



Pocket Guide to South Africa 2008/09
ENVIRONMENT

The overarching vision of the Department of Environmental Affairs and Tourism is a prosperous and equitable society living in harmony with its natural resources.



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Government leads protection of the environment by example. At regional level, the provincial conservation agencies are major role-players, and independent statutory organisations such as South African National Parks (SANParks) and the South African National Biodiversity Institute (Sanbi) are valuable partners in the country's total conservation effort.

South Africa has taken several concrete steps to implement the United Nations' (UN) Agenda 21 on Sustainable Development. These include reforming environmental policies, ratifying international agreements and participating in many global and regional sustainable-development initiatives.

Environmental heritage

South Africa enjoys the third-highest level of biodiversity in the world. It has between 250 000 and a million species of organisms, many of which occur nowhere else in the world.

While South Africa occupies about 2% of the world's land area, it is estimated that the country is home to 10% of the world's plants and 7% of the reptiles, birds and mammals. The southern African coast is home to almost 15% of known coastal marine species, providing a rich source of nutrition and supporting livelihoods of coastal communities.

Important dates:

World Wetlands Day: 2 February
National Water Week: 19 to 25 March
Earth Day: 20 March
World Water Day: 22 March
World Meteorological Day: 23 March
World Environment Day: 5 June
World Oceans Day: 8 June
World Desertification Day: 17 June
National Arbour Week: 1 to 7 September
International Day for the Protection of the Ozone Layer: 16 September
World Tourism Day: 27 September
World Habitat Day: 4 October
National Marine Day: 20 October





The 12th session of the African Ministerial Conference on the Environment (AMCEN) was held in June 2008 at the Sandton Convention Centre, Johannesburg. During the conference, the *Africa: Atlas of our Changing Environment* was launched. The atlas is the first major publication to depict environmental change in Africa's countries using satellite imagery, and is a resource for remedial action at all levels.



South Africa assumed the chair of AMCEN for the next two years, which will provide an opportunity to raise the profile of global environmental issues in Africa. It will represent Africa at international environmental meetings.

The National Spatial Biodiversity Assessment by the Department of Environmental Affairs and Tourism and Sanbi revealed that 34% of South Africa's ecosystems were threatened, with 5% critically endangered; while 82% of the 120 main rivers were threatened and 44% critically endangered. Of the 13 groups of estuarine biodiversity, three were in critical danger and 12% of marine biozones were under serious threat.

South Africa's National Biodiversity Strategy and Action Plan aims to guide conservation and the management of biodiversity to ensure sustainable and equitable benefits for all communities.

The country's three globally recognised biodiversity hotspots are the Cape Floral Region, which falls entirely within South African boundaries; the Succulent Karoo, which South Africa shares with Namibia; and Maputland-Pondoland, which South Africa shares with Mozambique and Swaziland.

The coastline meets the Atlantic, Indian and Southern oceans, which provide exceptional habitats ranging from cool water kelp forests to tropical coral reefs.

The Cape Floral Kingdom has the highest recorded species diversity for any similar-sized temperate or tropical region in the world. It is a world heritage site.



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Biodiversity is protected and promoted through institutions and initiatives such as the:

- South African Biodiversity Facility
- South African Biosystematics Initiative
- South African Environmental Observation Network
- Biobank South Africa.

Biomes

There are eight major terrestrial biomes, or habitat types, in South Africa. These biomes can, in turn, be divided into 70 veld types.

The biomes are the Savanna, Nama-Karoo, Succulent Karoo, Grassland, Fynbos, Forest, Thicket and Desert. The Fynbos Biome is one of only six floral kingdoms worldwide.

Conservation areas

The Convention on Biological Diversity, to which South Africa is a signatory, requires that 10% of terrestrial and 20% of marine biodiversity be conserved by 2010. There are a number of management categories of protected areas in South Africa, which conform to the accepted categories of the International Union for Conservation of Nature.

By May 2008, about 5,9% of South Africa's land surface area was under formal conservation through the system of national and provincial protected areas.

Scientific reserves

These are sensitive, undisturbed areas managed for research, monitoring and maintenance of genetic sources. Access is limited. Examples are Marion Island and the Prince Edward islands near Antarctica.

Wilderness areas

These areas are extensive in size, uninhabited, and underdeveloped, and access to them is strictly controlled. Examples are the Cederberg Wilderness Area and Dassen Island in the Western Cape.



