CBSG & WAZA working together for wildlife conservation
Annual meetings 2005 - New York

For many years now the (currently called) Conservation Breeding Specialist Group CBSG and the (currently called) World Association of Zoos and Aquariums WAZA have been working together for wildlife conservation. There is often confusion about the relationship, mandate and overlap due to the history and even the nomenclature of both organisation.

CBSG is an IUCN Specialist Group which, in fact, used to be called the International Zoo Liaison Committee but later came to be called the Captive Breeding Specialist Group and is now called the Conservation Breeding Specialist Group. Even now, people get confused about CBSG because the activities of this specialist group not only encompass much of what goes on in zoos and other captive breeding institutions but conservation science as applied to field conservation as well. In point of fact the Conservation Breeding Specialist Group should be called the Conservation Biology Specialist Group, because "conservation biology" is the best and perhaps the only term to encompass its very wide range of tools, processes, skills, training and activities. This will be seen by the summary reports of the CBSG Annual Meeting working groups from this year's annual meeting, which was held in Syracuse, New York ... just minutes away from New York City (by flight) where the annual WAZA meeting was held.

WAZA is a member of IUCN which used to be called the International Union of Directors of Zoological Gardens, or IUDZG. A few years ago the name was changed to reflect the changing philosophy and direction of the organisation, which was, in fact, influenced quite a lot by the relationship with CBSG and its founder Dr. U. S. Seal, now sadly deceased. WAZA now, as can be seen by the World Zoo and Aquarium Conservation Strategy directing its efforts to the highest conservation priority, e.g. saving species *in situ.*

The two organisations have been working together for a quarter century and it is fair to say that both have influenced the other. It is too early to reflect on the exact history perhaps but one hopes that someone is remembering and recording the entire series of events that led to the evolution of CBSG and WAZA as truly holistic scientific conservation organisations with high standards of ethics and welfare for carrying out both *in situ* and *ex situ* conservation.

ZOOS' PRINT, starting our third decade of regular monthly publication with this issue, and Zoo Outreach Organisation owe much to both organisations, whose development and evolution have influenced and even occasionally been influenced by Z.O.O. and its vociferous advocacy of certain principles, particularly regarding zoos in developing countries.

This issue of ZOOS' PRINT is dedicated primarily to the output the meetings of CBSG and WAZA 2005 which a few people from South Asia were in a position to attend.

We continue with our serialisation of the World Zoo and Aquarium Conservation Strategy and our promotion of the WAZA Project Branding initiative and the new WAZA Resolutions, Statements and Guidelines (December issue contained much information about this), and have included also brief summaries of the working groups of the Conservation Breeding Specialist Groups.

In November - December, even after this issue was prepared for press Zoo Outreach Organisation conducted its third annual CBSG/RSG meeting and its sixth annual SAZARC meeting. In all liklihood, February issue will be devoted to reports of those meetings.

We look forward to another decade of ZOOS' PRINT Magazine and Journal with more and more cooperation and collaboration with CBSG, RSG and WAZA.

Overview of CBSG & WAZA Annual meetings 2005 - New York

The theme of the 2005 CBSG ANNUAL MEETING was Responding to Emergent Issues and Urgent Needs. The meeting began with several preliminary meetings of the Global Conservation Network Board, the CBSG Steering Committee and a Regional Networks meeting. The meeting was hosted by the Rosamond Gifford Zoo and its Director, Dr. Anne Baker (who, incidentally, got her Ph.D. for work on macaques in Sri Lanka and is the wife of CBSG Chairman, Dr. Bob Lacy).

