

SANDPAPER

smoothing the way forward for protected area management in Namibia

Issue 18
August 2010

Biodiversity Edition



The newsletter of the
Strengthening the Protected Area Network (SPAN) Project
Ministry of Environment and Tourism



Sponsored by:



From the Editor's Desk

I am sure you enjoyed the 2010 FIFA World Cup South Africa that took place next door. I know, however, that many field-based staff did not have the luxury of watching every game. Conservation is a 24-hour job that requires staff to working long hours away from one's home.

I remember back in 1998, when France met Brazil in the finals. I had to make do with listened to the commentary on an old Untag car radio while on duty in Mamili National Park. The voice of the commentator competed with the sound of grunting hippos and the distant roaring of a Botswanan pride of lion as I listened intently with field staff around a campfire on a cool winter's night.

On that note, I welcome you to our 18th edition of your favourite magazine, in which we celebrate the International Year of Biodiversity. So far, Namibia has held several events to mark the occasion and *Sandpaper* brings you news of all the events.

World Biodiversity Day was celebrated on 22 May, with a symposium held in Windhoek. We marked World Environment Day on 5 June, with this year's celebrations held in Keetmanshoop. Meanwhile, the Annual Ministerial Sports Weekend took place in Swakopmund during the first week of May, with biodiversity as its theme.

We also bring you articles of one of the world's biodiversity hotspots, the Succulent Steppe, and take a look at the concept of biodiversity offsetting. And our SPAN team talks to staff about their thoughts on biodiversity.

So, after all of the soccer euphoria, sit back and enjoy. Just don't pack away your vuvuzelas yet the next edition of *Sandpaper* promises some new uses for them stay tuned for a jumbo surprise!

Michael Sibatani
SPAN Acting Project Coordinator

Sandpaper

SPAN Acting Project Coordinator
Michael Sibatani

Sandpaper Coordinator
Copy Editor
Linda Baker

- Contributors
 Ben Beytell
 Colgar Sikopo
 Absalom Shigwedha
 Boas Erckie
 Chantel Louw
 Christian Lerch
 Daniel Diogenus
 Denyse Faulkner
 Dries Alberts
 Elton Kuruseb
 Holger Kolberg
 J Lamek
 Johannes Kapner
 Karel Ndumba
 Lesley Lospers
 Manie le Roux
 Martin Kasaona
 Monika Shikongo
 Obed Rukoro
 Patience Mamili
 Paulus Ashili
 Penda Shimali
 Phillipus Nambuli
 Samson Mulonga
 Shedrick Kaseba
 Simon Mayes
 Timoteus Iita
 Vincent Mwalima
 Vitalis Mushongo

With thanks to the SPAN support team and Macmillan Education Namibia

Design and Layout
Suzi Seha

Printing
Solitaire Press

Publisher
Strengthening the Protected Area Network (SPAN) Project, Directorate of Parks and Wildlife Management (DPWM), Ministry of Environment and Tourism
Private Bag 13306, Windhoek
Tel: +264 61 284 2569
Fax: +264 61 245160
sandpaper@span.org.na

Cover photo: Tony Heald

The opinions of *Sandpaper's* contributing authors are not necessarily the views of the Ministry of Environment and Tourism or *Sandpaper*. The Ministry of Environment and Tourism, the authors and *Sandpaper* accept no liability for views expressed herein.

None of the contributors receive any form of remuneration for their contributions.

No part of the magazine may be reproduced without written permission from the publisher.

This publication is printed on 100% recycled paper.

Contents



11



14



18

Features

Message from The Minister	2
Why Biodiversity Matters	3
Biodiversity Offsets	6
Conversation on a Desert Dune	8
Biodiversity is Life	9
MET Sports Day	11
A Biodiversity Hotspot	14
Protected Areas & Climate Change	16

Regulars

From Ben's Briefcase	1
Staff in Action	12
Warden Profile	18
SPAN Update	20
News from the Field	22
Colgar's Corner	24
Quiz	25
Park Talk	Back cover

By Ben Beytell
Director: DPWM



From Ben's Briefcase

Game Ranger's Biodiversity



Biodiversity. What does it mean? One definition is that biodiversity refers to ... "the variety and variability of all animals, plants and micro-organisms on earth, and can be considered at three levels: genetic diversity (variability within species), species diversity and habitat diversity".

Let us stop right here, as I share with you a recent experience involving genetic diversity.

I attended a gathering of the Namibian members of the Game Rangers Association of Africa (GRAA). Many of the old "grey-beards" with up to 40 years experience in conservation, along with newer arrivals, attended this get-together. Due to distances, financial and other constraints, many who had wanted to attend could not be present. Nevertheless, about 30 diehards braved the cool winter nights to camp out in the Khomas Hochland.

After the entertaining and thankfully short and informal speeches, we pulled our chairs close to the fire to rekindle old friendships. Late in the evening, as a Pearl-spotted Owlet called in the distance, I studied the faces reflected in the flickering light of the fire.

Slowly it dawned on me: surrounding me was a unique example of genetic diversity within *Homo sapiens*. In fact, these specimens could be classified as a sub-species. Setting them apart was an affinity with nature and an unshakeable belief that they could make a difference.

These are the standard-bearers of our quest to convince our descendants that they are bound by an umbilical cord to Nature. The cutting of this cord will lead to the demise of life itself. Sharing the same degree of commitment and dedication, each of these beings is characterised by a certain expertise that makes them a unique member of this fraternity.

They are the game rangers, and will remain so until their dying day. They have offered their lives to this cause, and to hell with the rest! Some have risked life and limb for the cause, as

is the case of one larger-than-life trails ranger, tour guide and anti-poaching expert.

My eyes rested upon the face of another chap, always the gentleman, who mapped out the Naukluft hiking trail after walking it himself. He knows the Namib better than anyone and put to book the history of Sesriem, Cape Cross and the Namib Desert for generations to follow.

Seated beside him is a former Chief of Etosha: game park management expert, professional hunter of big game and wildlife ranch management expert. And there is another of Etosha's best a former Problem Animal Control officer and head of game capture an expert in game park development.

Among the group sat the adventures known for their nine lives. One accident-prone twitcher, who bears more than a passing resemblance to a Dwarf Bittern, has been trampled by an elephant, bitten by countless poisonous snakes and has fallen off the scaffolding he constructed to monitor raptor nests.

I looked into the face of the man who took me on my first game-capture experience. Shadows flicker across the features of a veteran whose undaunted commitment has led him to travel far and wide across the country, from the Skeleton Coast to Etosha, Waterberg and finally to the Sperrgebiet. This is a man who has championed game park, trails and wilderness development with ambitions that sometimes exceed the mind. An excellent horseman, he knows the names of all the animals and plants in his area, from the largest mammal to the most insignificant plant or insect.

One fellow was once described as resembling a puff-adder: "Short, thick, and full of sh#!!" This worked in his favour when confined in the back of a capture truck with an irate, half-drugged male lion. The beast tried its best to expunge our friend from behind his hiding place a spare wheel giving new meaning to a Hungry Lion take away!

This game capture expert caught the last rhinos in what is now Bwabwata National Park.

Continued on Page 5

Ben Beytell,

Few have as much experience and knowledge of Namibia's parks as MET Director of Parks and Wildlife Management, Ben Beytell. This regular column provides an opportunity to learn from someone who is at the very heart of parks in Namibia.

Minister's Message

Namibia is proud to join nations around the world in celebrating the International Year of Biodiversity.

During this year, the world celebrates life on earth and the value of biodiversity to our lives.

In Namibia, this year coincides with the observance of 20 years of Independence. We have much to celebrate. Namibia has a large biodiversity endowment, which is of global

forms the backbone of our economy. Think of the resources for agriculture, mining, fisheries and tourism.

But our biodiversity is under threat. Climate change is real, and will threaten livelihoods, biodiversity and our economy unless we heed the early warning signs. We would like to see a greater move to adaptation activities at community-level; among others in areas such as water resource management, renewable energy



Left:

significance. Although predominantly a semi arid country, we have a remarkable variety of ecosystems, ranging from hyper-arid deserts with less than 10mm of rainfall to subtropical wetlands and savannas receiving over 600mm of precipitation per annum. Six major terrestrial biomes exist, namely Namib Desert, Succulent Karoo, Lakes and Salt Pans, Nama Karoo, Acacia Tree-and-shrub Savanna and Broadleaved Tree-and-shrub Savanna. We also have 29 different vegetation types. These biomes are storehouses of high species richness. They house more than 4,000 species and subspecies of higher plants, 658 bird species and 217 mammal species - some of which are uniquely adapted to our harsh desert conditions.

This biodiversity richness generates global and national benefits through protecting globally important ecosystems. Biodiversity

promotion and biodiversity management and synergy with land degradation.

Namibia is committed to environmental sustainability and will continue to work together with the donors to achieving our Millennium Development Goal 7 and national development goals.

Government is taking action within international conventions and national legislations, policies and strategies. You, the reader, are also a custodian of our biodiversity. Time has come for you to decide how to safeguard it and create better lives for us all today and in future.

I urge you to take action. Educate yourselves about the challenges facing our environment and the initiatives to conserve it. Take steps, no matter how small, you must act. Together we can make a huge difference.

Why Biodiversity Matters

Looking at our biodiversity challenges and the road ahead

What is this thing called biodiversity?

- Biodiversity describes life on earth,
- The variety of living things
- The places they inhabit
- The interactions between them

Ecosystem services include

- Food production, soil fertility, climate regulation, carbon storage
- The foundation for life

Biodiversity and link to development?

- Can shape the development path of a country, region or locality
- Development choices in turn determine the
 - Fate and state of biodiversity and ecosystems
- The way we organise, control and govern our development processes too often ignore this reality
- Today biodiversity is being eroded and ecosystem services degraded

Sandpaper enters the world of Sem Shikongo as he takes a snapshot of our biodiversity, how environmentalists have tackled a long list of challenges and lays out what we need to do to ensure that our precious biodiversity is conserved for future generations.