In May 2008, the Department of Environmental Affairs and Tourism and South African National Parks completed the second year of implementation of the Infrastructure Development Programme for which a total amount of R541 million was made available over a four-year period.

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By May 2008, the programme had employed 1 357 people. Some 50 small, medium and micro-enterprises were empowered and transformation in the construction industry was actively supported.

Under this programme:

- 145 tourism-accommodation units were upgraded and many new accommodation units constructed in various national parks
- 89 upgraded and new staff accommodation units were put in place in various national parks.

Construction work has also started on important initiatives that include:

- a new entrance gate at Twee Rivieren in the Kgalagadi Transfrontier Park
- conference centres in Mopani and Skukuza rest camps in the Kruger National Park
- a world-class centre in Mapungubwe National Park that will celebrate the rich heritage of this world heritage site.

National parks and equivalent reserves

SANParks manages several national parks throughout South Africa, excluding in Gauteng, North West and KwaZulu-Natal. The system of national parks is representative of the country's important ecosystems and unique natural features.

Commercial and tourism-conservation development and the involvement of local communities are regarded as performance indicators. These areas include national parks, provincial parks, nature reserves and indigenous state forests proclaimed in terms of the National Environment Management: Protected Areas Act, 2003.

South Africa is in the process of establishing transfrontier conservation areas (TFCAs) in co-operation with its neighbouring countries.



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The conservation status of the areas within these TFCAs varies from national parks, private game reserves and communal natural-resource management areas to hunting concession areas. Though fences, highways, railway lines or other barriers separate the constituent areas, they are managed jointly for long-term sustainable use of natural resources.

TFCAs aim to facilitate and promote regional peace, cooperation and socio-economic development. The success of TFCAs depends on community involvement. In turn, TFCAs are likely to provide local communities with opportunities to generate revenue.

Southern Africa's transfrontier conservation areas (TFCAs) have packaged 53 investment opportunities in the various countries. They range from small and medium lodge-type developments to multimillion-rand developments, such as the Kavango-Zambesi Waterfront Development.



The Department of Environmental Affairs and Tourism hosted an investment conference on behalf of the nine Southern African Development Community countries (Angola, Botswana, Lesotho, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe) in October 2008. The objective of this conference was to market a portfolio of uniquely packaged tourism investment opportunities in the seven existing TFCAs to potential investors.

TFCAs allow tourists easy movement across international boundaries into adjoining conservation areas.

The six identified TFCAs are the:

- Ais-Ais/Richtersveld Transfrontier Conservation Park
- Kgalagadi Transfrontier Park
- Limpopo-Shashe TFCA
- Great Limpopo Transfrontier Park
- Lubombo Transfrontier Conservation and Resource Area
- Maloti-Drakensberg Transfrontier Conservation and Development Area.



National parks of South Africa



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| 1. Addo Elephant National Park | 12. Mountain Zebra National Park |
| 2. Agulhas National Park | 13. Namaqua National Park |
| 3. Augrabies Falls National Park | 14. Ais-Ais/Richtersveld National Park |
| 4. Bontebok National Park | 15. Table Mountain National Park |
| 5. Golden Gate Highlands National Park | 16. Tankwa Karoo National Park |
| 6. Karoo National Park | 17. Tsitsikamma National Park |
| 7. Kgalagadi Transfrontier Park | 18. Vaalbos National Park |
| 8. Knysna National Park | 19. West Coast National Park |
| 9. Kruger National Park | 20. Wilderness National Park |
| 10. Mapungubwe National Park | 21. Camdeboo National Park |
| 11. Marakele National Park | |

The National Environmental Management: Protected Areas Amendment Act, 2004 protects South Africa's biosphere reserves, which are generally formed around existing core conservation areas.

Biosphere reserves include outstanding natural beauty and biological diversity, exist in partnership with a range of interested landowners and can incorporate development, as long as it is sustainable, while still protecting terrestrial or coastal ecosystems.



National and cultural monuments

These are natural or cultural features, or both, and may include botanical gardens, zoological gardens, natural heritage sites and sites of conservation significance.

In December 1999, Robben Island, the iSimangaliso Wetlands Park (formerly the Greater St Lucia Wetlands Park) and the Cradle of Humankind were proclaimed world heritage sites by the United Nations Educational, Science and Cultural Organisation (Unesco).

The Ukhahlamba-Drakensberg Park was nominated as a mixed site. In July 2003, the site of the Mapungubwe civilisation became the fifth heritage site. The Cape Floral Region also became a world heritage site at the end of June 2004.

