



## People & Conservation

### Environmental Experience

The Table Mountain National Park's Environmental Experience (EE) Programme is primarily aimed at the disadvantage youth of Cape Town.

These youth live far away from the TMNP and do not have the opportunity to visit the Park often. Much of the future of our conservation efforts hinge on building a love for nature in the hearts and minds of our youth – tomorrows leaders.

The Park has two busses - a 60 seater and a 22 seater – that pick children from schools on the Cape Flats and take them to the Park for the day. These excursions are not only recreational but have an educational angle as well.

Table Mountain is the perfect outdoor classroom to do a Natural Science lesson. Class in the Clouds provides you with a pre-prepared RNCS linked lesson to do on top of Table Mountain.

You can catch a ride in the cable car up Table Mountain into the *Class in the Clouds*. A learner will receive a free Coca-Cola, the guidance of a teacher assistant and a Class in the Clouds certificate. (There will be an extra charge if you travel with the Park bus). It is very important to make your booking at The Table Mountain Cableway by phoning +27(0) 21 424 0015 or e-mailing Fairuz Abrahams at [fairuz@tablemountain.net](mailto:fairuz@tablemountain.net)

### Cape Point

Cape Point is a unique area to visit where you can experience the fynbos, wild animals, beaches and multi cultural sites.

At Cape Point you will be able to integrate all learning outcomes. Natural Science lessons can include, fynbos identification, plant adaptations or dune ecology. The beaches and rock pools are also wonderful topics for a playful lesson. There are numerous short hikes that can form part of your lesson. Cultural historical sites also form a great part of the Cape Point area and can cover Social Science Learning Outcomes. Hikes and any lesson in the outdoor classroom should be planned well ahead of time.

Boulders is home to an African Penguin colony where learners can get up-close to observe these beautiful birds. RNCS linked lessons are available for foundation and intermediate phase.

Silvermine is a biodiversity rich area and the perfect spot to do any fynbos lesson. The dam also offers an ideal setting for fresh water ecology lesson. There are also beautiful hiking trails that can be included in map work lessons. This area has amazing lookout points which the learners can look over the city below. Many Social Science Geography learning outcomes can be covered in lessons in this area of the Park.

Silvermine also has areas that show the signs of early human habitation. These include Peer's Cave - a well know Khoi/San site as well as the Sunbird Centre that is an old Homestead. This centre can be booked for overnight accommodation for children. Please phone +27(0) 21 701 8692 to make a booking.

### Teacher Training

To fortify our commitment to educating the youth about the environment, the TMNP has developed a curriculum and training programme for teachers. This programme has been endorsed by the Western Cape Department of Education and teachers who participate and pass are qualified to do environmental education with their kids in the Park.

The Park also has various centres where kids can spend the day, and in some cases overnight, in the Park, that can be used in conjunction with the People and Conservation Department:

#### [Sunbird Centre in Silvermine](#)

An overnight facility - the [Sunbird Environmental Awareness Centre](#) is located in the scenic Silvermine River Valley within the Silvermine Section of the TMNP.

#### **Bordjiesrif**

Is situated in the Cape of Good Hope section – day visits only.

#### [The People's Trail](#)

It starts at Constantia Nek at 09:00, opposite the Constantia Nek Restaurant, where you will meet a Table Mountain National Park guides. You can access Constantia Nek via Rhodes Drive, Kirstenbosch, from Hout Bay or from the Wynberg/Tokai/Constantia area. The 2-day trail is a 15km hike, which ends on Table Mountain Road at the bottom of Platteklip Gorge, where you will descend. The trail will end by 15:00. [People's Trail information brochure](#)

#### **For more information and bookings:**

Contact: Nolene Mafakala, tel: +27(0) 21 701 8692, fax: +27(0) 21 701 8773, e-mail: [nolenem@sanparks.org](mailto:nolenem@sanparks.org)

## **People & Conservation**

### **Junior Rangers**



The TMNP Junior Rangers are a group of children from all corners of Cape Town that participate in nature conservation training to become well-informed voluntary rangers contributing to the vision and mission of SANParks.

The first cohort of Table Mountain National Park Junior Rangers was chosen at the beginning of 2009. A selection panel consisting of TMNP staff, iKapa Honourary Rangers and TMNP Volunteers chose 40 children out of 200 that applied to be chosen as part of the first TMNP Junior Rangers.



Application for 2009 have already closed but interested parties for 2010 can contact Christa Stringer on +27(0) 21 780 9006 from November 2009 for application forms.

If you would like to become involved with training on sponsoring a child for a year, please also contact Christa Stringer on the number above.

**For further enquiries please call the People and Conservation Department: Tel. +27 (0) 21 701 8692.**

#### **More info on Environmental Education:**

- [Sunbird Centre in Silvermine](#)
- [The People's Trail](#)

## **People & Conservation**

### **Volunteers & Friends**

The people of Cape Town are passionate about their National Park and as a result there is a vibrant volunteer and friend's community. These devoted citizens give freely of their time in order to assist the Park in a multitude of activities such as alien clearing, firefighting, path maintenance, guiding, cleansing and education.

Friends and volunteers differ slightly in that volunteers are directly linked to the Park whereas friends groups are independent associations that interact with the Park but have their own public voice.

However because many of these activities are specialised TMNP employs a fulltime Volunteer Manager to coordinate and oversee all activities.