The meeting was warmly and inspiringly welcomed by comments from Nicholas Pirro, Onondaga County Executive and a moving speech by Oren Lyons in welcome from the Onondaga Nation. Dr. Kathy Holzer gave a singularly outstanding presentation of CBSG's year in review followed by Bob Lacy, Chairman's discussion of Urgent responses to emergent issues. Dr. Onnie Byers provided an Introduction to the Meeting Format and Working Group Topics which were

• Development of self-sustaining populations of elephants in the world's zoos and the global zoo community's role in elephant conservation (Bruce Bohmke)
• Issues related minimizing the use of wild-caught birds to support zoo exhibits and educational programs (Chelle Plasse)
• Coordinated global strategies for zoos to assist with conservation of rodents, bats, and other small mammals (Pete Riger)
• Emerging problems with mariculture (Brad Andrews)
• World Zoo and Aquarium Conservation Strategy - CBSG's role in implementation (Jo Gipps)
• Global, coordinated zoo-based conservation project prioritization (Jeffrey Bonner)
• Extractive reserves concept (Bill Conway)
• Low currency country (LCC) zoo engagement initiative (Sally Walker)

The meeting consisted of working groups on these topics and Regional reports of CBSG networks as well as a symposium and panel discussion of the issues of Disease and Conservation, moderated by Dr. Phil Miller and including Steve O'Brien: Plagues and Adaptation: Learning the Genomic Lessons of History, Laura Hungerford: Epidemiology of emergent diseases in wildlife populations, George Kollias: Disease surveillance and health assessment for translocated otters followed by A brief history of disease risk assessments in CBSG by Phil. The last day ended by a very enjoyable afternoon and dinner at the Rosamond Gifford Zoo where Awards and special thanks announced. The winner of the Ulie Seal Award this year was Georgina Mace, a well-known conservation scientist who, upon Ulie Seal's suggestion, re-created the IUCN Red List from subjective guesswork to its current objective and numerical criteria and categories. Summaries of the working groups follow after an overview of the WAZA meeting.

The theme of the 60th Annual WAZA Conference was entitled Wildlife Conservation: A Global Imperative for Zoos and Aquariums. The conference was hosted by the Wildlife Conservation Society WCS which operates five zoological facilities in New York cities and has literally hundreds of field outposts in many countries of the world.

The conference consisted of technical sessions of scientific and issue based presentations, Committee sessions, Administrative sessions, Workshops and leisure and social events.

In true New York fashion WCS laid on so many exciting and glamourous events to show off the city in all its glory while at the same time providing excellent meeting facilities and perfect organisation. An afternoon at the famous Bronx Zoo was followed by a barbeque buffet dinner where no one wanted to go home. Another highlight was a musical broadway show at New Amsterdam theatre of the city's famed theatre district. It was an appropriate selection for zoo people, the Lion King, which was fabulous. A gala Farewill Cruise throughout the New York Harbour off Chelsea Pier where participants got to see the Statue of Liberty from the water at night, something many Americans even had not seen.

In the introductory sessions, Dr. Ron Forman, Director of the Audubon Zoo gave a poignant report on how the Hurricane Katrina affected his city and his zoo. He reported how zookeepers, not knowing where their families were or whether they had homes left, still would not leave their animals to brave the storm alone. Some of the technical sessions were entitled : Promoting Conservation, Conservation Challenges and Opportunities and Exhibits, Conservation and Media. Workshops included World Zoo and Aquarium Conservation Strategy, Global Trends, Issues of Animal Health, Blurring the Boundaries-Linking the Zoos to the Wild, Catalyst for Conservation: Conservation Psychology, Grevys Zebra Conservation Initiative in Kenya. All of the various WAZA committees met, including CIRCC, Committee for Inter-Regional Cooperation in Conservation, Welfare and Ethics, Marketing, Programme Committee, Aquarium Committee, Associations meeting, Nominating Committee and Education Committee.

In the final sessions all reports were presented as well as adoption of resolutions and statements which have been included in last issue of ZP and this. The new WAZA President was officially recognised and the outgoing President handed over the gavel to her. Dr. Karen Sausman, Director of the Palm Desert Zoo and author / editor of a book which many Indian zoos have used, Zoo and Aquarium Fundamentals, is the first female President of WAZA. There was not a free moment and all of it was good. Now much work is to be done to follow up the resolutions and assignments. Next year the WAZA meeting will be held in Leipzig Zoo, Germany.

