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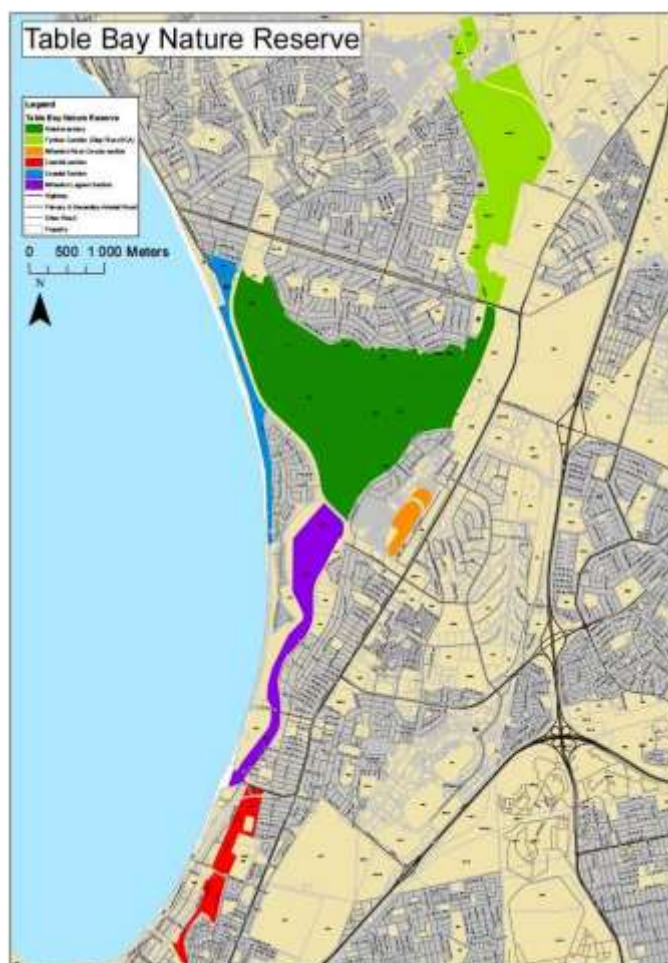
TABLE BAY NATURE RESERVE

QUARTERLY REPORT JULY – SEPTEMBER 2015

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For the Nature Reserve webpage, click the link or type www.capetown.gov.za/tablebaynr in your browser.

1 EXECUTIVE SUMMARY

- The African parties to the **Africa-Eurasian Waterbird Agreement** (AEWA) met in Cape Town in August. A field trip was arranged for 37 conference delegates to visit the Rietvlei wetlands on 26/08/2015.
- The **Protected Area Advisory Committee** (PAAC) for Table Bay Nature Reserve had its inaugural meeting on 10 July 2015. The meeting was attended by 28 people from 22 organisations.
- **Important Bird and Biodiversity Areas** (IBAs) of South Africa were reviewed by BirdLife SA. The Rietvlei Wetland Reserve has been listed as an IBA since the directory was first published in 1998.
- The **annual reserve site visit** of the Branch Manager took place on 20/08/2015.
- **Spring walks** were conducted in the Milnerton Racecourse Section, as advertised in the local press.
- **An integrated bird census** counted a total of 2,046 birds comprising 37 species.
- **A nocturnal animal survey** in the Milnerton Racecourse counted 50 Cape dwarf chameleons.
- **A camera trapping survey** of six cameras was placed in the Nature Reserve.
- **Rainfall was far below average** during this quarter.
- **A talk on Milnerton Racecourse Section** was presented by Landi Louw to the Friends of Rietvlei.
- **The Fynbos Forum 2015** was attended by Student Hester Pentz with a poster based on her ongoing research project into factors affecting the distribution of coral worms in the Milnerton Lagoon.
- **Environmental Education and Outreach**, including the now famous school holiday programmes, generated 484 person days of benefit to people over seven event days.
- **Income from visitors** at the Rietvlei Water Area during this quarter was R53,789 from 2,821 visitors.
- **A Tsebo Bohlale Graduate Internship Programme** intern, Andiswa Ngcai, was placed at Rietvlei.
- **Displaced peoples' illegal structures** were removed from various management sections.
- **Illegal hunting snares** were discovered in the Diep River Section and a suspect was apprehended.



Figure 1. Cape clawless otter at Rietvlei (photo by Frieda Prinsloo).

2 HIGHLIGHTS & CHALLENGES

2.1 HIGHLIGHT: The African parties to the Africa-Eurasian Waterbird Agreement (AEWA) met in Cape Town in August. A special field trip was arranged for about 37 conference delegates to visit the Rietvlei wetlands and the SANCCOB rehabilitation centre at Table Bay Nature Reserve on 26/08/2015.

The field trip was hosted at the Rietvlei Education Centre by the City of Cape Town, BirdLife SA, Cape Bird Club, SANCCOB, and the National Department of Environmental Affairs. Altogether there were about 60 people taking part in this field trip. Though most of the foreign delegates were French-speaking, the assistance of an interpreter helped to facilitate understanding.

The delegates had the opportunity to go out into the field and identify South Africa's own water birds in their natural habitat as well as see how the penguins are being rehabilitated at SANCCOB.

Koos Retief gave a welcoming and introduction and also guided the delegates around the seasonal wetlands at Rietvlei (see Figures 2-3).

We are very proud to have been selected by this conference for their field trip.



Figure 2. Some of the conference delegates outside the Rietvlei Education Centre.



Figure 3. Article in regional press about the AEWA conference in Cape Town.

2.2 CHALLENGE: Displaced people and the construction of illegal structures are increasing the pressure on the Nature Reserve.

Some of the management sections that suffer from these threats include the Zoarvlei Wetlands, Milnerton Lagoon, the Coastal Section, the Diep River and the Fynbos Corridor.

The impacts associated with illegal occupation of natural areas include large scale litter accumulation, damage to council property, trapping of birds and animals, illegal fires, and a reduction in the sense of security (see Figure 4).

Nature Reserve staff work with support from the Displaced People's Unit, Anti-Land Invasion, and City Law Enforcement to remove illegal structures (see Section 11 for more information).

Social Development assist displaced people to find accommodation, if and when they are willing to cooperate. Very few illegal occupants ever do cooperate with them, but instead remain outside.



Figure 4. Paardeneiland with flamingoes in Zoarvlei Wetland in the background, and an illegal structure in the foreground.

3 CONSERVATION PLANNING

3.1 The Protected Area Advisory Committee (PAAC) for Table Bay Nature Reserve had its inaugural meeting on 10 July 2015. The meeting was attended by 28 people from 22 organisations (see below):

External members and civil society

- Brooklyn & Ysterplaat Residents Association
- Cape West Coast Biosphere Reserve
- CapeNature
- Department of Water and Sanitation
- Dolphin Beach Body Corporate
- Friends of Blaauwberg Conservation Area
- Friends of Rietvlei
- Milnerton Aquatic Club
- Milnerton Canoe Club
- Milnerton Ridge Ratepayers Association
- Paardeneiland City Improvement District
- WP Freshwater Angling Association
- Woodbridge Island Body Corporate

City of Cape Town

- Subcouncil 1
- Biodiversity Management Branch
- City Parks Operations: Northern District
- Environmental and Heritage Management
- Rivers, Stormwater & Catchment Management Branch

Guests

- Department of Environmental Affairs
- Department of Environmental Affairs & Development Planning (Provincial)
- SANCCOB
- University of Stellenbosch

The agenda consisted of the following presentations and proposals:

- Introduction to Table Bay Nature Reserve by Mr Koos Retief
- Quarterly Report Feedback by Mr Koos Retief
- Diep Estuary Management Plan feedback by Ms Landi Louw
- Hydrology & geohydrological study and hydrodynamic modelling of the Diep Estuary by Mr Wageed Kamish and Mr Ross Campbell
- Annual Water Quality Review by Ms Candice Haskins
- Security proposal for Milnerton Ridge boundary by Mr Rolf Spaeth

The committee also adopted the Constitution and Code of Conduct, and resolved to accept late applications from SANCCOB and the National Department of Environmental Affairs. The committee however had no nominations for a chairperson and therefore a chairperson was not yet elected.

3.2 Important Bird and Biodiversity Areas (IBAs) of South Africa were reviewed by BirdLife South Africa and its partners in birdlife conservation. The Rietvlei Wetland Reserve has been listed as an IBA since the directory was first published in 1998.

The 2015 revision updates much of the information from the first directory and makes some changes to the listings and names.

The *Rietvlei Wetland Reserve* listing underwent a name change to *Rietvlei Wetland: Table Bay Nature Reserve*. Key information in the listing was updated.

BirdLife SA launched the new glossy report and a summarised status report at an event held at the False Bay Nature Reserve on 16/09/2015.

Koos Retief attended the launch on behalf of Table Bay Nature Reserve, and received complimentary copies of the printed resources to keep at the office.

Rietvlei Wetland is one of 23 IBAs in the Western Cape and 112 IBAs in the whole of South Africa.



Figure 5. BirdLife South Africa's Important Bird and Biodiversity Areas of South Africa resources and Status Report of 2015.

3.3 The annual reserve site visit of the Branch Manager, Ms Julia Wood, took place at Table Bay Nature Reserve on 20/08/2015. Koos Retief hosted the event, and was assisted by Landi Louw and Christopher Singo. Field trips were undertaken to the Milnerton Racecourse Section, which is managed by Landi Louw, and to the Diep River and Fynbos Corridor Sections that are managed by Christopher Singo. Biodiversity Coordinator, Cliff Dorse, and Monitoring & Evaluation Coordinator, Leighan Mossop also attended.

4 FLORA

4.1 Spring walks were conducted in the Milnerton Racecourse Section, as advertised in the local press from 15-20/09/2015 (see Figures 6-7).