- [TMNP Volunteer Application Form](#) (*is applicable when applying as a Volunteer Ranger - These volunteer rangers perform a slightly different role from the ordinary volunteers.* )
- [TMNP Volunteer Indemnity Form](#)

**For more information on volunteering in the Park or the various Friends groups please contact:**

- Volunteer Manager - [calvinm@sanparks.org](mailto:calvinm@sanparks.org) or call +27(0) 21 701 8692

## **People & Conservation**

### **Cultural Heritage**

The Cape Peninsula has a rich social history to compliment its natural wonders ranging from the Stone Age to more modern times such as the two World Wars.

As custodians of the 25 000 hectare Table Mountain National Park that incorporates many of these historically significant sites, Park management is also tasked with protecting this valuable cultural heritage.

To this end the TMNP has developed a Heritage Resource Management Plan (HRMP) which outlines all the sites of cultural significance as well as identifies those most urgently demanding protection. Download the HRMP

### **A glance at our Cultural History**

Traces of early stone age tools give evidence that early hunter gatherers lived on the Cape Peninsula around 600 000 years ago.

Later inhabitants – the San (hunter-gatherers) - harvested food from the seashore and evidence of their presence are the middens (prehistoric refuse heaps) that are found in a number of caves in the park and reveal a great deal about their lifestyle.

About 2000 years ago the Khoi Khoi migrated from the north, displacing the San, bringing with them their herds of cattle and sheep. It was the Khoi Khoi who were the dominant tribe when the Europeans sailed into Table Bay.

Other evidence of these early inhabitants is the rock art in Peer's Cave in the central section of the Park.

## **Early European Explorers**

The first in a steady stream of Europeans to visit the Cape Peninsula was the explorer Bartholomew Dias who set sail from Portugal in 1487 to find a sea route to the riches of the East. And in 1488 they had unwittingly rounded the Cape of Good Hope.

It was a full 10 years later that Vasco da Gama set sail from Portugal, rounded the Cape and reached India, making him the first person to open the sea route from Europe to the East and proving that rounding the Cape of Good Hope did indeed provide hope of reaching the riches of the East.

Commemorative crosses have been erected to honour Dias and Da Gama at Bordjiesrif and near Platboom, respectively, in the Cape of Good Hope. Ever since, the Cape of Good Hope has been an important landmark for mariners and Table Bay at the foot of the majestic Table Mountain became, and still is, a haven where seafarers could seek shelter and take aboard fresh supplies of water and meat bartered from the Khoikhoi

## **Settlers & Slaves**

In 1652, the Dutchman, Jan van Riebeeck, stepped ashore at Table Bay tasked with establishing a refreshment station for the Dutch East India Company and their ships that sailed the route to the Dutch East Indies. A fort (the Good Hope Castle) and gardens were established at the foot of Table Mountain. A viticulture industry was initiated and land was granted to settlers to grow crops. And so began European settlement at the Cape.

Tragically, European occupation of the Cape resulted in the virtual extermination of the Khoenkhoen tribes through slaughter and the introduction of European disease such as smallpox against which these peaceful herders had no defense.

These European settlers have left a rich architectural history scattered around the Park such as the Kings Block House on Devil's Peak - an early fort built by the British in 1790 to guard against attack from the south west – and in the deep south an old farmstead, dating back to 1780, has been lovingly restored and is now the TMNP's Buffelsfontein Visitor Centre.

Other sites of interest include the lighthouse at Cape Point, the dams on top of Table Mountain, relics from both World Wars, Maclears Beacon (the highest point in the Park) and of course the numerous shipwrecks that litter the coastline.

However some of the most fascinating heritage sites have deep spiritual significance to the Muslim population of Cape Town. When slavery was rampant in the Cape slaves were imported from Malaysia and the east. Among these were prominent holy men whose Kramats are found in the Park such as those at Oudekraal and Signal Hill.

Probably the most well known heritage site in the Park is Rhodes Estate. Cecil John Rhodes was a powerful and

controversial character who could be called the father of conservation on the Cape Peninsula having acquired land spanning the eastern slopes of Table Mountain from Devils Peak to Constantia Nek. On his death this land was bequeathed to the people of Cape Town and protected from development. This land, with the exception of Kirstenbosch National Botanical Gardens, is now managed by the TMNP.

**For more information on the rich cultural history of Cape Town and the Peninsula please refer to the following museums:**

- Iziko Museums of Cape Town: [www.museums.org.za/iziko](http://www.museums.org.za/iziko) or call: +27 (0) 21 481 3800
- The Slave Lodge on Adderley Street – call +27 (0) 21 460 8242
- District Six Museum – call +27 (0) 21 461 8754
- Bo-Kaap Museum – call +27 (0) 21 481 3939

## Birding in Table Mountain National Park

Although bird numbers are not always impressive (compared to the bird rich eastern and northern parts of South Africa), the Table Mountain National Park's cumulative bird list is a large one and there are several SA endemic species.

The diversity of habitats present (ocean, shoreline, cliff-face, rocky highland, fynbos, forest and suburbia) contributes to the large species count, as does the geographical positioning at a continent's corner, which means many vagrants swell the list, due to weather conditions blowing stray birds or miscalculated flight journeys on the part of individual birds.

In fynbos regions one should search for *Grey-backed Cisticola*, *Karoo Prinia*, *Cape Sugarbird*, *Orange-breasted Malachite* and *Southern (Lesser) Double Collared Sunbird*. *Cape Siskin*, *Cape Rock-thrush* and *Ground Woodpecker* should be looked for in rocky areas at higher elevation. In damp areas at high elevation, *Striped Flufftail* are found, although this species is more likely to be heard than seen. Birds of Prey should also be looked for overhead in these higher altitude areas. *Verreaux's (Black) Eagle*, *Jackal and Steppe (summer) Buzzard*, *Rock Kestrel*, and the occasional *Lanner* and *Peregrine Falcon* should all be scanned for. *White-necked Raven* is common.