He may be a charismatic Director of Tourism who speaks German fluently among others, but Sem Shikongo is no stranger to the intricacies of biodiversity strategies, policies and multilateral environmental conventions and agreements. In fact his contribution to the international environmental and development sector has been recognised when he was awarded the Yale University World Fellows Award. Today he is an associate to the prestigious Yale University in the United States of America.

In celebration of the International Year of Biodiversity, the Strengthening the Protected Area Network (SPAN) Project invited Shikongo to address our regular Park Talk forum on the link between biodiversity and development within the Namibian context.

According to Shikongo, Namibia faced several challenges at Independence. Poverty, national debt, a skewed distribution of income, unequal access to land and natural resources, poor education, health and housing for the rural majority were just some of the hurdles for a new Government to overcome.

The environment at Independence Rural people felt that natural resources such as wildlife belonged to the Government and were its responsibility. Nature conservation was seen as an issue of parks and wildlife and thus to be taken care of by the then Nature conservation department.

Article 95 (1)

The state shall...maintain

(1) 'ecosystems, essential ecological processes and biological diversity of Namibia and utilisation of living natural resources on a sustainable basis for the benefit of all Namibians, both present and future;

Article 91 (Ombudsman functions)

Shall include the following:

(c) 'The duty to investigate complaints concerning the over-utilisation of living natural resources, the irrational exploitation of non-renewable resources, the degradation and destruction of ecosystems and failure to protect the beauty and character of Namibia'

The country, Shikongo stated, also inherited a vast environmental debt at independence. Marine fisheries had collapsed during the 1970's and agricultural productivity was declining due to a number of inappropriate land use practices

© Trygve Cooper



Bush-encroachment, deforestation, overgrazing and soil erosion were prevalent, while a loss of biodiversity and fertility of croplands were evident. Limited environmental planning between sectors and across regions of the country had taken place, while Eurocentric and rigid agricultural policies had been imposed on a highly variable environment.

Laws, policies and practices were also biased. "In the past, no recognition was given to the value of the traditional knowledge, innovations and practices of the Namibian people, or the fact that resource users made the best managers," Shikongo said.

But Namibia's Constitution was the cornerstone for ensuring that our biodiversity and environment could recover, be used sustainably and be protected. In fact, Namibia was one of the first countries in the world to take this bold step.

Another masterpiece was the amendment of the Nature Conservation Ordinance in 1996 to pave the way for communal area conservancies. This set the stage for community to benefit from biodiversity and thus serving as a powerful incentive for the conservation, management and sustainable use of biodiversity in Namibia.

A number of laws and policies are now in place or under development to give effect to the visionary provisions of Article 95 (1).

Shikongo pointed out that currently among Namibia's major threats to

biodiversity are habitat loss, introduction of invasive alien species, over-exploitation of natural resources, pollution and climate change.

"Namibia is agriculturally marginal and at high risk of land degradation," he told the audience.

Current challenges and interventions

"The country depends on biodiversity and biological resources for many economic sectors, including tourism, trade, fisheries, forestry, agriculture, health and diverse types of rural development."

Biodiversity expertise is essential to guide sustainable development. Since Independence, Namibia has:

- Signed the United Nations Convention on Biological Diversity (CBD) in 1992 and ratified in 1997
- Negotiated and became a member to the Biosafety Protocol
- Established the Namibian National Biodiversity Programme in 1994 within the Ministry of Environment & Tourism
- Received bi-lateral support (financial & technical) from the German Government via German Agency for Technical Cooperation (GTZ)
- Received financial support from a number of agencies e.g. via United Nations Environment Programme (UNEP)
- Initiated several ongoing GEF/ World Bank-project interventions aimed at addressing biodiversity conservation, use and management to offset local and global benefits

The Namibian Biodiversity Programme highlighted biodiversity through several high quality publications. It developed the 2001-2010: Biodiversity and Development in Namibia Strategy, which is currently under review.

Through partnerships, the MET had compiled tree and carnivore atlases, worked on guidelines for the Sperrgebiet National Park and embarked on several research and environmental management projects such as the development of biodiversity, desertification Indicators and seed banks.

Shikongo outlined the following as **crucial steps and actions** taken towards sustainably implementing strategies for biodiversity management and use. He noted that these had emerged as valuable lessons learned over the years of implementing biodiversity activities in Namibia:

- Policy and strategy development to support biodiversity use and management
- Monitoring and evaluation to track biodiversity status
- Agenda setting, awareness creation and access to biodiversity information
- Institution building and cooperation, capacity development and mainstreaming into other sectors
- Leverage for getting international support
- Protection and rehabilitation of priority biodiversity areas and
- Promotion of sustainable use and management of natural resources.

Below Left:

Below Middle:

Below Right:



© Linda Baker



© Linda Baker

The road ahead
But the road ahead is still a long one. Shikongo stressed that at national level, stronger focus on implementation is needed. This means that projects and programmes need to go beyond the planning stage and become a reality.

Namibia's internationally recognised Community-based Natural Resource Management Programme should be promoted more widely to decision-makers. However, Shikongo cautioned that the programme could only be seen as sustainable if people at grassroots have an in-depth understanding of biodiversity and the issues around it.

He stated that MET needed to ensure that enough finances are allocated

annually to it in the national budget to conserve biodiversity and protect the environment. This could be achieved by lobbying political decision-makers and highlighting ministerial and national development priorities.

The importance of biodiversity to other sectors also needed to be enhanced.

"Awareness raising and communication are key to informed decision making," he said when discussing challenges. Local people should be more involved with the formulation of documents and strategies. These also needed to be published in popular, understandable formats for people to grasp concepts easily.

"There is also a need to enhance

biodiversity management capacity on the ground. This requires greater integrated management, inter-sectoral and inter-ministerial collaboration."

Trade-offs, flexible responses and improved monitoring of interventions and evaluation were also needed, along with continued capacity-building.

"The meaning of Biodiversity needs to be translated into practical examples on the ground for the lay-man to understand. We need to explain the practicalities of interactions of climate change, land degradation and biodiversity with sustainable livelihoods in simple terms." 1

Below Left:

Below Right:



© Linda Baker



© Linda Baker

Ben's Briefcase continued from page 1

He re-stocked key game parks with rare sable and roan antelope that proliferate today. During the off-season, he and his game capture team build fences to contain these high-value species.

And then there are the 'youngsters'. A woman who joined as a game ranger and had to cope with these characters for a long time, but who is the best information and Media Liaison Officer this Ministry will ever see. She was in lively conversation with one of our finest staff from Mahango Game Park. Despite a lowly pay as a workhand, this woman has

hiked a lift across the country to participate in the event. She is the best example of what customer care and tourist hospitality is and her interest in birding has earned her accolades from near and far.

Curling comfortably in a camping chair next to them sat our community-liaison expert, nominated to serve on the Board a young woman who fits in like a glove with the rest.

Lastly, I reflect on the lightly freckled face of a man respected and revered by

the communities of Bwabwata and Caprivi, a trainer of trainers, with anti-poaching achievements like few other.

I have only discussed those of the subspecies that attended the jamboree. To those of you who were not there we know you were there in spirit.

Many are not formally members of this Association, but you belong to the subspecies anyway. To the undying breed of Game Rangers of Africa - as the conservationists of Africa, I salute you! 1

Biodiversity Offsets

Developing Biodiversity Offsets for the Namibian Uranium Rush
- looking for solutions through innovation and cross-sectoral collaboration

Biodiversity offsets are measurable conservation outcomes resulting from collaborative [coordinated] actions designed to compensate for the combined residual adverse biodiversity impacts arising from more than one development project in a specific geographical area, after appropriate prevention and mitigation measures have been taken.

Business and Biodiversity Programme definitions of Offsets and Aggregated Offsets

Namibia is one of the world's major producers of uranium. Due to the rise in global consumption of uranium, exploration and mining have become increasingly active in the country.

Namibia is experiencing a "Uranium Rush". Last year, uranium production outstripped diamond output in the country. This is of huge benefit to the economy and creates employment in the short term. But it puts fragile environments that support high levels of biodiversity and endemism at risk, along

with sustainable tourism and a variety of livelihoods.

Socio-economic and environmental impacts are forecast to be significant. Preliminary results from environmental impact assessments (EIAs) for new mines indicate that uranium mining is likely to lead to some species becoming extinct in the Namib Desert. Many of Namibia's endemic species are concentrated in the Namib, particularly plants, invertebrates and birds.

Many fear that mining will spoil the unique sense of place that appeals to residents and visitors to the Namib, while others say the activity is fracturing the integrity of the Desert.

Sites of cultural, geophysical and ecological importance that fall within the uranium provinces of Erongo and Southern Kunene regions are under exploration and are also threatened by the development of uranium mines.

Currently five mining licenses have been awarded with another six at an advanced stage of planning. Furthermore, the Geological

Right:
Moonlandscape... Many fear that mining will spoil the unique sense of place that appeals to residents and visitors to the Namib, while others say the activity is fracturing the integrity of the Desert.





© Pippa Howard



© Pippa Howard

Survey of Namibia lists 78 exclusive exploration licenses (EPLs) of which 72 have been granted and six are pending.

Companies, including Rio Tinto, Langer Heinrich Uranium, Bannerman, Swakop Uranium, and Reptile Uranium, are operating inside the Namib- Naukluft, Sperrgebiet and Skeleton Coast national parks.

Namibia has established an impressive system of Protected Areas (PAs), managed by the State, which constitutes a cornerstone of its conservation programme. This system comprises 20 national PAs, covering 17 percent of the terrestrial area.

Current activities, through programmes such as the Strengthening the Protected Area Network (SPAN) Project, are working towards weaving these and other protected areas into a tight, cohesive and effective network of PAs, providing an effective buffer against a large variety of threats to biodiversity.

These areas are of supreme beauty, and are home to a wide range of globally important flora and fauna. They are significant national assets, not only because of their contribution to gross domestic product (GDP) (primarily through local and international wild-life based tourism), but also for those living in and around them.

