South African Tourism

SA Tourism is the official national agency responsible for the marketing of South Africa as a preferred tourist destination of choice.

Its task is to increase the number of international and domestic tourists, grow tourist spend and length of stay, promote a geographic spread of tourism growth benefits, and address seasonality. In this respect, it is required to implement the International Tourism Growth Strategy and Domestic Tourism Growth Strategy

SA Tourism participates in major travel shows, presents workshops for members of the travel industry, and coordinates media and public relations campaigns.

New Growth Strategies

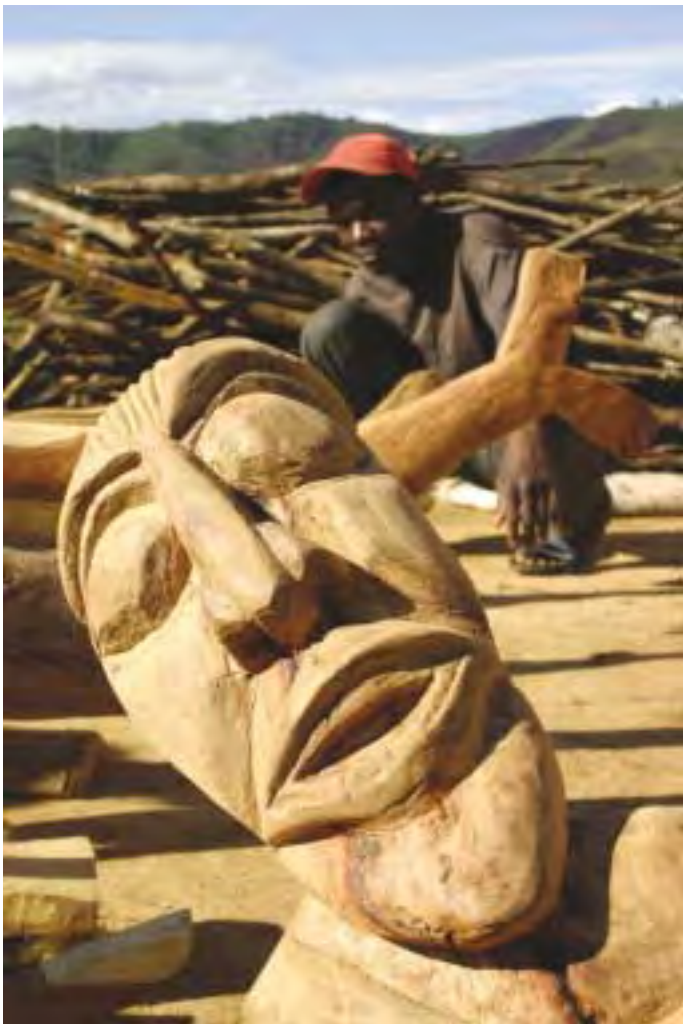
SA Tourism has reached a new level of maturity following the launch of the Tourism Growth Strategy at Tourism Indaba 2002. For the first time, the organisation moved from broad marketing to carefully targeted tactical customer-focused campaigns informed by market intelligence.

The same year, saw the launch of the organisation's four integrated global marketing campaigns, featuring value-for-money packages. The campaigns were named 'My South African Story' for the US market; the 'Live the Moment' campaign in India; the 'Great Urban Getaway' in Kenya and Tanzania; and the 'Sunsation' campaign in the United Kingdom.

The campaigns were designed to address SAT high-level objectives of reducing seasonality, increasing tourist volume and spread, optimising length of stay, improving geographic spread, and promoting transformation.

During 2003/4, the campaigns have been extended and expanded to other core markets including Germany, France and India.

The international Tourism Growth Strategy has been designed to provide SA Tourism with the option of quickly shifting focus and



leveraging new opportunities, in what is an ever-changing environment, allowing it to 'play smarter' than in the past.

Africa and The Middle East: Given the high market share that South Africa has in many African markets, the strategic focus is not simply on growing volume, but rather on extracting further value by 'up-selling' and 'cross-selling' into other product areas.

The international Tourism Growth Strategy identified Kenya, Tanzania, Nigeria, certain countries in West Africa, the Indian Ocean Islands and parts of the Middle East as being of tactical importance in increasing tourism to South Africa.

Asia and Australasia: South Africa is already seeing the results of the Memorandum of Understanding signed in 2002 between South Africa and the Peoples' Republic of China, which accorded South Africa much sought-after Approved Destination Status. This entitles South Africa to market group leisure activities in China, and contributes to the simplification of tourist travel from the Chinese mainland to South Africa.

The 8th ICC Cricket World Cup in February 2003, provided an unprecedented opportunity to market South Africa to the cricketing nations of the world, including India. There was an enormous surge of Indian visitors as the country progressed to the finals – a 147.7% increase in arrivals from India, compared to the same period in 2002. Indian tourism to South Africa was further enhanced by the organisers of the International Indian Film Awards (IIFA) deciding to relocate the 2003 Awards to Johannesburg.

Europe Portfolio: Germany has continually proved to be one of Europe's leading source markets for tourist arrivals to SA, closely followed by France, the Netherlands and Italy. These have traditionally proven to be important core markets for South Africa, and visitor numbers continue to post gains.

America and the United Kingdom (UK): Of all overseas visitors, the greatest numbers originate from the United Kingdom. Of the countries comprising North and South America, the United States, Canada and Brazil have proven the most promising in terms of attracting long haul visitors.

MICE

South Africa is Africa's leading conference destination attracting more than 63% of the continent's total conference market. According to the International Convention

and Conference Association (ICCA), South Africa is placed 22nd on its World Top Convention Country ratings. However, Meetings, Incentives, Conferences, Events (MICE) research commissioned by SAT in 2002 shows that SA was ranked 10th as an incentive destination, moving up from an average 12th position ranking in previous years. In the UK, SA has been ranked second in the world as a long-haul incentive destination, with Cape Town named as the country's most preferred city.

The country's reputation has been considerably enhanced by the hosting of a number of high-profile global gatherings in recent years, including the UN's World Summit on Sustainable Development (the largest ever gathering of its kind) in Johannesburg during 2002; the World Parks Congress in Durban during 2003 and sporting events such as the 8th ICC Cricket World Cup in 2003.