In forest patches *Sombre Greenbul (Bulbul)*, *Olive Thrush*, *Cape Batis*, *Dusky* and *Paradise Flycatcher*, *Black Saw-wing*, *African Olive-Pigeon (Rameron Pigeon)* and *Lemon (Cinnamon) Dove* are usually to be found. *African Wood-Owl* too is often present but is more elusive as are *Rufous-chested (Red-breasted) Sparrowhawk* and *African Goshawk*. In areas where exotic pines and oaks are present, pockets of the dwindling *Chaffinch* population may still be found. Dense thickets on forest fringes is the haunt of the *Knysna Warbler*, although this species is more likely to be heard than seen, particularly between September and November. *Honey Buzzard* is another special to be searched for between from Newlands to Tokai, Constantia and Hout Bay.

One of the birding highlights of the peninsula is the *African (Jackass) Penguin* colony at Boulders Beach. Several hundred penguins are present all year round and the bird's lack of fear and a well designed boardwalk means that visitors can obtain excellent sightings of this species at close quarters. During July 2000 a *Greater Sheathbill* found its way into the colony. It was thought to be a ship-assisted bird from the sub-Antarctic Islands.

If one has access to a telescope, pelagic seabird watching can prove rewarding at several points along the peninsula coastline. *Cape Gannet*, *Blackbrowed Albatross*, *Sooty Shearwater*, *White-chinned* and *Giant Petrel* can

be seen all year round when strong winds bring the birds closer to shore. Winter is the best time for seabirdwatching and *Shy*, and *Yellownosed Albatross* and *Pintado Petrel* compliment the previously mentioned species. Get on board an organised pelagic boat ride and you will see many more open-ocean species as well. *Cory's Shearwater* is recorded in summer, particularly on the False Bay side of the peninsula.

Along the Peninsula coastline, *African Black Oystercatcher* may be found as well as four species of cormorant. *Crowned*, *Bank*, *White-breasted* and *Cape Cormorant* are all present, sometimes even seen side by side. *Cape (Kelp)* and *Hartlaub's Gull* are abundant throughout, while *Antarctic* (winter), *Swift* (all year), *Sandwich* and *Common* (both summer) *Tern* may all be located.

## Fauna

Ecosystems are not made up of plants alone and the animals that are indigenous to an area are integral to its health.

As you hike keep your eyes peeled for the animals that call the Table Mountain National Park home. Many are so well adapted to the fynbos ecosystem that you need to be quick to spot them.

The animals listed below are but a few of the Park's residents and may not be as overtly exciting as the "Big Five" but those lucky enough to observe them will be amazed by the variety of life supported by the Table Mountain chain.

### Mammals

Historical evidence (rock art and fossils) give evidence that the Cape Peninsula was once populated by a variety of larger mammals such as lion, leopard and hyena, however due to hunting and environmental degradation they are but a memory.

TMNP management has started reintroduction of locally extinct species - but on the tamer side of things with the tiny klipspringer.

Antelope species adapted to fynbos are generally tiny and hard to spot but well worth the patience. Look out for klipspringer (*Oreotragus oreotragus*), recently reintroduced to Table Mountain. These petite buck are likely to be seen standing proudly on rocky outcrops. Grysbok (*Raphicerus melanotis*), common duiker (*Sylvicapra grimmia*), Grey Rhebok (*Pelea capreolus*) and steenbok (*Raphicerus campestris*) can also be spotted toward evening and in the early mornings.

Larger Antelope species such as Eland (*Taurotragus oryx*), Red Hartebeest (*Alcelaphus buselaphus*), Bontebok (*Damaliscus dorcas dorcas*) can be found in the Cape of Good Hope section of the TMNP.

Other mammals include: Cape Mountain Zebra (*Equus zebra zebra*), caracal or rooikat (*Felis caracal*), Large-spotted genet (*Genneta tigrina*), Small-spotted genet (*Genneta genetta*), porcupine (*Hystrix africaeaustralis*), Rock Hyrax (*Procavia capensis*), Chacma Baboons (*papioursinus*), Cape Clawless Otter (*Aonyx capensis*), Water mongoose (*Atilax paludinosus*); Cape Molerat (*Georhycus capensis*), Striped Polecat (*Ictonyx striatus*); Cape Dune Mole (*Bathyergus suillus*) Water mongoose (*Ayonix capensis*), Small Grey Mongoose (*Galerella purverulenta*) and the Cape Fox (*Vulpes chama*).

### Reptiles & Amphibians



Table Mountain hosts an amazing variety of reptiles and amphibians that, if you take the time to observe, are as interesting as larger animals, if not more so.

The TMNP is home to around 22 snakes, 10 of which are non-venomous, although they can still deliver a nasty bite if provoked and five of the venomous species include the Cape Cobra, the Puff Adder, Boomslang, Rinkhals and Berg Adder. The good news is they are mostly shy and will avoid human contact. The one you are most likely to encounter is the Puff Adder which moves at a leisurely pace and enjoys a nice warm spots, such as rocks and pathways.