However, several barriers hinder movement toward improving PA management effectiveness. These include: a fragmented policy framework; undermined institutional capacities, weak capacities for PA operations, incomplete bio-geographic and spatial (GIS) bio-physical data coverage, and the absence of tested mechanisms for public-private-community partnerships.

An important opportunity exists now to explore opportunities for developing potential mechanisms to establish individual and aggregated biodiversity offsets. These can be designed to support the protected areas network and taking into account important landscapes and biodiversity under state, privately owned and communal lands.

We need to explore the development of

effective management of natural resources between Park agencies, conservancies and communities and subsequent benefit sharing. This, of course, would necessarily engage issues of land tenure and authority and would work within or support the development of policy frameworks on protected areas and Wildlife Management.

Key to this will be consideration of jointly managed parks or aggregated offsets involving different land-use sectors, and the development of concepts such as conservation banking.

An effective mechanism would also take into account the country's successful Community-based Natural Resource Management Programme, which seeks to improve the quality of life of rural Namibians by empowering people to care for their natural resources and to derive benefits from these resources.

We need to focus on cross-sectoral engagement and collaboration between the private sector (including mining) on the one hand and the Namibian government on the other hand, as it works to implement its CBD (Convention on Biological Diversity) commitments, and engages local communities as principal stewards of the country's natural resources.

FFI and BBOP (Forest Trends) are working with the Ministry of Environment and Tourism (MET)'s Departments of Environmental Affairs and Parks and Wildlife Management to develop both a sound understanding of and mechanisms for the potential implementation of biodiversity offset frameworks: this includes policy-development and pilot projects. Collaboration with local communities and corporates will be essential to consider innovative approaches that can provide the fundamental mechanisms and pathways to implement biodiversity offsets.

These could provide long term sustainable financial solutions to communities whilst setting aside land for conservation and protecting species and ecosystem services threatened by development activities. Included in such consideration will be

Above Left: Uranium rush ... mining puts fragile environments that support high levels of biodiversity and endemism at risk, along with sustainable tourism. But it also earns much needed revenue for Namibia.

Uranium mining is currently taking place on the Welwitschia Plains in the Namib Naukluft National Park.

Above Right: Private road ... a signpost with the Namib Naukluft National Park indicates the presence of a uranium mine.

Conversation on a Desert Dune

Finding answers to some difficult questions

Earlier this year, three prospective scientists conducted guided independent research at Gobabeb Training and Research Centre in the Namib-Naukluft Park as part of "Gobabeb Training and Research Internship Programme", better known as GTRIP.

Sitting on a dune overlooking the station on our last night, Michelle and I sat with the three 2010 GTRIPers discussing their previous five months at Gobabeb. We had collected written feedback from them, and I was curious about one answer concerning perceptions of the mining industry.

The student had written: "Before the course...I didn't know that the mines actually make an effort to keep the environment safe".

The answer was puzzling. It implied she thought the mines were doing a good job to protect the environment. But I realised she really implied that before the course she thought mines did nothing to mitigate their environmental damage. If so, I thought, was her new impression optimistic?

As the sun set against the dunes, I read the quotation to our young researchers and asked whether they agreed. Their responses were surprising.

Edna, who had just accepted a job as an environmental technician for a zinc mine in the south, seemed disappointed by conversations with environmental technicians from a nearby prospecting company.

Paraphrasing one, she said: "We have to build this road, but we won't do it on hills or in salt pans or washes." To her, this meant there was little hope for substantial environmental protection if it stood in the way of economic gain.

We talked about a presentation that was made by Research Manager Theo Wassenaar, during which he showed a map that overlaid large uranium deposits with biodiversity hot spots in the Namib. The indicating dots fell right on top of each other.

One student referred to Theo's map when making her next point. The Namib's biodiversity has been developing for millions of years, she said. Then within a human generation, a mine could destroy a large portion of it, extract billions of dollars of uranium, and then leave.

Despite this seemingly negative outlook, all agreed they could make a positive impact in their future work as "environmental somethings" in Namibia.

Two shyly admitted they had not really thought about the relationship between mining and the environment before undertaking the course. They believed ecology was about conducting game counts and assessing diversity of plant populations.

Now, they were making connections: between wind and plant germination, between prospecting trucks and bacteria that colonise quartz, between uranium and, well, everything else. As one said: "We have started to find the answers for ourselves."

As we returned to the station under a starlit sky, with the occasional barking gecko breaking the desert silence, I thought about the future. As these bright young people step into the professional world, there are three more Namibians who understand the relationships between economic development and ecosystem conservation. Their newfound knowledge will positively contribute towards sustainable environmental management in Namibia.

Biodiversity is Life

Namibians celebrate International Year of Biodiversity



The United Nations has urged countries to celebrate life on earth and the value of biodiversity for our lives during 2010. The world was invited to take action to safeguard the variety of life on earth: biodiversity. Several activities around the country have so far been held to mark the International Year of Biodiversity.

In Namibia, the Directorate of Environmental Affairs (DEA) coordinated a steering committee to oversee a range of activities to mark the occasion. As part of the steercom, the Strengthening the Protected Areas Network (SPAN) Project has actively participated in activities. Some of the highlights on the Namibian Biodiversity calendar include:

African Ministerial Conference on Access and Benefit-sharing

African ministers of the environment and high-level officials gathered in Windhoek, during March week to consult

on the international regime on access and benefit-sharing (ABS) under the Convention on Biological Diversity (CBD). This major ministerial conference was held under the stewardship of His Excellency President Hifikepunye Pohamba who officially opened the conference. Representatives from over 43 African countries attended.

Reflecting on the importance of the meeting, Ahmed Djoghlaif, the Executive Secretary of the Convention on Biological Diversity, said in his opening address, "History will recall that it was here in Windhoek, in March 2010, that, under the leadership of Namibia, the first political step towards the Aichi-Nagoya Protocol on Access and Benefit-sharing was taken... History will recall that the first world leader to be personally engaged in the negotiation of this new legal instrument for the tomorrow's future is you, Your Excellency Hifikepunye Pohamba, President of the Republic of Namibia."

Media training workshop at Waterberg Plateau Park

Several media practitioners attended this in April. Incoming Deputy Minister of Environment and Tourism, Hon Uahekua Herunga, officially opened the workshop.

In his keynote address, he urged the media to work together with environmentalists and conservationists to find ways to explain biodiversity in a way that is relevant to most people.

He called on them to familiarise themselves with subject matter to be able to use jargon-free language and provide examples that will help make the issues real.

"Key to successful reporting on biodiversity is the ability to show people that they are part of biodiversity, reliant on its richness and deeply affected by its loss," Herunga said.

Above Left:

Above Right Top:

Above Right Bottom:

Diarise these dates:

27 September - World Tourism Day

This will be celebrated in Tsumkwe under the international theme "Tourism and Biodiversity"

Biodiversity Action Day / Brandberg Namibia

On 8 May, a huge flag reading

"Biodiversity Action Day / Brandberg Namibia" was hoisted on the summit of Namibia's highest mountain, the Brandberg, which is also one of the country's most significant sites for endemism.

As a party of hikers reached the zenith, a variety of stakeholders gathered below to take part in hands-on experiences and gain new insight into the area's biodiversity. These included pupils from the local town Uis and the capital Windhoek, representatives of Namibian NGOs and companies, political decision-makers and journalists.

The "Burning Mountain" rises more than 2 000 m from the surrounding plains. Brandberg boasts some of Africa's most significant rock paintings. It recently featured in world headlines with the discovery of the "Gladiator", which represents a new insect order.

The unique features of Brandberg and the surrounding Tiseb Conservancy are most suitable to illustrate the tight relationships between biodiversity and humans.

The Namibian Minister of Environment and Tourism, Ms. Netumbo Nandi-Ndaitwah, and the Counselor for Development Cooperation at the German Embassy, Dr. Romeo Bertolini, supported this important insight with their contributions. They participated in the late-night light trapping, summarised the findings of the action day and pointed out that effective conservation of biodiversity for Namibia's economic well-being.

The Minister emphasized that the Biodiversity Action Day is to be taken as an incentive for further action to safeguard biodiversity.

<http://www.biodiversity-day.info/2010-namibia.html>

Parliamentary Briefing on Biodiversity
On May 17, the Minister of Environment and Tourism, Hon Netumbo Nandi-Ndaitwah, called together Parliamentarians for a special briefing session on Biodiversity.

MET/UNAM Scientific Symposium on Biodiversity Conservation for

Development

About 100 participants celebrated World Biodiversity Day in May at the Habitat Centre in Windhoek. Hon Minister Nandi-Ndaitwah officiated at the event.

The Minister announced that MET is in the process of updating the National Biodiversity Strategy Action Plan. This will go a long way towards facilitating biodiversity conservation in line with the national development objectives.

The United Nations Resident Representative, Karri Egge, read a statement from the UN Secretary General, Ban Ki-moon, on the International Day for Biodiversity.

The Assembly will hold a special high-level impetus to the Nagoya Biodiversity Summit in October in Japan, which aims at a new vision for biodiversity.

The symposium, organised by the Ministry of Environment and Tourism and the University of Namibia, was attended by scientists, students and environmentalists listened to presentations highlighting biodiversity and climate change, biodiversity and the desert environment, coastal development and biodiversity, and biodiversity and tourism development, among many others. Several posters and publications were launched at the event.

Keetmanshoop celebrates World Environment Day

"Humans are the greatest threat to the conservation of the environment in Namibia."

This was the controversial subject debated by learners from Keetmanshoop schools as part of a range of environmental activities carried out to celebrate World Environment Day (WED) from 2 to 4 June 2010.

The WED was celebrated under the theme "Many Species, One Planet, One Future". The event highlighted environmental issues as experienced by people residing in the Karas Region.

As deforestation and littering were identified as major environmental challenges, two secondary schools embarked on

tree-planting and clean-up campaigns to increase awareness on these issues.

Other activities included an evening of presentations for decision-makers and a main event held on Friday 4 June, where the Minister of Environment and Tourism, Hon Netumbo Nandi-Ndaitwah, and the Governor of Karas Region, Hon Dawid Boois, were among the distinguished speakers.

