

# WAZA 64th Annual Conference and WAZA congress

**The 64th Annual Conference of the World Association of Zoos and Aquariums, and a special first-time a WAZA Congress, open to the public, was hosted by St. Louis Zoo at The Ritz-Carlton Hotel, St. Louis Missouri U.S.A. The Conference theme was "Zoos and Aquariums: global challenges, opportunities and strategies".**

## The WAZA Congress

The Congress and Conference opened with a Welcome Address by host Jeffrey Bonner, Director, St. Louis Zoo. Jim Maddy, President and CEO of the American Zoo Association welcomed the group to the Region. There was also a welcome address by WAZA President, Gordon McGregor Reid.

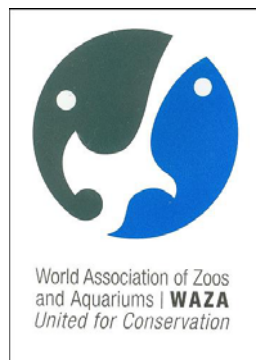
Afterwards there was a keynote address on Conservation and Sustainable use of Biodiversity from Z to A: Zoos & Aquariums & the Convention on Biological Diversity for 2010 & Beyond by Ahmed Djoghlaflaf, Executive Secretary of the UN Convention on Biological Diversity. Immediately following his address there was a formal signing of the Memorandum of Understanding between WAZA and CBD by Ahmed Djoghlaflaf and Gerald Dick, Executive Director, WAZA.

Other keynote addresses by luminaries in their niche or field of conservation were:

- Simon Stuart, Chm, SSC, IUCN, Global Biodiversity Challenge: What must we do to turn the tide?
- Jane Smart, SSC, IUCN, The IUCN Red List of Threatened Species: Reaching the WAZA Public
- Russ Mittermeier, C.I., Conservation Prioritisation; The Challenge of the Hot Spot Concept
- Katie Frohardt, Strategic Importance of Flagship Species & Habitats
- Ward Hagemeyer, Conservation, Human Development & Poverty Alleviation: Benefits & Challenges
- Rick West, ICOM, New Challenges for ICOM-International Council of Museums

The public portion of the Congress which included also presentations related to Communication and Public Awareness went up to 4:30 after which it was closed and WAZA closed meetings and workshops began.

A few keynote addresses of the Congress will be summarised in this issue. Also the Reports of the three Asian regional Associations, JAZA, SEAZA and SAZARC as well as the Heini Hediger Award will be included in this issue. Some remaining items of interest from WAZA conference will be carried over till February issue, that is the edited or summarised committee or working group reports which would be of interest to the zoo community at large, continuing next issue.



## Some Congress Keynote Presentation Summaries or Abstracts

### The Global Biodiversity Challenge : What must we do to turn the tide?

**Simon Stuart,  
Chair, Species Survival Commission, SSC, IUCN,**

We are fortunate to have certain tools for meeting the challenges of declining global biodiversity. One of these which is key to turning the tide is the IUCN Red List Criteria and Categories so that we know where we are and what we are losing fastest. The completed and ongoing assessments include:

- Global Mammal Assessment 2008
- Global Amphibian Assessment 2004
- Global Marine Species Assessment
- Global Freshwater Biodiversity Assessment
- Global Reptile Assessment
- Plant and Terrestrial Invertebrate Assessments
- Sampled Red List Index

Threat levels for many groups in that list were very high. The main threats are :

- Habitat loss for all species groups
- Over-hunting for mammals and turtles
- Invasive species for birds
- Disease for amphibians
- Over-fishing for sharks and groupers
- Bycatch for sharks
- Ocean warming and acidification for corals
- Illegal collecting for cycads Biodiversity trends

Despite all that, there is some good news :

- Although last year we recorded deterioration in status for 183 species, 40 species improved.
- 5% of threatened mammals have increasing populations
- 16 bird species were prevented from going extinct in last 15 years due to conservation efforts
- We increasingly know where and how to act

But the Biodiversity Crisis is getting worse with the three Major Species Extinction Crises

- **Amphibians**
- **Corals and**
- **Asian large animals**

In **Amphibians** the disease chytridiomycosis has devastated the populations of hundreds of amphibian species since 1970, especially in Australia and the Americas.

In **Corals**, there have been catastrophic declines in abundance associated with bleaching and diseases

driven by elevated sea surface temperatures. The situation has deteriorated dramatically since the mid 1990s.

In **Asian Large Animals** there have been massive decreases in wildlife populations in the last two decades, especially in Southeast Asia and China.

#### **What this mean for zoos? What can zoos do ?**

- Among the conservation organisations, there is a shift away from a focus on species
- Zoos should aspire to becoming the driving force in biodiversity conservation – both *in situ* and *ex situ*. There is a vacant niche that must be filled!

#### **Amphibians**

- Join the new Amphibian Survival Alliance (ASA) and make contributions (in-kind, facilities, financial, etc) to it so that both *in situ* and *ex situ* amphibian conservation can take place.
- Expand the AmphibianArk, which will be the *ex situ* component of the ASA.
- Help establish a worldwide Amphibian Conservation Fund under the ASA.
- Help ensure that the core costs of the ASA staff are funded.