Of the species of lizard that inhabit the TMNP the most common are the Southern Rock Agama (males identifiable by a bright blue head during mating season), the Black Girdled Lizard (all black and definitely prehistoric in looks) and the Cape Skink (usually found relaxing on a good sunny rock).

TMNP is a haven for a variety of amphibians most notably the endemic and endangered Table Mountain Ghost Frog (*Heleophryne rosei*) and the endemic Cape Chirping Frog (*Arthroleptella lightfooti*).

Also look out for the Cape River Frog (*Afrana fuscigula*), the diminutive Arum Lily Frog (*Hyperolius horstocki*) and the Leopard Toad (*Bufo pantherinus*).

The slowest of all the reptiles, but definitely worth watching are the tortoises. Look out for the Angulate Tortoise (*Chersina angulata*) and the Parrot-beaked Tortoise (*Homopus areolatus*).

## Birds

Although bird numbers are not always impressive (compared to the bird rich eastern and northern parts of South Africa), the Table Mountain National Park's cumulative bird list is a large one and there are several endemic species.

The diversity of habitats present (ocean, shoreline, cliff-face, rocky highland, fynbos, forest and suburbia) contributes to the large species count, as does the geographical positioning at a continent's corner, which means many vagrants swell the list, due to weather conditions blowing stray birds or miscalculated flight journeys on the part of individual birds. Please note that this list is not all inclusive.

In fynbos regions one should search for Grey-backed Cisticola (*Cisticola subruficapilla*), Karoo Prinia (*Prinia maculosa*), Cape Sugarbird (*Pomerops cafer*), Orange-breasted (*Nectarina violacea*), Malachite (*Nectarina famosa*) and Lesser Double Collared (*Nectarina chalybea*) sunbirds. Cape Siskin (*Pseudochloroptila totta*), Cape Rock-thrush (*Monticola rupestris*) and Ground Woodpecker (*Geocolaptes olivaceus*) should be looked for in rocky areas at higher elevation.

Birds of Prey should also be looked for overhead in higher altitude areas. Verreaux's (Black) Eagle (*Aquila verreauxii*), Jackal (*Buteo rufofuscus*) and Steppe (*Buteo buteo vulpinus*) buzzards, Rock Kestrel (*Falco tinnunculus*), and Peregrine Falcon (*Falco Peregrinus*) should all be scanned for.

In forest patches look for Sombre Bulbul (*Andropadus importanus*), Olive Thrush (*Turdus olivaceus*), Cape Batis (*Batis capensis*), Dusky (*Muscicapa adusta*) and Paradise flycatchers (*Terpsiphone viridis*), African Olive/Rameron Pigeon (*Columba arquatrix*) and Cinnamon Dove (*Aplopelia larvata*).

African Wood-Owl (*Strix woodfordii*) are often present in forest areas as are Rufous-breasted Sparrowhawk (*Accipiter rufiventris*) and African Goshawk (*Accipiter tachiro*).

Dense thicket on forest fringes is the haunt of the Knysna Warbler (*Bradypterus sylvaticus*).

One of the birding highlights of the peninsula is the African Penguin (*Spheniscus demersus*) colony at Boulders Beach. Other seabirds include: Cape Gannet (*Moruscapensis*), Black-browed Albatross (*Diomedea melanophris*), Sooty Shearwater, White-chinned and Giant petrels can be seen all year round when strong winds bring the birds closer to shore.

In winter look out for the Shy (*Diomedea cauta*) and Yellow-nosed (*Diomedea chlororhynchos*) albatross and Pintado Petrel (*Daption capense*).

Along the Peninsula coastline, the endangered African Black Oystercatcher (*Haematopus moquini*) can be found as well as four resident species of cormorant namely - Crowned (*Phalacrocorax coronatus*), Bank (*Phalacrocorax neglectus*), White-breasted (*Phalacrocorax carbo*) and Cape Cormorant (*Phalacrocorax capensis*). Kelp (*Larus dominicanus*), Hartlaub's (*Larus hartlaubii*) and Black-headed (*Larus ridibundus*) gulls are abundant throughout.

Download the [birding checklist](#) for Table Mountain National Park - Cape of Good Hope section.

## [Marine Life](#)

The Cape Peninsula straddles the two bio-geographic provinces – the cool temperate Namaqua province to the west and the warm temperate South Coast province to the east. This is one of the most diverse and productive stretches in South Africa. The Cape Peninsula is even endemic to this change-over region. It is also the area of the longest commercial fishing in South Africa. The MPA was declared in order to protect this precious biodiversity from commercial and recreational exploitation.

Species that occur here range from microscopic planktons, crustaceans, abalone and rock lobster to giants such as the great white shark and the southern right whale. In between occur numerous [types of fish](#) such as hake, yellow tail and cape salmon – all three top-targeted commercial species. Others include red roman white steenbras and galjoen – popular for recreational anglers but under strictly regulated conditions due to their threatened status.

**Want to find out the status of fish, simply SMS "fish species" to 079 4998795.**

One of the reasons for the profusion of [Great White Sharks](#) in the False Bay is the abundant population of Cape Fur seals that have colonised Seal Island in the middle of the Bay. The Cape Fur Seal is also an efficient hunter in its own right.

## **Whale Watching**

A major tourist attraction is whale spotting as the MPA is a popular breeding ground for species such as the Southern Right (*Eubalaena australis*) and Humpback (*Megaptera novaeangliae*) whales. From August to October these giants of the deep awe visitors on an annual basis with their amazingly graceful marine acrobatics. Good vantage points for whale spotting are Chapman's Peak Drive, Rooikrans, Boyes Drive and the Scarborough/Kommetjie Pass.

