

Gerald Dick – WAZA Executive Office

Official Launch of the Year of Biodiversity



On 11 January 2010, the Year of Biodiversity 2010 was officially launched in Berlin in the presence of Chancellor **Angela Merkel**. Germany is about to hand over the presidency of the conference of the parties to Japan, where the COP 10 will take place later this year in Nagoya. She also promised to support biodiversity conservation as this matter is of equal importance as climate change. In order to strengthen the importance of biodiversity internationally Merkel urged to establish an interface between science and politics, like the IPCC is doing for climate issues.



UNEP's Executive Director **Achim Steiner** said in his speech that an unprecedented scientific, economic, political and public awareness effort was needed to reverse-and to stop-the loss of the planet's natural assets. Also he underlined that although the biodiversity target for 2010 has not been met, this does not mean that the target was wrong, rather it has to be decided what actions have to be taken for the future.



The Executive Secretary of CBD, **Ahmed Djoghlaif** highlighted the Nagoya meeting of the Conference of the Parties which is promising to become a truly extraordinary event. *There, the Parties will make a final assessment of progress toward the 2010 biodiversity target, set a new biodiversity targets for 2020 and 2050, finalize a comprehensive post-2010 Strategic Plan for ultimately stopping biodiversity loss in the years to come, and establish an international regime on access and benefit-sharing. All of this will be done using a bottom-up approach, with the participation and input of a broad range of stakeholders.*

In order to support the activities of the Year of Biodiversity, WAZA has produced a biodiversity book **Building a Future for Wildlife** which can be ordered at 29,90 € or 45 \$ from www.nhbs.com or www.amazon.com or www.filander.de. Additionally the **Biodiversity Poster** can be ordered from the WAZA secretariat for 15 € or 20 \$. Also the Biodiversity manual on the WAZA website should be used and can be downloaded from the 2010 section. There you can also find the **Species of the Day**, an IUCN initiative for the whole year 2010, showing every day a new species together with a factsheet.

Please support WAZA and make use of these offers! ■



CBD CoP 10



Convention on
Biological Diversity

Achievements and the Zoo/Aquarium Community

WAZA and JAZA as visible conservation partners

The tenth meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD CoP 10) took place in Nagoya, Aichi Prefecture, Japan, from 18 to 29 October, 2010. After the ambitiously set target to “achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on Earth” it not only became clear that this target was not met, but the expectations were high on how the global community would react. In a monster conference, where in total about 18,000 participants took part, it was hoped that clear decisions were made on how to stop biodiversity loss, on how access and benefit sharing (ABS) can be agreed on and how those endeavours can be financed.

The adoption of the Nagoya “package” consisting of the ABS Protocol, the Strategic Plan 2011-2020 and the Resource Mobilisation Strategy constitutes a success not only for the CBD but also for environmental multilateralism. For the implementation of CBD measures the host country, Japan, put 2 billion \$ on the table. The strategic plan will also serve as a guiding instrument for other conventions, such as CITES, Ramsar, CMS, World Heritage and organisations like IUCN, BirdLife, WWF and CI.

The strategic plan is meant to serve as an overarching framework to coordinate all activities under the CBD as well as guiding major biodiversity related endeavours globally. The paper is called “Living in harmony with nature” following a proposal of the very supportive and pushing host country. It consists of a vision for 2050 and a mission, starting with “effective

and urgent action to halt the loss of biodiversity in order to ensure that by 2020 ecosystems are resilient and continue to provide essential services, thereby securing the planet’s variety of life, and contributing to human well-being, and poverty eradication”. The 20 concrete targets are organised in five strategic goals. Those are about the underlying causes of biodiversity loss, the reduction of direct pressures and sustainable use, ecosystems, species and genetic diversity, the ecosystem services and participatory planning, knowledge management and capacity building. Apart from the targets mentioning invasive alien species or coral reefs, target 12 on species is the most relevant one for our community, it reads: “By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.”

NGO meeting with CBD Executive Secretary Ahmed Djoghlaf, Nagoya, 24 Oct 2010.

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© WAZA
Kazutoshi Arai, JAZA Vice-Chair, Kanako Nishimoto of JAZA and Gerald Dick at Nagoya Higashiyama Zoo and Botanical Gardens.



© Gerald Dick / WAZA
Kakapo from Wellington Zoo, New Zealand, with thousands words on the wings.