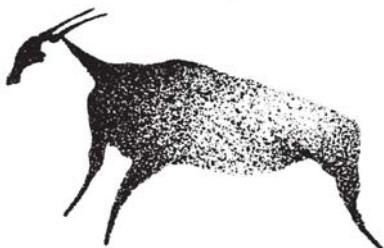
#### **Corals**

- Set up captive breeding programmes for coral species, starting with those most impacted by coral bleaching.
- Lobbying governments to negotiate seriously on climate change.
- Running public education programmes on climate change, and helping to mobilize public support for radical new climate policies.

#### **Asian Large Animals**

- Join the new IUCN initiative to save Asian large animals from extinction, with a particular focus on supporting field projects protecting the species most at risk.
- Help secure funding for the coordinator of the initiative so it can get started.
- Implement captive breeding programmes where needed.
- Raise public awareness of the plight of Asian large animals.

***If we don't think big, then we won't have a significant impact on the crisis. It's a massive challenge, but conservation does work.***



SPECIES SURVIVAL COMMISSION

## **Prioritisation: The Challenge of the Hot-Spot Concept**

**Russ Mittermeier, Conservation International**

*Editorial Note : Dr. Mittermeier didn't have a text version of his presentation but permitted us to use a similar piece from his book, Hotspots Revisited.*

Biodiversity is the sum total of all life on Earth, our living legacy to future generations. It is the basic underpinning of sustainable development, that wealth of genes, species, ecosystems and ecological processes that makes our living planet what it is. That's why we give Biodiversity so much importance. Life on earth faces a crisis of historical and planetary proportions. Unsustainable consumption in many northern countries and crushing poverty in the tropics are destroying wild nature. Expanding agriculture, industry, and urbanization are fragmenting and eliminating natural environments, accidental and deliberate introduction of exotic species is wreaking havoc with native communities, pollution is altering complex biogeochemical and climate cycles through the land, air, and water, and hunting, trade, and over-fishing are decimating the last populations of large vertebrate species (Vitousek *et al.* 1997). Biodiversity is besieged.

Extinction is the gravest aspect of the biodiversity crisis; it is irreversible. While extinction is a natural process that is part of the history of the planet, the fossil record indicates that, in the absence of humans, the lifespan of a species averages one million years (May *et al.* 1995). Now, however, human impacts have elevated the rate of species extinction by at least a thousand, and possibly several thousand times the natural background rate (Pimm *et al.* 1995). Mass extinctions of this magnitude have only occurred five times before in the history of our planet; the last, probably caused by a cataclysmic asteroid impact 65 million years ago, brought the end of the dinosaur age (Alvarez *et al.* 1980).

It is easy to imagine the disasters that humanity would face if the rate of other natural processes, such as the frequency of floods or disease transmission rates, increased a thousand-fold. The world as we know it would be devastated. But what exactly do we lose with the catastrophic extinction of other species? Foreclosing future resource-use options is perhaps the most obvious consequence.

The biodiversity crisis could be compared with burning down the world's libraries without knowing the titles of 90 percent of the books or the content of most of the pages of the known books. Less tangibly, but no less importantly, species extinction inflicts a deep cultural, spiritual, and moral wound on humanity. All of the world's societies value species for their own sake, over and above any utilitarian purpose, and wildlife—especially the

larger vertebrates and many plants—are an integral part of the fabric of all human cultures (Wilson 1984, Wilson & Kellert 1993).

Meanwhile, the road to extinction is also perilous to people who are coping now with emerging infectious diseases.

In order to stem the extinction crisis most effectively, we must prioritize where we should act first. Most conservation is, and always will be, local. People care most about what is happening in their own backyards. We believe that all biodiversity is important and that all nations and communities, however large or small, should do everything possible to conserve the biological riches on which they depend. However, several efforts at the local scale have planetary consequences that transcend local and regional scales and thus justify priority allocation of scarce financial resources.

The establishment of priorities for conservation is a complex issue (Margules & Pressey 2000). The problem can best be framed by a question—in which areas would a given conservation dollar contribute the most towards slowing the current rate of extinction of global biodiversity? We must measure not species richness but endemism—the degree to which species are only found in a given place. This can be thought of as a measure of irreplaceability—in essence, the number of geographic options one has for the conservation of the species found in a given area (Pressey et al. 1994).

Since we cannot conserve a species that is endemic to a given area anywhere except in that area, the area is wholly irreplaceable at a global scale. A further problem concerns which species we should evaluate. We know that we cannot map all species because we have not even named most of them. Whether or not the distributions of plants and vertebrates—the species we know best—are mirrored by the myriad of unknown terrestrial invertebrate species, remains an open question, though some evidence suggests that they may be (Howard et al. 1998). One of the largest gaps in our current knowledge remains in the aquatic realm, which is in critical need of effective conservation action. Distributions of species in marine and freshwater environments remain largely unknown, although ongoing projects are addressing this issue. Finally, and quite fortuitously, vascular plants and vertebrate animals tend to be large, and play prominent roles in structuring ecosystems (Terborgh 1988), although species that we know less about are also vital for ecosystem processes (Wilson 1987).