The Vredefort Dome in the Free State was declared South Africa's seventh world heritage site at the 29th session of the Unesco World Heritage Conference held in Durban in July 2005, when the body met in sub-Saharan Africa for the first time.

Makapan Valley in Limpopo and the Taung Cave in North West were declared extensions of the Cradle of Humankind.

The Richtersveld Cultural and Botanical Landscape was declared a world heritage site in 2007 and covers an area of 160 000 hectares (ha) of dramatic mountainous desert in the north-western part of South Africa.

The world's oldest map of Africa was commemorated in Cape Town on 25 August 2008. The Montalboddo Fracan map of Africa is 500 years old. It was first published in Milan in 1508 and is the first known map of Africa printed as a separate continent.



It was first printed in a book compiled by Italian monk Fracanzano Montalboddo. While modern-day maps are much more accurate and contain more information, it is through the Montalboddo Fracan map that Africa as a continent was first recognised and given an identity.

Habitat and wildlife management areas

These areas include conservancies; provincial, regional or private reserves created for the conservation of species, habitats or biotic communities; marshes; lakes; and nesting and feeding areas.



Sustainable-use areas

These areas emphasise the sustainable use of products in protected areas such as the Kosi Bay Lake System in KwaZulu-Natal.

Wetlands

Wetlands include a wide range of inland and coastal habitats – from mountain bogs, fens and midland marshes to swamp forests and estuaries, linked by green corridors of streambank wetlands.

The Working for Wetlands Programme focuses on wetland restoration, while maximising employment creation, support for small, medium and micro-enterprises and skills transfer.

Through the *National Wetland Inventory*, South Africa has identified 120 000 wetlands, which cover 7% of the country's surface area.

Many wetland plants have great medicinal value. In South Africa, traditional medicine is the preferred primary healthcare choice for about 70% of people. Wetlands provide some of the 19 500 tons of medicinal plant material, which are used by some 28 million South Africans every year.

South African water are of global importance for conserving seabirds. South Africa's sub-Antarctic Prince Edward islands hold 44% of the world population of wandering albatrosses and 21% of the global population of Indian yellow-nosed albatrosses.



Surveys show that the numbers of African penguins breeding in the Western Cape have decreased by about 70% in the past four years, and the overall population of the species is presently at its lowest recorded level.

It is within this context that South Africa launched the National Plan of Action for reducing the incidental catch of seabirds in longline fisheries (NPoA seabirds) at the official opening of the international meeting of the Agreement on the Conservation of Albatrosses and Petrels. Launching the NPoA seabirds demonstrates South Africa's continued commitment to the conservation and management of seabirds in a sustainable and responsible manner.



Botanical gardens

Sanbi manages eight national botanical gardens in five of South Africa's nine provinces. The gardens collectively attract over 1,25 million visitors a year, are signatories to the International Agenda for Botanic Gardens in Conservation and are founding members of the African Botanic Gardens Network.

The largest garden is Kirstenbosch, situated on the eastern slopes of Table Mountain in Cape Town. It displays 5 300 indigenous plant species, and was voted one of the top seven botanical gardens in the world at the International Botanical Congress held in Missouri, United States of America, in 1999.

The other gardens in the national network are the Karoo Desert in Worcester, Harold Porter in Betty's Bay, Free State in Bloemfontein, KwaZulu-Natal in Pietermaritzburg, Lowveld in Nelspruit, Walter Sisulu in Roodepoort/Mogale City, the Pretoria National Botanical Garden and Hantam in the Northern Cape.

The Pretoria National Botanical Garden houses the National Herbarium of South Africa, the largest in the southern hemisphere.

Contracting parties to the Convention for Co-operation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region, the Abidjan Convention, met in South Africa on 10 June 2008 to strengthen strategies in response to the increasing challenges marine and coastal environments are faced with.



The Abidjan Convention area covers some of the most productive coastal and marine ecosystems in the world. These areas are rich in oil, gas and mineral resources and has a great potential for tourism. The coastal zones of the convention area are hubs for intense socio-economic activities and centres of human settlements, transport and industrial and commercial activities.

Zoos

There are a number of zoological gardens in South Africa. The 85-ha National Zoological Gardens (NZG) of South Africa in Pretoria is one of the world's 10 best. It attracts more than 600 000



visitors annually. The national zoo is responsible for the biodiversity conservation centres in Lichtenburg and Mokopane, and the satellite zoo and animal park at the Emerald Animal World complex in Vanderbijlpark.