Landi Louw hosted the Spring walks with the assistance of various nature conservation students.

Four guided walks were attended by 42 people in total. The portion of the reserve where the spring walks are hosted is normally not accessible to the public due to being inside the horse running track.



Figure 6. A spring walker meeting a Cape dwarf chameleon.



Figure 7. A group of spring walkers.

4.2 Some of the spectacular wildflowers from the Nature Reserve are reproduced below, including *Ferraria crispa* and *Maraea gawleri* (see Figures 8-9).



Figure 8. *Ferraria crispa* in Coastal Section (photo sent by Maleen).



Figure 9. *Maraea gawleri* at Milnerton Racecourse.

4.3 Invasive and alien vegetation clearing during this quarter focused mainly on water hyacinth, Port Jackson, emergent annual weeds of various species, and *Eucalyptus* (gum) trees.

Water hyacinth clearing was conducted in the Diep River, Milnerton Canal, and Milnerton Lagoon Sections. Manual clearing was used in conjunction with herbicide treatment and biological control in selected areas.

Port Jacksons were removed from various parts in Rietvlei, Zoarvlei, and Diep River Sections, while Manatoka trees were removed from the Milnerton Lagoon section along the boundary of the Milnerton Golf Club.

5 FAUNA

5.1 An integrated bird census was conducted on 24/07/2015. The census was done by the Nature Reserve team and staff from other nature reserves and covered 11 survey sections (see Figures 10-12 for details). The water birds numbered a total of 2,046 birds comprising 37 species. These included:

- 1 Water thicknee, 1 Giant kingfisher, 1 Malachite kingfisher, 2 Glossy ibis, 2 African fish eagle, 2 Three-banded plover, 2 Caspian tern, 4 Purple heron, 4 African spoonbill, 4 African black duck, 4 African black oystercatcher, 5 Blackheaded heron, 5 Little egret, 5 Mallard hybrid, 7 Haded a ibis, and 8 Yellowbilled egret, that accounted for **2,8%** of the water birds.
- 12 Blackwinged stilt, 13 Little grebe, 16 Cape wagtail, 17 Cape teal, 19 Great crested grebe, 20 Grey heron, 23 Sacred ibis, 33 African darter, 58 Yellowbilled duck, 59 Reed cormorant, 62 Kelp gull, 65 Blacksmith lapwing, 71 Common moorhen, 79 Cape shoveller, 83 White pelican, and 85 Whitebreasted cormorant, that accounted for **34,9%** of the water birds.
- 111 Southern pochard, 169 Egyptian goose, 181 Hartlaub's gull, 397 Redknobbed coot, and 416 Greater flamingo, that accounted for the remaining **62,3%** of the water birds.
- Additional species were observed, including Cape weaver, Common waxbill, Helmeted Guineafowl, Cape bulbul and Black shouldered kite.

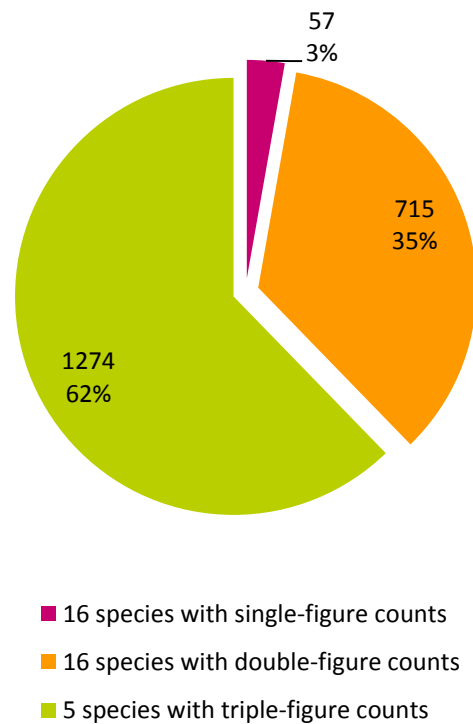


Figure 10. Relative contribution of low, medium and high counts.

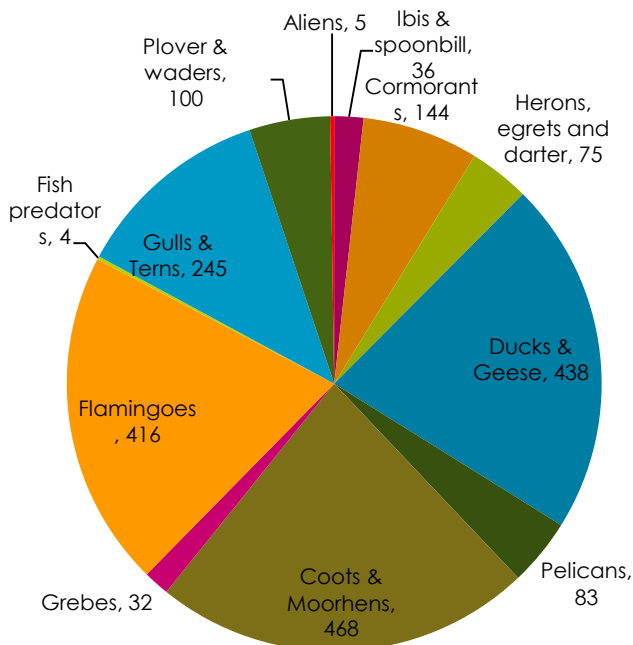


Figure 11. Relative contribution from the various groups of birds.

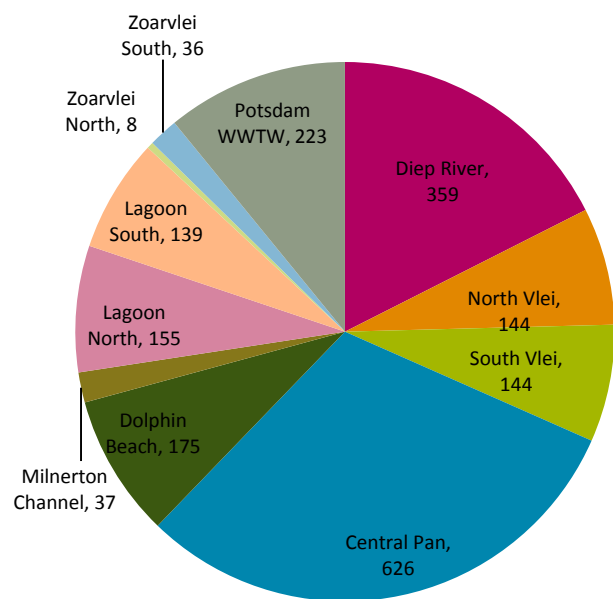


Figure 12. Relative contribution of birds from the survey sections.

5.2 A nocturnal animal survey was conducted in the Milnerton Racecourse by Landi Louw with several volunteers. A total of 50 Cape dwarf chameleons were counted during the survey (see below Figures 13-14).



Figure 13. A Cape dwarf chameleon on night.



Figure 14. The nocturnal survey team.

5.3 A steenbok (*Raphicerus campestris*) was released in the Rietvlei Section after it was captured by Cliff Dorse and Andre Rossouw in a Public Open Space in the Parklands / Sunningdale area. Unlike Cape grysbok, Steenbok do not survive in urban area, therefore the animal was captured and relocated into Rietvlei (see below Figures 15-16 for images of the animal's release into Rietvlei).



Figure 15. The Steenbok in the transport crate.



Figure 16. The Steenbok running free in Rietvlei.

5.4 A camera trapping survey was planned for the Table Bay Nature Reserve. Six camera traps were placed in strategic locations throughout the Nature Reserve on 30/09/2015. The traps are activated by motion sensors and are intended to record animals that move past them. Camera traps have been used successfully in many areas to confirm the presence of elusive or nocturnal wildlife species. The results from this survey will be analysed and reported during the next quarter.



Figure 17. Southern pochard (photo by Frieda Prinsloo).



Figure 18. Great white pelican (Frieda Prinsloo).

6 SOIL

Nothing to report.

7 WATER

7.1 Rainfall was below average during this quarter, with Rietvlei only receiving 141mm and Milnerton Racecourse 144,5mm. During 2015, only January, June and July received above-average rainfall. All the other months so far have received well below the average (see Figure 19 below).

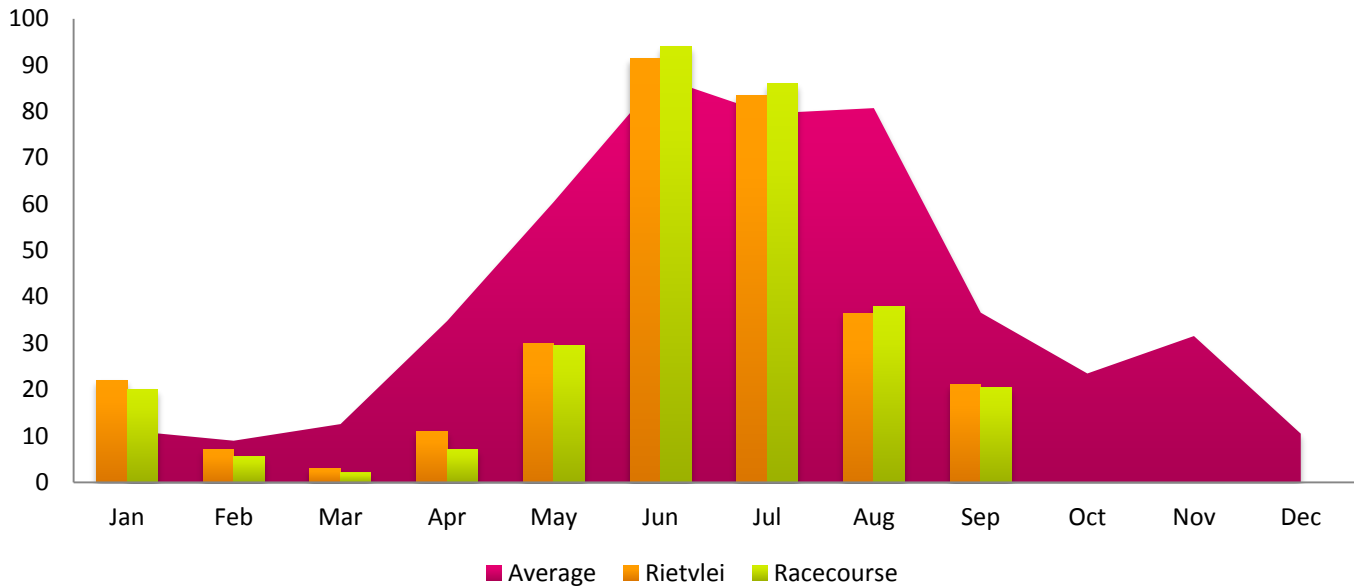


Figure 19. Monthly rainfall records plotted over the average rainfall.