Other popular marine mammals are the dolphins that inhabit the MPA, these graceful and curious animals can be found body surfing the various breaks around the peninsula. Commonly sighted species are the Bottlenose Dolphin (*Lagenorhynchus delphis*), the Common Dolphin (*Delphinus delphis*) and the Dusky Dolphin (*Tursiops truncatus*).



## [Insects](#)

There are a profusion of insects in the TMNP and they play an integral role in the fynbos ecosystem either by directly pollinating plants or as a vital source of nutrient for birds and animals that themselves act as distributors of seed.

Certain insects are especially adapted to service specific plants. Look out for butterflies such as the Mountain Pride Butterfly (*Aeropetes tulbaghia*) that is the exclusive pollinator of a variety of red plants such as the red disa, and the red crassula.

## Flora

### [Fynbos](#)

The Table Mountain National Park (TMNP) is rich in floral biodiversity and is part of the Cape Floral Kingdom World Heritage Site. The most common vegetation type in the TMNP is fynbos (meaning *fine bush*).

Fynbos is an ancient yet unique vegetation type and has developed over millions of years with *restios* dating as far back as 60 million years. It has a high level of endemism (when a specific plant occurs nowhere else on earth) often with a species being endemic to an area of a few kilometres only. It is this high level of endemism combined with the high rate of development and environmental degradation that has resulted in the Cape Floral Kingdom being declared a biodiversity hot spot.

#### **Fynbos consists of four major plant groups:-**

- Proteas: large shrubs with broad leaves
- Erica's: heath-like, low growing shrubs
- Restios: reed-like plants; are the only group that are found in all fynbos habitats and as such are called
- Geophytes: bulbs; these include watsónias and disa's both of which occur mainly in wetland areas and are prominent after fires.

Fynbos is a fire-dependent vegetation that needs to burn around every 15 years to stimulate new growth and ensure that plant and animal communities remain healthy. However, because of the proximity of houses to the TMNP, often fires that would be beneficial to the vegetation are extinguished because of the threat to human settlement. If fynbos does not burn in about 20 - 30 years it will become moribund which could result in the extinction of some species.

On the other hand certain areas of the Park experience fire too frequently due to human intervention. This can be destructive to the ecosystem because when young fynbos (fynbos that has not yet reached seed-bearing status) burns, seed banks are depleted which can change the diversity of plant species in the area, e.g. more grass species, which could result in even more frequent fires.

Visit our section on [Fire Management](#) to find out how the TMNP Firefighting Unit operates.

## [Renosterveld](#)

Renosterveld (rhinoceros field) is a type of vegetation found on the slopes of Signal Hill and Devil's Peak, wherever there are exposures of Malmesbury shale.

It thus occurs on gentle to steep lower slopes forming a tall, open shrubland and grassland, typically with Renosterbos not appearing very prominently. This vegetation is very grassy due to frequent fires and lack of grazing. On south-facing slopes and upper slopes this unit merges into fynbos. The early seral (?) stages after fire are dominated by spectacular bulb displays and resprouting bush clumps of Wax Currant-rhus, after which tussock grasses, shrubs and ferns emerge. After only 12 months the reseeding species start to become more obvious, much faster than in Fynbos.

This is a critically endangered vegetation unit, with only 13% remaining, the rest having been lost under Cape Town's urban sprawl. A fair proportion of the conserved area on Devil's Peak is covered by pine and gum parkland, and is the focus of restoration research.

Renosterveld burns every 3–5 years to the dismay of Cape Town citizens, but this is the natural fire frequency for this vegetation type, especially where it is not heavily grazed.. Large portions of Signal Hill however, have been, protected from fire for up to 25 years, and as a consequence, bush encroachment and invasion by alien Thatching Grass is providing a management challenge for protecting the bulbs and succulents in this veld type.

**Information from:** *Fynbos Biome in The Vegetation of South Africa, Lesotho and Swaziland* by A.G. Rebelo, C. Boucher, N. Helme, L. Mucina, M.C. Rutherford et al. 2006. L. Mucina & M.C. Rutherford (eds). *Strelitzia* 19, pp 52-219.

## [Afromontane Forest](#)

While we have no real indication of the expanse of Afromontane Forest on the peninsula in pre-colonial times, today only small pockets remain in the TMNP as during 50 years of European settlement, large areas of Afromontane had been harvested.

Afromontane Forest usually occurs below 800m and requires good rainfall and nutrient-rich soil and today is found primarily in kloofs on the slopes of Table Mountain but it does occur as far south as the Cape of Good Hope. It consists of medium-height (15m-20m), evergreen trees and unlike its neighbour fynbos, it is not very rich in diversity and consists of around 33 species of trees.

Due to the dense nature of the forest canopy, only a few other plants, such as ferns, are found in the forest but there is an abundance of algae's and mosses. The majority of animals in the forests are of the reptilian, invertebrate (insect) or avian persuasion although you can see rooikat and smaller antelope such as steenbok.

For good forest walks visit the [activities](#) section.

## Sensitive Ecosystems

### Rivers & Wetlands

The few remaining wetlands on the Cape Peninsula are of huge ecological significance. The Noordhoek/Kommetjie wetlands and the central area of Table Mountain are excellent representatives of wetland ecology. Their slightly acidic nature limits the number of plants that grow there, although numbered among those that do are some of the Park's rarest floral jewels such as the Bokmakieriestert (*Witsenia maura*), *Erica heleogena* and three endemic leucodendrons all of which are numbered on the IUCN's Red Data List.

