False Bay Ecology Park

The False Bay Ecology Park (FBEP) covers 1 200 ha and includes Rondevlei and Zeekoevlei Nature Reserves, a coastal strip as well as the Cape Flats Waste Water Treatment Works and the Coastal Park Landfill Site. CAFDA to the north of Rondevlei is integral to the vision of the Park. The FBEP is an area with a unique and varied biodiversity and is particularly rich in birdlife. Surrounded by dense urban development, the Park faces special challenges such as security, illegal dumping, litering and water pollution. Development, including low and upper income residential units as well as a proposed toll road, which would bisect the Park, and alien vegetation encroach on its boundaries. To offset these difficulties the Park has amazing opportunities to provide recreation, social and economic upliftment and environmental education to a large population on its doorstep. It is also used to educate people on good principles of waste and water management.

The Cape Care Route, a sustainable development tourism project, includes both Rondevlei and the CAFDA centre. The FBEP was selected as the Mayor of Cape Town's special project depicting partnerships at the UNEP World Environment Day event in San Francisco in 2005. The prominence the Park received in San Francisco was due to the Involvement of a wide range of civil society organisations, NGO's and 10 City line functions who currently serve on the FBEP Steering Committee and are involved in the planning and implementation of plans for the Park.

FALSE BAY ECOLOGY PARK

RONDEVLEI NATURE RESERVE

The City of Cape Town has been conserving the rich biodiversity of the Cape Flats at Rondevlei Nature Reserve since 1952. Rondevlei has a museum, aquarium, auditorium, network of footpaths and an overnight island camp. Hippos were reintroduced to Rondevlei in 1981. At present there are 5 hippos including Brutus, the dominant male, and Cleo, an original female. 15 Hippo calves have been born at the Reserve, but most of these have been relocated to other nature reserves. The varied bird life can be observed from bird hides and tall observation towers.

ZEEKOEVLEI NATURE RESERVE

Zeekoevlei Nature Reserve, managed by the City of Cape Town, was proclaimed in 2000 and includes the largest natural inland water body in the city. Zeekoevlei is the key recreational area for walking, picnicking, braaing, fishing, sailing, rowing, or dragon boating.

FALSE BAY COASTLINE

False Bay is one of the 'Beautiful Bays of the World' and a popular recreation spot for walking, fishing and watersports. It is also part of a natural corridor, in the City of Cape Town's Biodiversity Network, linking the Table Mountain National Park with the Kogelberg Biosphere Reserve. The vulnerable African Black Oystercatcher (Haematopus moquini) breeds along the shore.

CAPE FLATS WASTE WATER TREATMENT WORKS – SOUTHERN BIRDING AREA (STRANDFONTEIN)

The Cape Flats Waste Water Treatment Works handles approximately 40% of the City of Cape Town's sewage effluent. Ironically, the high nutrient levels in the maturation ponds encourage the growth of plankton and provide excellent feeding grounds for birds, making this **Southern Birding Area (also known as Strandfontein)** an 'Important Bird Area' (IBA) of South Africa. Birdwatchers visit the site where up to 20 000 birds gather, representing a remarkable diversity of species including 9 Red Data species.

CAPE FLATS DEVELOPMENT ASSOCIATION

The CAFDA Stables Craft and Culture Centre, with its Indigenous plant nursery and Koffie Kombuis, provides a refreshment stop on the Cape Care tourist route. Donkey-cart rides into Rondevlei Nature Reserve are planned for the near future.

COASTAL PARK LANDFILL

The waste cycle is an essential part of environmental management. Coastal Park is a large general-waste landfill that services the south and deep southern peninsula areas of Cape Town. It includes a drop-off zone open to the public six days a week, where waste is sorted and then taken to the landfill or recycled.

ENVIRONMENTAL EDUCATION CENTRES

Environmental Education staff run day environmental education programmes at Rondevlei Nature Reserve which are fully subscribed months in advance.

The Cape Town Environmental Education Trust (CTEET) runs two overnight facilities with a focus on high quality, low cost outdoor education. During three days campers focus on human and nature-related environmental issues and personal and social development.