The World Zoo and Aquarium Conservation Strategy -- Chapter 8 Sustainability

Summary
This chapter presents a vision of all zoos and aquariums working towards sustainability and reducing their 'environmental footprint', by using natural resources in a way that does not lead to their decline. They will also provide examples to visitors of how they can 'green' their lifestyles. Sustainability is defined as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'. It embodies social, economic and environmental dimensions. The 'Earth Summit' in Rio in 1992 set out 27 principles for sustainable development, including Agenda 21, and the subsequently developed ISO 14000; these principles address environmental management and pollution prevention. From these, a set of eight guiding principles can support zoos and aquariums in developing objectives and activities for sustainability: 1) use environmentally sound waste management, 2) be energy efficient, 3) use natural resources responsibly, 4) if you pollute, you pay, 5) put local consumption first, 6) contribute to equitable development, 7) apply the precautionary principle, and 8) encourage public awareness and participation. By becoming models for sustainability, zoos and aquariums can become champions for environmental responsibility, enhance compliance with environmental principles and help inform and shape future legislation. The chapter outlines four ways for zoos and aquariums to initiate and develop sustainable practices, by: encouraging environmental interest groups ('green teams'), developing an environmental management system, registering and gaining ISO 14001 accreditation, and aiming for 'animal embassy' responsible tourism accreditation. These initiatives need to be supported by organizational environmental policies and environmental audits. In summary, zoos and aquariums practising environmental sustainability can influence attitudes and change behaviour. In these ways they can contribute to the conservation of the whole planet.

Vision

All zoos and aquariums will work towards sustainability and reduce their 'environmental footprint'. They will use natural resources in a way that does not lead to their decline, thus meeting the needs of the present without compromising future generations. All zoos and aquariums will serve as leaders by example, using green practices in all aspects of their operations and by demonstrating methods by which visitors can adopt sustainable lifestyles.

8.1 Introduction

Zoos and aquariums are progressively contributing more to the conservation of biological diversity. They undermine this aim, however, if they work in ways that contribute to the depletion of natural resources. If they adopt measures and activities that help to sustain the natural resource base, they not only reduce this risk, but also add impetus to biodiversity conservation efforts.

Every zoo and aquarium has an environmental 'footprint' because the operations of every institution have a collective impact on the environment. The extent and effect of this footprint will vary considerably. For example, institutions with animal collections requiring substantial and complex life support systems generally have higher energy and water usage. Some institutions will have to make bigger changes than others if they are to approach sustainability. For many, achieving the 'sustainable zoo' or 'sustainable aquarium' appears daunting and seems far removed from the day-to-day tasks of keeping the institutions viable. This is particularly true for those institutions in the less developed and poorer parts of the world. Nevertheless, every zoo and aquarium must reduce its environmental footprint. The zoological community must initiate and increase those activities that will achieve reduction, and embrace the concept in principle and practice.

8.2 Sustainability

Achieving sustainability can be defined as reaching a state where all operations of a zoological institution are neutral in the environment. To measure this accurately is challenging and, because development continues apace worldwide, involves continuous operational adjustments and repeated measurement. A more practical definition is that of the World Commission for Environment and Development (Brundtland Report): 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'. This definition embodies three dimensions: social, economic and environmental.

The United Nations Conference on Environment and Development in Rio de Janeiro 1992, the 'Earth Summit', was a landmark event in the evolution of sustainable development. Several agreements important for zoos and aquariums were produced there. They included the Rio Declaration on Environment and Development, Agenda 21, the Statement of Principles for the Sustainable

Management of Forests, the Framework Convention on Climate Change and the Convention on Biological Diversity.

The Rio Declaration sets out 27 principles for sustainable development. Agenda 21 is a comprehensive plan of action to be taken globally, nationally and locally by organizations of the UN system, by governments and by major groups in every area where humans have an impact on the environment. An important aspect of the Earth Summit was the participation of the International Organization for Standardization (ISO; www.iso.org), which resulted in ISO 14000, a group of standards dealing with sustainability and environmental management. It includes ISO 14001, which addresses environmental management and pollution prevention.

8.3 Guiding principles for the sustainable zoo or aquarium
From the above main sources, we can present a set of eight guiding principles under which any zoo or aquarium can define its objectives and activities for sustainability. Through the practical application of these guiding principles, a zoo or aquarium will be able to defend its sustainable practices under accreditation scrutiny.