The rainfall accumulation curves in Figure 20 below indicate the deficit in rainfall thus far. In 2015, the rainfall to date has only accumulated to 300mm, whereas normally it exceeds 410mm by September.

The banks of the Diep River and Rietvlei have not been flooded this far. The low rainfall also means that in the coming summer season the seasonal wetlands could prematurely dry out.

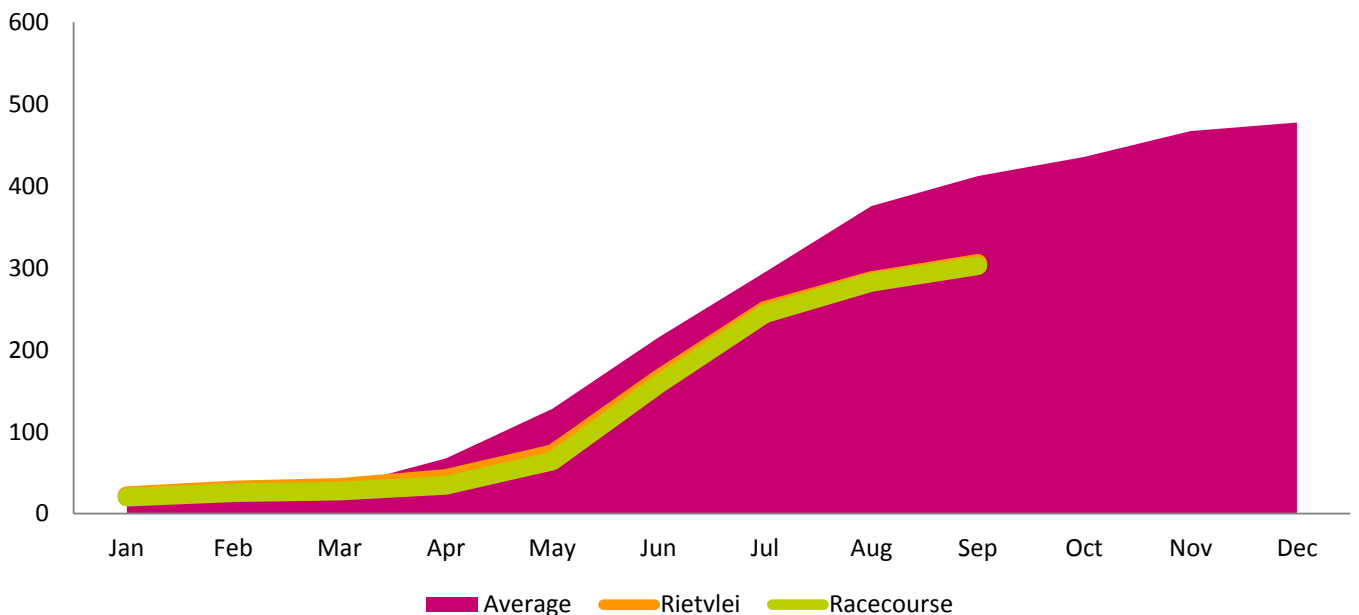


Figure 20. Rainfall accumulation curves plotted over the average accumulation.

8 FIRE

8.1 Prescribed ecological burning was conducted at Klein Dassenberg Nature Reserve (Atlantis) and in Duinefontein near Melkbosstrand. Table Bay Nature Reserve staff assisted with burning of brush piles after invasive vegetation clearing was completed by contractors. The brush piles consisted mostly of felled Port Jackson's that were stacked into large heaps for later burning. Seven days were used for this burning work, including 13-15, 20, 22-23, and 28 July 2015 (see below Figure 21 from Klein Dassenberg).



Figure 21. Burning of brush piles at Klein Dassenberg.

8.2 Preparation of firebreaks in Table Bay Nature Reserve was undertaken at Sandpiper Crescent, as well as along fence lines at Pentz Drive and the R27 at Rietvlei. Firebreaks are used to access perimeters in case of the need to fight a fire, and to slow the spread of fires. Firebreaks are not, however, able to stop all fires.

8.3 Mapping of the fire history of Table Bay Nature Reserve was brought up to date by capturing all the GPS mapped fire boundaries onto a geographical information system (GIS) at head office.

A fire history map is a visual representation of fire events in a given area and can be used to determine the vegetation ages in an area. It can also be used to prioritise areas for future prescribed burning, when and where necessary.

A fire history map has its limitations in the sense that fire events that took place before record-keeping started might not be documented in any way. Sometimes small fires go undetected if they occur after hours. **We therefore request neighbours to advise us when they observe fires in the nature reserve.**

See Figure 22 overleaf for an extract of the updated colour-coded fire history map based on recent fire s.

Fire events Table Bay NR

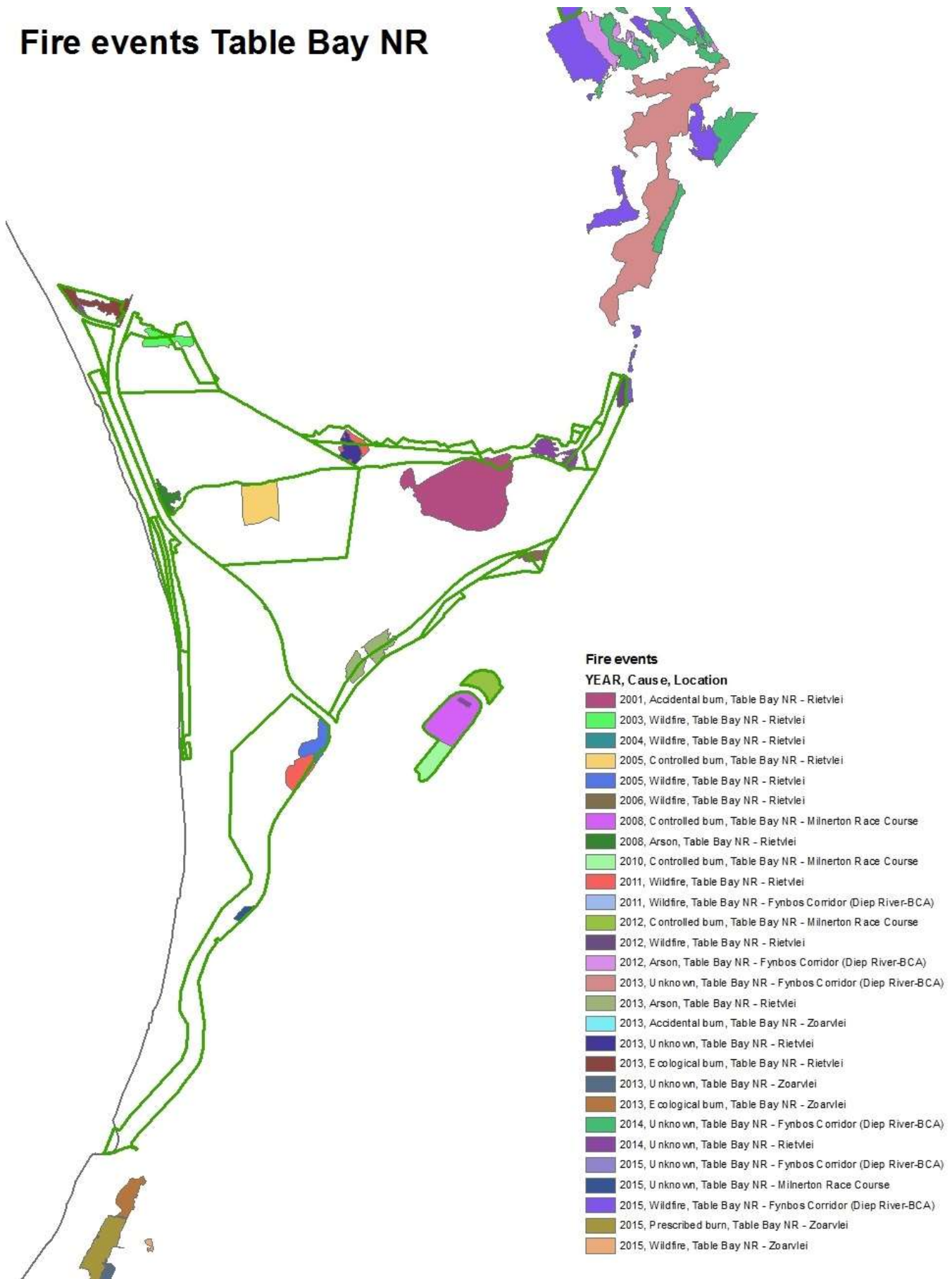


Figure 22. Extract of the updated fire history map of Table Bay Nature Reserve.

