59.00	2	R 118	
Adults Season tickets		1	1	R 115.00	2	R 230	
Family Season tickets	1	2	1	R 175.00	4	R 700	
General							R 11 340
Fishing (adult: 18 and older)	84	65	120	R 38.00	269	R 10 222	
Fishing (children: 3-17)	31	12	20	R 13.00	63	R 819	
Fishing (seniors: 60 and up)	9	2	12	R 13.00	23	R 299	
GRAND TOTAL							R 32 699

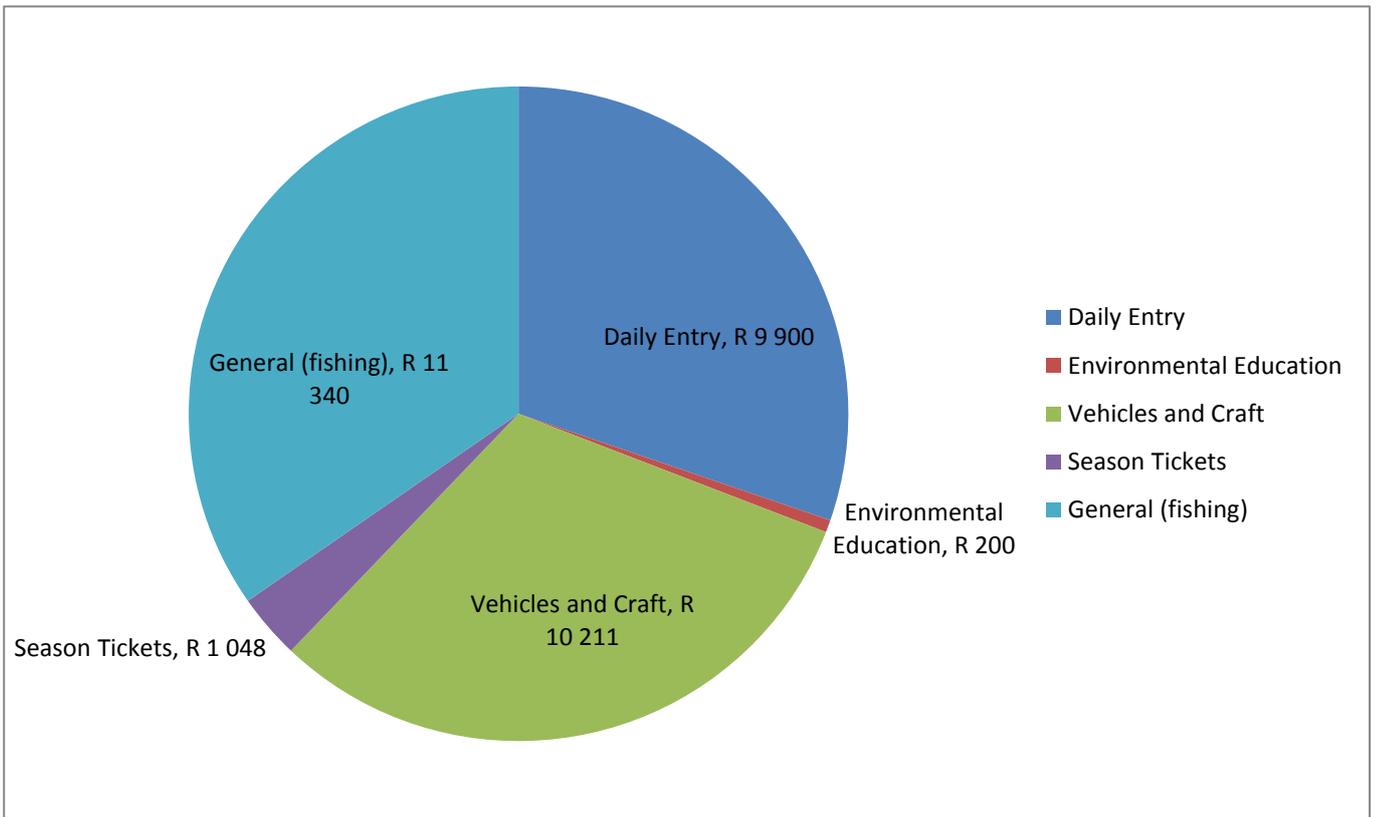


Figure 79. Pie chart of income generated at TBNR during this quarter.