Zeekoevlei Environmental Centre (ZEC) was opened in 2001 and can accommodate 40 learners at overnight camps. At the Otter Raised Bush Camp learners sleep under the stars as part of the environmental experience. A larger Bush Camp is also planned.

The False Bay Ecology Park Environmental Centre (FBEP EC), which opened in 2006, caters for 120 learners and educators on sleepover camps and will become the headquarters of CTEET.

FUTURE PROPOSALS

- **New Headquarters** for the Park at a central location on the southern shore of Zeekoevlei.
- **An Eco Village and Camp Site** for holidays, will demonstrate how to build and live in harmony with the environment while using natural resources in a sustainable way.
- **Extensions** are proposed to the east and west of the Park, to include seasonal wetlands and endangered Cape Flats Dune Thicket, which are extremely rich in biodiversity.

SPECIES LIST

You may find these animals and plants at the False Bay Ecology Park. Some of them are highly endangered and threatened with extinction; the False Bay Ecology Park is their last hope of survival.

INVERTEBRATES:
Insects and spiders
- Barker's Ranger Butterfly (RARE)
- Silver Arrowhead Butterfly
- Painted Lady Butterfly
- Cocktail Ant
- Carpenter Bee
- Long-proboscis flies
- Horse flies
- Midges
- Praying mantids
- Spider-hunting wasps
- Dragonflies
- Damselflies
- Crab spiders

MAMMALS (23 species)
- Hippopotamus
- Cape Clawless Otter (RARE)
- Cape Hare
- Cape Grysbok (RARE)
- Steenbok
- Small Spotted Genet
- Water Mongoose
- Striped Mouse
- Porcupine
- Cape Molerat
- Cape Dune Molerat
- Cape Golden Mole

AMPHIBIANS
(8 species: 2 endangered)
- Western Leopard Toad
- Arum Lily Frog

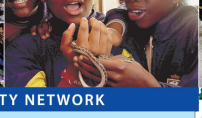
REPTILES (29 species)
- Angulate Tortoise
- Cape Dwarf Chameleon
- Cape Skink
- Ocelated Gecko
- Cape Sand Snake
- Mole Snake
- Cape Cobra
- Puff Adder

BIRDS: (240 species)
- African Sacred Ibis
- African Spoonbill
- Little Egret
- Cape Gull
- Hartlaub's Gull
- Caspian Tern
- Sandwich Tern
- Swift Tern
- Curlew Sandpiper
- Little Stint
- Pied Avocet
- Black-winged Stilt
- African Darter
- Grey Heron
- Yellow-billed Duck
- Little Grebe (Dabchick)
- Black-necked Grebe
- Red-knobbed Coot
- Maccoa Duck
- Southern Pochard
- Little Bittern
- Pied Kingfisher
- Blacksmith Plover
- Bokmakierie
- Karoo Prinia (Spotted Prinia)
- African Marsh Harrier
- Black Swift
- Southern Double-collared Sunbird
- Barn Swallow (European Swallow)
- African Fish Eagle
- African Black Oystercatcher
- Greater Flamingo
- Lesser Flamingo
- Great White Pelican

PLANTS (Over 320 plant species : 17 endangered, 2 endemic)
Apiil Fool, Blood flower, *Bergsalvia*, *Haemanthus coccineus*
Arum Lily, Varkblom, *Zantedeschia aethiopica*
Bobbejaantjie, *Babiana ambigua*
Bullrush Papkuil, *Typha domingensis*
Bushtick-berry, Bietou, *Chrysanthemoides monilifera*
Cancer Bush, *Lessertia frutescens*
Candelabra Flower, Koninginskandelaar, *Perdepoorkbossie*, *Brunsvigia orientalis*
Cape Flats Conebush, *Leucadendron levisanus* (ENDANGERED)
Cape Flats Pea Bush, *Psoralea glaucina* (ENDANGERED)
Cape Flats Erica, *Erica vernicifolia* (EXTINCT IN THE WILD)