WAZA activities

With the great support of JAZA, it was possible to jointly organize numerous activities during the conference. Besides two poster demonstrations on biodiversity activities of WAZA and its members, JAZA organized a display tent in the fair area of the conference. Information about zoos and aquariums and educational material was disseminated and hundreds of kids visited the tent and did small handicrafts under the supervision of zoo staff. At two occasions it was possible to present the WAZA Aquarium strategy for conservation and sustainability, also in its Japanese version. On the one hand, a press conference was held with Shigeyuki Yamamoto, JAZA chair, Mark Penning, WAZA president and Gerald Dick, WAZA executive director, on the other hand a side event was especially dedicated to the details of the strategy and its significance for Japan. At this event additionally three concrete examples of conservation work in Japan were introduced: freshwater fishes, amphibians and Japanese crested ibis and Oriental white stork. The presentations can be seen and downloaded from the WAZA website (conservation). The events were very well attended and the contribution of the world zoo and aquarium community to biodiversity conservation in the UN Year of Biodiversity was made perfectly visible.

In early January the United Nations General Assembly proclaimed the period from 2011 to 2020 as the United Nations Decade on Biodiversity in its Resolution 65/161, which reads as follows:

“Decides, following the invitation of the tenth meeting of the Conference of the Parties to the Convention on Biological Diversity, to declare 2011–2020 the United Nations Decade on Biodiversity, with a view to contributing to the implementation of the Strategic Plan for Biodiversity for the period 2011–2020, requests the Secretary-General, in this regard, in consultation with Member States, to lead the coordination of the activities of the Decade on behalf of the United Nations system, with the support of the secretariat of the Convention on Biological Diversity and the secretariats of other biodiversity-related conventions and relevant United Nations funds, programmes and agencies, and invites Member States in a position to do so to contribute, on a voluntary basis, to the funding of the activities of the Decade”; the Decade coincides with and supports the implementation of the Strategic Plan for Biodiversity 2011–2020 adopted by the Conference of the Parties and provides a perfect framework for communication and focus for WAZA as well. ■

To find out more:
www.cbd.int



© WAZA
WAZA JAZA tent with Gerald Dick, Shigeyuki Yamamoto, JAZA Chair, Kazutoshi Arai, JAZA Vice-Chair and Mark Penning.



© WAZA
WAZA Poster display, Gerald Dick and Kanako Nishimoto of JAZA.



© Gerald Dick / WAZA
CBD side event with Mark Penning, Shigeyuki Yamamoto, JAZA Chair and Hisashi Hashikawa of Nagoya Higashiyama Zoo (left to right).

Biodiversity and World Environment Day:

brief reports from different regions



Eoghan O'Sullivan | EAZA Conservation Video Released

EAZA marked International Biodiversity Day with the launch of the association's first ever video, focusing on zoos and *in situ* conservation. The ten minute film, available on EAZA's YouTube channel provides good examples of the many ways in which zoos are partnering with field conservation projects. It includes contributions from Patrícia Medici (Lowland Tapir Conservation Initiative, Brazil) and Nguyen Van Thai (Carnivore and Pangolin Conservation Program, Vietnam), as well as, from the zoo perspective, Bengt Holst (Copenhagen), Christoph Schwitzer (Bristol and AEECL) and Stewart Muir (Newquay).

At the time of writing the film had been viewed more than 2,700 times on YouTube and was also shown to delegates at the EAZA Directors' Day 2010 and the EAZA Conservation Forum. A version with Spanish subtitles, courtesy of AIZA, is also available online, and further translations are expected in the coming months.

WAZA members might like to consider sharing the video with colleagues and visitors. It can be embedded in any website or added as a "favorite" on your YouTube channel. ■

www.eaza.net

www.youtube.com/eazavideo

Karin Leemann Gisler Natur- and Tierpark Goldau – Switzerland

"GEO- Biodiversity Day, an Inventory of Nature": on 13 June, Goldau took part in this internationally coordinated activity. Children and adults searched for 24 hours for species along the river Schüttbach. All species which were found were recorded, be it plants, earthworms or mosquitoes. The main idea was to show that it is not necessary to go to the tropics in order to find many species, but it is possible to encounter biodiversity right at the doorstep. ■



Screenshot of the EAZA biodiversity video.



© Natur- und Tierpark Goldau
Determining river insects under wet conditions, even outside the water.



© Leipzig Zoo
Sabah rhino exhibition in Zoo Leipzig.



© Stefan Worrng, KSTA
Theatre performance in Cologne Zoo.

Frank Oberwemmer Zoo Leipzig – Germany

The 2010 logo is used on leaflets, stationary and posters and is shown on a flat screen at the entrance of the zoo together with a film. For schools a drawing competition has been set up in cooperation with the „Helmholtz-Zentrum“ for environmental research and the Saxonian foundation for nature and environment. An exhibition about the Sabah rhino project has been set up.