Local schools put on environmentally-themed cultural performances, dramas, poetry readings and displayed posters that made use of recycled or reused materials.

Biodiversity at the Namibia Tourism Expo 2010

Several projects pooled their resources to create a stand at the Namibia Tourism Expo 2010 at the beginning of June. Strategically placed at the entrance to the President's Hall, our eye-catching biodiversity stand featured some of Namibia's rare endemic species, such as black-faced impala, the gladiator insect found at the Brandberg, the Lapped-faced Vulture, Damara Tern, the Benguela dolphin and the Marula tree. It also highlighted Namibia's six biomes. Staffed by students from Polytechnic, the stand attracted many visitors and created awareness about our country's precious biodiversity.

World Day to Combat Desertification

Observed on 17 June, this year's theme of "Enhancing soils anywhere enhances life everywhere" was marked with various activities. The MET's Country Pilot Partnership Programme for Integrated Sustainable Land Management (CPP-ISLM) held celebrations in Omatjete, organised a panel discussion on NBC's "Talk of the Nation" around the theme "Desertification and Biodiversity and what it means for Namibia" along with a public talk on desertification and soil conservation.

1

*With thanks to
Lesley Losper and
Bryn Canniffe (DEA)
and Irene !Hoas (New Era)*

MET Sports Day



Left:

Above:

Left:



Left:

Below Left:



Above:

Left:



Below:





Left: Desert drivers ... Southern park staff having fun during a 4 x 4 off-road driving training session held at Aus earlier this year.



Above: Tyre change ... Oiva Akudhenga from DSS changes a tyre on the road between Sesfontein and Anabeb conservancies.

Right: Everything counts ... Uakendisa Muzuma (Warden, DSS) presents the northwest game count results to the Anabeb and Sesfontein conservancies at Khowareb.



Above: Namib wonders ... Mbeha Rector (Special Assistant, Concession Unit) and representatives of the Topnaar Community conduct a site visit of historical floodplains of the Kuiseb River and the Kuiseb Delta within the Dorob National Park.

Left: Snakes alive ... Workhand Tuyenikelao Shilmi poses with a python that was bought to the MET office in Windhoek after it was hit by a car.



Right:



Above: Lonely work ... Möwe Bay Watchman Vilho Ashipala repairs a park entry sign while checking for signs of illegal entrance into the Skeleton Coast Park's north west boundary.

Left: Water affairs ... Ranger Matambo Singwangwa (R) and Workhand Amakali Immanuel from Mudumu National Park examine the old Santika borehole pump before being demolished and rebuilt, with assistance from Khaudum Park and Maintenance staff.



Below:

Right:





Left: Women power ... Workhand Haikali Rachel erecting a tent at Poachers' camp in Mangetti National Park.



Above:



Above: Into the wild ... Scout Vilho Nghifindaka releases a tortoise back into nature in Mangetti National Park.



Above: Pause for thought ... Chief Warden Chrispin Mulisa of the North East Region takes a break after a long day's work in the Mangetti National Park.



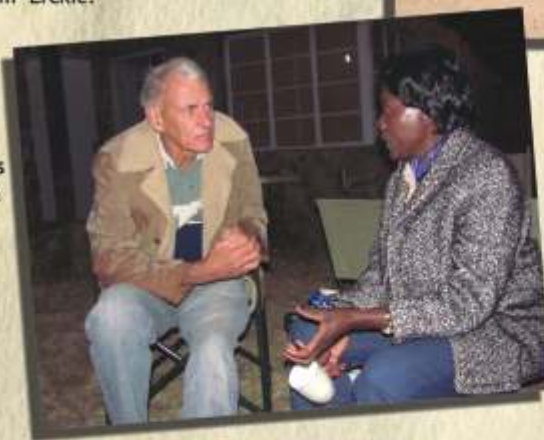
Right:



Above: Fenced in ... Deep in discussion during a site meeting at the new Etosha fence project are (from left): Bony Simataa (Warden) Seimy Shidute (DASS Director), Christian Lerch (Head of Maintenance), Works Inspector xxxxx and CCW Rehabeam Erckle.



Above Left: This way ... Skeleton Coast Chief Warden Gerson Somaeb and Mowe Bay Ranger Bernard Awob discuss the construction of a new patrol and tourism road in the Park's northern section.



Left:



Left: Group work ... Participating in community capacity enhancement training activities held in Katima Mulilo are (from left, seated): Mamili National Park's Simwanza Morris (Watchman), George Sakutuka (Ranger) and Beauty Mbeha (Watchman) while UNDP's Programme Assistant Nelson Zaakapi looks on.



Above: Fuel stop ... Refueling an MET aircraft at Ganab Station in the Namib-Naukluft Park are (from left) Oiva Akudhenga (Warden, DSS), private Pilot Gunter Grasreiner and Uakendisa Muzuma (Warden, DSS).

MET staff IN ACTION

We need your photos!

This page relies on your contributions from MET staff. Please send photos of you and your colleagues with captions to: sandpaper@span.org.na. Prints and positives can also be sent to the SPAN office at DPWM.

By Samson Mulonga,
SPAN Field Coordinator,
Southern Parks

The Sperrgebiet National Park A Biodiversity Hotspot

What is a Biodiversity Hotspot?

The Convention on Biological Diversity Biodiversity defines biodiversity as the abundance, distributions of and interactions between genotypes, species, communities, ecosystems and biomes.

Biodiversity keeps the world alive and healthy by producing air and fertile soils, decomposition of waste and dead materials, clean water and food. The better the level of health of the world's biodiversity the more stable and productive the planet. However the loss of biodiversity through unsustainable practices is one of the largest threats facing the planet.

Populations and species are being eliminated at an accelerated rate leading to high rates of species extinctions. The five main global change drivers with regard to biodiversity include:

- habitat degradation and destruction
- climate change
- nutrient loading
- overexploitation of biological resources, and
- biotic change.

At the current loss of biodiversity it can be said that biodiversity is besieged. Extinction is the most critical problem of the biodiversity crisis as it is irreversible. While extinction is a natural process, human impacts have elevated the rate of extinction by at least a thousand, possibly several thousand, times the natural rate. Mass extinctions of this magnitude have only occurred five times in the history of our planet; the last brought the end of the dinosaur age.

Against this background, scientists and the conservation community came up with the idea of "biodiversity hotspots". As conservation budgets are usually insufficient, identifying conservation priorities is crucial to avert the looming and current extinction of species.

British scientist Norman Myers prepared a pioneering paper on the concept in 1988. Three years later an extensive global review was undertaken. This looked at ways in which to define biodiversity hotspots.

To qualify as a hotspot, a region must meet two strict criteria: it must contain at least 1,500 species of vascular plants as endemics, and it has to have lost at least 70 percent of its original habitat.

In the 1999 analysis, published in the book *Hotspots: Earth's Biologically Richest and Most Endangered Terrestrial Ecoregions*, and a year later in the scientific journal *Nature* (Myers, et al. 2000), 25 biodiversity hotspots were identified. Collectively, these areas held as endemics no less than 44 percent of the world's plants and 35 percent of terrestrial vertebrates in an area that formerly covered only 11.8 percent of the planet's land surface.

is the newly recognised Horn of Africa. The Succulent Karoo is a winter rainfall desert with a mild climate moderated by cold Atlantic Ocean currents. The climate has contributed to the evolution of a rich array of endemic species. For an arid region, the area has an extraordinarily high plant endemism, including the richest succulent flora in the world.

There are more than 6,350 vascular plant species in this hotspot, nearly 2,440 of which are endemic (40 percent). According to Conservation International, local plant species richness is high. An average of 70 species are found in 0.1 hectare test plots, and the diversity between sites in the region is also significant.

Many plants here, especially succulents, are specialists for a limited range of environmental conditions, producing a phenomenon known as point endemism.

Notable plant species found in this hotspot include the botterboom (*Tylecodon paniculatus*), a stem succulent that has glossy leaves in winter and red flowers in summer, and the halfmens ("half human") (*Pachypodium namaquanum*), a stem succulent endemic to the Richtersveld that can grow up to four meters tall. Clusters of halfmens stems tend to face toward the north, giving the appearance of groups of people gazing northwards. The stems' crowns of leaves, which resemble hairy human heads, enhance the impression. The scientific explanation for this unusual orientation is that the plants, which grow on shaded slopes, lean northwards so that their leaves and developing flowerheads, produced during the cool, foggy winter months, are exposed to the sun's warming rays.

The Sperrgebiet National Park - in a Biodiversity Hotspot

The Sperrgebiet National Park (SNP), which forms 90 percent of the Succulent Karoo Ecosystem in Namibia, is located in the south-western corner of Namibia.

It is about 320 km at its longest and up to about 100 km wide, covering an area of about 22 000 km². It is bounded by the low water mark on the Atlantic Ocean in the west, the Orange River in the south, the Namib-Naukluft Park in the north and mainly freehold farmlands to the east.

The Succulent Karoo Ecosystem

The Succulent Karoo Ecosystem that spans between Namibia and South Africa is one of the world's 25 Biodiversity Hotspots. Stretching along the Atlantic coast of Africa, from southwestern South Africa into southern Namibia, the Succulent Karoo hotspot covers 102,691

square kilometers of desert. Some pockets of this hotspot are scattered within the Cape Floristic Region Hotspot, which borders it to the south.

The hotspot, which mainly consists of winter rainfall desert, is one of only two hotspots that are entirely arid. The other

About 1,050 known plant species are found in the Park. That's nearly a quarter of Namibia's flora found on less than three percent of the country's land! For this reason the Succulent Karoo is listed among the world's top 25 biodiversity hotspots.

Sperrgebiet is also identified as an Important Plant Area (IPA) for Namibia. IPAs are sites of high importance for wild plants which provide a framework for implementation of Target 5 of the Convention on Biological Diversity's Global Strategy for Plant Conservation. Target 5 aims for "protection of 50 percent of the world's most important areas for plant diversity assured by 2010 the International Year of Biodiversity".