9 PEOPLE, TOURISM & EDUCATION

9.1 Stakeholder Engagement

9.1.1 Internal Meetings

Table Bay Nature Reserve staff attended no less than 8 official internal meetings during this quarter:

- 24/07/2015: Integrated Performance Management meeting;
- 31/07/2015: North Region Health & Safety Committee;
- 31/07/2015: North Region Management Committee;
- 20/08/2015: Branch Manager's annual reserve site visit;
- 04/09/2015: North Region Management Committee;
- 11/09/2015: Fynbos Corridor restoration site inspection with Dr Pat Holmes;
- 14/09/2015: Flora Management Committee; and
- 18/09/2015: Biodiversity Management Branch meeting.

9.1.2 External Meetings

Table Bay Nature Reserve staff attended no less than 8 official external meetings during this quarter:

- 09/07/2015: Wooden Bridge restoration meeting with consultants;
- 10/07/2015: Table Bay Nature Reserve Advisory Committee;
- 22/07/2015: Wooden Bridge restoration meeting with DEA&DP;
- 31/07/2015: Milnerton Racecourse Environmental Management Committee;
- 28/08/2015: Milnerton Racecourse Environmental Management Committee;
- 10/09/2015: Environmental Management level 5 learnership induction meeting at NCC;
- 17/09/2015: Friends of Rietvlei evening meeting; and
- 23/09/2015: Subcouncil 15 regarding Branch Manager's Annual Report to Council.

9.2 Benefit to People

9.2.1 Rietvlei Education Centre Usage

The usage of the Rietvlei Education Centre, excluding visiting school groups, generated about 67 person days of benefit to people over three event days.

DATE	GROUP	ACTIVITY	PERSON DAYS
20/08/2015	Blaauwberg Development Area Environmental Liaison Committee	Meeting	12
20/08/2015	Friends of Rietvlei	Evening talk	30
17/09/2015	Friends of Rietvlei	Evening talk	25
TOTAL			67

- **A talk on the management of the Milnerton Racecourse Section** of the Table Bay Nature Reserve was presented by Landi Louw to the Friends of Rietvlei at their evening meeting on 17/09/2015. The Friends of Rietvlei host regular evening meetings with guest speakers at the Rietvlei Education Centre. People that are interested to join the Friends of Rietvlei can look at their website at www.friendsofrietvlei.co.za.
- **The Fynbos Forum 2015** was held in Montagu from 3-6/08/2015. Student Hester Pentz presented a poster at the forum, based on her ongoing coral worm research project, titled "Factors affecting the distribution of *Ficopomatus enigmaticus* in the Milnerton Lagoon and estimated cost of removal." See Figure 23 overleaf for an example of the poster that was presented.

Factors affecting the distribution of *Ficopomatus enigmaticus* in the Milnerton Lagoon and estimated cost of removal

Hester Pentz, Biodiversity Management Branch, Environmental Resource Management Department, City of Cape Town

Introduction

Ficopomatus enigmaticus is an invasive coral-forming species of tube worm that has the potential to change the ecosystem dynamics of invaded areas. They pose a risk of flooding by means of adding resistance to stream flow in tidal estuaries, and can impact recreational activities as well as built infrastructure.

The study area is located in the Milnerton Lagoon, Cape Town, which forms part of the Diep River tidal estuary.

Objectives of the study

- Map the distribution of *F. enigmaticus* in the Milnerton Lagoon.
- Determine the factors affecting their distribution in the Lagoon.
- Determine the methods and resources needed to effectively manage the infestation.

Methods

- The area of distribution was mapped using a GPS.
- Four ten meter longitudinal line transects were used to gather data. One transect was upstream of the infested area, two were inside the infested area, and one was downstream.
- Each transect had three data collection points and the measurements were averaged.
- A YSI multi meter was used to obtain measurements of temperature, as well as temperature-corrected measurements of pH, dissolved oxygen, salinity, and conductivity.
- Other measurements included Secchi disk readings of turbidity, as well as water depth, rate of flow and type of substrates.
- A portion of the *F. enigmaticus* corals will be removed to monitor the impacts and effects after the removal.



Figure 2. *Ficopomatus enigmaticus* (individual tube worm) (Photo: author)



Figure 3. *F. enigmaticus* coral growths (individual tube worm) in Milnerton Lagoon (Photo: author)

Preliminary Results

Data from a survey recorded during an outgoing tide is tabulated below (see Table 1). Site 1 is upstream of the infestation, site 2 inside the infestation, and site 3 is downstream. Further data collection will be done, including during incoming tides.

Table 1. Averages of data collected to date.

Parameters \ Sites	Site 1 (upstream)	Site 2 (Inside)	Site 3 (downstream)
pH	7.90	7.38	7.64
Temperature (degrees Celsius)	13.61	14.79	14.09
Dissolved oxygen (DO ppm)	0.81	0.71	0.23
Salinity (PSU)	0.99	1.53	4.06
Conductivity (Millisiemens/cm)	1.93	2.92	7.34
Secchi disk reading (cm)	32.67	65.0	83.83
Rate of flow (minutes/10m)	2:00	2:30	6:30

Discussion

The preliminary results show an increase in salinity and conductivity longitudinally from upstream of the infestation towards the sea. A decrease in dissolved oxygen was observed going downstream, however Secchi disk readings and rates of flow increased towards the mouth.

This suggests that tube worms may prefer a certain salinity regime and a set of environmental conditions. The low salinities in the data can be attributed to the sand bank at the mouth which is retaining fresh water in the system.

Future work

This study is in progress, and not all the data has been collected yet. Due to low winter rainfall, the sand bank at the mouth of the estuary has not been scoured away and this is leading to high water levels. Scouring of the sand bank would make larger areas of the estuary accessible during this study, which could facilitate coral removal efforts. Cost estimates of removal can then be calculated.

The Wooden Bridge over the lagoon is more than a hundred years old, and is designated as a National Monument. There are plans to renovate the bridge within the next few months during which certain portions of the coral growth will be removed. This could be monitored as part of this study, as well as provide information for future studies.

Benefits of the study

The results of this study may assist management with future decision-making about the management of the Milnerton Lagoon.

This research can give an indication of the cost, time, and man-power needed to manage the coral infestation, as well as give insight into how to prevent them from establishing in other areas.

Acknowledgements

This poster would not have been possible without assistance from Jacobus Retief, Land Louw and Leighan Mossop for advice and editing, and Amalia Pughath for GIS support.



Figure 1. Map of the study area.



9.2.2 Rietvlei Boma Usage

The usage of the Rietvlei Boma generated 440 person days of benefit to people over 23 event days.

DATE	GROUP	ACTIVITY	PERSON DAYS
10/07/2015	TBNR Advisory Committee	Meeting	29
13/07/2015	Holiday programme group	Legless lizards programme	35
15/07/2015	Holiday programme group	The enviro-school of rock	30
16/07/2015	Holiday programme group	Triassic Trio programme	33
21-22/07/2015	NQF level 2 learners	First Aid training	32
28/07/2015	Smart driver training	Monitoring and evaluation	9
11-12/08/2015	EPWP group	Financial Skill training	19
25/08/2015	Wilderness Youth Development Circle	Meeting	6
26-27/08/2015	Basic Fire training	Training	38
31/08 – 1/09/2015	Basic Fire training	Training	34
02-03/09/2015	Basic Fire training	Training	28
14-17/09/2015	NQF level 5 learners	Training and Support	48
18/09/2015	Herbal Homeopathic PTY LTD	Teambuilding	75
21-22/09/2015	NQF level 5 learners	Training and support	24
TOTAL			440

9.2.3 Environmental Education and Outreach

Environmental Education and Outreach, including the now famous school holiday programmes, generated 484 person days of benefit to people over seven event days (see Figures 24-29 below).

DATE	GROUP(S)	LEARNERS	TEACHER +ADULTS	PERSON-DAYS	PROGRAMME
13/07/2015	Holiday programme group	24	11	35	Legless Lizards
14/07/2015	Holiday programme group	22	11	33	Chameleon Commotion (Milnerton Racecourse)
15/07/2015	Holiday programme group	22	8	30	The Enviro-school of rock
16/07/2015	Holiday programme group	27	6	33	Triassic Trio
26/08/2015	Africa-Eurasian Waterbird Agreement field trip	0	60	60	Guided bird watching walk
01/09/2015	Rondebosch East Primary School	102	9	111	Animal Habitats (with SANCCOB)
30/09/2015	Sophakama Primary School	180	2	182	Arbor programme & tree planting
TOTALS		377	107	484	TOTALS

Below are some images from this quarter's education and outreach experiences. Our staff and students all work together to make each child's learning experience fun and fulfilling.

The below images were captured at the Rietvlei Education Centre, Milnerton Racecourse, the Rietvlei Boma (at the office buildings), and at Sophakama Primary School in Du Doon:



Figure 24. Rondebosch East primary school at the Rietvlei Education Centre.



Figure 25. Triassic Trio holiday programme about tortoises, turtles and terrapins at Milnerton Racecourse.



Figure 26. Chameleon Commotion holiday programmes with Landi Louw at Milnerton Racecourse.



Figure 27. Decorating "tortoise shells" with arts and crafts at the Rietvlei Boma.



Figure 28. Arbor Day programme at Sophakama Primary School, Du Noon.



Figure 29. Grade 6 learners planted two Wild Plum trees at the school grounds.

9.3 Visitors and Income

9.3.1 Income from visitors at the Rietvlei Water Area during this quarter was R53,789 from 2,821 visitors.

Figures 30-31 indicate the growing trends in both income and recorded visitor numbers since 2010.

Figure 32 indicates the income at the Rietvlei entrance in the first three quarters of each year since 2010.