Ruth Dieckmann | Cologne Zoo – Germany

To put the focus on biodiversity, this year we decided to arrange for two school competitions – one in cooperation with the Kölner Stadtanzeiger, a local newspaper, the other initiated by our zoo school.

The Kölner Stadtanzeiger ran a project providing students with this daily newspaper over a period of two to four weeks to familiarize themselves with print media. This

project was combined with a competition for the best biodiversity presentation. In this competition, primary school classes were asked to submit their creative projects, while secondary school students had to write a newspaper article on biodiversity. In January 2010, we organised a major plenary session attended by experts from biodiversity research: Theo Pagel and Thomas Ziegler from Cologne Zoo, Stephen Anhalt from Cologne Botanical Garden and Thomas Graner from the Federal Agency of Nature Conservation (BfN) discussed problems and strategies of biodiversity conservation together with almost two hundred students.

Nicola A. Mögel | Zoo Nürnberg – Germany

At the day of biodiversity in the zoo, numerous visitors have been informed about various aspects of marine life, freshwater species, the evolution of species and special adaptations like fur as natural skin

protection. The zoo vet explained the diversity of her work, being responsible for 300 different species. An additional focus of the day was the diversity of livestock breeds. ■

To demonstrate that biodiversity is not only essential in far away exotic countries, we developed a classification guide for European animals. The aim of this booklet is to introduce kids to observing nature. This will enable us to combine the zoo’s efforts in nature conservation overseas with nature conservation in Europe.

The classification of local biodiversity is supported by a booklet that shows the most common local mammals, reptiles and insects. The booklet is available in German and can be ordered at Verband Deutscher Zoodirektoren (www.vdz.de). ■



© Zoo Frankfurt

Raul Acosta and Manfred Niekisch present the agreement of cooperation between their Zoos.



© Zoo Frankfurt

A dog of the Frankfurt custom office in search of forbidden souvenirs.

Christine Kurrle | Frankfurt Zoo – Germany

Prof. Dr. Manfred Niekisch, director of Frankfurt Zoo, with the support of GTZ, celebrated the International Day of Biodiversity in Brazil. There he gave a presentation on Frankfurt Zoo and Nature Conservation at the Ministry of Environment. He and the Director of the Zoo Brasilia, Raul Gonzales Acosta signed a partnership agreement between the Zoos of Frankfurt and Brasilia. The aim of this agreement is to foster the exchange of expertise in research and education and to promote the role of zoos for nature and species conservation *in situ*.

At Frankfurt Zoo the International Day of Biodiversity and the biodiversity week was celebrated by several activities, games and information desks. The ambassadors of conservation, an educative group of volunteers working for the Frankfurt Zoo and the Frankfurt Zoological Society, were excellently involved in these activities. They had taken the visitors on an imaginary journey to Sumatra by showing them animal foot prints and scents of the rainforest.

In addition several other partner organizations promoted biodiversity at the Frankfurt Zoo. At the information desk of "Umweltlernen e. V." and "StadtWaldHaus" the public had the chance to learn about various types of life in freshwater. The Institute of Apiculture presented a bee colony

whereas the "Hessische Gesellschaft für Ornithologie und Naturschutz" imparted knowledge about local birds. Furthermore the "Global Nature Project" built an insect hotel, where they displayed insect nesting boxes.

The dogs of the Frankfurt custom office demonstrated their skills by detecting endangered species and forbidden souvenirs in suitcases. A job they do daily at the Frankfurt Airport.

Last but not least a GTZ exhibition on Amazonia and an exhibition on the work of the Frankfurt Zoological Society completed the program. The Frankfurt Zoo has welcomed nearly 26 000 visitors who took part at the biodiversity week. ■

Thomas Kauffels Opel Zoo – Germany

Meeting and touching biodiversity was the theme of the activities in Opel Zoo in May 2010. ■



© Opel Zoo

Give way to biodiversity, an action plan at the Opel Zoo.

Examination of small creatures under the microscope at the Opel Zoo.

© Opel Zoo





© Zoo Vienna
Vienna City Marathon.



© Zoo Vienna
One school – one tree.



© Zoo Vienna
Reidi Seahorse (*Hippocampus reidi*).



© Zoo Vienna
Species days at the Zoo Vienna.



© Lars Wiklund
School of Nature in Parken Zoo.

Regina Pfistermüller Tiergarten Schönbrunn, Zoo Vienna – Austria

April 18th, Vienna City Marathon

For saving biodiversity we need to be fast and show endurance, just like in a marathon. A team of 26 staff members of the Vienna Zoo joined the Vienna City Marathon to create awareness for the International year of Biodiversity.