But its not only Sperrgebiet's plants that are special. The Park also has a rich but poorly studied diversity of animal life. These include 80 terrestrial and 38 marine mammal species including the nearly half of the world's Cape fur seal population. Most nearly 600,000 of them - are found in four main colonies at Wolf and Atlas Bays and on North and South Long Islands.

African Penguin, Cape Gannet and various cormorants, gulls and terns breed on Possession, Ichaboe, Sinclair, Plum Pudding, Pomona and Albatross islands. The mouth of the Orange River is an internationally recognized wetland under the Ramsar Convention, with about 60 wetland birds recorded, while nearly 120 terrestrial bird species have been recorded. Reptiles abound, with almost 100 species documented, along with 16 frog species. It is believe that nearly 90 percent of the area's invertebrates remain undescribed to science.

Proper management planning a key for

conserving a biodiversity hotspot
A Government-comisioned land-use plan for the area, found conservation and tourism to be the most sustainable activities for this former forbidden zone.

Cabinet designated the area as a national park. The Ministry of Environment and Tourism, with support from the SPAN and SKEP Projects and other stakeholders, developed a habitat management plan in accordance to the IUCN zonation categories.

Park activities are guided by a high-level Park Advisory Committee (PAC). This consists of representatives from Ministries of Environment and Tourism, Mines and Energy, Lands and Resettlement, Fisheries and Marine Resources; the National Botanical Research Institute, National Heritage Council, the Karas Regional Council and Namdeb.

The Committee provides strategic advice, serves as a negotiating forum and mediates disputes to optimise all aspects of the SNP activities, including biodiversity and landscape enhancement, economic development, social opportunities and livelihood improvement.

Several plant conservation strategies are underway, including:

- Conducting detailed assessments of the biodiversity hotspot;
- Establishing a national succulent atlasing project, with particular focus on this hotspot;
- Monitoring carefully selected critical plant populations;
- Monitoring areas at high risk to invasion by alien vegetation, such as drainage lines, roadsides, mining and prospecting areas and around human settlements, and implementing

Human Impacts and threats to biodiversity

The Succulent Karoo Ecosystem is highly sensitive and fragile. Almost all the Namibian coastline in this hotspot has been mined for diamonds. In the park, the greatest impact is evident along the coast and at the alluvial terraces of the lower Orange River Valley.

Inappropriate land use would have a devastating impact on the biodiversity of the area and its future economic potential. Areas considered to be of particularly high sensitivity include:

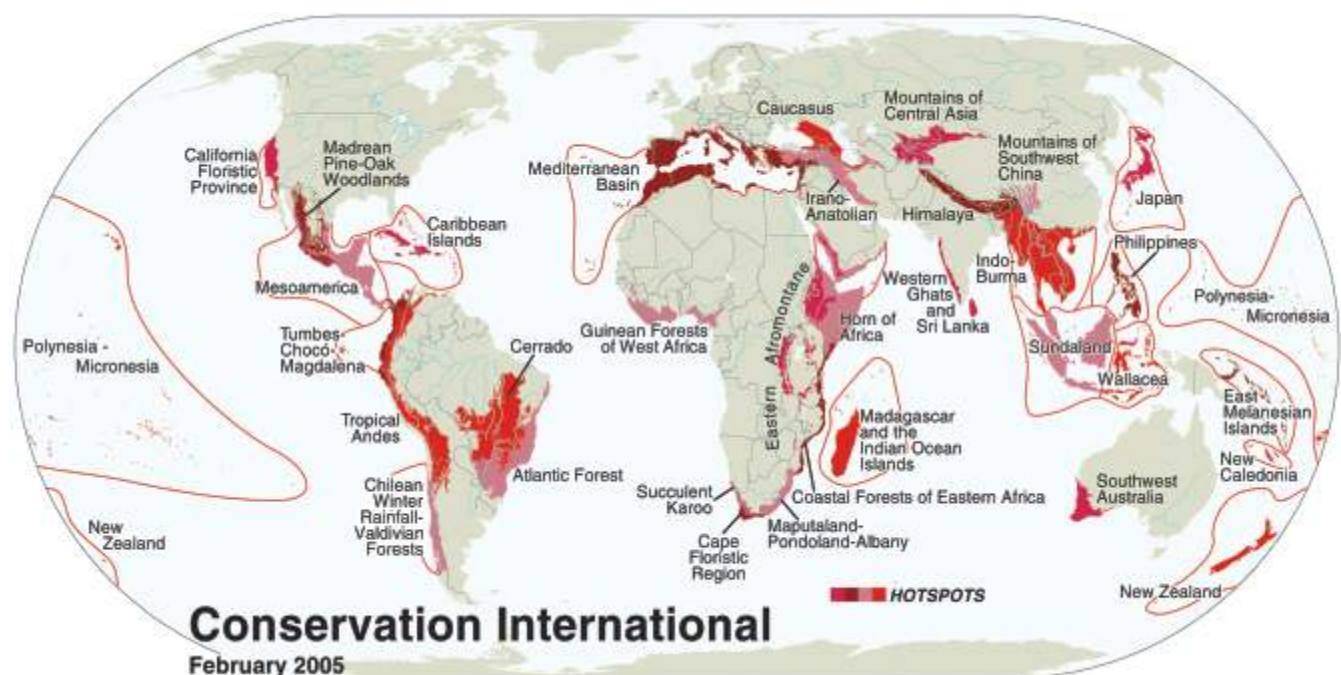
- The Orange River valley
- The coast, coastal dune hummock habitat and coastal rocky outcrops
- Inland inselbergs, mountain ranges and rocky outcrops
- The offshore islands, particularly those supporting significant breeding populations of red data bird species which are now part of the new Namibia Islands Marine Protected Area.

control measures;

- Continuing support and promotion of botanical surveys and research in collaboration with the National Botanical Research Institute, leading to a better understanding of the area's flora.

With proper planning in place and a forum for discussing developmental issues in the park, the Sperrgebiet National Park and the Succulent Karoo Hotspot - stands to benefit from proper development and land-use planning without comprom-ising the integrity of the ecosystem. This should conserve the rare and endemic biodiversity that gives the area the bio-diversity hotspot status. The future looks bright for Namibia's only internationally recog-nised biodiversity hotspot.

1



Protected Areas and Climate Change

New study forecasts that wildlife, tourism are wise investments

Climate change is here. And its impact is expected to be far reaching in the next generation. Consider too, that our population is predicted to reach 3 million by 2050.

Just how climate change will affect us is difficult to accurately determine. But it is forecast with a high degree of certainty that Namibia (and the rest of southern Africa) can expect:

- an average increase in temperature of between 2 to 6°C in the interior;
- our climate will become drier, rainfall variability is likely to increase and extreme events such as droughts and floods are likely to become more frequent and intense;
- soil moisture levels are projected to decline;
- we can expect crop failure and severe water shortages impacting upon subsistence farming communities the most;
- large parts of the country will become unsuitable for cattle farming, and
- sea levels will rise.

We simply don't know what will happen with the coastal fog system, which is known to be vital for most endemic and many other plant and animal species in the Namib.

All of this will affect the fishing and agricultural sectors, with small stock farming replacing cattle farming in many areas. Crop farming is forecast to become unviable in many areas except the north east, where floods are projected to become more likely. This will negatively affect Namibia's Gross Domestic Product (GDP).

A range of statistics and studies show that the poor are likely to become poorer, with reduced employment opportunities, especially for unskilled labour.

To gauge the likely effects on Namibia's biodiversity and ecosystems in our protected areas, SPAN Project commissioned a study on the impacts of Climate Change on Namibia's Protected Areas. The Southern African Institute for Environmental Assessment (SAIEA) together with the Namibia Nature Foundation and Anchor Environmental

Consultants, successfully tendered to complete a comprehensive study, also assessed the economic implications of climate change-ascribed wildlife and biodiversity changes, and investigated feasible adaptation options.

"It is going to impact us in a huge way, so we need to get ready for it," Dr Peter Tarr, Director of SAIEA, told Sandpaper.

When it comes to our environment, the study forecasts that we can expect:

- more frequent flooding of a greater magnitude in Namibia's northern rivers;
- reduced inflows into the Etosha pan, affecting the natural springs around the southern parts of the pan;
- loss of species in many areas - particularly the Succulent Karoo - with local extinctions in this global biodiversity hotspot by 2050
- a shift in Namibia's main vegetation type from Grassy Savanna to Desert and Arid Shrubland by 2080. Ground cover will decline throughout much of the country.

Warmer temperatures could result in significant changes in species distribution, composition and migration:

- The south and south west are predicted to see the greatest increase in plant species numbers and the lowest proportion of species loss, while greater losses are expected in the central, northern and eastern areas;
- about seven percent of plant species could shift their distribution range out of Namibia entirely; 52 percent of species showing range contractions and 41 percent showing range expansions;
- an average decline in wildlife grazers by about 13 percent by 2050 and about 24 percent by 2080;
- none of the ranges of plains game species are likely to retreat out of any of the national parks;
- springbok and gemsbok are likely to expand their ranges to the Bwabwata National Park;
- Human wildlife conflict with species such as elephants could increase due to pressure on habitats.

But it's not all doom and gloom. "There is hope," Dr Tarr told Sandpaper. "By making the switch now by drought-proofing ourselves we can meet the challenges of climate change and get ahead of the game."

How do we do this? “We have to look at Namibia’s comparative advantages. These include investing in our wildlife and our scenery,” he commented.

“It makes sense to start investing in wildlife and wildlife-based tourism. Wildlife is more adaptable and suited to Namibia’s habitat than activities such as stock and crop farming.”

A study undertaken by SAIEA last year showed that even if Namibia becomes drier, it will not significantly affect tourist’s willingness to visit.

And most of our wildlife is already adapted to our harsh climate. Some species will slightly shift their ranges, but few of our large mammals are expected to be seriously affected.

“It will be imperative, however, to take down fences along some park boundaries, particularly in areas along the western escarpment such as the Namib-Naukluft and Sperrgebiet national parks, where wildlife numbers may crash following periods of prolonged drought if fences remain in place.