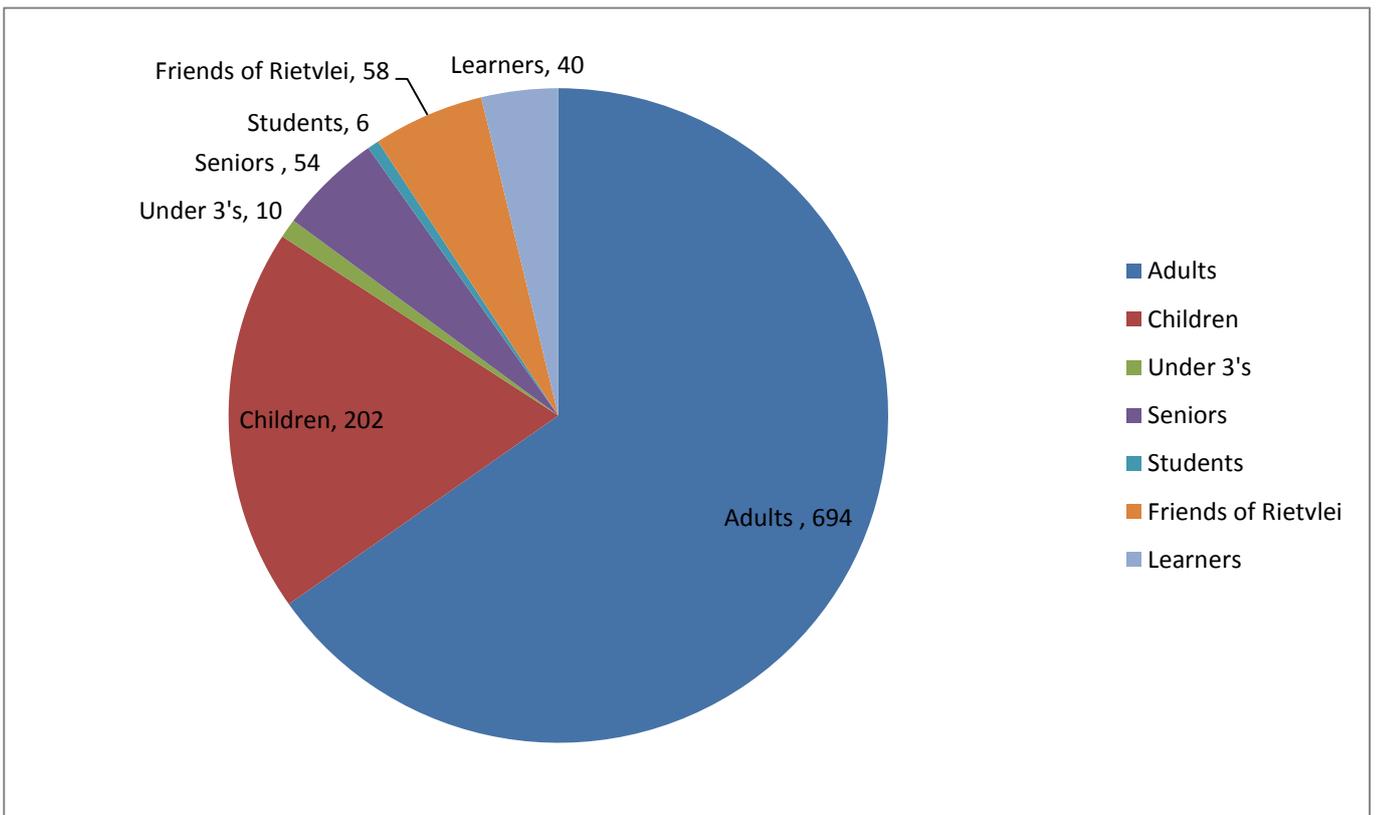


Figure 80. Pie chart of visitors through the TBNR control point during this quarter.