Cape Flats Passerina, *Passerina paludosa* (ENDANGERED)
Cape Rain Daisy, *Dimorphotheca pluvialis*
Dragon Disa, *Disa draconis* (ENDANGERED)
Gladiolus, Sandpaje, Blou Afrikaner, *Gladiolus carinatus*
Lachenalia, Sandkaliossie, Bergnaatje, *Lachenalia bulbifera*
March Lily, Maartlelie, *Amaryllis belladona*
Meduseh Head, *Euphorbia mammillaria*
Rondevlei Spiderhead, *Serruria amuela var. foeniculacea* (ENDANGERED)
Rose Scented Geranium, *Pelargonium capitatum*
Sedge, Steekbeisie, *Schoenoplectus scirpoides*
Soldier-in-the-box, Geldbeurslie, *Albuca canadensis*
Somel, Suuring, *Oxalis pes-caprae*
Sour fig, Suurvy, Perdevy, *Carpobrotus edulus*
Sukerbos, *Protea repens*
Suurkanol, *Chasmanthe aethiopica*
Spinnekopblom, *Ferraria crispa*
Tabakiloss, *Senecio halimifolius*
Thatching Reed, Restio, Dekriet, *Chondropetalum nudum and Thamnochortus spicigerus*
Tortoiseberry, Skilpaddesnie or Duinebessie, *Nylandtia spinosa*
Watsonia, Pypie, *Watsonia meriana*
White Bristle Bush, Blombos, *Metalasia muricata*
Wild Iris, Uniqie, *Moraea fugax*
Wild Sage, Bruinvalie, *Salvia africana lutea*

For more information on species, visit www.rondevlei.co.za



FACT SNIPPETS

Biodiversity is the wide variety of plant, animal and other species in their natural habitat.

The Cape Floral Kingdom is a hotspot of biological diversity with many more species per unit area than anywhere else in the world. A heathlike vegetation known as fynbos covers 80% of the region and is characterised by proteas, ericas, Cape reeds (restios) and geophytes that survive harsh conditions as underground bulbs.

Ecosystems are made up of living things and their environment.

A catchment area is the land draining into a river or vlei. It is very important to manage litter, pollution and the run-off of fertilizers and sewage into small vleis. Algae thrive on the nutrients and Zeekoevlei often has a water problem due to activities that occur in its upstream catchment area.

Wetlands, such as vleis and marshes, are very important areas. They provide a natural filter where silt settles out of water and excess fertilizers are removed by plants, like reeds, growing around the edges. Water birds, fish, frogs and special plants form distinctive ecosystems.

Migratory birds, particularly waders, travel as far as 28 000 km from their breeding grounds in north-central Siberia to feast in the Cape in summer. If migratory birds are to survive, international co-operation is needed to protect their breeding grounds, their feeding grounds and fuelling stops along their flyways.

Alien invasive species: Foreign trees, particularly Port Jackson and Rooikrans wattles, introduced from Australia to consolidate the sand dunes, grow vigorously and compete with the fynbos, resulting in a loss of biodiversity. Some water weeds are also invasive and clog waterways. Carp is an invasive fish that was introduced to the vleis and is an ecological problem, as it outcompetes indigenous fish species.

Red Data Species: These are species that are vulnerable, threatened or endangered.

Sustainable Development: Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Pollution: is the result of the release to air, water or soil from any process or of any substance which is capable of causing harm to man or other living organisms supported by the environment. Litter and dumping are obvious examples of land-base pollution. Run-off of herbicides and pesticides cause water pollution.

Integrated Waste Management (IWM): The IWM concept recognises the importance of a broad hierarchy of approaches of preferred options for dealing with a waste stream in a 'cradle-to-grave' approach. These options include waste avoidance, re-use, recycling, resource recovery, treatment, and finally disposal.