May 26–28, One school – one tree

Planting a tree has an impact on many generations to come – on humans, on wildlife and on climate. In cooperation with the Austrian Federal Gardens the Zoo Vienna started a school initiative in which all schools in Austria can pick up a native tree to plant in their school yard. Three distribution sites have been established, one of which was in the zoo. In addition to the tree, informative activities on Austrian Biodiversity, its use and misuse, and on conservation projects the zoo is supporting, was waiting for the students. All together 245 trees were distributed.

June 5–8, World Ocean Day

70% of our planet is made up by oceans, but only 1% of this habitat is protected. But the ocean has a substantial influence on the ecosystems of our planet and on health and wellbeing of humans. Information and quizzes about corals, fish, over-fishing and pollution and destruction of coastal habitats were provided to young and adult zoo visitors at interactive sites throughout the zoo.

August 5–8, Conservation Days

This year's conservation days highlight the International Year of Biodiversity. In addition to presenting the zoo's active role in conservation more than 20 different animal- and nature conservation groups showcase their valuable work for the preservation of habitats and species, these range from international NGOs like WWF, BirdLife or Sharkproject to Austrian national parks, government bodies and local conservation initiatives. ■

Mats Ericson Parken Zoo i Eskilstuna AB – Sweden

The environmental work of Eskilstuna municipality, Sweden, has long been in the front line and since 1996 they have annually celebrated the World Environment Day which has given them an outstanding 15 years record. This impressed the UN who showed the celebrations live on their webpage. This year proved to be not much different and was a great success with the theme "Many species, One planet and One future" and for the first time the celebrations took place at the Parken Zoo where biodiversity and the preservation of endangered animals are considered essential. The visitors enjoyed many activities and exhibitions, all free of charge, including music performances from Pauline, Emil Jensen and Petson, theatre with Captain Mjau. Mikael Karlsson, the President of the Swedish Society for Nature Conservation emphasized the importance of recognizing this day as a means to improve our management of the environmental challenges we face today. ■



© Ronald van Weeren, Artis
Wilderness in Europe, exhibition.

Ebelin Boswinkel | Artis Zoo, Amsterdam – The Netherlands

Conference “Biodiversity”

2010 is the International Year of Biodiversity and in accordance with this Artis Royal Zoo is organising a three-part conference event entitled “Biodiversity, Opportunities for a New Economics” in partnership with the Ministry of Agriculture, Nature and Food Quality, IUCN and the Netherlands Ecological Research Network to take place in November 2010.

The first part is a scientific conference which will look at the contribution of science to biodiversity conservation and will explore the economic value of conserving nature. In addition it will investigate future financial and economic models for transitioning to an environmentally sustainable economy. The second part will focus on small and medium-sized enterprises (SME) as a target group within the private sector and will focus on innovative profit models for SMEs as well as what kind of conservation investments and business strategies are needed if we are to think of the environment as a type of capital that supplies the stream of benefits we depend on for economic prosperity. The third conference will focus on the necessary related innovations which will have to take place in environmental education. A central question is

how to educate according to this approach for a new generation of qualified professionals for Dutch trade and industry. The point of departure is that the private sector’s contribution is of key importance in bringing about a transition to an environmentally sustainable economy and thus the willingness and ability of the private sector to integrate considerations of nature, biodiversity and the complex functioning of ecosystems into economic decisions has the potential of transforming production and consumption processes in the future.

Exposition

The exposition **Wildernis in Europa** in the Zoological Museum Amsterdam (located in the Zoo’s Aquarium) shows the wilderness in Europe and explains its current state.

Lectures (20.00, Planetarium)

- **Van Blauw Blauw tot Killy Killy.** Bert Denneman (Dutch Bird Protection Society) talks about biodiversity and nature conservation in the Dutch Caribbean. (3 August 2010)
- **De Nederlandse natuur bestaat niet.** Menno Schildhuizen (NCB Naturalis and the University of Groningen) explains why there is no such thing as ‘Dutch nature’. (5 October 2010)

- **Mist u de dodo?** Midas Dekkers (reknown author and biologist) provocatively discusses biodiversity: Aren’t 10 million species of animals more than enough? Do we really miss the dodo? (2 November 2010)

Zoo Trails

‘In soorten en maten’ (family trail on biodiversity)

Guided tours

Biodiversity tours by Artis guides

Specials

- Visit the biodiversity garden at the zoo and learn more about plants and biodiversity
- Artis 2010 calendar is all about biodiversity
- **Wat veel soorten!** Artis developed an ‘activity book’ with themed to biodiversity (for children from 6 to 12 years)
- On August 28th visitors can visit the Butterfly Pavilion at night to search for ‘night butterflies’. ■



© Zoo and Chateau Zlín
Tree planting in the Zoo.