The NZG is a national research facility, which presents an opportunity for the zoo to reposition itself as one of the world leaders in breeding and researching endangered species.

The NZG houses 3 117 specimens of 209 mammal species, 1 358 specimens of 202 bird species, 3 871 specimens of 190 fish species, 388 specimens of four invertebrate species, 309 specimens of 93 reptile species and 44 specimens of seven amphibian species. These figures comprise the animals housed at the zoo in Pretoria as well as at the two biodiversity conservation centres and the Emerald Animal World complex.

Marine protected areas (MPAs)

The MPAs are modelled on the success of the iSimangaliso Wetlands Park – with strict zoning of both marine and coastal protected areas. The four MPAs are Aliwal Shoal on the south coast of KwaZulu-Natal, the coastal and marine environment next to Pondoland in the Eastern Cape, Bird Island at Algoa Bay and the Cape Peninsula in the Western Cape.

Some of the protection measures to be implemented in the MPAs are restrictions for people who want to fish, as well as restrictions for stowing fishing gear when fishing from a vessel.

Marine resources

The sustainable exploitation of marine resources, on the one hand, and the demand for fish products from local and foreign consumers, on the other, pose a growing challenge globally, and South Africa, with its 3 000 km-long coastline, is no exception. The Marine Living Resources Act, 1998 sets out the broad objectives of fishery management and access rights. It also sets empowerment and broad transformation objectives for the fishing industry.

South Africa's fisheries are among the best-managed in the world.



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South Africa has joined several countries across the world in promoting the “eco-village” idea, which focuses on low-impact and sustainable living.

The idea is the vision of One Planet Living – a joint venture between the World Wide Fund for Nature and British environmental organisation BioRegional.

South Africa’s first eco-village will be situated in Sibaya, north of Durban in KwaZulu-Natal. The village will be built on a 885-hectare site owned by one of the largest developers in South Africa, Tongaat Hulett Developments. Five thousand homes will be built on this land.

The eco-village concept is based on 10 guiding principles of sustainability, which include eradicating carbon-dioxide emissions; energy efficiency; recycling; sustainable transport systems, which cut dependency on fossil fuels; making use of locally sourced material and food to boost local economies; adhering to fair trade relationships; promoting biodiversity and preserving local cultural heritage; and endorsing physical, mental and spiritual well-being.



The Department of Environmental Affairs and Tourism has completed the allocation of long-term commercial fishing rights of eight to 15 years in 20 fishing sectors. Out of more than 8 000 applicants for fishing rights, 2 480 were granted long-term fishing rights, with 59% of these being Black Economic Empowerment-compliant. By mid-2008, a performance review process of the commercial fishery rights’ allocation was underway and draft policies on the transfer of commercial fishing rights and allocation of large pelagics had been published. To complete the allocation process, the department is working on a revised Policy on Subsistence/Small-Scale Fisheries.

South Africa has four environmental-protection vessels, namely the *Victoria Mxenge*, *Lilian Ngoyi*, *Sarah Baartman* and *Ruth First*.

The patrol vessels – all named after women who showed courage, dedication and commitment to the struggle for freedom – are used in assisting with high-speed disaster relief, search and rescue, evacuations, firefighting, pollution control, towing and



other emergency operations. The *Florence Mkhize* speed vessel assists in combating poaching.

South African beaches participate in the Blue Flag Campaign, which works towards sustainable development at beaches and marinas. This includes environmental education and information for the public, decision-makers and tourism operators.

South Africa's coastal-management policy is one of the best in the world, with the country being the first outside Europe to gain Blue Flag status for coastal management.

South Africa's Blue Flag beaches 2008/09

Eastern Cape

- Dolphin Beach, Jeffrey's Bay
- Hobie Beach, Port Elizabeth
- Humewood Beach, Port Elizabeth
- Kelly's Beach, Port Alfred
- Kings Beach, Port Elizabeth
- Wells Estate, north of Port Elizabeth

KwaZulu-Natal

- Hibberdene Beach, south coast
- Margate Beach, south coast
- Marina/San Lameer Beach, south coast
- Ramsgate Beach, south coast

Western Cape

- Bikini Beach, Gordon's Bay
- Camps Bay Beach, Cape Town
- Clifton 4th Beach, Cape Town
- Grotto Beach, Hermanus
- Hawston Beach, near Hermanus
- Lappiesbaai Beach, Stilbaai
- Mnandi Beach, Cape Town
- Muizenberg Beach, Cape Town
- Strandfontein Beach, Cape Town.