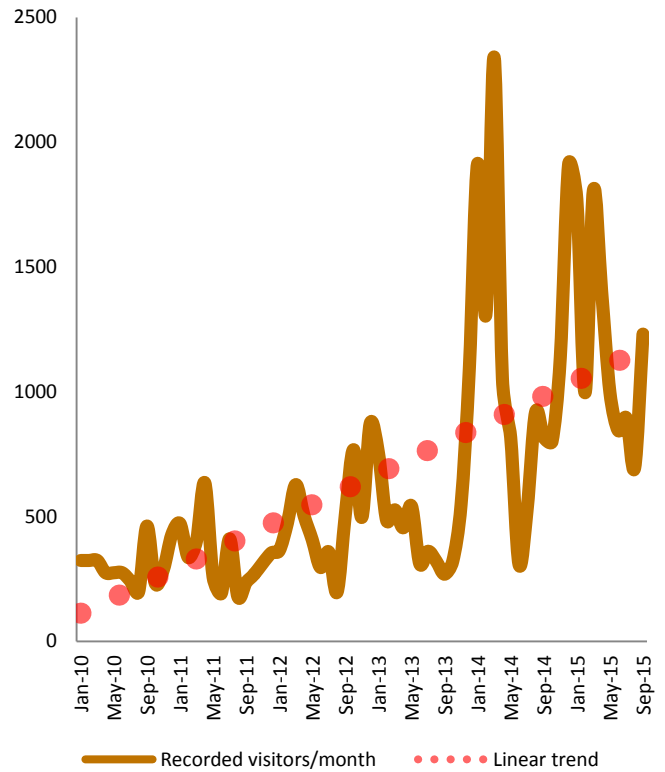
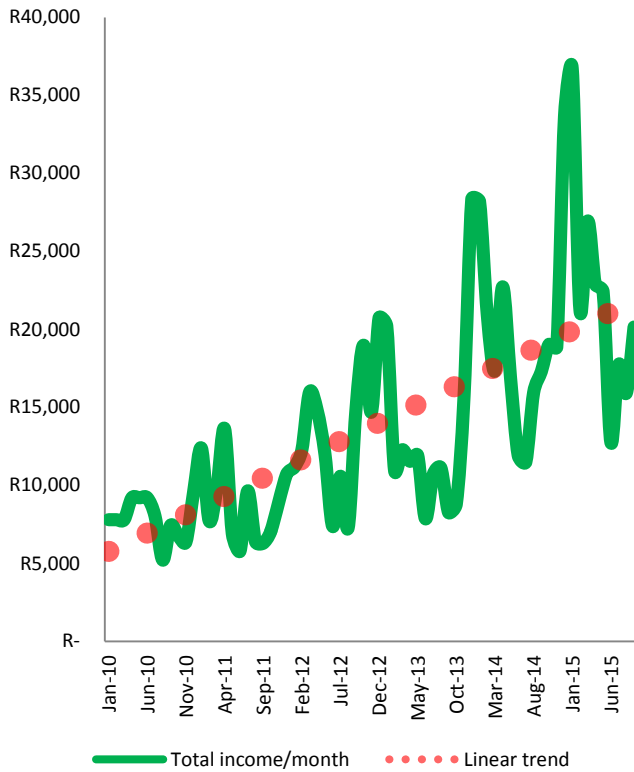


Figure 30. Trend in income since 2010.

Figure 31. Trend in recorded visitors since 2010.

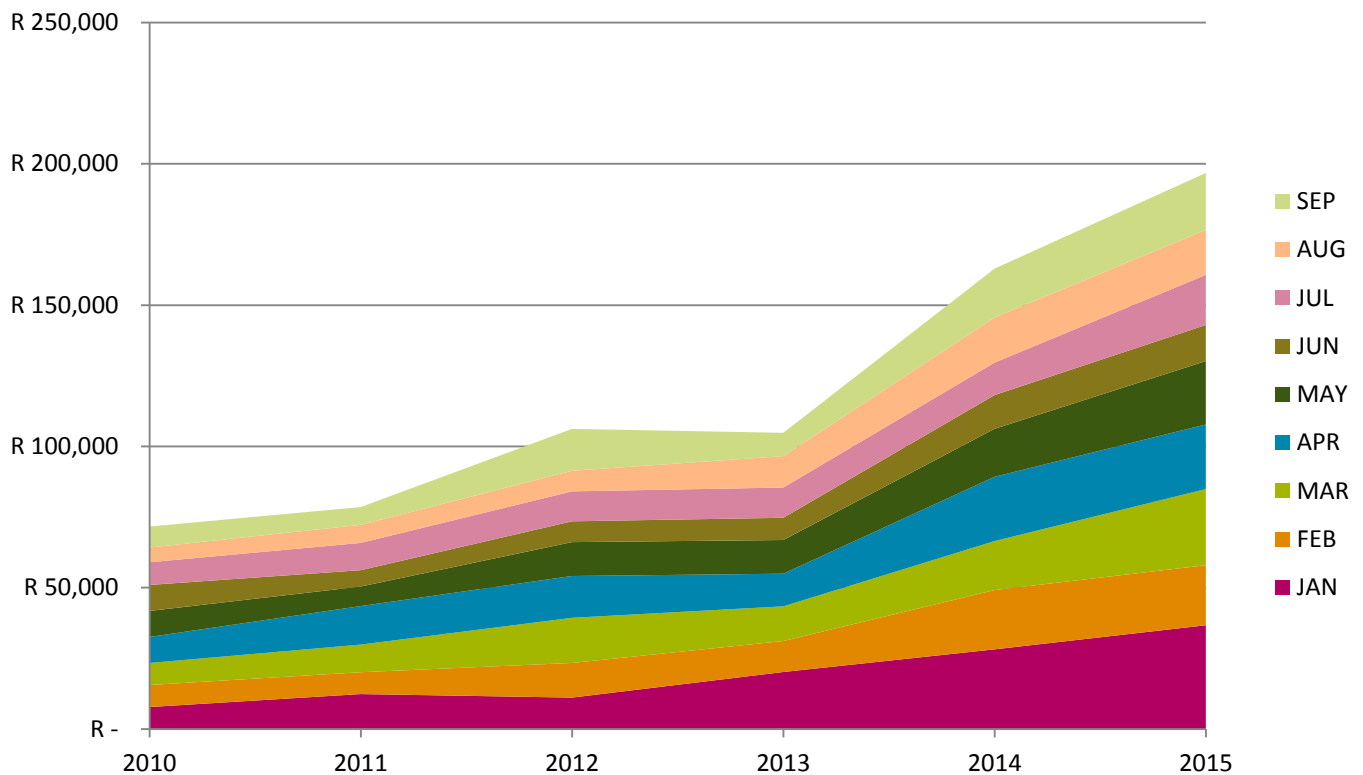


Figure 32. Income recorded at the Rietvlei entrance gate in the first three quarters of each year since 2010.

10 STAFF

10.1 Training of permanent and temporary staff at the Table Bay Nature Reserve amounted to no less than 98 person days over 35 training events, including the following interventions:

Date(s)	Course	Number of days x	Number of learners =	Person days
29/06-1/07/2015	NQF 2 Learnerships: Chainsaw & brushcutter training	3	3	9
13-16/07/2015	NQF 5 Learnerships: Human Sustainability	4	3	12
20/07/2015	SAP Project Management Notifications	1	1	1
21-22/07/2015	NQF 2 Learnerships: First Aid Level 1	2	3	6
22/07/2015	SAP Project Management Notifications	1	1	1
27/07/2015	SAP Requisitions & Reservations	1	2	2
27/31/07/2015	NQF 5 Learnerships: Environmental Law	5	3	15
11/08/2015	Anti-hijack training	1	2	2
19/08/2015	SAP Project Management Notifications	1	1	1
24/08/2015	Anti-hijack training	1	5	5
24-27/08/2015	NQF 5 Learnerships: Environmental Ethics	4	3	12
28/08/2015	NQF 5 Learnerships: Environmental Law	1	3	3
31/08-1/10/2015	Basic Fire Fighting	2	4	8
3/09/2015	SAP Asset Management	1	2	2
14-17/09/2015	NQF 5 Learnerships: Integrated Environmental Analysis Tool	4	3	12
15/09/2015	Basic Environmental Education and Communication	1	1	1
29-30/09/2015	Environmental Management Level 5 Learnership Contact Session: Occupational Health & Safety	2	3	6
	TOTALS	35		98

- **A Tsebo Bohlale Graduate Programme** intern, Andiswa Ngcai (see Figure 33), was placed at the Table Bay Nature Reserve. She reports under Senior People and Conservation Officer, Elzette Krynauw.
- **The Fynbos Forum 2015** was held in Montagu from 3-6/08/2015. Student Hester Pentz presented a poster at the forum, based on her research project. Landi Louw also attended the forum, and Koos Retief attended in his private capacity.
- **The Cape Peninsula University of Technology’s Work-Integrated Learning Candidates for 2016** were interviewed on 12/08/2015. Koos Retief and Penelope Glanville represented the North Region’s at the interviews. Placements were offered to a number of students at North Region nature reserves. Two positions were offered at Table Bay.
- **Driver Assessments for Trailer Drawing with Council vehicles** was conducted at Table Bay Nature Reserve on 9/09/2015. Koos Retief, Clinton Roux, Kyle Kelly and Allan Gargan successfully passed the assessments. They are therefore allowed to draw trailers, in accordance with their driver’s licenses, with Council vehicles.



Figure 33. Tsebo Bohlale Graduate intern, Andiswa Ngcai.

11 LAW ENFORCEMENT

11.1 Displaced peoples' illegal structures were removed from various management sections of the Nature Reserve during this quarter. Nature Reserve staff are supported by City Law Enforcement, Displaced Peoples Unit and Anti-Land Invasion Unit. The following operations were conducted this quarter.