South Africa boasts around 1 700 conference venues ranging from safari, mountain and coastal hideaways, to state-of-the-art international conference facilities. The country hosts approximately 1 500 conferences and exhibitions a year.

Its popularity as a preferred conference destination has been further enhanced by the successes enjoyed particularly by the Cape Town, Durban, Sandton and Gallagher international convention centres. The Cape Town International Conference Centre, which opened in July 2003, hosted over 290 000 visitors at 196 events during its first four months in operation, including sixteen international and twelve national conventions. The International Conference Centre in Durban received 'Africa's Leading Conference Centre' Award from the 'World Travel Awards' for the third consecutive year.

Visitor Statistics

Tourist arrivals have grown consistently over the last few years. In 2002, overseas tourist arrivals grew by an enormous 11.1% to 6.4 million tourists. Numbers arriving from outside Africa grew by 20.3%.

In 2003, overseas arrivals grew by 4%. This is over and above the phenomenal growth achieved in 2002.

This growth is clear evidence of the effectiveness of the focused tourism marketing being undertaken by SAT.

Emerging Tourism

At Indaba 2001, SAT launched the first Emerging Tourism Entrepreneur of the Year Award (ETEYA) competition.

Since then, the award has gone from strength to strength, attracting increasing numbers of quality entrants and impressing judges with their high standards and creativity.

Entry into the ETEYA competition is open to black (as defined in the constitution) entrepreneurs, operating small, micro and medium level tourism or hospitality-related businesses. It is

limited to businesses that have been operating for less than three years and that employ less than fifty people. Annual turnover must not exceed R3 million and, where a partnership exists, the black partner should be an equal or majority shareholder.

Calls for entries are issued in April each year, following which twenty seven semi-finalists are shortlisted (three from each province), and in-depth site visits undertaken. In conjunction with the provinces and the Tourism Enterprise Programme - and after further inspection of business plans - nine finalists are eventually chosen. Further judging takes place during World Travel Market in London in November where the overall winner and runner-up – receiving R50 000 and R30 000 prize money respectively to go towards their businesses – are announced during a special media event.

South Africa Online

Visitor hits on www.southafrica.net - SAT's website platform - rose from an initial 3 000 hits a month in May 2002 to 1.5 million a month during 2003.

The website's ranking, among the top 1 percent in the world, is further evidenced by its Number 1 position on leading Internet search engines (Google, Yahoo and Hotbot) when Internet users search for 'South Africa'.

Besides disseminating information about South Africa, southafrica.net has been invaluable and cost-effective in encouraging travellers to book holidays with identified trade partners.

Tourism Grading Council of South Africa

The Tourism Grading Council of South Africa first launched a National Grading Scheme for the accommodation sector in November 2001. This scheme helps visitors to compare and benchmark establishments, to know what to expect in terms of quality – and where standards are not met, to be able to give feedback based on objective criteria.

Operators can apply for grading in nine categories: Hotel, Bed and Breakfast, Guest House, Country House, Lodge and Self-catering, Meetings, Exhibitions, Special Events, Backpacker & Hostelling and Caravan & Camping.

Plans to extend Star grading to other sectors of the industry are also at an advanced stage. This will include tour operators, food and beverage establishments and tourist transport service providers.

Since 2001, 2 000 accommodation establishments have been graded, making this system the fastest-growing quality assurance programme in the history of SA's tourism industry.

South African National Parks

South African National Parks (SANParks) is the leading conservation authority in all National Parks around this country, responsible for 3 751 113 hectares of protected land in 20 National Parks.

Its focus in the first decade of democracy has been to make National Parks more accessible to tourists in order to ensure conservation remains a viable contributor to social and economic development in rural areas.

SANParks, as the conservation agency of the DEAT, has also increased the area of land under its protection by 360 000 hectares in this time.

The management of research and the monitoring of programmes is structured around the study of South Africa's key biomes – Grassland, Forest, Fynbos, succulent Karoo, Nama Karoo, Savanna and Thicket.

To date, the savanna ecosystem is the most understood and the best conserved – the Kruger National Park is an example. The latest book to tackle this subject is one that was launched in March 2004, titled 'The Kruger Experience: Ecology and Management of Savanna Heterogeneity', a collaboration between SANParks scientists, South African academic scientists and international scientists.

Some national forests, previously managed by the Department of Water Affairs and Forestry, are now coming under the management of SANParks, offering challenges for restoration ecology – the systematic attempt to return forest landscapes to their 'natural states'.

In short, the organisation has managed to transform itself, continue its high research and management standards, expand the land under its protection at an entirely unprecedented rate, and has also begun to generate up to 75% of its own operating revenue. This last point is a remarkable financial achievement compared to most conservation agencies in the world, including those in developed countries.

Land Acquisition

The area of protected land managed by SANParks has been steadily expanded through several innovative initiatives, including contractual parks, public-private initiatives as well as the traditional means of purchasing identified land important for biodiversity management.

Since 1995, 360 000 hectares of land have been added to the

National Parks system, exhibiting a level of commitment to conservation never before undertaken by previous South African governments.

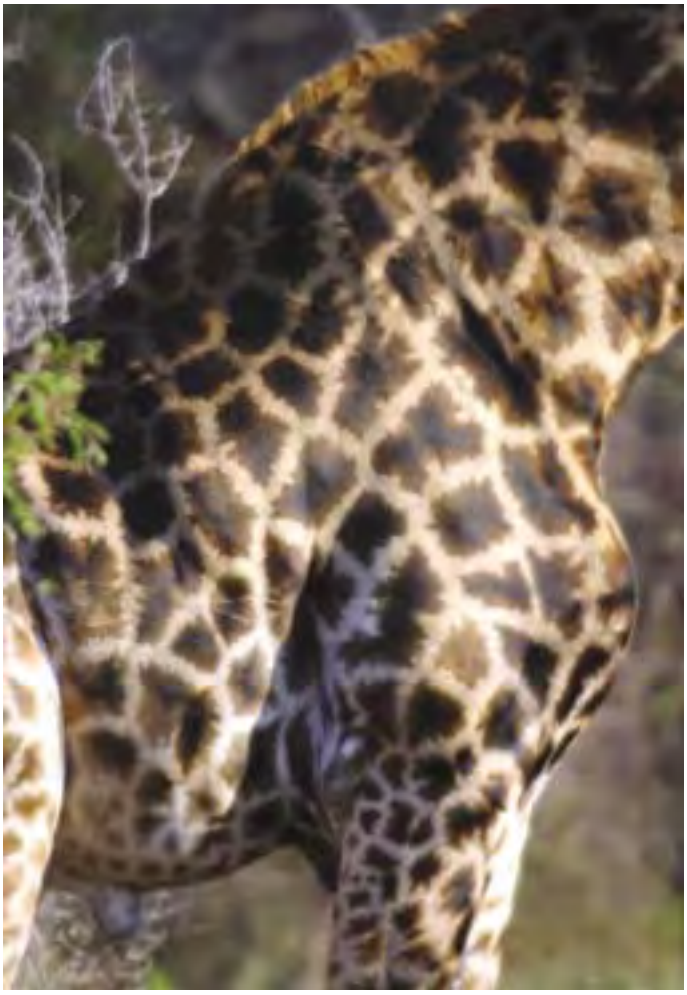
In ten years, four new National Parks (Agulhas, Namaqua, Table Mountain and Mapungubwe) have been proclaimed. At the same time, existing National Parks such as Addo Elephant, Augrabies Falls, Karoo, Marakele, Mountain Zebra, Tankwa Karoo, West Coast and Wilderness Lakes have been expanded.