Use environmentally sound waste management
• Minimize the total production of waste.
• Manage separation of waste at source to encourage maximum re-use and recycling.
• Minimize the risk of polluting.

Be energy efficient
• Maximize energy efficiency in all on-site and off-site operations.
• Try to reduce travel-related energy consumption.
• Efficiently maximize the use of energy which is produced and distributed, especially from renewable sources.
• Apply the three Rs – reduce, re-use, recycle – where possible.

Use natural resources responsibly
• Use products that embody the most efficient and least environmentally damaging use of renewable and nonrenewable natural resources. This applies to products from major construction materials to daily consumables, and should apply back along the supply chain to source.
• Apply the three Rs.
• Make sure that animal acquisitions and dispositions are not only sustainable environmentally but also ethically acceptable.

If you pollute, you pay
• Support the general principle that the polluter should not pass on to others the cost of cleaning up pollution.
• Apply the principle in your own institution as a measure of good practice.

Put local consumption first
• Maximize the proportion of goods and services that come from local providers with acceptable environmental practices.
• Reduce the environmental impact of transportation wherever feasible.

Contribute to equitable development
Keep in mind that sustainable development requires a reduction in the differences of living conditions across the world and that you can contribute to this by:
• conducting activities that contribute to this ideal;
• supporting conservation projects that embody this general principle
• adjusting purchasing policies and practices to help.

Apply the precautionary principle
• Obtain and analyse as much information as possible before making a decision.
• When in doubt, put in place measures to reduce environmental impact.

Encourage public awareness and participation
• Use the zoo's or aquarium's educational resources to help people understand why changes are important and what they can do personally to live in a more sustainable manner.
• Set an example for other businesses in Earth-friendly operations.

8.4 Benefits of sustainability
People often ask, 'What will sustainability cost?' This is a valid concern, and underlines the importance of introducing sustainable practices in a way that improves the economic viability of zoos or aquariums. A more sustainable zoo or aquarium should expect to make cost savings through green practices, and they will become a more attractive option to visitors, donors, investors, insurers and partners and thus increase net income. They should stress sustainable activities as a basis for promotion and marketing.

Other benefits are less tangible but just as important. A zoo or aquarium that introduces sustainable practices will, without doubt, help to improve the environment and will fulfil the institution's moral imperative to be involved in such practices – as must all other sectors of society. It can be argued that the zoological community has greater environmental responsibilities than many other institutions and the adoption of sustainable practices will help meet its obligations; biodiversity conservation without actions for sustainability is incomplete. Zoos and aquariums will stand as a model for sustainable practices, encouraging others, especially in the same community, and, if they are publicly owned, setting an example for 'greener' government.

By encouraging others in regional zoological associations to adopt sustainable practices, zoos and aquariums will improve their image as champions for environmental responsibility, enhance compliance with environmental principles and, even better, help to inform and shape future legislation. They will also improve employees' awareness of environmental issues and responsibilities, enhance employee morale and help to ensure that the institution is seen as a desirable employer. Moreover, they will significantly promote the concept to their visitors and will qualify for official awards and recognitions.

Many of these benefits were examined in detail at the 1st International Symposium on Environmental Management in Zoos held in 2001 in Denmark at the Aalborg Zoo.

8.5 Implementing sustainable practices
This section outlines four possible ways for zoos and aquariums to initiate and improve sustainable practices. These are presented as guidelines to help all zoos and aquariums, although it is realized that there are cultural, social and financial differences that affect the way the practices can be implemented. Further details can be found in the companion manuals which will follow this publication. Zoos and aquariums will adopt the best combination of these measures to achieve their goal of sustainability.

Environmental interest groups
Many zoos have 'green teams' or other groups for which staff can volunteer. A zoo or aquarium seeking sustainability will encourage these initiatives. Such groups can help management identify priority issues to tackle, research green options, conduct audits, and help implement and even establish environmental policies.