“Mobility is the key adaptation by plains game to arid savanna systems. By making sure there are open systems across which these animals can freely roam, we will be ensuring the survival of these animals,” Dr Tarr said. This means working with park-neighbours to jointly manage open landscapes and ecosystems.

The studies show that as areas in western Namibia become more arid, Khaudum, Bwabwata and Mudumu will become strategic for woodlands ungulates.

More frequent flooding along the inland rivers may favour wetland species such as hippopotamus, sitatunga, lechwe, reedbuck, puku, otters, crocodile, wetland birds such as Fish Eagle, Wattled Crane, ducks, storks and many others, as well as fish, mollusks and other aquatic invertebrates. There should be favourable habitats for fish recruitment and production, for both subsistence and tourism providing the rivers are not dammed or drained for irrigation schemes.

North-eastern areas should also become more suitable habitat for white rhino by 2050.

New habitats should be considered for some of our more precious wildlife. For instance, black-faced Impala range could be expanded into the Otavi mountains. New populations of black rhino should be started in areas such as Khaudum and /Ai-/Ais national parks, Nyae-Nyae and N? a_Jaqna conservancies.

Transboundary conservations initiatives and open systems across international borders should be maintained and further explored.

The study states that Namibia’s farming systems are on the arid margins of viability. The impacts of projected climate change on these production systems are expected to be severe. It is expected that the decline or in some cases failure, of traditional and conventional forms of land use in Namibia’s rural areas will have a greater (though indirect) impact on biodiversity than the direct impacts of climate change. This is because people will be forced to use wildlife and other natural resources much more in the future than they do today, in order to survive. There is thus an urgent need to strategically rethink the adaptive responses of both production and conservation planning in this country over the next few decades.

It recommends that reconfiguring landscapes and increasing size and connectivity of the conservation network is the best way to enable wildlife to adapt to climate change.

The study concludes that: “Improved management of natural resources and rangelands is vital. This doesn’t necessarily mean extending the state national parks, but rather extending the development of community and private conservation areas within the conservation network, particularly in those areas targeted as key in relation to losses in biodiversity. Building on Namibia’s highly acclaimed CBNRM programme is recommend-

The study recommends several strategies to be adopted, including:

- encouraging the carefully controlled production of charcoal and fuel wood, and possibly small-scale power generation to manage bush encroachment;
- adopting Integrated Water Resource Management, including measures to increase water supply and reduce demand;
- introducing well-designed biodiversity monitoring programmes in parks;
- diversifying livelihoods, including building capacity in this regard;
- addressing natural resource shortages through improved natural resource management;
- increasing the focus on rangeland and natural resource management, and shifts into conservation-oriented business. This would involve building on existing programmes such as CBNRM;
- Exploring opportunities for types of carbon projects, such as concentrated solar power and small-scale biomass energy production. Meanwhile, Namibia should also apply for adaptation funding in order to meet some of the challenges that lie ahead.

Other recommendations include strengthening the policy environment to create incentives for the growth of businesses and enterprises around these, developing and nurturing partnerships, and removing bottlenecks.

ed.”
In the case of transforming the protected areas patchwork into a protected areas network, and expanding and diversifying CBNRM activities, the benefits are anticipated to be greater than just the offsetting of potential losses due to climate change.



Warden Profile

Paulus Johannes

Ranger: Sperrgebiet National Park

By Patience Mamili,
Information Warden, Keetmanshoop



Spending days on end alone in on one of the world's loneliest parks isn't easy. But for one of Namibia's youngest rangers, working in the Sperrgebiet National Park is a rare privilege. Patience Mamili finds out more about this inspiring guardian of the Sperrgebiet.

"The Sperrgebiet is special because it has unique fauna and flora and it's a bio-hotspot," says an animated yet sincere Paulus Johannes. Based at Oranjemund, he is responsible for one of the world's most precious desert parks.

Since joining the Ministry of Environment and Tourism three years ago, this enthusiastic young ranger has knuckled down to some gruelling work on the windswept plains and shores of one of the most spectacular parks Namibia has to offer.

His efforts earned him the first runner-up Springbok Award at last year's prestigious MET Annual Field Staff Awards, much to his own surprise.

Born 22 years ago in Lüderitz, southern Namibia, Paulus showed a love for the environment from an early age. Throughout his school days, he volunteered for environmental projects. He became a member of environmental clubs such as the Orca Research Club, which concentrated on beach clean-up campaigns and bird counts. He also volunteered for the Brown Hyena Research Project and was then hired as an assistant for the Brown Hyena Kolmanskop Environmental Centre - first as an after-school activity and later, after matric, in a fulltime post for a year.

Working as a volunteer created an awareness about environmental issues and his interest in the environment continued to grow. He also

gained experience in fieldwork and research.

Paulus graduated from Lüderitz Secondary School in 2006 and, in 2007, he moved with his parents to Rosh Pinah. There, he befriended a local MET Ranger, Wayne Handley, who operated in the /Ai-/Ais/Richtersveld Transfrontier Park(ARTP). Passionate about the environment, Paulus bombarded Wayne with questions about the MET's environmental education activities in the area.

"Wayne was very helpful and took me along to Dreigrat Gate and the Sendelingsdrift Tourist Access Facility, which were being constructed in the ARTP," says Paulus. "He lent me environmental books and other publications to read."

When a ranger post became vacant in the nearby Oranjemund Station, Wayne encouraged Paulus to apply. "I prepared myself by reading some documents on conservation." Well-armed with enthusiasm, knowledge and a love of conservation, he got the job.

At the time of his appointment, Paulus was only 19 years old. From the start, his then Chief Control Warden for Wildlife Management, Charles Musiyalike, informed him that the task ahead came with big responsibilities.

Not only was he about to become one of MET's youngest rangers, but he was to work in area that was about to be proclaimed as one of Namibia's newest and largest - parks. Sperrgebiet National Park had been set aside as a no-go area for a century. After much planning and consultation on a local, regional and national level, Government, in partnership with stakeholders, was to transform the area

Top:

Middle:

Bottom:





into a national park to preserve one of the world's richest and most vulnerable desert biomes for present and future generations.

Veteran Conservationist Trygve Cooper took Paulus under his wing on his first day of work. He spent time in the field with his immediate supervisor, Warden Kosmos Shilongo.

"Kosmos is a good advisor and teacher," says Paulus. "He was prepared to share his knowledge and taught me some basic field skills. I also learnt some wilderness tactics from Kosmos and Trygve."

He is very proud of working in the Sperrgebiet National Park. "I feel honored that I am preserving biodiversity for future generations in an area that has not been touched for 100 years," he says humbly.

Main duties include patrols, game counts, fence repairs, mine rehabilitation, and administration.

"I like the Incident Book Monitoring System - it helps to keep track of what is happening in our park," he says. Paulus enjoys visiting places of interest. He was one of the few lucky enough to visit the site of a 500-year-old shipwreck laden with treasure found north of Oranjemund in 2008 that made international headlines.

He is currently learning about birds at the Orange River Mouth a wetland of international importance recognised as a Ramsar Site.

Currently, plans ensure that the Sperrgebiet will become a "pro-poor" national park, with

carefully developed tourism activities enabling formerly disadvantaged people to have a share of the cake from the park. Paulus looks forward to the introduction of tourism ventures. He is, however, wary of large lodges with associated infrastructure being developed. 'I don't think they would be suitable for the Sperrgebiet since it's a biodiversity hotspot. I believe guided tourism is the answer."

Last year, before an audience of more than 300 people, he collected two prestigious awards at the MET's Annual Field Staff Awards Ceremony in Windhoek. On behalf of the Sperrgebiet National Park, he collected the Incident Book Monitoring System Award, which the area shared with staff from Mudumu National Park. He was also selected as the first runner-up for the Springbok Award, which recognises the outstanding performance of a young MET field staff member who demonstrates great potential to succeed in the field of conservation, park management and special outreach services.

"I did not expect to win the prize - it came as a huge surprise," he smiles shyly. "Thanks to Kosmos for nominating me."

In the near future, he plans to study so that he can become the park's Chief Warden. "I'd like to stay in the Sperrgebiet so that I can learn more about the different succulent plants," Paulus enthuses.

Final words from this young man: "You learn new things all the time when you work in the environmental field - field work is exciting."

1



Paulus's Wish List:

- reintroduction of wildlife species which used to occur in the park
- more staff members
- more vehicles; and
- increase in budget to help implement activities to meet targets.

Top Left:

Top Right:

Right:



SPAN Update

Compiled by Augustine Ganes
SPAN Project Assistant

Strengthening the Protected Area Network (SPAN) Project within the Ministry of Environment and Tourism aims to increase management effectiveness of the national protected area network in Namibia for biodiversity conservation. It is supported by the United Nations Development Programme (UNDP) and the Global Environment Facility (GEF).

SPAN Contact details Project Coordinator
Phone: 061 284 2505 Fax: 061 245160
coordinator@span.org.na www.span.org.na

New Project Coordinator for SPAN

Its official ... Michael Sibalatani, who joined SPAN in January as a Deputy Project Coordinator, is the new head of SPAN. Michael comes to SPAN with more than 15 years of conservation experience under his belt. We featured him on these pages in the last edition of Sandpaper, so he's no stranger to our readers.

"It has been a smooth transition from been a park manager to being a project manager thanks to the Project Management Unit, MET and other stakeholders," says Michael. SPAN staff have pledged their support for the popular, hard-working figure.

Incident book audits

SPAN field coordinators joined staff from the Ministry of Environment and Tourism (MET)/CONINFO to audit incident books earlier this year. The Incident Book Monitoring System was initiated by MET's Directorate of Parks and Wildlife Management in north eastern parks in 2003. It has since been rolled out to most parks in the country. The system aims to collect basic information on various activities and events in parks for input into a comprehensive management-orientated monitoring system for adaptive decision-making based on solid data.