Almost 6% of South Africa is now under formal state protection, 60% of which falls under the management of SANParks. The state plans to increase this amount to 8% by 2010, and later to 10%, in accordance with IUCN (World Conservation Union) recommendations.
The land added so far has been through the organisation's own fundraising efforts, donors and major contributions from the South African Government.

The Minister of Environmental Affairs and Tourism recently announced the addition of five new marine protected areas. It is expected that, once the proclamation process has been completed some of these marine parks will be transferred to SANParks.

People and Parks

South Africa historically inherited a Euro-centric model of parks system that is suited to the relatively wealthy urban societies. However, the last part of the first decade of democracy was strongly influenced by the latest World Parks Congresses in 1992 and 2003 with their themes of 'People and Parks' and 'Benefits Beyond Boundaries'. Over the past ten years, SANParks has explored ways and means in which the South African community, especially the National Parks' neighbours, can reap benefits from biodiversity and champion its protection.



SANParks has focused its first phase of community programme on addressing the issues of poverty alleviation and empowerment of ordinary citizens in villages adjacent to the National Parks. The community programme to date, has focused on environmental awareness, primarily amongst school children, developing entrepreneurial skills and sustainable employment. With the formation of the Directorate: People and Conservation in 2003 it is expected that the programme will start expanding further into the communities and building an improved stakeholder liaison structure.

At present, park neighbours are able to benefit in a number of ways from the National Parks. These include the clearing and re-use of exotic alien vegetation, limited and controlled harvesting of certain resources within parks (including mopane worms, firewood, proteas), and sustainable use of various plants, especially those that have medicinal properties.

DEAT and Tourism has identified SANParks as one of its drivers for poverty alleviation and has such, contributed considerable amounts of money through the Poverty Relief Programme.

In the past three years an amount of money in excess of R270 million has been dedicated to this programme. These funds are used for the improvement of bulk infrastructure in the parks. The programme covers rehabilitation of archaeological sites, upgrading

and maintenance of roads, new tourism accommodation, new tourism product development, removal of unwanted structures (such as internal fences, buildings and windmills), erection of new tourism infrastructure and maintenance, and construction of new gates. The main focus of the programme is to impart skills to local communities and to facilitate the creation and development of SMMEs in those communities.

Tourism Development

The key focus for the development of tourism in the National Parks in the last ten years has been to increase the number of tourist visits to parks by ensuring that service levels are of good standard.

It is a little-known fact that SANParks has the highest number of owner-managed hospitality beds in SA – 5 619. Occupancy levels remain high and impressive, but the organisation recognises that there is still a low response from people historically excluded from the National Parks.

Strategies are being designed to attract black tourists. In the year 2002/3 this market accounted for only 10% of the overall number of tourists to the National Parks, and SANParks is determined to increase that figure.

A daily conservation fee per visitor per day was introduced from June 2003 with differential pricing on daily park use between the South African nationals and residents, SADC nationals, and the international visitors.

In order to further encourage local visitors, the WILD Card was also launched in 2003. This is a smart card giving access to all or some of the parks for a predetermined number of people (individual, a couple or a family) over a year. The card gives unlimited free entry to these parks. In addition, the WILD card rewards visitors, giving preferential rates for airline bookings and discounts at restaurants or other WILD Card partners.

In recognition of the contributions of its international visitors SANParks also introduced the Wild Pass in September 2003. This card benefits those international visitors who spend at least a minimum of ten days in the National Parks. The international Wild Pass reduces the conservation fee on the ten day period by almost 50%, and there is no limit on the number of parks that can be visited within the purchased time period.

Since the inception of the **Wild** Card and the conservation fee, SANParks has generated an additional income of R19 million compared to the previous year's gate entry fees. So far SANParks has also sold in excess of 80 000 **wild** cards, far surpassing the initially estimated 50 000 cards targeted for the end of the 2003/04 financial year.

It is also well worth noting that for the first time in recorded history, Kruger National Park hosted one million visitors in a single financial year – that of 2002/3.

Commercialisation

In 1999, SANParks adopted a strategy termed 'Commercialisation as a Conservation Strategy' which involved the concessioning of carefully chosen sites within the National Parks for private lodges and the outsourcing of certain commercial operations like shops and restaurants.

SANParks specifically chose areas in its parks for low volume/low impact/high revenue. As a result, the organisation can now depend, with a degree of certainty, on a guaranteed income stream over the 20-year concession period. This makes a major contribution to the future finances of the organisation.

The commercialisation of shops and restaurants successfully concluded in 2001, has resulted in gross turnover from these facilities increasing by 33%. Importantly, income to SANParks has increased by 88%, from R12.27 million to R23.07 million.

Kruger National Park, the Table Mountain National Park and Tsitsikamma, remain the principal sources of revenue for SANParks.

Transfrontier Parks Initiatives

The biggest challenge and achievement for the South African Government in the last decade on conservation related matters, has been the formation of the transboundary parks. This initiative has seen negotiations between SA and all its neighbouring countries to form six transfrontier parks. In five of these Parks, SANParks is the South African Government's implementing agent, rendering all the professional and logistical support to these projects.