- 02/07/2015: Coastal Section (about three structures);
- 21/08/2015: Fynbos Corridor (about two structures);
- 11/09/2015: Milnerton Lagoon and Coastal Section (about nine structures); and
- 17/09/2015: Zoarvlei Section (about 14 structures)

11.2 Illegal hunting snares were discovered in the Diep River by Site Manager Christopher Singo. After receiving this report, Koos Retief investigated the scene and apprehended a suspect in the act of removing a Cape spurfowl that was already caught in one of the snares. The suspect also had a bag containing various equipment that were being used to set snares, and that may have been used to hunt birds. The equipment was confiscated and the suspect was taken to SAPS. The police however never lay charges and the suspect was later released with a warning (see Figures 34-36 below).



Figure 34. Snares and hunting equipment.



Figure 35. A snare attached to a bush.

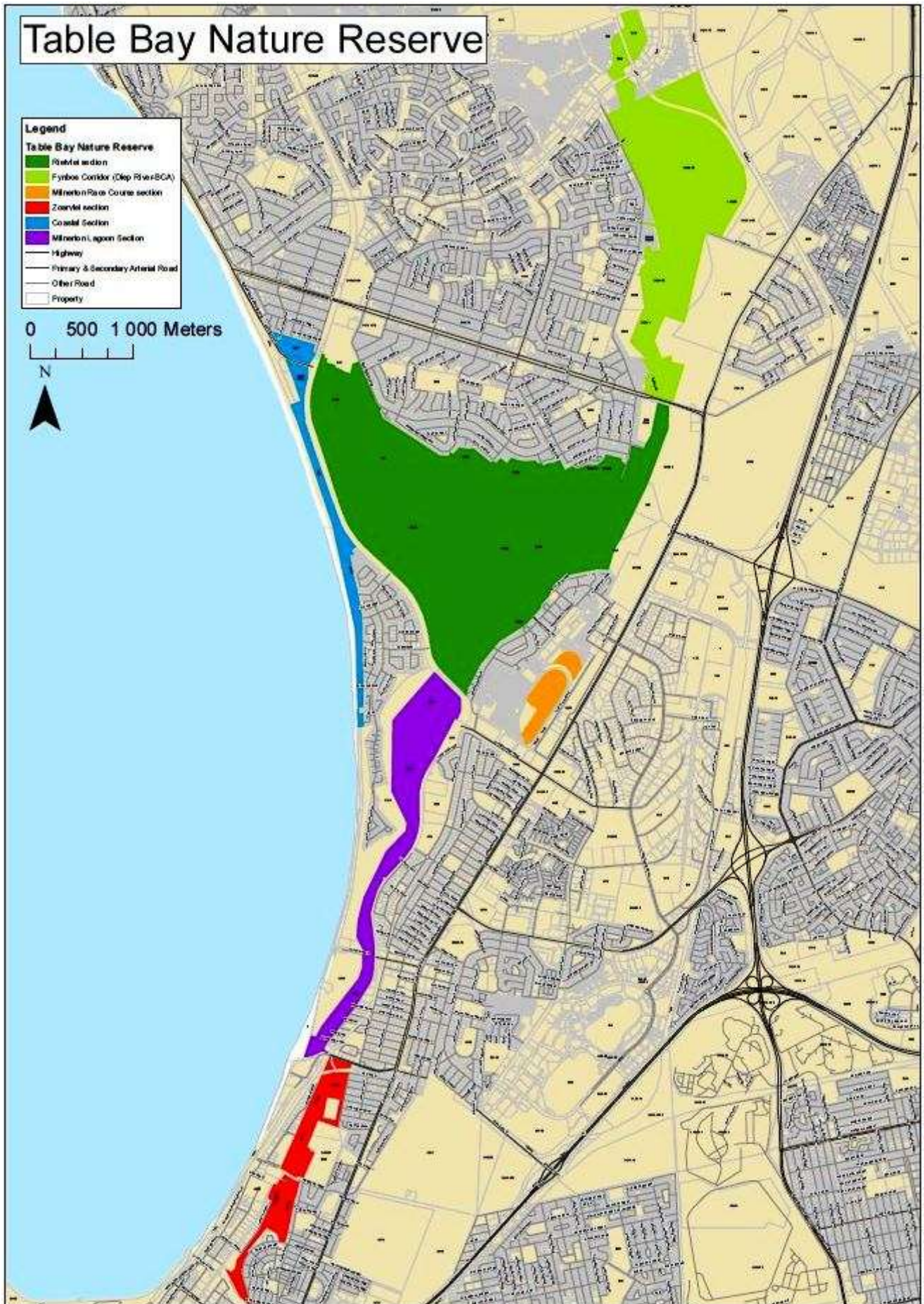


Figure 36. Suspect with a Cape spurfowl caught in a snare.

12 INFRASTRUCTURE & EQUIPMENT

- **A legal compliance assessment (LCA)** was conducted at the Nature Reserve on 7/07/2015. It was found that specific occupational health & safety signage is required in certain areas. A quote was obtained to install this signage. The gas heaters in the Rietvlei Boma also had to be changed to comply with the Community Fire Safety By-Law.
- **An asset verification** was completed during this quarter with the assistance of Barbara Stadler. The verified asset register is kept on a central database at head office.
- **A damaged section of fence line on the R27 at the Rietvlei wetlands** was repaired after an insurance claim was awarded. An independent contractor was used to complete the repair work.
- **Two new Stihl F560S brush cutters** were procured at the cost of R24,000. These brush cutters will be used during invasive vegetation management and fire break cutting.
- **Four new gas heaters were procured** at a cost of R3,400. These heaters will replace the previous set of gas heaters that were found to be non-compliant with the Community Fire Safety By-law. The old gas heaters will be relocated to a nature reserve where they can be utilised legally.
- **Two hand-held two-way radios were written off** during this quarter. One radio sustained water damage from falling out of a capsizing boat. The other radio was stolen from an employee during a mugging incident while off-duty. Insurance claims were entered for both radios.

APPENDIX A: MAP OF RESERVE



APPENDIX B: PRESS ARTICLES

The buck swaps here ...



Go, bokkie, go! A female grysbok (above) was one of five relocated by Environmental Resource Management's Landi Louw and Koos Retief (alongside the capture crate), along with (behind, from left) Anwille Saaiman, Sonja Erasmus, Sisanda Pakade and Vuyokazi Rubushe.

The City has relocated five Cape grysbok between Milnerton and Melkbosstrand to improve genetic diversity.

Table Bay Nature Reserve staff, assisted by approximately 30 students and volunteers, worked together to relocate three grysbok from the Milnerton Racecourse section of Table Bay Nature Reserve to the Atlantic Beach Golf Estate. Two other grysbok were relocated from the golf estate to Milnerton Racecourse.

The Cape or southern grysbok (*Raphicerus melanotis*) is a small antelope endemic to the Cape Floristic Region. It has a rough, reddish or sandy coat flecked in white, with a black 'bridge' to the nose and a dark scent gland in front of the eye. It stands only 45–55 cm at the shoulder and weighs 8–12 kg, and males have short, straight and smooth horns.

Grysbok are primarily nocturnal, though they may be seen during early morning and late evening. They can go for long periods without drinking water, getting sufficient moisture from their food.

The City's veterinarian, Dr Elzette Jordan, inserted identification microchips under the skins of the antelope to facilitate the location and tracking of these individuals. Table Bay Nature Reserve's Milnerton Racecourse section is the first small nature reserve in the City that

has successfully exchanged small game for the purpose of improving genetic diversity.

Milnerton Racecourse is only 19 hectares in size and is physically separated from the rest of Table Bay Nature Reserve. It has no natural predators or ways for animals to disperse. If animals cannot disperse, this can lead to inbreeding, which could lead to physical deformities, weaknesses and mental retardation. As a result of a lack of predators, over-population can also lead to intensive over-browsing on

the plants in the critically endangered Cape Flats sand fynbos at Milnerton Racecourse.

Management intervention is therefore needed to mimic game dispersal and reduction of numbers to ensure a healthy and sustainable small game population.

This small game exchange between the City and the Atlantic Beach Golf Estate has paved the way to involve other private landowners in the management of the City's game populations.

Pay a visit to the fabulous Table Bay Reserve

The 880 hectare Table Bay Nature Reserve consists of seven parts: The Rietvlei wetlands, Milnerton lagoon, Milnerton beach, Milnerton racecourse, Zoarvlei wetlands, Diep River and the Parklands fynbos corridor.

This reserve has a variety of permanent and seasonal wetlands, and is surrounded by Cape Flats dune strandveld and Cape Flats sand fynbos vegetation.

The reserve protects 412 plant, 31 mammal, 196 bird, 33 reptile, nine amphibian, and 14 fish species. It also supports important insect, invertebrate and planktonic communities. Two species are

vulnerable, and 14 are near-threatened.

Activities and facilities include boating, sailing, picnic and braai areas, fishing, hiking and two bird hides.

- Table Bay Nature Reserve is open 07:30–17:30 daily, and water sports hours are 10:00–17:00 (weekdays) and 09:00–17:00 (weekends). Admission is free, except for the Rietvlei wetlands, where adults pay R18 and children (aged 3 to 17), students and senior citizens pay R6,50. Entrance for children under three is free. The main entrance is at the southern end of Grey Avenue, Table View.

Endangered wildlife killed by motorists

Motorists travelling past the Blaauwberg Nature Reserve are asked to be vigilant following the death of several animals.

According to the City of Cape Town, Cape grysbok, caracals, Cape cobras and porcupines are some of the animals being killed by motorists speeding along roads near nature reserves.

Nocturnal animals are particularly vulnerable. "The City is calling on motorists to be vigilant and to slow down when driving in these vicinities, especially at night, as animals often cross the roads unexpectedly. Recently a number of animals have been killed on Otto du Plessis Drive and the R27 near the Blaauwberg Nature Reserve," states the City.