#### ***Recommended Read:***

For an enlightening read that will greatly enhance your enjoyment of the TMNP, buy *Mountains in the Sea – an Interpretive Guide to Table Mountain National Park* by award-winning environmental journalist John Yeld. The book comprehensively covers all aspects of the Park from fauna, flora and fire to popular hikes and history. It is available from TMNP outlets at Westlake, Tel: 021 701 8692, Boulders Penguin Colony, Tel: 021 786 2392 and Buffelsfontein Visitor Centre, Tel: 021 780 9204.

For more information on the flora of the TMNP visit: [www.botanicalsociety.org.za](http://www.botanicalsociety.org.za) or [www.sanbi.org.za](http://www.sanbi.org.za).

## Alien Clearing

One of the biggest threats to the biodiversity of the Table Mountain National Park is the presence of alien invasive plant species. In particular, adult, woody seed-bearing alien invasive plants such as Port Jackson, Rooikrans, Wattle, Hakea, Pine and Blue Gum are especially threatening.

#### **These trees have several negative impacts on the fynbos ecosystem:**

- They impact negatively on the hydrology of an area and use up precious water supplies (i.e. interfere with waterways).
- They destabilise river banks.
- They are vigorous growers and out-compete indigenous species by occupying spaces where indigenous species would thrive.
- They destroy the balance of habitats and therefore impact negatively on indigenous fauna.
- In some cases their seeds lie dormant for 70 -100 years resulting in continuous and dense re-growth
- They are very flammable and cause frequent and very hot fires.

For the reasons listed above alien clearing is a core part of TMNP's biodiversity management. The alien clearing programme is undertaken in partnership between TMNP and Working for Water, an [Expanded Public Works Programme](#) implemented by the Department of Water Affairs and Forestry (DWAF) which employs between 300-350 people from surrounding communities to work in the park.

Other alien clearing initiatives are being undertaken in the indigenous Afromontane forests. There are around 360 alien plants in Newlands forest alone, most of them invasive. These aliens are garden escapees such as Chinese Privet and Eugenia and pose a real threat to the natural diversity of the forests.

## TMNP Mill

The Milling Project is a small project, based in Tokai, falling within the Working for Water Programme (WFW). Seen as a Value-Added industry, the Milling Team specifically mill alien tree species (e.g. gum trees) into planks which can be used by SANParks for repairing and building new boardwalks, bird hides, etc. The aim is to promote a culture of "reduce, re-use, recycle" whilst at the same time reducing fire risks on the mountain slopes. The most important objective is the relief of poverty and the development of communities through job creation.

After felling and de-branching the trees, the branches are stacked for prescribed burning. The excess material that is left over after milling the logs is used for fire wood and the sawdust can be used by the Horse stables nearby as "bedding" for the horses.

### Interesting Links:

[www.arc.agric.za](http://www.arc.agric.za)

SAPIA (ARC-Plant Protection Research Institute) keeps you up-to-date via an electronic newsletter with information on what aliens you need to be on the lookout for as well as updates on biodiversity control.

<http://za.ispot.org.uk>

iSpot is an avenue for laymen to contribute (usually by uploading images) interesting sightings of animals, plants and fungi that they encounter. Any observations from the wild or your garden, from an alien to a threatened species, is welcomed. iSpot will help you to identify any unknown species.

### How can I help?

If you would like to be a volunteer involved with alien clearing, contact Calvin Mojapelo of the People & Conservation Department on 021 712 0527.

## To report a fire in the TMNP

### Please call:

- *Hotline: 086 110 6417 or the*
- *City's Regional Fire Control No: (021) 590 1900*
- *Newlands Fire Base: Tel: +27(0) 21 689 7438*

## Fire Management

Fire season in Cape Town extends from November to May and the dry and windy summers create the ideal conditions for wildfires to occur. The TMNP has a team of dedicated fire-fighters and firefighting volunteers on standby during the entire season.



Fire management in the TMNP is made complex by the fact that as biodiversity conservators Park Management must recognise that fact that fire is an integral part of the fynbos ecosystem while respecting the need to protect life and property on the urban edge.

There are various management interventions undertaken to meet both needs as well as various agencies responsible for Fire Management.

[Download](#) the TMNP Fire Management Plan.

## [Fire Management Organisations](#)

TMNP manages 25 000 hectares of the 30 000 hectares that make up the Cape Peninsula Protected Natural Environment (CPPNE). The remaining 5 000 hectares is a mix of private, City and State-owned land.

The **City of Cape Town and TMNP** are responsible for the management of fires in the area and have a Memorandum of Agreement (MoA) that defines their areas of responsibility and working relationship.

**Table Mountain National Park** is responsible for managing fire in the Park and on the urban edge and will assist the City in fighting veld and forest fires on municipal land.

TMNP has 76 field staff available to fight fires but during the fire season we hire 70 trained contract fire fighters to assist Park staff in fire fighting with 40 on 24 hour standby duty through out the fire season.

**The City of Cape Town** aims to protect life and property from fire within the Cape Town Metropolitan area and will assist the TMNP in protecting houses on the urban edge and in fighting fires that have started in road reserves or municipal land that have spread to the Park.