Southern Africa's first transfrontier park, the Kgalagadi Transfrontier Park, was formally opened on 12 May 2000 by the presidents of Botswana and South Africa. The second transfrontier conservation area, the Great Limpopo Transfrontier Park, came into being when the three heads of state of Mozambique, South Africa and Zimbabwe signed an international treaty in December 2002 at Xai-Xai, Mozambique. The treaty on the !Ai-!Ais/Richtersveld Transfrontier Park was signed in August 2003 between Namibia and South Africa.

The two other possible transfrontier parks involving SANParks will include the governments of Botswana, Zimbabwe and South Africa on the formation of Limpopo/Shashe Transfrontier Park, and the Lesotho government and South Africa on the Maloti/Drakensberg Transfrontier Park.

TRANSFORMATION

In the past decade of democracy SANParks has evolved from being a white-dominated institution to one that has embraced the demographics of the country. More black people have been employed in management positions, changing the face of the organisation.

Many resources have also been invested in the training of staff members. People who had been with the organisation for a substantial number of years without ever receiving training, thereby reducing their chances of promotion have now been trained in anything from computer skills to skills directly related to the execution of their jobs.

The Greater St Lucia Wetlands Park Authority

This organisation became DEAT's newest statutory body in 2003. It protects one of South Africa's greatest biological treasures.

Contained within it, is the old St Lucia Park, Africa's oldest protected area, declared 105 years ago – only three years after America's Yellowstone National Park, the first such protected area in the world.

The Park's importance

The Greater St Lucia Wetland Park contains extraordinary cultural and ecological treasures. It has 220 kilometres of coastline and beaches; 100 species of coral; eight inter-linking ecosystems; the only major swamp forests left in South Africa; three major lake systems, including Kosi Bay, Lake St Lucia and Lake Sibayi; and eight major game reserves within the broader Maputaland.

It is in the process of becoming part of a transfrontier park, incorporating conservation land in Mozambique and Swaziland. This is one of South Africa's World Heritage Sites, and includes four Ramsar wetlands of international importance.

The Park also incorporates a large marine protected area, part of which is home to at least eighteen prehistoric coelacanth fish.

In addition to these ancient fish that evolved 400 million years ago, the Great St Lucia Wetland Park has the highest global number and density of black rhino anywhere in the world; five species of turtles; the highest number of frog species in southern Africa (thirty five); thirty six species of snakes; 526 bird species (the greatest avifauna diversity in Africa, with half of South Africa's bird species and 25% of Africa's); more than 2 000 species of flowering plants; all five of South Africa's mangrove tree species; 25 000-year-old coastal dunes; and five cultural groups (Zulu, Swazi, Shangaan, Tonga and a relict group of Gonda speakers).

This fragile combination of natural beauty and social diversity, has elevated the St Lucia Wetlands to the status of an icon in the history of environmental struggle in South Africa.

History of the Struggle

During the late 1980s and early 1990s, the struggle for the future of the St Lucia Wetlands reached fever pitch when a broad coalition of South African citizens and organisations resisted plans by a multinational company to mine the dunes of St Lucia for titanium and other heavy minerals. Half a million citizens signed a no-mining petition, including President Nelson Mandela and the former Minister of Home Affairs, Mangosuthu Buthelezi.

After an epic battle, South Africa's new democratic government ruled that mining be prohibited and the area's fragile beauty and sense of place be protected for future generations by more benign engines of economic growth – for example, ecotourism.

Despite the urgency to deliver

proof that tourism and conservation could work, little happened until 1998 because of bureaucracy and local dynamics. Then, through the Lubombo Spatial Development Initiative, one of Government's macro-economic initiatives, and all levels of government committed themselves to the emphasis on nature tourism as an environmentally-friendly industry that would lead to economic growth.

As Deputy President Jacob Zuma expressed it: "It is the co-existence of beauty and poverty that constitutes the great challenge of Maputaland: to use the natural beauty of the place to bring reconstruction and development to the people of the region."

The Authority's origins

In November 2000, regulations under the World Heritage Act were gazetted, proclaiming the Greater St Lucia Wetland Park. This effectively consolidated sixteen parcels of land and a patchwork of earlier proclamations to create an integrated park of over 300 000 hectares stretching 220 kilometres along the Indian Ocean coast. It is one-third the length of the province KwaZulu-Natal.

The regulations also established a dedicated management authority to manage the site according to the World Heritage Convention and South African legislation. The Minister of Environmental Affairs and Tourism considered St Lucia to be such a special case that it became the first World Heritage Site in South Africa to be entrusted to a dedicated Authority.

The board is made up of all major stakeholders, and includes local communities. This is the first time in SA that local people and traditional leadership living in and adjacent to a park of such national and global significance, are fully represented in the park's highest decision-making body.

Functions

The Wetland Authority deals with three broad areas: The management of the wildlife and ecological systems of the area; commercial activities that include the development of nature-based tourism businesses and associated infrastructure in the park; and improvements in the social and economic condition of people living in the area.

A management agreement between the Wetlands Authority and Ezemvelo KwaZulu-Natal Wildlife ensures that the day-to-day management of the wildlife and natural systems in the Park will continue and benefit from the conservation organisation's expertise.

Achievements

The Authority has launched a major system to support and build the existing tourism market, to attract new investment into a range of lodges and hotels in the area, and to create opportunities for new nature tourism activities such as boat concessions, game drives and other appropriate tourism.

A drive to improve and upgrade the roads, fences, health and other infrastructure that will make the Wetlands Park a world-class tourism destination is also at an advanced stage. This includes unprecedented regional cooperation between South Africa, Mozambique and Swaziland, including a push to reduce levels of malaria affecting the health of inhabitants. Lake St Lucia is now malaria-free for the first time in history, and the incidence of the disease in other areas is low.

Other examples of regional cooperation include the building of the new Hluhluwe to Maputo road, the opening of border posts and the protocol that lays the basis for the Lubombo Transfrontier Conservation Development in the region.