Two-fold challenge

According to their statement, a caracal and Cape grysbok were killed on the road between Bloubergstrand and Melkbosstrand, near the Blaauwberg Nature Reserve recently. Other animals that have been killed over the last year include tortoises, Cape cobras, mole snakes, small-spotted genets and porcupines. In most cases, animals are hesitant to cross roads because it is a foreign environment to them so they will often do so suddenly and unexpectedly.

Mayco member for energy, environmental and spatial planning, Johan van der Merwe, says the challenge is two-fold.

He says many motorists are not aware they are driving through proclaimed nature reserve areas, while at the same time

many of the animals are nocturnal so it makes it difficult for motorists to see them at night when they unexpectedly cross the roads searching for food.

Responsibility

"Capetonians are fortunate to share this city with a range of unique plants and animals, many of which are found nowhere else in the world. We have a responsibility to ensure we conserve and protect our biodiversity. For example, the Blaauwberg Nature Reserve alone is home to at least 47 threatened plants and conserves 624 plant species, 40 mammal species, 166 types of birds, 30 species of reptile and four amphibian species, including the dwarf burrowing skink. The loss of a single animal can have a significant impact on the environment," he says.

Van der Merwe further explains the reserve forms part of the southern area of the Cape West Coast Biosphere Reserve and is located on the West Coast, about 25km from the city centre, between Bloubergstrand and Melkbosstrand, and inland from the R27.

"The reserve is dissected by two busy roads, namely Otto du Plessis Drive and the R27. This is a popular area for Capetonians and tourists, offering stunning views of two world heritage sites, namely Robben Island and Table Mountain, as well as a range of recreational and educational activities," he adds.

► For more information about the City's nature reserves, visit www.capetown.gov.za/naturereserves.

City must take action now

Re. "Pollution clogs channel", TB, 12 August: My proposal for a solution to the problem, lay big concrete pipes to get the water stream covered completely. This on the side of the West Coast Road (R27) before and after the intersection

Blaauwberg Rd / West Coast Road as well as the short part along Blaauwberg Road by the Pick & Pay parking area.

Repair the damaged fences or move the fences closer to the road side.

The City of Cape Town is just not able or not interested to handle such "small problems".

If they (the City of Cape Town) carry on the way they do now, we will be a lost City soon and do not have to point fingers to other Provinces and Cities.

FRANZ LIECHTI
Table View

We need to change our mindsets

This year has brought with it a growing number of stories across our country showing the devastation of our natural water resources due to effluence overflows, litter, dumping and contamination from human excrement.

The pollution in the channel going into the Diep River catchment area (Rietvlei) is just one such case. When you read figures of "7000 homeless" in the mother city, it means about 9000 cases of human waste being deposited daily, in places they shouldn't be. That's sure to contaminate a lot!

The sad reality, is you can follow the small canals and waterways that lead further up the West Coast, through Parklands and Sunningdale, as well as natural wetlands that flow between DuNoon and Killarney, and you'll find much

the same.

Our homeless problem stems from many things, social conditions, lack of employment, drugs and unstable home environments. But it seems we've become a country building a reputation of hand outs. NGO's, NPO's, government grants. We're inadvertently creating a culture that expect it, and don't see the need to do anything in return.

Fencing off waterways, and implementing clean-ups is just the plaster on a gaping wound. We need to implement a "zero tolerance" attitude towards encouraging a life of vagrancy.

Begging or hawking at traffic lights should be made a fineable offence. The City should implement a Token system, that ties in with a recycling programme. Soup kitchens and displaced person shelters should be built in proximity to recycling plants. For every bag of rubbish collected, a token for food, or shelter is handed out. It should be, that should you chose to live on the street, you need to be an active participant in a Social Programme.

10 Million ZAR thrown at 7000 displaced individuals wont do much, (that's +- R 1450 p/p) unless it's channelled into an actively monitored programme.

If the City wants to implement plans to help alleviate homelessness and the problems associated with it, they need to start at ground level to invoke a pride at Community level. Collaborative networks involving schools, artists, Community organizations need to be established to encourage daily/ weekly community clean ups. Schools and local Churches need to participate in these clean ups too. Don't just throw a donation in the collection bowl. Get your hands dirty! Turn rubbish into art. Upcycle, create skills workshops. Roll out public "Stop the Rubbish" Campaigns. Create visible billboard attention. National Attention! As citizens of this amazing country, we need to change our own mindsets, and start thinking more about the

differences we can make, rather than waiting for someone else to take that responsibility. Pay it Forward. Give a Hand up not a Hand Out! think "What can I do for my Town today?"

Anyway, back to our waterways. Identified problem hot spots need to be cleared weekly and monitored. The implementation of this can also be handled by the City's Job creation programmes (EPWP) and can tie in with the Operational Environmental Management Plans (OEMP's) of the Reserve area with supplemented funding by Ward grants.

The City also needs to monitor their garbage removal times strictly.

This past year has seen many garbage collection days pass by without bins being collected timeously.

This can only exacerbate the current situation, as it encourages the thwarts of vagrants to scavenge more.

I believe a sustainable solution is only possible with a renewed sense of pride in our homeplace!

That starts with "Thinking Clean" at community level.

CHARLIE VANN
E-mail

City seems to be struggling

The City seems incapable of keeping our waterways clean. The condition of our freshwater as well as the pollution in Table Bay is totally unacceptable!

I have sent requests to the City to have the feed canals to the Diep River cleaned on many occasions. Hardly ever a response and if actioned it's too little too late.

How ironic the juxtaposition of the beautiful flamingos having to survive in the filthy water?

A real case of "mooi van vër, maar vër van mooi."

BOB SCHULING
E-mail

Rare walk on offer for spring

Nature enthusiasts can celebrate spring with a guided walk through Milnerton Racecourse.

According to the City of Cape Town, the Table Bay Nature Reserve will host the annual walk from Tuesday 15 to Sunday 20 September between 10:00 and 12:30 each day.

During the Milnerton Racecourse guided walks, participants will be able to explore normally inaccessible parts of the Table Bay Nature Reserve.

“Outdoor enthusiasts can look forward to being guided by the reserve’s site manager on the 2km walk through the beautiful southern area of the reserve usually closed to the public. This is yet another innovation in our quest to ensure the sustainability of our reserves and to make them more accessible to our residents. We can, however, only achieve this with the support and willing engagement of members of the public, said City mayco member for energy, environmental and spatial planning, Johan van der Merwe.

One of the reserve’s hidden gems is the Cape Flats sand fynbos inside the old Milnerton Racecourse. So far, 218 plant species have been recorded at the Milnerton Racecourse, 32 of which are on the Red List of the International Union for the Conservation of Natural Resources. Most of these species flower in spring.

This vegetation type is critically endangered and not normally accessible.

Visitors might be lucky enough to spot one of the resident Cape grysbokkies or other animals in the reserve, such as the Cape clawless otter, water mongoose, angulate tortoises, marsh terrapins, numerous species of butterfly and over 100 bird species.

Participants are asked to meet at the public open space next to the road at the third traffic circle on Grand National Boulevard in Royal Ascot, Milnerton on the mornings of the walks. All children are most welcome, but no pets will be permitted.

For enquiries or bookings, please contact Landi Louw on Landi.louw@cape-town.gov.za or 021 444 7218. There is no cost but booking is essential.

The coastal clean-up which took place at Woodbridge Island last year.



Waste tackled on clean-up day

The 30th International Coastal Clean-Up Day will see scores of volunteers gather at Woodbridge Island on Saturday 19 September from 09:00 to 12:00.

Douw Steyn, director for sustainability at PlasticsSA and chairman of the National Recycling Forum (NRF), says each year, thousands of kilograms of waste are removed along the world’s shorelines, and South Africa is recognised as one of the leading participants in this clean-up initiative.

The first International Coastal Clean-Up Day was held in 1996 as an initiative of the plastics industry and KZN Wildlife, to remove the most visible plastic litter from the coast. Since then, it has become an annual country-wide event supported by the glass, cans, paper and board in-

dustries, as well as oil converters, recyclers, brand owners, retailers, Brand SA, KZN Wildlife, Tuffy Manufacturing, Pick n Pay, Garbie (East Rand Plastics) and the Department of Environmental Affairs (DEA).

“All packaging streams, as well as oil and e-waste recyclers, will use Clean-Up and Recycle Week SA to spread the message about the importance of looking after the environment and ensuring that everybody takes responsibility for recycling where they work, live or play,” Steyn says.

In Cape Town, major clean-ups will be taking place at Woodbridge Island. Beach and river clean-ups are being planned by communities, schools and businesses around the country.

▶ For more information visit www.clean-up-sa.co.za.