Environmental management systems
An environmental management system (EMS) is a set of processes and practices that enables an organization to reduce its environmental impacts and increase its operating efficiency. Developing an EMS is a structured way to reach goals of sustainability. An EMS stresses the importance of health and safety alongside environment. It should lead to continual improvement through a structured process of planning, implementing, checking, reviewing and acting to make necessary changes.

An EMS can be based on standards already available, and zoos and aquariums should adopt the one most appropriate to their circumstances. Some countries have developed their own EMS standards, as have some regions. An example is the European Union's Eco-Management and Audit Scheme (EMAS).

ISO 14001
ISO 14001 is a comprehensive, global standard for an EMS which stipulates that all members of the organization participate in environmental protection. It considers all stakeholders, and sets out processes to identify all environmental impacts. It is proactive, focusing on forward thinking and action. ISO 14001 stresses improving environmental protection by using a single EMS across all functions of the organization. It does not measure performance or product; rather, it allows institutions to measure how their activities affect the environment.

To register and gain ISO 14001 accreditation, a zoo or aquarium must have an EMS. ISO 14001 is broadly recognized across public and private sectors. As more and more zoos and aquariums are accredited with ISO 14001, there will be greater recognition of, and benefit to, the zoo community from government, corporations and society at large.

'Animal Embassy'
'Animal Embassy' is an international standard of environmental responsibility with specific application to zoos and aquariums. It unites animal management and other standards with environmental criteria like those covered by ISO 14001. It is being developed by the Institute of Responsible Tourism and Loro Parque in Spain, and will require participating institutions to have an EMS.

There are various certification schemes for green tourism, but 'Animal Embassy' is the only one to target zoos and aquariums. It especially relates zoos and aquariums to sustainable tourism, but it offers a helpful step towards ISO 14001.

8.6 Environmental policies
Integral to the above structures are environmental policies and audits. By stating its environmental policies an organization can crystallize goals and objectives to create an atmosphere of awareness. Clear expressions of intent can also have a positive external influence, encouraging others to help to put the policy into action.

Senior management must be responsible for producing the environmental policy, including the initial assessment and review of environmental conditions that guide the policy's production. It is important to involve all staff and volunteers at all stages.

8.7 Environmental audits
An environmental audit measures and assesses the environmental impacts that a zoo or aquarium's activities have on its surroundings. It also takes into consideration historical and potential future impacts. An environmental audit is a first step in a successful EMS. The preparation of an environmental baseline assessment, with input from all staff, is the starting point for an audit cycle. Self assessment, with or without external assistance, not only is important at the start, but will continue to be an essential part of maintaining an EMS, even though a third-party independent audit may be a desired goal. In 2003 the Aalborg Zoo in Denmark and North Carolina Zoological Park, USA were the only zoos to have a completed environmental audit cycle and to have attained ISO 14001 for their EMSs. In achieving the vision of sustainability, many other zoos and aquariums will follow Aalborg's and North Carolina's example.

Recommendations
The World Zoo and Aquarium Conservation Strategy (WZACS) strongly recommends that all zoos and aquariums adopt measures and activities that help sustain natural resources.

The WZACS recommends that all zoos and aquariums have a written environmental policy and undertake environmental audits.

The WZACS urges all zoos and aquariums to practise environmental sustainability, for by showing by example how sustainability can be achieved, social attitudes and behaviour can be changed; zoos and aquariums can thus be shown to be contributing to the conservation of entire ecosystems.

New WAZA Resolutions, Policy Statements and Guidelines adopted at the 60th Annual Conference in New York

WAZA Resolution on the Amphibian Extinction Crisis

Recognizing:

• That amphibians face an extinction crisis in several parts of the world;

• That the complex factors behind the extinctions are not well understood;

•· That the spread of one of the immediate mortality agents, the chytrid fungus, can not be halted in the wild;

• That other areas of amphibian biodiversity are probably at similar risk.