The Wetlands Authority has also:

- Facilitated the settlement of three major land claims about 60% of the St Lucia Wetland's area in a manner that safeguards the physical and institutional integrity of the Park;
- negotiated the removal of over 12 000 hectares of alien plantations which negatively affect the hydrology of the Lake system from St Lucia's Eastern and Western shores. This is linked to a major Landcare programme which includes wetland rehabilitation, dune rehabilitation and alien plant eradication that is community-based and job-intensive;
- developed a land inclusion policy that eases the incorporation of private and communal land on its fringes; and
- helped to prepare a cutting-edge Integrated Management Plan as well as a Strategic Environmental Assessment. The IMP sets the scene for the redevelopment of the Park as a world-class conservation asset. It contains a detailed zoning scheme, sets carrying capacities and puts in place various monitoring systems. Part of the plan calls for the reintroduction of endemic game such as elephant after more than eighty years of absence.

Objectives

The Wetlands Authority's major objective is to ensure that the World Heritage Site is developed in a way that ensures local residents, benefit from the Park and have access to it. New tourism facilities are being created for people who, under the apartheid regime, never considered visiting a game park because these were

seen as places where animals were more important than people.

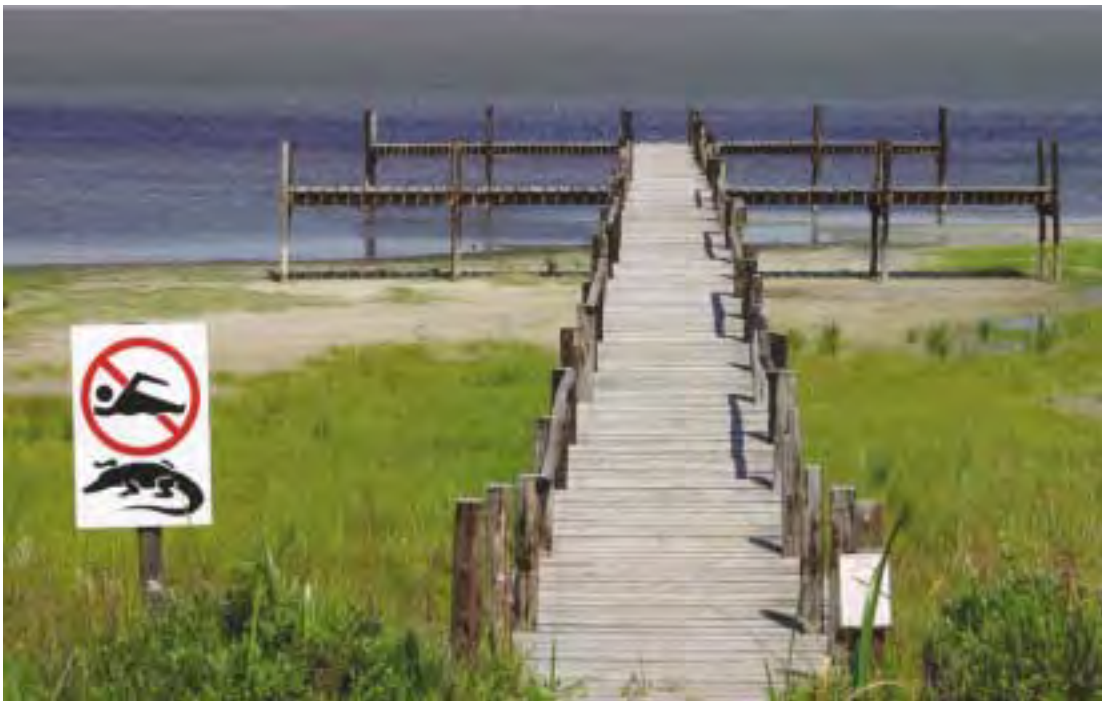
The Wetlands Authority includes a specialised division called social, environmental and economic development (SEED) to carry out what is probably its most important task: the alleviation of poverty to promote development in the villages. A core function, is to ensure empowerment activities in the park across a wide spectrum including ownership, job creation, procurement and training.

Nature-based tourism development including the current investment opportunities, is also being used to broaden ownership patterns. Communities living adjacent to the Wetlands Park and landowners, are mandatory partners in these developments.

Review

At the 2003 World Parks Congress, the Greater St Lucia Wetland Park was presented as a model of protected area management that balances conservation and development in a sustainable framework.

During the Congress, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) cited South African legislation as a model of the implementation of the World Heritage Convention, and the Greater St Lucia Wetland Park, as an icon of how the Convention can be applied in practice.



South African Weather Service

The South African Weather Service predicts the weather through various instruments, human expertise and complex computer modeling systems. It provides weather information and warnings to the public through radio, television, newspapers, its website and cellular telephone technology.

It also provides weather information to industries affected by the weather, for example, the aviation, maritime, construction and agricultural sectors.

Activities during 2003/4

Drought Conditions and Significant Weather Events:
SA was hard hit by a drought throughout the whole country and the expertise of the Weather Service was used in disaster management planning throughout the year. Daily and seasonal forecasts, as well as ten-daily, monthly and seasonal rainfall maps were published on the website www.weathersa.co.za to assist authorities in monitoring the development of the drought situation in South Africa from the onset of the summer-rainfall period.

Intense cold fronts swept over the country in mid August, accompanied by gale force winds, stormy seas and heavy snowfalls and high fire danger indices. Many minimum temperature records were broken on 22 August 2003. The container vessel Sealand Express ran aground in Table Bay during this period, requiring daily weather forecasts to prevent a possible oil-spill.

Forecast Services
Public forecasts, supported by a special web page, were supplied on a daily basis. Special forecasts were also done for the World Cup Cricket event, Comrades Marathon, the Vasco da Gama and Lipton Cup races.

A Northern Region Office, providing forecasting services for Gauteng, Mpumalanga and Limpopo was established.

Prediction Research and Development
For seasonal predictions, a new forecast scheme based on climate models, was developed and implemented, contributing significantly to seasonal forecasts. The first probabilistic forecasts were issued at the end of the year.

In terms of numerical prediction models, the quality of forecasts from the Eta model running on the Cray SV1 supercomputer and used daily by forecasters, was enhanced, by increasing its resolution from 48 km in the horizontal and 38 layers in the vertical, to 32 km and 45 layers. This considerable increase in accuracy stands to benefit clients of the operational weather forecasts.

New Meteosat Second Generation Geostationery Satellite
South Africa was selected as a test site for the dissemination of data from Meteosat 8. A satellite dish for the reception of the new Meteosat Geostationary Satellite (MSG) was donated by Eumetsat and has, since December 2003, provided considerably more detailed imagery and more frequent updates.