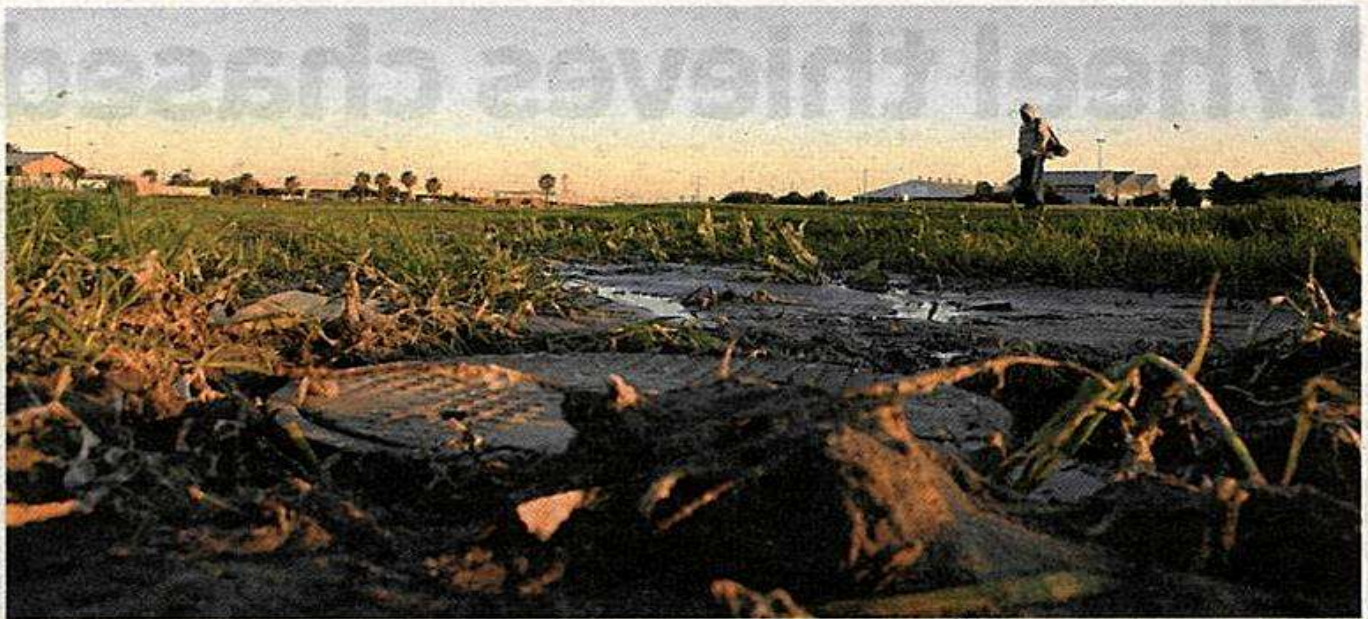
Volunteers collected 120 bags of rubbish at Lagoon Beach as part of International Coastal Clean-up Day which took place on Saturday September 19. Fine Music Radio (FMR) together with Plastics SA participated in the clean-up and concentrated on a 100 metre area along Lagoon beach. The coastline was populated with sweet wrappers, chip packets, nappies, plastic bottles, toothbrushes, plastic granules, ear buds and even a toilet seat.



■ Ninety volunteers dedicated their time to cleaning up a section of the Lagoon beach coastline.



■ Volunteers at the Lagoon Beach clean-up included Julian Battaglia, Glyn Fogel, Richard Jewson, Vanessa Levenstein, Wesley Lewies, John Richards, Andy Wilding and Rebecca Baatjes.



Brooklyn residents have raised concern about this manhole which they say often overflows with raw sewerage. PHOTO: MONIQUE DUVAL

Sewage floods park

MONIQUE DUVAL

[@monique_duval](#)

Brooklyn residents have raised their voices after having to close their noses following a sewage spill near Haarlem Street.

Resident Sheik Noorani Toorabally, who lives closest to the spill, says a manhole located along the open space can often be seen lifting as raw sewage spills onto the grass.

He says City of Cape Town officials have been on the site to find a solution during the past week.

“The problem starts at the pump station. Every time something happens there you see the water come out of the manhole. It makes everything stink and the sewage forms a pond of stinky water,” he says.

Toorabally explains that each time there is a spill he reports it to the officials at the pump station, but says it’s important for officials to find a permanent solution.

“We are worried about many things. Firstly there are health risks. People walk here with their children and dogs and this water just stands here and stinks up the place. We are worried about whether or not the spill will affect the sewer lines to our homes and we don’t want this stuff pushing up in our bathrooms,” he says.

Residents say they monitor the manhole

frequently and when a bad smell is detected in Brooklyn, that is the likely cause.

According to City mayco member for utility services, Ernest Sonnenberg, the gravity line leading to the pump station overflowed and this led to the effluent being discharged through the manhole.

He confirmed the spillage was untreated sewerage and explained it is a combination of effluent water from showers, baths, toilets and dishwashers among other things.

Asked whether problems at the pump station were linked to load shedding, Sonnenberg said there was a local power outage over the weekend but supply has since been restored to normal functioning order. “The pump station is regularly monitored and maintained. Unfortunately there are times when infrastructure experiences a fault, but the City works to ensure that the impact of these instances is kept to a minimum.”

Sonnenberg further said the site is being cleaned and reminded all residents to please report any problems to the call centre as soon as possible so they can be addressed.

According to Toorabally, this is not the first time there has been a spillage and he believes officials need to create a bypass to the river canal to prevent sewage pooling near their homes.

▶ Report issues like this to the City’s call centre on 0860 103 089.

Land invasion near Dunoon stopped

ATHINA MAY

After being alerted to a land invasion in the industrial location opposite Dunoon, the City of Cape Town's Anti-Land Invasion Unit and police removed 18 structures on Monday June 29, and cleared 200 sites that were cordoned off with sticks which marked the area for future illegal occupation.

The City was notified of the illegal invasion by Ward 104 councillor, Lubabalo Makeleni, who had addressed the community of approximately 800 people and advised them that what they were doing was illegal.

"They just can't expect to move on to land and demand houses while there are people on the housing waiting list.

"A few of them came to my house to demand land, but I was not home," said Mr Makeleni.

He said the shacks which were on City land were encroaching Parklands and that some of the shacks were on part of the Rietvlei wetland reserve.

Benedicta van Minnen, the City's mayoral committee member for human settlements, said unplanned

creation of informal settlements makes the task of delivering and accelerating the provision of housing opportunities and other services a great challenge.

"If land such as this is illegally occupied, the economic and job creation opportunities that would be created if industry could be established there are lost, and it condemns these residents to live in areas with little access to jobs and economic opportunities.

"The City simply cannot afford nor tolerate land invasions," said Ms Van Minnen.

Invaded land is dangerous and immediately becomes a fire and flood risk, Ms Van Minnen added, making the delivery of other services in the area impossible.

"It is imperative that we uphold a fair and equitable system for those in need and for our most vulnerable residents.

"The City will continue to uphold the values contained in the South African Constitution. This includes respect for the dignity of all and compliance with the rule of law at all times," said Ms Van Minnen.



Residents are concerned about commuters getting robbed while using this bridge over Zoarvlei to get to the MyCiti bus station. PHOTO: MONIQUE DUVAL

A bridge to danger

MONIQUE DUVAL
@monique_duval

Screams heard by Brooklyn residents have sparked concern about robberies at Zoarvlei.

Speaking at a recent meeting held by the Brooklyn, Ysterplaat and Rugby Residents' Association (BYRRA), a resident said the sound of screams ringing out was becoming more frequent. He said he feared for the safety of commuters who cross the bridge between Brooklyn and Paarden Eiland to get to the MyCiti station.

During a walk along the vlei last week, Justin Kumlehn, who heads BYRRA's safety and security portfolio, said robberies along the bridge were an ongoing issue.

He explained when the bridge was first built, lights along the bridge helped illuminate the area which helped commuters feel safer. However, vandalism has seen the bridge being stripped of various valuables, including the lights.

Ernest Sonnenberg, mayoral committee member for utility services, says the lighting was vandalised within the first month after the bridge was completed in 2012.

In the interest of pedestrian safety, the municipality has installed floodlights on either side of the bridge.

The new lights were noted at the BYRRA meeting but residents suggested that cameras would be "more of a deterrent".

"Early in the morning and late at night you can hear people screaming. That bridge is very unsafe and maybe cameras will help," one man said.

Kumlehn said there were various factors which impacted on safety near the bridge and explained that the thick vegetation along the vlei provided hiding place for robbers and made the area difficult to police.

"It is a difficult area for police to watch over because the road access ends on Wemys Road and the vlei will have to be patrolled by foot," he said.

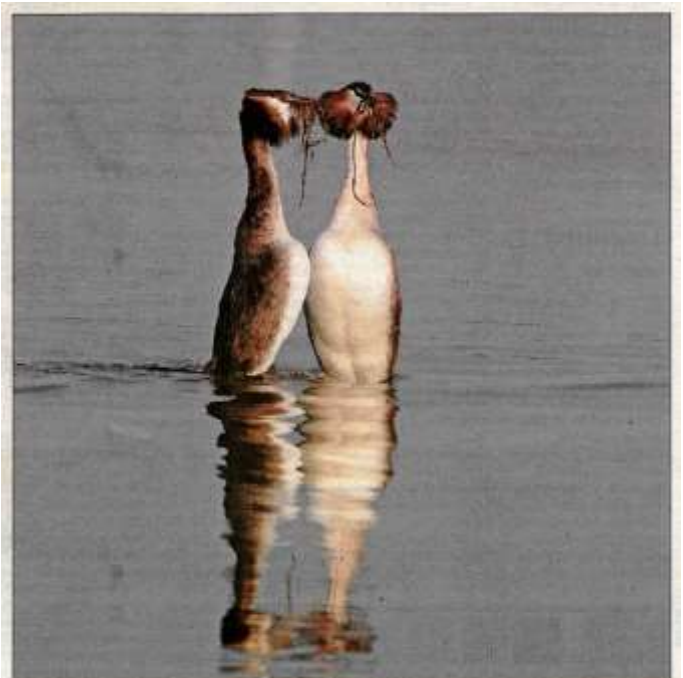
According to Milnerton police spokesperson Warrant Officer Daphne O'Reilly, there were no reported robberies of commuters in the last month.

In the past there have been "sporadic incidents" in which commuters reported getting robbed on their way, she says.

Have you been a victim? Tell us about your experience and send a letter to briewe@tygerburger.co.za.



■ Frieda Prinsloo of Parklands sent in this picture of a black-headed heron catching a mouse in the Rietvlei in the Table Bay Nature Reserve.



■ Frieda Prinsloo of Parklands sent in these pictures depicting the mating dance of Crested Grebes. The images were shot in the Rietvlei area of the Table Bay Nature Reserve.