- **Waste avoidance** is the reduction of waste at source.
- **Re-use** is the utilisation of a waste product without further transformation (e.g. old glass jars as storage containers)
- **Recycling** The manufacture of a product that is made from 'waste' materials (e.g. melting waste glass to make new glass bottles; using plastic bags to make crafts – e.g. plastic chickens). Many of the crafts at the CAFDA centre are made from recycled materials.
- **Resource Recovery** The recovery or retrieval of recyclable material either from, or before they enter the waste stream for the purposes of recycling or re-using. "Pickers" at Coastal Park Landfill are performing a resource recovery function
- **Treatment** The processes of changing the physical and /or chemical properties of a waste product. For example, human waste is treated at the Cape Flats Wastewater Treatment Works, and becomes sewage sludge and effluent of an acceptable standard, that is either utilised for irrigation or discharged to the ocean or rivers.
- **Disposal** The final step in the hierarchy which involves landfilling of wastes in a controlled manner. This is the main function of the Coastal Park Landfill Site.

Composting: Composting is the decomposition of plant and other organic remains to make an earthy, dark crumbly substance that will enrich soil. Composting is one of the natural alternatives to using chemical fertilizers.

Eco-tourism: The concept behind eco-tourism is to create a tourist industry which can help the economy and improve people's lives by creating jobs, whilst not compromising the environment and also helping in the wise management of natural resources.

BIODIVERSITY NETWORK

It has been said that the definition of urbanisation is when we cut down all the trees and name the streets after them. This phenomenon is true for Cape Town, so true in fact, that we have done this with entire suburbs…

Here are some Cape Town examples

Heathfield and **Blackheath**: named after the many Erica (heath) species, some endemic, that used to occur there. All have been destroyed in our rush to develop!

Grassy Park: named after the "thatching grass" (Cape Restios) cut in the wetlands to thatch cottages in Wynberg. Today Rondevlei and Zeekoevlei Nature Reserves are the only places in the area where these plants can be seen in their former state.

Lotus River: named after the African Water Lily (or Lotus Flower) that is sadly extinct in the very place where it was once discovered.

Zeekoevlei: Named by Jan Van Riebeeck after the hippos (zeekoeie) that were exterminated over 200 years ago. Hippos were reintroduced to Rondevlei Nature Reserve in 1981.

Bergvliet: named after the vlei (vliet) that used to lie next to the mountain. Many wetlands in this area have been drained.

Cape Town has a wealth of natural diversity and a culture linked to this biodiversity. We must celebrate, cherish and secure what remains of our natural heritage for future generations, not only in name and history.

To try and ensure that we protect what remains of our biodiversity, a **Biodiversity Network** has been defined for Cape Town. Its aim is to protect functioning examples of all the ecosystems that make up the City's unique natural heritage. False Bay Ecology Park is one of 9 nodes of the Biodiversity Network. The FBEP is at a junction of ecological corridors that link Table Mountain National Park and Kogelberg Biosphere Reserve, and Table Bay and False Bay. These corridors ensure that areas rich in biodiversity do not become ecological islands. Pockets of healthy natural vegetation act as stepping stones along the corridors.

LEGEND
Biodiversity Network
- Protected & Core Flora Sites
- Biodiversity Sites
- Corridors and Nodes
- Table Mountain National Park

RESOURCES AND CONTACTS

False Bay Ecology Park Pamphlet
False Bay Ecology Park Environmental Education Pamphlet
Rondevlei Nature Reserve Plant Guide Booklet
Rondevlei Nature Reserve Bird Guide Booklet
Rondevlei Nature Reserve Bird Identification Guide
CAFDA: An Illustrated History 1944 – 2004 by Neil Scott

Rondevlei Nature Reserve: www.rondevlei.co.za
Zeekoevlei Nature Reserve: www.fbep.co.za
Imvubu Nature Tours: www.imvubu.co.za
Cape Town Environmental Education Trust (CTEET): www.zeepz.co.za
Cape Bird Club: www.capebirdclub.org.za
Zandvlei Trust: www.zandvleitrust.org.za
WESSA: Western Cape: www.wessa.wcape.school.za
Cape Town & Western Cape Tourism: www.tourismcapetown.co.za

For all records, sightings and general information about species: www.biodiversity.co.za

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