Metsys Radar Technical Activities
The annual maintenance of all eleven radars in South Africa was completed by January 2004. Innovative radar inter-network calibration and enhancement continued on a budget 90% below the universal norm for radar

maintenance. The East London, Polokwane and Ermelo radars were supplied with more efficient uninterruptible mains power supplies (UPS), as well as simplified, cost-saving operating consoles.

Automatic Weather Station Network

Major changes to enhance the efficiency of the Automatic Weather Station (AWS) network, were made. Three new AWS's were installed.

The Namibian Weather Service was supplied, on a commercial basis, with ten fully functioning AWS's.

Glidersonde/ Powersonde Project

A single multipurpose logger was developed to fit inside relatively small remote-controlled planes.

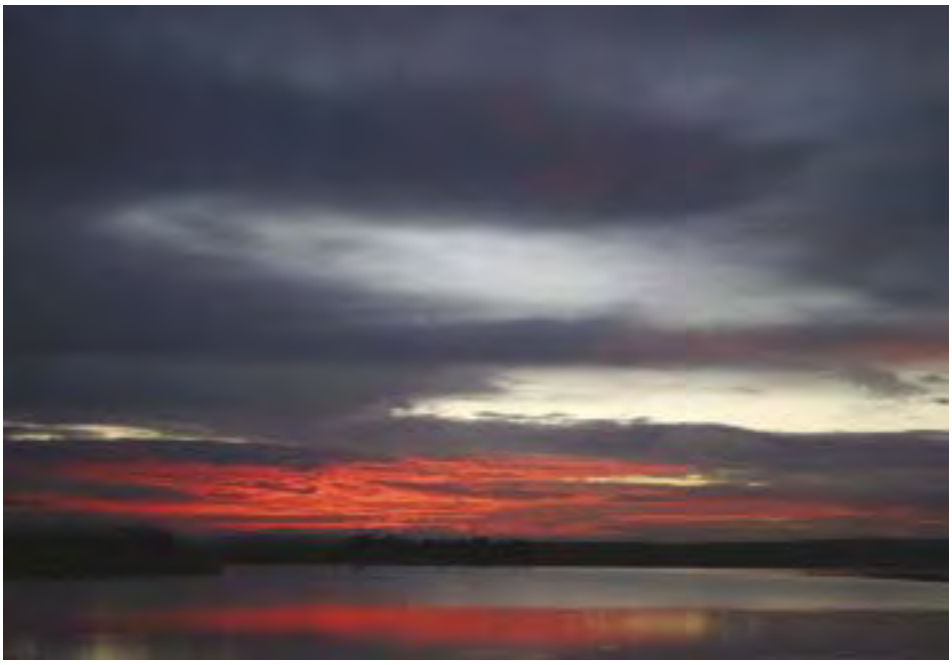
Weather Observations and Networks

The comprehensive observational network consisted of 1 600 rainfall stations, 49 first order, 15 second order and 62 third order stations, 130 Automatic Weather Stations, weather stations on Marion and Gough islands and a manned station at Vesles in Antarctica, twenty weather offices around the country, one Global Atmosphere Watch Station in Cape Point, and a supporting mechanical workshop in Pretoria. Maintaining old autographic instrumentation has become very costly and such instruments are being replaced by electronic sensors.

Upper-air ascents were done at ten stations and Marion and Gough islands. The UK Meteorological Office supported the full upper air programme for Gough Island and provided funding for one AWS station in Tanzania.

Forty-one weather buoys were deployed in the South Atlantic Ocean and nine in the Tropical Indian Ocean to monitor the movement of tropical cyclones. An employee of the Weather Service was elected as Vice Chairperson of the Data Buoy Cooperation Panel, responsible for the southern hemisphere and Africa. The Port Meteorological Officers in Cape Town and Durban continued to give support to the marine community.

All important greenhouse gas datasets of the Global Atmosphere Watch programme were maintained and accepted at World Data Centres for 2003. Weather Service personnel assisted with the establishment of an Ozone Monitoring Station in Maun, Botswana, when a Dobson Spectrophotometer was installed on World Ozone Day (16 September).



Climate Systems

A new method was implemented, to store data and maps using digital photography of documents and storing these on CD-ROM. The Norwegian Government continued to support the upgrading of the climate database and provided additional funding for the project to increase climate monitoring in the southern Atlantic, as well as the inclusion of Weather Service aircraft in pollution monitoring over South Africa.

Climate Information and Publication Services

Apart from commercial climate services, daily rainfall, as well as maximum and minimum temperatures, were published. Two monthly publications, the Daily Weather Bulletin and the Climate Summary of South Africa were published, as well as two scientific publications, "Climate of South Africa, Climate Controls" and "Climate of South Africa, Climate Regions".

World Meteorological Organisation (WMO) Commitments and International Relations

- The Chief Executive Officer of the Weather Service was elected to the Executive Council of the WMO during its fifty-fifth session.
- An AMDAR Workshop, hosted in Benoni in October 2003, dealt with the promotion of weather observation instrumentation aboard aircraft flying over SADC countries. These observations will ultimately improve weather forecasts for the aviation industry.
- A GOOS-Africa Workshop

held in October 2003 in Benoni, dealt with the mobilisation of resources for an ambitious African Ocean observations network, benefiting especially the maritime and related industries.

- A WMO Hydrology Workshop, held in November 2003 in Centurion, reviewed progress on regional flood management projects.

Cost Recovery and Commercial Income Generation

Cost recovery: Despite not earning its full income for the provision of aviation meteorological services, the Johannesburg Aviation Weather Centre was able to maintain all services and improve others. A dedicated aviation website was launched and more than 90% of all scheduled flights received flight documentation from this source. In cooperation with the Air Traffic and Navigation Services (ATNS) the South African Weather Service began implementing a plan to increase the number of routine aeronautical weather reports in SA from eleven to twenty five.

SA continued to comply with the requirements of the International Civil Aviation Organisation (ICAO).

Commercial service delivery: The pricing policy for climate and forecast products was finalised and implemented. More than 60% came from the industry and insurance/ attorney fraternities.

Commercial contracts were secured with Multichoice and the Southern African Large Telescope (SALT) project. The Weatherline contract with service provider, Cointel, continued.

A contract with the Koeberg Power Station to deliver meteorological observation and forecasting services was successfully continued, while the Weather Service provided information to the court cases into the Storms River rafting tragedy which occurred in March 2000.