The auditing took place in Etosha/Skeleton Coast and southern parks, while the auditing in the North East parks was done in conjunction with senior management from the region.

Audits use a simple score out of 10 to evaluate how well each park has performed during the year.

DG Ecological Consulting was awarded a 12-month contract to support the introduction of the Incident Book Monitoring System Support to Waterberg Plateau Park, Daan Viljoen, Namib Naukluft Park and Von Bach. Further support will be given to parks where the

IBMS was recently introduced such as Etosha, Skeleton Coast, Sperrgebiet, Naute, /Ai /Ais and Hardap parks. The consultant will work closely with the SPAN field coordinators and MET staff. The IBMS was introduced to the Mangetti National Park by MET staff with support from the SPAN Field Coordinator for north east.

International Year of Biodiversity (IYB)

SPAN has actively participated in the Ministry of Environment and Tourism's national programme to mark the International Year of Biodiversity. Communications Officer Linda Baker represents the Project on the National Steering Committee. She developed a comprehensive media strategy for the implementation of activities and has actively assisted partners to engage the media in covering various events.

SPAN is celebrating the year by highlighting biodiversity in its regular Park Talks, through this special edition of Sandpaper and through funding various activities such as the annual ministerial sports weekend and the stand at this year's tourism Expo.

Park Innovation Grants

Four Park Innovation Grant (PIG) projects were approved. These were the purchase of four cameras at Waterberg to capture images of rare species at waterholes; upgrading of the hanger and runway at Okaukuejo for aerial surveys; monitoring flamingo breeding at Etosha Pan and Lake Oponono through aerial surveys and the assessment of Etosha's blue crane population status and conservation by means of an aerial survey.

Park innovation grants were introduced to provide parks and other staff with funding for small projects. The Park Innovation Grant (PIG) enables staff to implement innovative projects that will

improve park management and services to visitors, neighbors and communities. The fund is a MET initiative through the SPAN Project and is part of efforts to introduce a new approach to management.

Training manual for induction course

User-friendly staff training manuals for staff induction courses will be produced in the near future. The need for these materials was identified as a meeting between the Human Resource Transformation Adviser (HRTA) and Directorate of Parks and Wildlife Management (DPWM) staff.

Thereafter a Terms of Reference for the compilation of the field staff induction training manuals was developed. These were endorsed by SPAN's Project Management Group and the MET Training Committee before being signed by the Permanent Secretary.

Training Support for North East

Staff received refresher training on how to operate boats in Katima Mulilo earlier this year. Meanwhile tractor operators from north eastern parks and Waterberg Plateau Park were trained in tractor operation and maintenance while refresher training on the Incident Book Monitoring System was done at Mangetti National Park for Bwabwata West, Khaudum and Mangetti staff. SPAN Field Coordinator Simon Mayes also introduced the Incident Book into Mangetti National Park.

Park Branding

MET, in partnership with SPAN, will soon unveil the new logo and branding for Namibia's parks. A new logo for our parks was chosen after consultation with chief control wardens last year. This was approved by Cabinet late last year.

The new logo consists of our national animal, the majestic oryx (*Oryx gazelle*), which appears on the national coat of arms and is widely distributed



Above Left:

Above Right: MET, in partnership with SPAN and the NACOMA, is redeveloping the MET website.

throughout the country. It also symbolises economic opportunities through both photographic tourism and the trophy hunting industry.

The new logo represents an umbrella for all directorates working in our magnificent parks, and will help MET to brand its protected areas, increase the profile of conservation and the Government's commitment to conservation in Namibia.

Consultants are putting the final touches to branding guidelines, which will direct the standardisation of signage in parks, visitor centres and public buildings in parks, stickers on vehicles, badges on uniforms and the park portion of the MET website.

Waterberg Plateau Park as a new Span demonstration site

The Span Mid-term Evaluation recommended that a smaller park be chosen where innovative conservation approaches could be achieved and replicated in other parks. Waterberg was chosen and approved to become another project demonstration site by the Project Management Group. Follow up meetings with technical staff within MET and UNDP took place to identify key intervention areas. The innovative approach for this site is the development of an effective protected area system for the conservation of rare and high value species and capacity through adaptive management and partnership with research institutions. Waterberg became the fifth SPAN demonstration site after Etosha/Skeleton Coast Link, Sperrgebiet National park, /Ai /Ais Hot Springs and the Bwabwata Mudumu and Mamili National Parks.

Biodiversity indicators

MET, in collaboration with SPAN, the Namibia Nature Foundation (NNF) and NamPower, initiated a platform to discuss information systems. This look at ways to collaborate to optimise work

being done and planned in conservation data gathering.

Meanwhile, national and park level biodiversity indicators are to be developed. EcoAfrica Environmental Consultants has been hired to develop these, along with a monitoring system of these indicators. Training manuals and training will be offered to staff members on how to monitor the indicators. carry out the monitoring.

Concession Unit Support

Due to the hard work of the Concession Unit and Concession Committee, chaired by Deputy Permanent Secretary Erika Akuenje, concessions were signed as follows:

- Hobatere Roadside concession head rights between Ehi-rovipuka Conservancy and MET
- Hobatere North concession head rights between #Khoadi-//Hoas conservancy and MET
- Etendeka concession head rights between Anabeb and Omatendeka conservancies and MET
- Aus Info Centre concession and MET

The signing of these concessions took place in March, whereby the Minister of Environment and Tourism signed the head agreements on behalf of the Ministry.

The concession Unit is now fully staffed. George Masilo filled the Chief Control Warden position, Fabiola Katamila was appointed as Chief Warden and Hilde lileka has been appointed as clerk.

Climate Change in Parks

MET, in partnership with SPAN, hired the Southern African Institute for Environmental Assessment (SAIEA) to assess the vulnerability of Namibia's biodiversity and ecosystems to climate change, economic implications of climate change of climate change-ascribed wildlife and biodiversity changes. The study predicts that Namibia can expect an increase in temperature and evapo-transpiration at

all localities, with a maximum increase of between t2 - 6 °C in the interior. Warming is likely to be less along the coast than along the escarpment and inland regions. The study also indicated rainfall variability is likely to increase and extreme events such as drought and floods are likely to become more frequent and intense.

The document is currently being printed and will also be made available on the MET website.

Performance workshop

Following a National Strategic Planning Meeting held at Swakopmund earlier this year, the MET decided to introduce a Performance Management System (PMS) to ensure effective performance management towards the realisation of its strategic objectives.

MET, in consultation with the Office of the Prime Minister (OPM) began the implementation of the system with a workshop on developing "Performance Agreements from Annual Plans". This was held for all MET Senior Management and was conducted by the OPM's Performance Management Unit (PMU).

All directorates are expected to have completed and signed performance agreements by the 30 June 2010. The implementation of the PMS is supported by the SPAN project through the Human Resource Transformation Programme.

MET website

MET, in partnership with SPAN and the NACOMA, is redeveloping the MET website. This will feature a new look, more informative pages, loads of documentation and some downloadable forms and files. Content is being developed by consultant Ginger Mauney while the design is been developed by Gijima. The MET IT Division is uploading content to the web portal. Watch the space for news of the launch. 1

News from the field

Right:

Far Right:



Apollo 11 Cave feasibility study

SPAN commissioned a Feasibility Study for preservation and tourism development options for the Apollo 11 Rock Art Cave in the Vainas Richtersveld Trans-frontier Park. The relatively un-known cave is an important national heritage asset and is one of Namibia's hidden gems.

According to Dr John Kinnahan, leading Namibian archeologist and one of the consultants commissioned to complete the study, the cave has yielded evidence of human occupation dating back about 100 000 years, along with the earliest examples of African figurative art, dating to about 28 000 years.

While the site has potential for tourism development, it is in a remote location and highly vulnerable to damage unless managed with appropriate care.

The study highlights the conservation needs of the site as well as detailed

Fish River Viewpoint almost complete

A new, N\$1,6 million enviro-friendly viewpoint overlooking the spectacular Fish River Canyon is due for completion in July. Designed by Namibia's own Nina Maritz, who is internationally recognised for her expertise in energy efficiency and sustainable building within developing countries, the new facility will greatly enhance the visitor experience to this popular southern destination while conserving the fragile environment.

Meanwhile, another team of consultants have produced a series of interpretive information posters for tourists. These will be displayed at the viewpoint. These include information on the fauna, flora and geology of the canyon as well as information on the history of the area, human footprint, transfrontier process and the Fish River Canyon hiking trail. The viewpoint is expected to be officially launched later in the year.

tourism options. Recommendations were made regarding conservation work to protect and preserve the site, which will be undertaken in consultation with the National Heritage Council and other stakeholders represented on the project Steering Committee.

A pilot exercise to gauge the tourism potential of the area is now planned complete with the production of signage. As part of this project guidelines for conservation and restricted access to the site have been developed.

The third Bwabwata Technical Steering Committee (BTC)

Permanent Secretary of the Ministry of Environment and Tourism, Dr Kalumbi

Shangula, chaired the third Bwabwata Technical Steering Committee (BTC) meeting on 21 May at Kamutjonga Inland Fisheries Institute (KIFI) in Kavango Region. Representatives of all ministries involved in Bwabwata National Park attended the meeting, which aimed at discussing future development issues within the Park.

MET, as the lead Ministry in BNP, recognises the need to coordinate development planned for the park. Input from the Technical Committee will inform the Minister of Environment and Tourism, Hon Netumbo Nandi-Ndaitwah, on the best approaches to zone, manage and develop the Park, in particular the Omega (I, Chetto & III) and Bagani areas.

Mudumu North Complex (MNC) Collaborative Management Forum

Two large developments are underway in the MNC. A business plan for the development of the Kongola Tourism and Information Hub was drawn up and distributed to stakeholders. Kongola, situated about 110 km west of Katima Mulilo in Caprivi Region, has grown in recent years from a service station site into a small, lively tourism hub.

The exercise aims to ensure planned, sustainable development that benefits local communities. Plans incorporate the existing Mashi Crafts outlet while providing space for the sale of firewood from community forests, honey from conservation farming and office space for tourism guiding services. All of these will benefit local residents and communities, providing income and jobs. The next stage is to finalise plans and start the building process.