© Wellington Zoo
Penguin nest boxes being built at the zoo.



© Wellington Zoo
Giant steel and mesh kakapo before its journey to Nagoya.

Anna Vávrová ZOO and Chateau Zlín – Czech Republic

The **Festival of Biodiversity** was held in ZOO Zlín on Saturday May 22nd, 2010. The day-long entertainment program was prepared by children and teachers from 6 basic schools and 5 environmental education centres. At the beginning of 2010 the employees of the educational department of ZOO Zlín announced a project for basic schools called “We are part of nature, you and me.” The results of their half-year work were presented by individual schools on the Day of Biodiversity.

Visitors to the ZOO could participate in various competitions, games, practical demonstrations and recognition of natural substances, quizzes, puzzles and creative workshops, all aimed at presenting the diversity of Czech nature. The celebration of the Day of Biodiversity also included planting trees of biodiversity in the ZOO and their symbolic watering by representatives of the participating schools. ■

Karen Fifield | Wellington Zoo Trust – New Zealand

Wellington Zoo hosted a special family day to revel in all things green and celebrate the United Nations’ International Day of Biodiversity on Saturday 22 May.

The aim of the event was to raise awareness of the conservation challenges facing the planet today and highlight ways people can make a positive difference to their local environment simply by making some small changes to their everyday lives.

The centrepiece of the celebrations was the launch of the Department of Conservation’s Words on a Wing initiative. This involved visitors writing personal biodiversity message on cardboard feathers and attaching them to a 1.5 metre steel and mesh kakapo.

The Zoo marks the first stop on the giant metallic bird’s journey to the Convention of Biological Diversity in Japan in October 2010, when hopefully it will be covered by 20,000 message feathers written by young people across New Zealand.

There was also a special programme of events hosted by the Department of Conservation taking place at the Zoo’s Wild Theatre, including face painting by BodyFX, comedy from The Improvisors and music from drumming troupe Nimba.

The celebrations at the Zoo were organised in partnership with the Department of Conservation, Forest & Bird and WWF New Zealand.

Penguin nest boxes were made at the Zoo by Zoo Crew members. These boxes will be placed on the Wellington south coast to assist wild penguins with nesting places as part of the “Forest and Bird Places for Penguins” programme which the Zoo supports.

All Zoo staff renewed their sustainability commitments for the year. ■



© Nikolaev Zoo

Dancing performance at zoo event.

Vladimir Topchy Nikolaev Zoo – Ukraine

About 30 holiday events, special events and ecological thematic actions are carried out on Nikolaev Zoo territory, annually. Since the beginning of 2010 the holidays **Earth Day**, **Day of Children Defence** and **World Environment Day** have become the brightest ones. Those events, carried out on the square, in front of the zoo, gather hundreds of enthusiastic spectators. As a rule, the program of any holiday includes the appearances of vocal and choreographic groups, competitions, quizzes, ecological agitations, get-up of thematic stands on the zoo territory, spread of leaflets and showing of films on the given theme to the visitors. Young naturalists, together with zoo employees, participate in holiday preparation. Ecological organisations, collaborating with our zoo, also take part to prepare the events. More than 80,000 visitors participated in those activities in 2010. ■



© S. Mamatha, Faculty, DPRS College

WED/IYB Drama at DPRS College, Mysore.



Sally Walker | Z. O. O. and SAZARC in South Asia

At least 19 organizations (3 Zoos, 2 Forest Departments, 9 conservation NGO's and 5 schools) took up the WAZA suggestion to combine WED and IYB, planning programmes themed **Many species, One planet, One future**. ZOO/SAZARC coordinated and supplied 1500 WED – IYB kits to all the organizations but the number of participants seems to have reached about 5000 in India. See brief remarks about a few programs. CEE Centre for Environmental Education, whose banner ran 5 days with multiple governmental agencies from Natural History Museum, Pollution Control Board, Science Centre, etc. attracted 600 participants in Bhopal. They used our WED IYB booklet for several lectures explaining the significance of the combination of events. Bushra Khan, Education officer of Lahore Zoo, Pakistan celebrated WED&IYB using bats as part of the biodiversity theme with assistance of a local bat researcher Dr. Mamood Hassan. S. Mamatha organized a WED – IYB event at De Paul School, with a drama using contents of ZOO