A contract was signed with Ngqura Harbour Contractors in the Eastern Cape for the installation of an automatic weather station at Ngqura for the Coega project.

Marketing the Weather Service
The Weather Service branding exercise was completed early in the year and implemented widely, most notably by the SABC and e-tv.

Publicity for the Weather Service was enhanced by participation in the World Park Congress Exhibition in Durban, the Sasol Sci-fest Exhibition in Grahamstown, the Bloemfontein Presidential Air Race and the University of Fort Hare Careers Day.

Creating Weather Awareness
Agricultural extension officers in three provinces were trained, bringing the number of provinces reached to eight. Regional weather offices hosted visits by schools where weather-related talks, linked to school curricula, were presented. Several exhibitions were mounted at special public events.

Knowledge Centre
The knowledge centre provided relevant research information to staff, meteorological students and the public and maintained the National Meteorological library. Information is available not only on traditional printed publications, but also on e-journals, CDs, videos and DVDs.

Information Technology (IT)
A new IT policy was approved by the Board and the local area network in the new Weather Service Head Quarters at Bolepi House, Erasmusrand was upgraded. Critical operational systems were migrated to IBM servers and Internet lines upgraded to 256 Kbps.

The new data capturing system (METCAP) was developed and implemented and the Wide Area Network upgraded by implementing Channel E1 technology.

Locating To New Premises
After nearly forty years' "temporary" residence in the Pretoria city centre, the South African Weather Service relocated to new premises

in Erasmusrand, Pretoria, in May 2003.

Highlights over the Past Ten Years

1994

- South Africa was welcomed back into the international arena and the World Meteorological Organisation requested the Weather Service to be responsible for the Regional Telecommunications Hub (RTH) and the Regional Specialised Meteorological Center (RSMC) in southern Africa.
- The International South Atlantic Buoy Programme (ISABP) became a reality.
- The first official seasonal forecasts were issued.
- The National Weather Watch was introduced.
- Charges for scientific publications were introduced with permission from Treasury.

1995

- The Chief Director of the then Weather Bureau was elected as member of the Executive Council of WMO.
- Meteorological services performed in the former Transkei, Ciskei, Bophuthatswana and Venda were integrated into the organisation.
- Upper-air stations were changed from Omega to Global Positioning System positioning systems.
- A web homepage was started.

1996

- Phasing out of mechanical recording instruments was started.

1997

- The Global Atmosphere Watch station in Cape Town was transferred to the Weather Service from the CSIR.
- The South African Rainfall Enhancement Programme was declared as the first real breakthrough in many years in this field.

1998

- An international review declared the Service one of the best of its size in the world.
- A specialised Baseline Surface Radiation Station (BSRN), the only operational station in Africa, was established at De Aar.

1999

- The Chief Director of the then Weather Bureau was re-elected as a member of the WMO Executive Council.
- Tornadoes over the Cape Flats and Cyclones Eline and Gloria brought misery to many parts of South Africa.
- The Severe Weather Watch for emergency services was introduced.
- The Radar Rainfall Network, tracking storms, tornadoes and cyclones, was developed.

2000

- The Johannesburg Aviation Weather Centre was established.

2001

- The organisation became a parastatal on 15 July 2001 when the Act on the South African Weather Service, Act No 8 of 2001, was promulgated.
- The interim CEO of the South African Weather Service was elected as acting member of the WMO Executive Council.

2002

- Aviation meteorological user tariffs were announced in the Government Gazette and the Service started to earn income for these services.
- The new Climate database, funded by Norwegian donor money was implemented.
- The Weather Service participated in the World Summit on Sustainable Development.

National Botanical Institute

South Africa has a particularly rich botanical heritage. Although the country represents only 2% of the Earth's land surface area, 7.5% of the world's vascular plants grow here, and nearly sixty entirely new species of plants are discovered every year.

The National Botanical Institute (NBI) does ongoing research on the country's plant riches, and also creates and administers National Botanical Gardens like Kirstenbosch. In this way, it helps to conserve our many plant species.

NBI works outside South Africa's borders too, helping to strengthen the levels of botanical expertise throughout the sub-continent. The southern African region, with 24 000 plant taxa, is particularly species-rich in terms of species per area. It has 0.0081 species per square kilometre, almost double that of Brazil (0.0044) and Asia (0.0041).

Some of the most significant work NBI has done in the past ten years has been through the Southern African Botanical Diversity Network (SABONET).

SABONET

SABONET was established in 1996 as a regional network aimed at building capacity amongst botanists within southern Africa. Its main objective was to develop a strong core of professional botanists, taxonomists, horticulturists and plant diversity specialists within the ten participating southern African countries. In addition to South Africa, these countries include Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Zambia and Zimbabwe.

Since its inception, the SABONET project has successfully established a network of cooperating twenty-two botanical gardens and seventeen herbaria in the region.

By enabling the staff of the various herbaria and botanical gardens in southern Africa to share their expertise and skills with one another, SABONET has developed the region's capacity to confidently undertake future national or collaborative sub-regional plant diversity projects.

Training: With logistical and financial support from SABONET, twentysix professionals from the ten countries obtained one technical Bachelor degree, fourteen Bachelor of Science Honours, and twentyone Master of Science degrees. SABONET has held twentyfive regional courses and trained 198 botanists in various subjects. Training interventions have included courses on herbarium management, plant identification, database management, botanical art, cycad conservation and EIAs

Publications: SABONET News is distributed free of charge to 2 000 subscribers in seventy four countries. It is a forum for participating countries and it gives news and updates. Occasional publications are also produced. Those out of print have been scanned and made available as pdf files on the dedicated SABONET website.

Computerisation: SABONET provided participating herbaria with the opportunity of using the data system PRECIS, which was developed by NBI. A total of 1 335 761 (about 50%) of the specimens included in the collections of the sixteen participating herbaria were computerised.

Field Trips: A total of 101 national collection trips and two regional expeditions were organised and carried out, resulting in the collection of 19 696 specimens to expand herbarium collections.

Conservation aids: Plant Red Data lists for each of the participating countries have been produced and published. Two threatened plant workshops were held and thirty five plant species identified for off-site conservation in Threatened Plant Programmes.