Our ultimate goal is to keep nature intact, which means that we must stop anthropogenic species extinctions. To approach this goal, we must slow the rate of species extinction as much as possible (over and above simply conserving as many species

as possible) with whatever conservation resources we have at our disposal, which requires incorporating threats (or vulnerability) and costs into priority setting. Like species, threats are hard to measure. However, the extent of habitat destruction is one useful metric, given the well-documented relationship between the size of an area of habitat and the number of species it retains (Brooks et al. 1997). Other measures, such as human population density (Balmford et al. 2001), can also be used.

Thus, we identify those areas that hold species found nowhere else and that are guaranteed to lose species if the areas are not conserved. Among these, we rank our actions based on threats, with the most threatened biodiversity receiving the most urgent action. Wherever we have choices, or equal levels of endemism, we should select opportunities for conserving the least expensive (and hence often least threatened) areas. In effect, we need a dual conservation strategy that always prioritizes endemic-rich areas and ensures that we protect the most threatened places with species that we will otherwise lose, while preemptively protecting equally unique places that are not yet under extreme threat.



The Convention on Biological diversity is based on three objectives : the conservation and sustainable use of biodiversity and the equitable sharing of the benefits from the use of genetic resources. Zoos and aquariums are important partners in the implementation of these objectives around the world as they can reach out to national audiences such as researchers and public. Their support comes in a variety of areas: Zoos and Aquariums support the provisions for *ex situ* conservation of the convention; they are important research facilities that can help build capacity at home as well as with partners abroad; they are important partners in communication, education and public awareness. As the world community approaches 2010-- the International Year of Biodiversity - and begins to set target and priorities for biodiversity efforts in the upcoming decades, continued and renewed engagement by zoos and aquariums will be required.

*(Anonymous quote from WAZA Conference Programme)*

## The IUCN Red List of Threatened Species -- Reaching the WAZA Public, Jane Smart, IUCN

### Abstract.

The IUCN Red List of Threatened Species™ is recognized as the world's most objective and authoritative system for assessing risk of extinction of species. Despite high recognition amongst the conservation community it has relatively little recognition among the general public and private sector. A new Red List logo, together with symbols depicting the IUCN Red List threat categories, aim to raise awareness of the need for species conservation by engaging new target audiences. This presentation will explore their application in zoos and aquaria given their significant role in educating the public about conservation.



## Strategic importance of Flagship species and Habitats, Katie Frohardt, Fauna & Flora International

**Abstract.** FFI was founded over 100 years ago. It has as its mission to conserve threatened species and ecosystems worldwide, choosing solutions that are sustainable, based on sound science and take account with our close partnerships with local organisations and communities who often value different parts of the biodiversity landscape, we crafted a focus on "flagship species and habitats" as we matured our presence of the US. The presentation focuses on the logic behind this focus on "flagships," and on a definition and application that strategically leverages ecological, economic and cultural values to broaden the constituency for biodiversity conservation over time.



Particularly relevant for a WAZA gathering, are opportunities a focus on flagships creates for *in-situ* and *ex situ* conservation communities to collaborate effectively, and in a way that is of ever-increasing relevance to protection of world biodiversity -- a shared goal.

## Conservation, Human Development and Poverty Alleviation: The Benefits and Challenges

### Ward Hagemeijer, Wetlands International

**Abstract.** In the world of today conservation and sustainable use of biodiversity - as one of the major ecosystem services - are most likely to be successful, especially in the long term, if they happen in harmony with development. Important stakeholders, decision makers, donors and local communities alike, need to become the owners of such an integrated approach. Demonstrating the benefits of healthy ecosystem services for people, especially the natural resource dependent poor,

can guarantee that development becomes (more) sustainable, and shifts from just a major threat to a potential opportunity. This requires a mind-shift from developers but also the conservation world.



As mentioned earlier, Conservation & Sustainable use of Biodiversity from A to Z: Zoos & Aquariums & the Convention on Biological Diversity for 2010 and Beyond, by Ahmed Djoghla, Executive Secretary of the UN Convention on Biological Diversity was the keynote address which was followed by a formal signing of the Memorandum of Understanding between WAZA and CBD by Ahmed Djoghla and Gerald Dick, Executive Director, WAZA. These events got the Congress off to a dignified beginning.

After the first session of the Congress, both Monday and Tuesday, an array of invited speakers from the zoo community itself gave a wide range of presentations within the conference theme. In the afternoon there were committee meetings and workshops interspersed with more thematic presentations and a couple of outstanding outings to places of interest in St. Louis. Tuesday afternoon the congress ended and the remaining two days were Conference with more scientific presentations, and continued meetings and workshops on WAZA business. It was a very instructive and inspirational event which fired up all members to further their conservation actions.

In the next few pages are a few of the summaries of presentations, reports and activities, selected for their interest to readers of ZOOS' PRINT.