WED packets & explaining loss of species and habitat. A student explained "Life on Earth" and another presented on biodiversity, after which each class planted a tree to join the other 4,000 varied plants on campus. B. A. Daniel, Scientist at ZOO, arranged IYB&WED with Anbu Charities in Coimbatore. Anbu helps less privileged students, providing free night time coaching. With 41 students from 13 schools, staff and parents celebrated 5th June, most participants attending an environmental event for the first time ever. A set of cards helped convey the word "biodiversity" and 5 kingdoms of life and convince students to teach biodiversity concepts to family and friends. Full coverage in press and local TV was arranged by Anbu. Other programs were conducted by WWF, North East in Assam and Arunachal Pradesh States, in Chennai (3) and Madurai, 4 in Coimbatore, in Calicut, Mysore, Pondicherry, Hyderabad, Trivandrum, Guntur, Chandigarh, and Orissa State in India and in Lahore, Pakistan. ■

Biodiversity and World Environment Day: brief reports from different regions



UNEP WED2010 WORLD ENVIRONMENT DAY • 5 JUNE MANY SPECIES ONE PLANET ONE FUTURE

Kateřina Kosov | Zoo Jihlava – Czech Republic

Activities were carried out on Earth Day, 24 April, events and accompanying programmes focusing on biodi-

versity, and on Children’s Day, 28 May with an elementary school competition between childrens’ groups. ■



© Kateřina Kosov



© Kateřina Kosov



© Kateřina Kosov



2010 International Year of Biodiversity


BIRDS DEPEND ON TREES

ARBOUR MONTH

MONTECASINO
WE'VE GOT IT


IN SEPTEMBER WE CELEBRATE ARBOUR WEEK

This was originally started in 1872 in Nebraska USA. A gentleman by the name of J. Sterling Morton, who was an ex-governor of the state, saw the need to replace the trees taken out by mankind to make space for agriculture and development. This initiative soon spread throughout the world.




In South Africa we celebrate Arbour Day once a year in September by choosing a common and rare indigenous tree that could be planted around your garden. This year the common tree is the Fever Tree (*Acacia xanthophloea*). One of the rare tree species selected this year is the Wild Gardenia (*Rothmannia capensis*).

Trees play a vital role in the environment by filtering out toxins from the environment. They filter out the air we breathe through the process of photosynthesis and absorb chemicals from the soil that are harmful to us and other organisms.



Some Birds also enjoy the fruit of the Wild Gardenia. The fruit is eaten by the Grey-Go-Away Bird (*Corythoides concolor*). They are able to feast on the flesh of the fruit and pass on the seeds through their scat into different habitats. This is how the trees ensure their survival.



Birds depend on trees for shelter and food. This means that environments that trees are found in provide animals with suitable habitats in order to survive. The Waffled Starling (*Certhopora cinerea*) would use the fever tree to nest in because of the protection it provides. The Fever tree has long white thorns that would deter predators wanting to feast on chicks and birds on eggs that are nesting in the trees.



MONTECASINO BIRD GARDENS

DEMOISELLE CRANE



(Anthropoides virgo)
The Demoiselle crane is 85-100 cm long with a 155-180 cm wingspan making it one of the smallest in the world. It has a long white neck stripe and the black on the front of the neck extends down over the chest into a plume. It has a loud trumpeting call that can be heard several hundred meters away. Like other cranes it has a dancing display during courtship as well as when displaying to other threatening individuals in a dual for territory and mating rights.



REPRODUCTION
The species of crane breeds in central Russia, with a few found in the Arabian peninsula. Some smaller groups have been found as far as western and Northern Pakistan. The crane migrates to Northern Africa and India in winter.

FEEDING AND HABITAT
Demoiselle Cranes spend a large amount of time in the grasslands surrounding marshes and wetlands foraging for seeds, roots and other plant matter. They only feed on insects who are a rich source of protein that provide them with the fat and body mass they need to overwinter with. They rarely are found more than 500 meters from the marsh or wetland edge as water-logged habitats are easy to probe with their sharp, spearlike bills in search of food.

IF THEIR MEAT IS APPROACHED OR FEARED BY PREDATORS, THEY WILL TAKE A WING INJURY IN ORDER TO DISTRACT THE PREDATOR FROM THE NESTING SITE. IF THE PREDATOR OR OTHER BIRD COMES TO CLOSE THEY WILL INSTANTLY MAKE THEM ESCAPE, FLYING OFF INTO THE DISTANCE.

MIGRATION
Many birds fly south to the effects of one of the harshest migrations known to man. They will leave their summer foraging and nesting grounds of Russia and the Arabian Peninsula during the months of March and April, where they will fly to the northern parts of Africa and southern tip of the Asian continent to winter in. They will fly over the Himalayas and weather some of the coldest mountainous wind and cloud. In order to avoid the grip of the weather they have been recorded to climb up to 28,000 feet above sea level. This is as high as some of the commercial climbers. Many will not make it due to fatigue, hunger and predation by other large raptors. They migrate back to their northern habitats during the months of August and September when they take their autumn flight over the Mediterranean, for the second time.