Botanical Gardens

As embassies of biodiversity and culture, South Africa's botanical gardens have attracted close to nine million visitors during the past decade. Of these, Kirstenbosch usually receives about 650 000 visitors, with the remainder spread amongst the other seven regional gardens.

The new millennium saw a significant shift in focus and support for infrastructural developments from Kirstenbosch to gardens situated in Gauteng,

Mpumalanga and the Free State. These developments have

included the construction of income-generating visitor facilities such as restaurants, visitors' centres, gift shops, concert stages, plant sales areas and tea gardens. Basic infrastructure like parking areas, toilets and signage were also improved.

These in turn created employment opportunities, both during the construction phase and through the outsourcing of the new facilities, for small businesses and individuals within the local communities.

Over a period of ten years, admission fee income from all the national botanical gardens has increased 10-fold, from R1.1 million in 1993/4 to R10.6 million in 2003/4. Rental income from outsourced facilities in all the gardens has also increased 10-fold from R362 900 in 1993/4 to R3.25 million in 2003/4.

New Species

Research staff at the Compton Herbarium in Cape Town have described more than 150 new species of plants during the last decade – which translates into an average of two new species per research member per year. This extraordinary rate of discovery is a vivid testimony to both the richness of the southern African flora and the productivity of the botanists at Compton.

They have also published more than 100 scientific papers and almost fifty popular publications at an average of four publications per staff member per year. A landmark publication is Cape Plants, a conspectus of all 9 000 species of vascular plants in the Cape Floristic Region. This mammoth undertaking was made possible through the collaboration of several botanists, including the staff at the National Herbarium.

The VEGETATION MAP

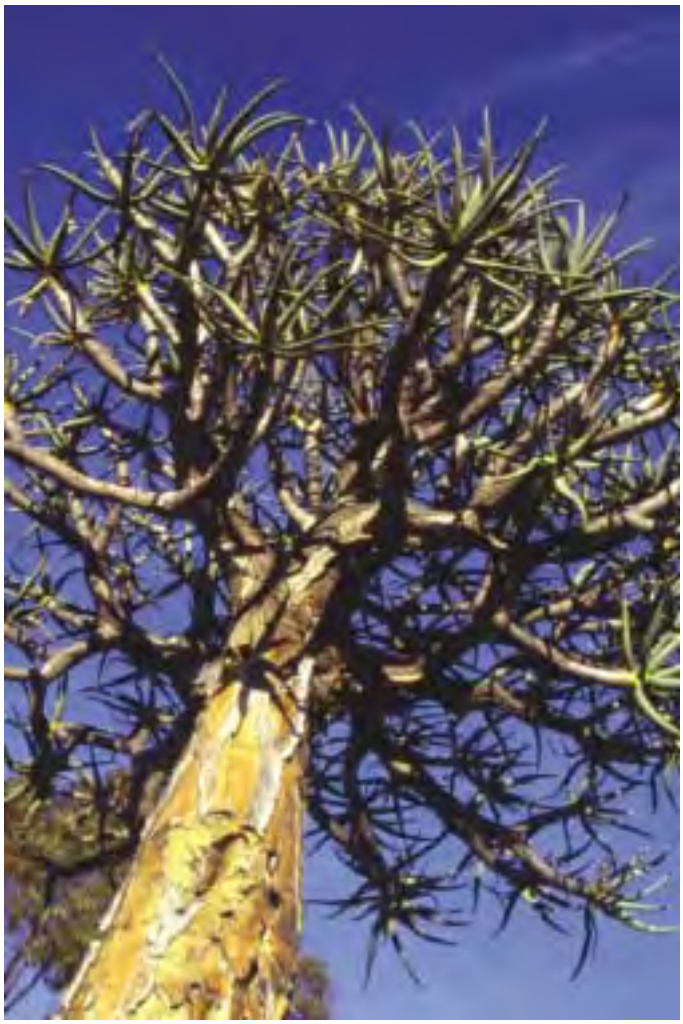
It has taken nearly nine years and the collaborative effort of sixty contributing experts, but at the end of 2003, the Vegetation Map of South Africa, Lesotho and Swaziland (also known as NBI's VEGMAP project) was completed.

Available in a Beta electronic version, the VEGMAP's level of detail is unprecedented. At least 440 vegetation types are mapped, contrasting strongly with the seventy vegetation types previously featured on vegetation maps of South Africa.

In the light of new knowledge gained in the project, biome boundaries were adjusted and a Subtropical Coastal Belt Biome was recognised.

National Conservation Assessment

At the end of 2003, the NBI embarked on the first National



Conservation Assessment for South Africa. This is a requirement of the new Biodiversity Bill and will be updated every five years as new data become available.

The project covers terrestrial, freshwater and marine environments, and is co-funded by DEAT and NBI. It forms part of the National Biodiversity Strategy and Action Plan.

The aims of the National Conservation Assessment are:

- To identify broad spatial priority areas for conservation action;
- to make recommendations about options for conservation action in each priority area; and
- to provide a national context for conservation plans.

The assessment will include the conservation status of ecosystems, based on the new VegMap; priority areas for species of special concern; national-scale ecological processes; vulnerability to future land-use pressures and alien invasive species; and an overall priority map.

The assessment will provide a basis for national prioritisation of the protected area network and a tool for monitoring the effectiveness of the protected area ecosystem.

Conservation

Through support from the Global Environment Fund/UN Development Programme, threatened plant programmes were initiated in all eight national botanical gardens during 2003. These programmes provide linkages between the gardens, conservation authorities, landowners, local communities and other relevant stakeholders.

NBI staff continued to play a key leadership role in the conservation and sustainable use of South Africa's plant diversity. This included, among others, attending various national and international meetings and congresses such as the World Parks Congress, the Global Strategy for Plant Conservation and the World Summit on Sustainable Development.

- More than 2 000 plants (succulents and geophytes from arid areas) were rescued and brought to the Karoo Desert National Botanical Garden from the Coega Development Zone in the Eastern Cape.

Coming Changes

As South Africa celebrates ten years of democracy, the NBI is preparing for a new mandate as promulgated by the National Environmental Management: Biodiversity Bill. NBI will be transformed into the South African National Biodiversity Institute (SANBI) during 2004.

INTEGRATION AND SUPPORT SERVICES

The Department of Environmental Affairs and Tourism has restructured the way it operates in order to attain maximum efficiency from its staff and institutional knowledge, improve its public profile and become more and easily accesible.