**Volunteer Wildfire Services (VWS)** is a volunteer organization that assists TMNP with fighting and securing wildfires in the park. These firefighters are on call anytime night or day, all year round. The VWS runs from bases in Newlands and South Peninsula. To support, join or find out more about the VWS please visit their website: [www.capefires.com](http://www.capefires.com)

**Working on Fire** was started to assist government and private organizations in combating wildfires. TMNP went into partnership with Working on Fire (WoF) Programme in 2004 which gives us access to the assistance of additional ground crew and equipment, such as helicopters.

### **Fire Protection Association**

Appointed as Fire Protection Officer TMNP's Manager of Fire and Technical Services, the Cape Peninsula Fire Protection Association (CPFPA) was formed to prevent, predict, manage and extinguish veldfires. Membership is voluntary for private landowners but is compulsory for owners of state and local authority land.

## [Fire Management Interventions](#)

### **Firebreaks**

- are a means of access for personnel and equipment during wild fire suppression,
- serve as a control line where a fire can be attacked, for example, by setting a backburn.

### **Prescribed Burns**

- reduce fuel loads
- rejuvenate fire-adapted and fire dependant vegetation
- help in invasive alien plant control

These are burns set by fire managers under controlled conditions. In Cape Town they are generally planned for March and April once the weather is favourable: no or little wind and a good amount of moisture is present.

TMNP also needs to take account the risk of being on the urban edge - if a prescribed burn escapes it can result in expensive damage to properties and infrastructure.

### **Stack Burning**

Alien plant clearing can result in the accumulation of large quantities of fuel in the form of dead brush, usually stacked in heaps. These stacks are burnt under moist conditions usually between June and August.

### **Alien Plants**

There are many alien plants that grow in the TMNP. Aliens burn with more intensity than fynbos because they tend to be woody with high levels of volatile oils. If unplanned fires occur in old stands of alien plants the fire can get so hot it will sterilize the soil resulting in poor fynbos recovery. Alien fuelled fires are also difficult to contain.

For this reason, among others, the TMNP runs an intensive alien clearing programme funded by Working for Water.

### **Causes of Fire**

- Human action: Mistakes such as children playing with fire crackers, flares, cigarette butts and airborne coals from braai's and home fires.
- Paraffin, gass and other spirit fuelled cooking equipment.
- Natural processes such as: lightning, iron-rich rocks falling and igniting dry, fine grasses.
- Arson. This is the deliberate lighting of a fire by an individual with the intent of causing damage.

## **Geology**

Although not strictly part of Biodiversity Management, the unique and often oddly shaped geology of the Table Mountain National Park deserves a mention.

**The Cape Peninsula is composed of three main rock formations of varying ages.**



- The Malmesbury Group, around 540 million years old, consists of dark grey mudstones and lighter coloured sandstones. Examples of this formation can be seen on Signal Hill and the lower slopes of Devil's Peak
- Cape Granite, around 540 million years old, is much harder and coarse-grained characterised by large white feldspar crystals, shimmering flakes of black mica and grey glassy quartz. This formation is the foundation for most of the Table Mountain Chain and good examples of granite outcrops can be seen at Boulders, Chapman's Peak and Lion's Head.
- Table Mountain Group, only 520 million years old, comprised of a further three formations:
  - The Graafwater formation: This layer is around 25m-65m thick and consists of sandstone and mudstone in red and purple hues.
  - The Peninsula Formation comprised of light grey, pebbly sandstones, forms the bulk of Table Mountain and is around 700m thick.
  - The Pakhuis Formation found on the top of Table Mountain and identifiable by glacially deposited pebbles of sandstone.

For more information please visit: <http://web.uct.ac.za/depts/geolsci/cape.htm>

## Marine Protected Area

The seas around the Cape Peninsula are rich in marine biodiversity because it is where the cold Benguela and warm Atlantic currents mix. In 2004 the Table Mountain National Park Marine Protected Area (MPA) was pronounced to help ensure that commercial and recreational use of the ocean is sustainable.

The MPA includes 1000km<sup>2</sup> of the sea and coastline around the Cape Peninsula from Moullie Point in the North to Muizenberg in the south. While fishing is allowed in the majority of the MPA - subject to the Department of Agriculture, Forestry and Fisheries' (DAFF) permits, regulations and seasons, it also includes six restricted areas with five "no take" zones within the MPA where no fishing or extractive activities are allowed. In the sixth restricted area around the Karbonkelberg in Hout Bay, only *snoek* are allowed to be caught deeper than the 35m contour.

These restricted or "no-take" zones are important breeding and nursery areas for marine life and through leaving these undisturbed there will ultimately be an increase in marine stock and threatened species are given a chance to regenerate.

The MPA is managed by TMNP in conjunction with the Department of Agriculture, Forestry and Fisheries (DAFF). TMNP undertakes the administrative and inshore law enforcement and educational activities while DAFF is responsible for issuing permits, quotas and law enforcement.

There are strict rules and regulations in place regarding fishing in the MPA – [click here to view these](#). Alternatively, visit the department's website at [www.environment.gov.za](http://www.environment.gov.za).

For further information on fishing, season dates, marine species, etc, please click on a link below:

[West Coast Rock Lobster](#)

[Abalone](#)

[DAFF website](#)

The Marine Team, based at Kommetjie adjacent to the Slangkop Tented camp, is faced with the challenge of combating poaching and educating the fishing communities around sustainable use. Poaching is the single biggest

threat to our marine environment and has resulted in strict regulations and bans on some recreational activities. Members of the public are asked to report poaching on 021 783 0234.

For information on sustainable use of the oceans please visit: <http://www.wwf.org.za/sassi> or send an SMS to 079 499 8795.