REPRODUCTION AND CARE
These birds will breed in the meadows on the edge of the wetlands in Asia and produce two eggs. The first egg that hatches and grows will be fed up and looked after. The second insurance egg will normally be left to fend for itself and perish, unless the first chick is too weak to survive. The eggs take between 28 and 30 days before they hatch. Both parents will spend time incubating the egg in turns as the other feeds in the meadows on grass, seeds and other plant material.

PROTECTOR
Photography will show that parents between the ages of 2 to 5 months when they will start to feed for themselves and learn correct ground for security and feeding back. Area will follow the flock until they are approximately 2 years old when they part up for life and mate for the first time. These birds may reach the age of 20 years if they do not succumb to the migration challenges before them.

PROTECTING THEM AND THE HABITAT
These birds are classified as LEAF CONSERVATION on the ICHN Species Red List. This means that there are more than enough individuals to ensure a healthy number of cranes to sustain the existence of the species. Their numbers are estimated to be from more than 10,000 individuals. They are protected under the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA). The 18 Countries that signed the agreement have promised to deal in the conservation of habitats for these birds as well as regulating human traffic and other activities that may have negative implications on the survival of the species.


TREE OF THE YEAR 2010

DID YOU KNOW?

The Fever Tree (*Acacia xanthophloea*) is a tall tree that may reach to 25 meters tall and spreading its thorny canopy over 10 meters wide.

MONTGOMERY SAYS....

"Their name is derived from the Greek language. Acantha means thorny or spiny. Xanthos pertains to the yellow colour and Phloios means bark."




CYCADS IN THE GARDEN

DID YOU KNOW?

Cycads are also known as "living fossils". They have been estimated to be around in the time of the Dinosaurs and they also made up the majority of their diet.

MONTGOMERY SAYS....

"There are Sixty Three (63) living species of cycad from the Genus: Encephalartos of which the majority are endemic to Africa. At Montecasino Bird Gardens we have a Cycad that is estimated to be as old as 2500 years old, aptly named 'Old Snake'."



Martin-John Van Rooyen |

Montecasino Bird Gardens – South Africa

We at the Montecasino Bird Gardens have celebrated the year of Biodiversity by making use of educational posters that are erected at our gate on a monthly basis. The themes change monthly and we erect new legends every month according to the theme for the month. We did not

only concentrate on animals but also diversified into elements such as Arbour Month and Pets as Gifts during Christmas time. Life is a celebration and the legends and posters have been designed in such a way that this message is illuminated to our public

and the joy of life is seen in our Bird Gardens as the Public walk around. These posters are on display in our restrooms as well. ■



© Lory Park Zoo

One of our young patrons with a Spotted eagle owl (*Bubo africanus*) perching on his arm.

Althea Guinsberg |

Lory Park Zoo and Owl Sanctuary – South Africa

On the 5th September 2010 was International Vulture day. Lory Park Zoo and Owl Sanctuary participated in the vulture culture theme of the day. As part of Lory Parks commitment to conservation and preservation it was of up most importance to get our public involved in the activities of the day and to educate the public about the plight of these majestic kings of the sky. Each family received a programme of the day which featured ten fun facts about vultures.

On the day we did guided tour of our Bird of Prey section, where our patrons had the opportunity to go with our Bird keeper Magdali Theron around the section. The talk was based on the *ex-situ* conservation projects that the zoo is involved in like the Southern Ground hornbill project and to meet our 4 different species of vultures and to learn about each of their different characteristics. Enrichment in the form of hanging horse legs were put in the enclosures of the vultures where the public could watch them pull and tug at their food, displaying their natural adaptations.

Kids had a table where they got to colour in vulture drawings and give their vulture a name. This was then followed with the opportunity to have a close and personal experience of interacting with another bird of prey species in the form our Spotted eagle owls.

We had two guest speakers from the University of Pretoria, Low De Vries and Cromwell Purchas who both did fanatic PowerPoint presentations about the misconception that vulture have, global threats to vultures and why it is important to conserve our vultures in Southern Africa. It was a hugely successful day and we felt that we had left an impression on our public in terms of driving home a conservation message about vultures and irreplaceable role they play in our environment. ■



© Lory Park Zoo

Our visitors on the guided tour

of Lory Park Zoo's Bird of Prey Section.



© Lory Park Zoo

Vulture conservation talk.



© NZG
Biodiversity Week
focusing on schools.



