

# SPATIAL PLANNING AND ENVIRONMENT ENVIRONMENTAL MANAGEMENT DEPARTMENT

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# **CONSERVATION WISE**

**Conserving Biodiversity for Future Generations** 

# QUARTERLY REPORT OF THE MILNERTON RACECOURSE ENVIRONMENTAL MANAGEMENT COMMITTEE OCTOBER TO DECEMBER 2019



Above: Carpobrotus aciniaciformis











From left to right: Heliophila africana, Lechenalia reflexa, Ixia paniculata, Ornithogalum thyrsoides, Orphium frutescens

Funded by the Royal Ascot Master Property Owners' Association (RAMPOA) in partnership with the City of Cape Town and the Cape Town Environmental Education Trust (CTEET).





## The elusive bagworm moth

The caterpillar larvae of the bagworm moth construct cases out of silk and environmental materials such as sand, soil, lichen, or plant materials. These cases are attached to rocks, trees or fences while resting or during their pupa stage, but are otherwise mobile. In many species, the adult females lack wings and are therefore difficult to identify accurately.

Adult females of many bagworm species have only vestigial wings, legs, and mouth parts. The adult males of most species are strong fliers with well-developed wings and feathery antennae but survive only long enough to reproduce due to underdeveloped mouthparts that prevent them from feeding.

A bagworm begins to build its case as soon as it hatches. Once the case is built, only adult males ever leave the case, never to return, when they take flight to find a mate





Figure 1: Bagworm moth eating a Cotula sp.

Figure 2: Bagworm inside the casing.

The caterpillar was not harmed by opening the casing because the skin was unattached. After leaving if for an hour the caterpillar closed the casing up with silk and was released back into the veld.



Figure 3: Two bagworm moths eating an Albuca sp.



Figure 4: Bagworm moth attached to a restio.

## **Burning for the Future**

A prescribed ecological burn is being planned for a suitable date from February to April 2020. The size of the block to be burned is approximately 3 hectares.

#### Objectives for planning an ecological burn are:

- Removal of ageing vegetation/insect infestation
- Stimulating the germination of soil-stored seeds
- Preserving a Critically Endangered vegetation type (Cape Flats sand fynbos)
- Preventing local extinctions of plant species (maintaining biodiversity)
- Create a mosaic of different vegetation ages within the racecourse.

The role of fire in fynbos is an essential ecological component to maintaining biodiversity. Fire management involves varying the season, frequency and intensity of fires, and reconciling ecological and practical requirements.

Too frequent fires present a threat to slowergrowing species, which can be eliminated. If fire is excluded from the area, other unwanted species can invade and result in loss of biodiversity. Prescribed ecological burning of vegetation is a management tool in areas where vegetation becomes senescent and a risk of species loss exists.

The objective of fire within the racecourse is to create a mosaic of vegetation ages and successional stages within the Nature Reserve to maximize representation of species at any given time. Fire helps to maintain biodiversity and restoring degraded vegetation. Fire within racecourse will also get rid of senescent vegetation and reduce the risk of losing species.



Figure 5. Red highlight showing area to burn

#### Some Fauna to see in the Nature Reserve:



Figure 6: Baby terrapin



Figure 7: Angulate tortoise



Figure 8: Achaea echo

# Update on mystery nests found in Leucadendron levisanus bushes

Dr. Charles Haddad (Doctorate in Entomology from the University of the Free State) was not able to identify the species of mystery spiders found in the Southern area of Milnerton Racecourse. He has confirmed however that they are Hackle-web spiders in the family Dictynidae.

The specimens will be deposited at the National Collection of Arachnida in Pretoria where Sarah Crews and Yura Marusik have submitted a grant proposal to revise the Afrotropical fauna. There they will hopefully be able to identify and describe the species.



Figure 9: Dictynidae magnified with an electronic microscope.

# Hester Pentz, the site manager of the Milnerton Racecourse at the Table Bay Nature Reserve, came across these mysterious spider nests on Leucadendron levisanus and Mauratia saturicioides. She opened some of the nests and discovered the presence of numerous small spiders. They were identified as a Dictypides especies by Charles Haddad and Ansie Dippenaar. Hester will send more specimens to be examined. Anybody seeing this type of nests to contact either Charles or Ansie, please.

Figure 10: An excerpt from the South African National Survey of Arachnida newsletter.

#### Be an Enviro Warrior

Environmental audits were conducted on residential and commercial properties to ensure they abide by the Environmental DO's and Don'ts of Royal Ascot.

A few main topics that residents and commercial properties struggled with were: roaming pets, excessive lighting, as well as liquid and waste disposal.

**Pets** are not allowed into the Nature Reserve. It is the resident's responsibility to contain pets to their properties and for the Body Corporates to enforce tenant rules. The challenge for the Nature Reserve is to protect the indigenous wildlife from the predatory tendencies of domestic pets. Free roaming domestic cats have been known to prey on birds, invertebrates, reptiles, amphibians and mammals.

You can help by installing appropriate measures to keep cats contained to properties at all times.

**Lights** have been used excessively and can be a hindrance to nocturnal wildlife. **You can help** by using minimal lighting with motion activated sensors as well as making sure lighting is directed only into one's property.

**Storm water** drains go directly to the sea and do not pass through treatment plants. It is very important to familiarise ourselves with what we can and cannot dispose of down storm water drains by reading the <a href="WASTEWATER AND INDUSTRIAL EFFLUENT BY-LAW">WASTEWATER AND INDUSTRIAL EFFLUENT BY-LAW</a> and <a href="STORMWATER MANAGEMENT BY-LAW">STORMWATER MANAGEMENT BY-LAW</a>. You can help by using biodegradable products where possible and remaining mindful of what is disposed of down storm water drains.

**Poor waste disposal** affects the Nature Reserve when plastics blow in from residential and commercial properties. **You can help** by insuring all rubbish bins are secured with lids. You can also help by using reusable grocery bags and by recycling. A family activity could even include volunteering for litter clean ups or educating those seen littering.