## Planning & Development

The TMNP's Conservation Planning and Development Department has a wide range of responsibilities:

### Land Consolidation

Table Mountain National Park was established through the proclamation of the initial 14 500 hectares of City land as National Park. Park Management was tasked with incorporating all remaining, undeveloped conservation-worthy land on and around the Cape Peninsula Protected Natural Environment (CPPNE) within the TMNP's management jurisdiction. The TMNP is 25 000 hectares in extent of the 30 000 hectares that comprise the CPPNE.

The Department has a process underway to secure the remaining conservation worthy City and public land and a CPPNE Private Land Consolidation Strategy which seeks to consolidate private land into the Park by donation, purchase, contract or cooperative agreement. Land consolidation progress is summarized in the Park's "Yesterday, Today and Tomorrow" maps.

- [Download Maps](#)

### Policy Management

Management of the Table Mountain National Park is informed by various policies and management plans. The Planning Department is responsible for the management and updating of all policy documents. For more information please visit the [Library](#).

### Information Management

All information regarding the Park recorded by plotting it into an Environmental Information System (EIS). This includes topics such as footpath and road networks, alien clearing activities, heritage sites, boundaries, firebreaks, heritage mapping and facility positions.

### Signage

Part of the Park's Visitor Management Programme includes ensuring that there is a comprehensive system of directional and informational signage throughout the TMNP. A comprehensive Signage Manual serves as the basis for provision of signage throughout the Park.

### Land Use Planning

The Department has prepared an overarching spatial planning framework for the Park – the Conservation Development Framework – which identifies recreational use zones, visitor sites and provides for the management of the Park-City interface. Planning frameworks are prepared for priority areas for implementation of visitor infrastructure and outsourcing via the SANParks concession programme.

## Research & Projects

### [The Expanded Public Works Programme](#)

The Expanded Public Works Programme (EPWP) administered by the Department of Water Affairs and Forestry (DWAF) assists in various environmental projects in the TMNP as well as other sensitive areas across the country. All alien clearing undertaken in the TMNP is funded by Working for Water.

EPWP Projects include those under the following programmes:

- Working for Wetlands
- Working on Fire
- Working on Land
- Working for the Coast
- Working for Wildlife\_

[For more information, click here to visit EPWP's website.](#)

In 2004 TMNP received a R35 million grant from the Department of Environmental Affairs and Tourism (DEAT) for the Expanded Public Works Programme. This initiated Phase 1 of the EPWP programme at TMNP. The grant allowed the park to engage over 400 people from local communities surrounding the park, through skills training and development over a 3 year period..

At the end of 2007, the park received an extension for another year, and at the end of 2008, received a further R6 million as a further extension on phase 1. This brought the total grant to R41 million (2004 – 2009).

The second phase of the project received R8 million from which 92 beneficiaries were employed. Phase 2 was initiated in November 2009 and concluded in June 2012.

## World Heritage Site Status

In June 2004 the Cape Floristic Region (CFR), which spans the eastern and western Cape, was declared to be: of universal significance to humanity and was inscribed as a Natural World Heritage Site.

The site is a serial nomination and is made up of eight separate areas that are considered to be representative samples of the entire region and is managed by four different authorities namely South African National Parks (SANParks), CapeNature, the Eastern Cape Nature Conservation Board (ECNCB) and the South African Biodiversity Institute (SANBI).

- Table Mountain National Park and Kirstenbosch National Botanical Gardens, managed by SANParks and SANBI respectively. This is the first time a botanical garden has been included in Natural World Heritage Site nomination.

- Cedarburg Wilderness Area – CapeNature
- Groot Winterhoek Wilderness Area – CapeNature
- Boland Mountain Complex - CapeNature
- De Hoop Nature Reserve - CapeNature
- Bosmansbos Wilderness Area - CapeNature
- Swartberg Complex - CapeNature
- Baviaanskloof Protected Area – ECNCB

## Why the CFR was declared a Natural World Heritage Site

The CFR is the smallest and richest of the six floral kingdoms that occur on earth. It is also the only kingdom confined to one continent and is home to an amazing 8 200 plant species - of which around 80% are fynbos. The significance of this hits home when you consider that the British Isles, 3 ½ times the size, boasts less than 1 500 plant species.

Many of the plants that occur here are endemic – that means that they occur nowhere else on earth. To add to this there are around 1,406 threatened plant species, 300 of which are endangered or critically endangered and 29 plant species are already extinct. It is this combination of high diversity and levels of threat from issues like urbanization, poor fire management and alien species that makes the CFR the world's hottest floral hot-spot. Add to this the increase in global warming and pollution.

## South Africa's World Heritage Sites

The City of Cape Town now boasts no less than three World Heritage sites:

- Table Mountain National Park
- Kirstenbosch
- Robben Island

The other sites in SA are the **Greater St Lucia Wetland Park, Sterkfontein – Cradle of Humankind, Mapungubwe Cultural Landscape** and the **uKhahlamba-Drakensberg Park**.

**For more information on World Heritage Sites, the Cape Floristic Region and threatened ecosystems please visit:**

- South African Biodiversity Institute: [www.sanbi.org/biodiversity](http://www.sanbi.org/biodiversity)
- IUCN's Red Data list: [www.redlist.org](http://www.redlist.org) and <http://whc.unesco.org>
- The Botanical Society: [www.botanicalsociety.org.za](http://www.botanicalsociety.org.za)
- Conservation International: [www.biodiversityhotspots.org](http://www.biodiversityhotspots.org)