© NZG
Listening and acting
at biodiversity week.

Elize de Jager |

National Zoological Gardens, Pretoria – South Africa

In order to celebrate Biodiversity Week, the NZG joined forces with South African National Biodiversity Institute (SANBI). SANBI provided a bus service and the NZG allowed free entrance to the zoo for certain disadvantaged school groups during the week 17–21 May 2010.

Although a number of our lessons focused on biodiversity to a lesser or greater extent, Biodiversity Week was celebrated with a fun-filled 'Biodiversity' programme. Our programme was aimed at Grade 8 and Grade 9 learners (12–14 year olds). These learners first went to the National Botanical Gardens where they followed

a programme on plant biodiversity, and then came to the NZG where they participated in a programme on animal diversity. Learners formed an understanding that living organisms are linked to each other and depend on each other in complex food chains and food webs which have to be conserved because they not only provide human beings with the resources that we require, they also maintain life on Earth. This collaborative effort with SANBI to convey the message of the celebrating and conserving of biodiversity was a first for our Department and set the cornerstones of many more such joined programmes to come. ■



© uShaka Sea World
Underwater experience at WED 2010.

Jone Porter |

uShaka Sea World, Durban – South Africa

For Biodiversity Day in May and World Environment Day in June, uShaka Sea World focused on a fun children's day. The theme for each of the two days was biodiversity and what you could do to make a difference. We had African Penguin masks for children to colour in, and they were told how endangered these endemic sea birds are, and what value they have for the South African coast line. Special time slots were allocated at different exhibits and displays in the Aquarium to educate families more about our marine species in a fun way. These included interactive displays and touch tables to attract children's attention.

If they ventured across to the seal stadium they could learn how to 'talk' like a seal, or meet a diver at the Snorkel Lagoon and find out how he experiences the underwater diversity. The dolphins were also sure to include their thoughts about our marine environment and biodiversity which was presented at the start of the shows. Chat stations in the Aquarium provided more information for the adults so that they too could learn more about fishing, sharks and invertebrates from the sea. The aquarists did a short underwater skit at the start of the Open Ocean Feed and the rays kept interrupting as they were impatient for their food. The Education Centre also screened the film 'The End of the Line' (which looks at the impacts of the fishing industry on fish stocks and fish diversity) during the week of biodiversity. ■



© JHZ

Planting a tree at Johannesburg Zoo.



© JHZ

Promoting and understanding the function of trees.

Louise Gordon | Johannesburg Zoo – South Africa

Johannesburg Zoo celebrates a number of Biodiversity events per year. We have changed the focus of all our environmental days to focus on ecosystems in their entirety, instead of just focusing on the message of each environment celebration day. This was done to address the low levels of understanding of ecosystems found in most visiting schools. If we focused on trees only during Arbor Day, the learners would not be able to form the connection between water conservation, animal conservation and trees. In this regard we renamed the environment days to Biodiversity days/events and included a number of specialist stakeholders to assist in presenting during these events. Each stakeholder would have an opportunity to focus on a specific part of the ecosystem such as water, food plants, trees and animals.

Johannesburg Zoo celebrated the following 10 Biodiversity events: February: National Wetlands day, March: Water week and Earth Hour,

April: Earth Day, May: Day of Biological Diversity and the annual Bird Fair, June: World Environment Day, July: Carnivore Week, August: Primate Week, September: Arbor Day

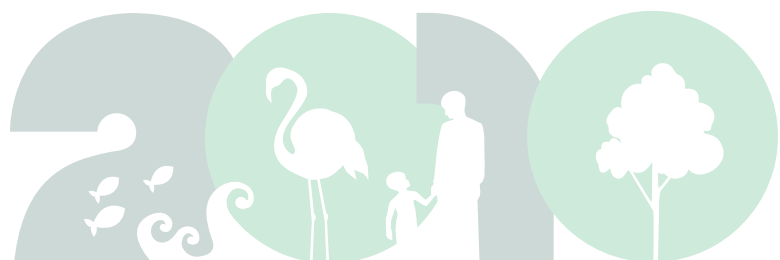
During each of these events we included presentations and activities that would focus on the various aspects of ecosystems. The Zoo would present mainly on the conservation of animals and the interrelationship between animals, plants and abiotic factors.

The participants came from various schools, many from previously underprivileged areas which were sponsored by corporates and the Zoo, as well as the general public and family groups. The number of learners and adults that attended these events totaled at 13 145. Events were mainly held during day time but for Earth hour and the Bird Fair we arranged sleep-overs in the Zoo. ■



© JHZ

Arbor Day and creatures in close-up position.



2010 International Year of Biodiversity