11 INFRASTRUCTURE

11.1 Repairs and Maintenance

11.1.1 Drainage repairs were undertaken at the tourist road in the Rietvlei picnic area. This is because local rainfall was damming up on the road, causing damage and potholes. TBNR staff inserted a drainage pipe and covered the road surface again (see Figures 81-82).



Figure 81. Inserting a drainage pipe.



Figure 82. Covering the drainage pipe.

11.1.2 Various other maintenance tasks were executed.

The **removal of derelict and disused infrastructure**, such as old sign boards (Figure 83) assist in restoring the habitat. During the installation of the new TBNR signage, most of the old signage that displayed the old reserve names were all removed. The signs and poles were returned to storage areas at the Rietvlei offices. Much of the materials can be reused or recycled.

Various **internal roads** and **water services** were also maintained and repaired (Figures 84-85) by Roads and Stormwater Department as well as Water Services.



Figure 83. Removal of old signage.



Figure 84. Tourist road at Rietvlei being scraped by the Roads Department depot machinery.



Figure 85. Leaking water main at Rietvlei abluition blocked was repaired.

11.1.3 Maintenance work continued: Other maintenance work included, but was not limited to, the cutting open of fire breaks and fence lines (Figure 86), the painting of buildings at the main entrance (Figure 87), and the placement of wooden bollards to indicate parking areas and no-go areas (Figures 88-91)



Figure 86. Maintenance of the fire break and fence line at Sandpiper Crescent.



Figure 87. Buildings at the main entrance were painted a uniform cream colour.

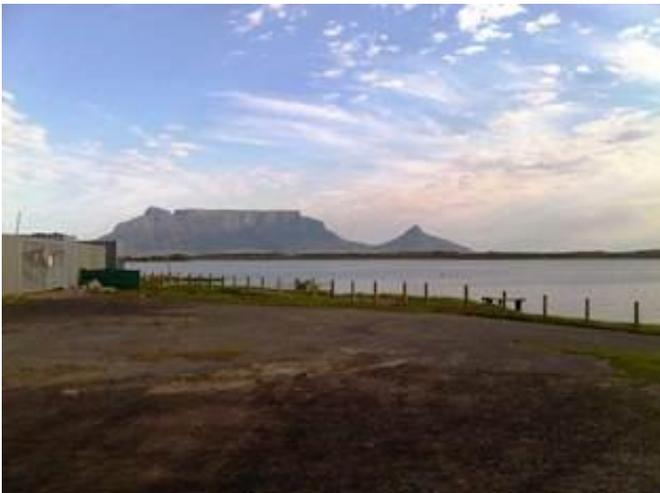


Figure 88. Bollards that replaced a part of an old fence at MAC.



Figure 89. Bollard indicating parking areas at fishing sites to prevent damage to shore line.



Figure 90. Planting of bollards around the entrance.



Figure 91. Planting of bollards around the office.

12 FINANCIAL MANAGEMENT

12.1 Capital Projects

12.1.1 Signage installations: 84 new reserve signs were purchased and installed at TBNR this quarter. This included 24 for the Rietvlei Section, 9 for the Coastal Section, 10 for the Zoarvlei, 7 for Milnerton Lagoon, 3 for Milnerton Racecourse, 18 for the Diep River, and 13 for the Fynbos Corridor.



Figure 92. Delivery of new TBNR signs.



Figure 93. Filling of poles with concrete to prevent theft.



Figure 94. Assembly of signs in the Rietvlei works area.



Figure 95. Drilling of holes and inserting of steel pegs in the base of the pole to prevent removal from concrete.



Figure 96. Installation of signs in the field.



Figure 97. Two signs at Rietvlei launch areas need replacing.

12.1.2 Rietvlei office construction:

A construction defect at the Rietvlei office started to emerge with the winter rains. The reception entrance area's sky-light was not properly water-proofed, and as a result some water damage occurred. Figure 98 indicates a site meeting between the City, the construction company (MSD Construction), and the Consulting Engineers (C2C Consulting).

The options for repairing the damage were discussed and MSD have committed to undertaking the repairs. These repairs will be undertaken in the next quarter



Figure 98. MSD, C2C and City meeting to discuss waterproofing of skylight at the office (photo: Bongani Mnisi).

Koos Retief

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