Meanwhile two wildlife water points have been built in the MNC. These will provide water for translocated wildlife and create tourism attractions in the area. The MNC trophy hunting concession will also benefit from this development. Two windmills will be built, complete with a standard cylinder pump and submersible pumps operated by a portable generator.

*By Simon Mayes: SPAN Field Coordinator:
North-east parks*

/Ai-/Ai/Richtersveld Trans- frontier Park (ARTP) begins implementing activities at field level

MET is working closely with SANParks to promote the ARTP. Various activities were discussed at a Joint Management Board (JMB) workshop held in Windhoek earlier this year. A work plan which was put together for joint activities and field staff are already hard at work implementing some of the plans. In June JMB members took to the field to look at the bottlenecks hindering progress. They are also involved in planning envisaged Orange River Festival

Biodiversity Tournament 2010, MET's Annual Sport Day

The MET Annual Sports Weekend Biodiversity Tournament 2010 was hosted in Erongo Region, Swakopmund, from 1 to 4 May. Karas Region was to host the tournament as scheduled but due to other logistical problems the event was shifted to the coast. Three sport codes were registered, being soccer, netball and volleyball .

Teams from seven regions, consisting of 557 MET staff ,took part in the tournament. The Etosha Team scooped first prize in the soccer section. The Khomas Team won the top award for netball while the team from the North East wowed the crowds with their volleyball skills.

Previous winner of different codes are as follows:

2007

Hosted in Etosha National Park

Soccer - Winners: Etosha National Park Runner up: Northeast

Netball - Winners: Khomas Runner up: Etosha National Park

Volleyball - Winners: Khomas Runner up: Etosha National Park

2008

Hosted at Swakopmund in Erongo Region

Soccer - Winners: Northeast Runner up: Erongo

Netball - Winners: Khomas Runner up: Etosha

Volleyball - Winners: Khomas Runner up: Northeast

2009

Hosted at Rundu in the Kavango Region

Soccer - Winners: Khomas Runner up: Northeast

Netball - Winners: Southern Region Runner up: Khomas

Volleyball - not all games could be played due time.

The Biodiversity Tournament 2010 was especially significant given that the event preceded the 2010 Fifa World Cup South Africa.

The introduction of an annual MET staff sports day has significantly improved communication between staff in regions. In some instances, staff get to meet their counterparts from other areas for the first time at this event.

Since its inception during the Etosha Centenary Celebrations in 2007 with support from the SPAN Project, the spirit of the MET Annual Sports Weekend has been jovial, with no irregularities recorded.

The tournament aims to create social interaction and good relations among MET staff members, formulate a code of conduct for the MET's sports and comply with provisions of the Namibian Sports Act.

Furthermore, it has become an annual event for participating teams to engage in clean up campaigns prior to commencement of games.

The SPAN Project was the main sponsor of the tournament.

By Chrispin Nkonkwena, Chief Control Warden: North Central Region

to be held in October to promote the *Southern parks*
ARTP and to pilot a cross-border hiking
trail.

By Samson Mulonga, Field Coordinator:

Colgar's Corner

Park Neighbours

Their contribution to biodiversity conservation

In this edition, I would like to share with you the contribution that park neighbours are making to biodiversity conservation.

Namibia has a well-developed network of protected areas that contributes to the country's conservation objectives and development goals. These areas, which form the cornerstone of conservation in Namibia, are surrounded by neighbours. Examples include the Ehirovipuka, Sheya Shuushona and King Nehale conservancies around Etosha National Park, the Mudumu North Complex between Bwabwata and Mudumu national parks, the Ukwangali initiative with the Mangetti National Park and many more.

diversity.

Members remain committed to building human and capital resources through their community game guards and resource monitors structures to protect wildlife and some species of wild animals that move in and out of the Etosha National Park. They remain committed to the sustainable utilization of wildlife resources through providing possible benefits to their members. These benefits remain ecologically and economically sustainable and are in accordance with the objectives of their neighbour, Etosha, as defined in the management plan.

In their Memorandum of Agreement with the MET and the Kavango Regional Council for the benefit sharing and development of the Mangetti National Park, the Ukwangali Traditional Authority has undertaken to control veld fires and help in the implementation of a burning programme for the park and adjacent areas. They will ensure that the park is free from encroachment by local people or their livestock, and is otherwise secure for conservation purposes. They have also agreed to share information among communities on the benefits of conservation and development of the area. Communities have put structures in place to ensure that they deliver to this commitment.

The Mudumu North Complex is another success story where stakeholders such as the MET, other line ministries, traditional authorities, conservancies, community forests, NGOs and private tourism operators meet, discuss and implement issues of common concern. These include game reintroductions into the area, human wildlife conflict, fire control and management, wildlife crime prevention and law enforcement, community benefits from wildlife and tourism.

Wildlife and protected area managers should continue to strengthen regular contact with park neighbours to promote good relationships and information exchange for enhanced ecosystem conservation and socio-economic development.

Where it is in the interest of improved conservation and promotion of national development goals, the Ministry of Environment and Tourism (MET) works closely with these neighbours, giving particular attention to promoting their socio-economic development and their involvement in biodiversity conservation.

I recently attended the Annual General Meeting of the Sheya Shuushona Conservancy. Several issues were discussed, including their role in the conservation of ecosystems, essential ecological processes and biological

Test your knowledge of Biodiversity

Win with Bushwackers! Find the missing words in the grid, and you could win this fantastic prize, courtesy of Bushwackers Windhoek! It's a NO 2 potjie pot, complete with carrying handle, chopping board and recipe book - all contained in a handy carrier bag!

Hidden words:

biodiversity
conservation
assessments
succulents

monitoring
genotypes
abundance
ecosystem

landscape
endemics
impact
flora

D	C	F	S	T	B	J	A	E	S	G	Q	H	R	C
T	C	A	P	M	I	T	E	R	F	J	L	R	O	V
P	T	C	B	V	O	N	J	P	O	V	Z	N	W	S
E	M	S	C	R	D	O	A	W	K	L	S	N	E	L
A	C	O	T	E	I	M	A	Q	M	E	F	P	P	A
G	N	O	M	N	V	O	P	A	R	B	Y	G	H	N
H	E	I	S	B	E	G	V	V	S	T	M	N	I	D
Y	C	O	N	Y	R	L	A	Q	O	W	M	I	B	S
S	O	C	E	A	S	T	U	N	W	U	P	R	L	C
J	Z	W	K	S	I	T	E	C	O	S	K	O	F	A
Y	C	W	H	O	T	G	E	N	C	F	C	T	X	P
Y	K	H	N	I	Y	Y	W	M	V	U	F	I	E	E
S	T	N	E	M	S	S	E	S	S	A	S	N	X	X
A	B	U	N	D	A	N	C	E	T	M	G	O	H	J
I	U	P	H	Q	H	H	P	K	U	P	S	M	I	S

SPAN Intern Augustine Ganes shows off this edition's prize.



Entries should be sent to SPAN / Bushwackers competition no later than 31 October, 2010.

Bushwackers/ Campworld, situated at 32 Rhino Street, Rhino Park in Windhoek, stocks a wide range of camping and outdoor gear. Take along proof that you work for MET, and you should be eligible for discount on selected goods!

Once you have found the 16 words, send a copy of the puzzle to SPAN Project, PZN Building, Private Bag 13306, Windhoek, deliver to the SPAN Team, Second Floor, PZN Building, Ruhr Street, Northern Industria Windhoek, fax to 061 245160 or email to augustine@span.org.na by 31 October 2010.

The first correct entry drawn will win the prize featured. The judges decision is final and no correspondence will be entered into. This competition is open to all employees of the Ministry of Environment and Tourism only. The winner will be announced in the next edition of *Sandpaper*.

WINNERS

for Sandpaper No 17:

Martha Nakale from MET- Ondangwa and

Ndinelo Heita from MET- Ongwediva.

Park Talk

Park Talk is a bi-monthly talk and discussion session dedicated to Namibia's national parks and their management.

Past Park Talks

- 30 August 2006
"National and Private Parks" The present and the future.
- 6 November 2006
"Parks and Namibian Crafts" Opportunities for smart partnerships towards poverty alleviation.
- 7 March 2007
"Etosha National Park - The Next 100 Years"
- 18 June 2007
NWR Strategic Vision
- 3 July 2007
What effect does tourism have on Poverty Reduction?
- 30 October 2007
Feedback from the Etosha Research Symposium
- 11 March 2008
"Impacts of Climate Change on Park Management"
- 20 May 2008
"The Natural Advantage" New Zealand & Namibian Approaches to Tourism in Protected Areas
- 9 September 2008
"New Environmental Management Act"
- 11 November 2008
"A Journey through Sperrgebiet"
- 11 February 2009
Repeat by demand
"A Journey through Sperrgebiet"
- 11 March 2009
"The Value of National Parks and State Protected Areas to the Business of Tourism"
- 23 June 2009
"Human Wildlife Conflict in Namibia - the way forward"
- 25 August 2009
"Women and Conservation in Caprivi Region"
- 20 October 2009
Tourism in Namibia's North-East Parks: Past, Present & Future
- 23 February 2010
"Recent Progress and the Future of the Transfrontier Conservation"
- 27 April 2010
"Implementation of CITES in Namibia"
- 29 June 2010
"Biodiversity, Poverty Alleviation and Rural Development"

www.span.org.na
info@span.org.na
Tel: 061-2842569

Unlocking the potential of the parks for Namibia
Project of the Ministry of Environment and Tourism

Tuesday, August 24, 2010

Upgrading Etosha

National Park: MCA -
Namibia funded activities

By Dr. Fanuel A. Demas
Director of Tourism
Millennium Challenge Account Namibia

Time: 18:00 - 19:30

Cinema Room

Franco Namibian Cultural Centre
118 Robert Mugabe Ave

Hosted by the

Strengthening the Protected Area Network (SPAN) Project
Ministry of Environment and Tourism