Therefore WAZA:

• Recognizes the significance of this ongoing extinction spasm;

• Acknowledges the pioneering efforts of various institutions and individuals (IUCN, CI, etc) in assessing amphibian status and the scale of the extinction process;

• Recognizes that accelerating efforts of various bodies, including many members of WAZA, to address the situation both in the wild and in captivity;

• Recognizes that its members have unique skills and abilities to mount a concerted amphibian conservation breeding program to establish captive assurance populations;

• Urges its members - both associations and individual institutions – to collaborate with IUCN and the bodies, including research institutions, set up to respond to this extinction crisis, and to provide all the resources possible to address this unprecedented situation.

There are many ways in which members can contribute their resources (skills, facilities, and financial help), but it is essential that the response is well coordinated and in conformity with principles and Action Plans now urgently being developed.

WAZA commits itself to encourage its members to join together and contribute;

WAZA itself will work with its Regional Associations to ensure its coordinating role is effective;

WAZA will liaise with CBSG, which is facilitating the first phase of WAZA's involvement; and WAZA will collaborate with the bodies established by IUCN and its partners to confront the ongoing extinction of amphibians.

Adopted at the WAZA Administrative Session of 6 October 2005 – 60th Annual Meeting, held at New York City, USA, 2005

WAZA Position on Flight Restraint in Birds

Various methods of flight restraint have long been in use in zoological establishments worldwide as a means of keeping birds in enclosures without netting. The method of flight restraint covers everything from regular feather clipping (with the potential for re-growth to the natural 'full-winged' condition); to the pinioning of juveniles, whereby the wingtip is 'disbudded'; to major surgical intervention such as tendectomy. In the case of pinioning and the diverse forms of surgical intervention there is no realistic prospect of recovery of full, natural flight capability.

Whereas there is no well-documented body of scientific evidence, it is clear that there are likely to be significant effects on managed birds (across all taxa which fly). The WAZA Code of Ethics and Animal Welfare therefore requires that pinioning of birds for educational or management purposes should only be undertaken when no other form of restraint is feasible.

Because of the ethical, welfare, husbandry, population management and conservation breeding issues, it is the view of WAZA that appropriate scientific and veterinary reviews and investigations into the impacts of flight restraint need to be conducted worldwide, particularly through the regional avian taxon advisory groups with a view of developing a WAZA policy on this issue.

Adopted at the WAZA Administrative Session of 6 October 2005 – 60th Annual Meeting, held at New York City, USA, 2005

WAZA Resolutions on the Import and Keeping of Elephants

A. Import of Elephants from Thailand to Australia

WAZA - The World Association of Zoos and Aquariums notes and supports the importation of elephants, bred at work camps in Thailand, to Australian zoos as part of an agreement between the Thai and Australian governments.

This is on the basis of a sustainable Asian elephant conservation breeding program, increased community education and support to *in situ*-programs of Asian elephant conservation.

B. Import and Keeping of elephants in General

WAZA strongly supports the importation of elephants to its member institutions when the importation is:

a) a part of a sustainable breeding program aimed at assisting with the conservation of elephants in the wild;
b) not to the detriment of the long-term viability of the population in the wild; and when the elephants will be cared for according to the highest husbandry standards for elephants.

Adopted at the WAZA Administrative Session of 6 October 2005 – 60th Annual Meeting, held at New York City, USA, 2005

WAZA Position Statement on Studbook Data Stewardship

Background
Specimen history data may be collated into studbooks for many reasons. However such data are routinely collected from zoos and aquariums for the purpose of supporting the coordinated management of *ex situ* populations of wildlife species.

Where the primary objective is to facilitate the coordinated management of *ex situ* populations, a studbook is established under the auspices of the regional or global zoo and aquarium association that administers the species management program.

Such organisations authorise studbook keepers to collect data on behalf of the association and urge, and in many instances require, their member institutions to contribute data to the studbook.

In such cases, institutions contribute data on the understanding that the data are to be used for the collective benefit.

Position Statement
WAZA considers that the purpose for which a studbook is established and the basis on which data are provided to the studbook are of relevance to the ownership of the studbook data and the subsequent availability of the studbook dataset in all its formats.
Therefore, WAZA considers:

• That all studbooks managed under the auspices of, and on behalf of, a recognised studbook authority (this being WAZA or a WAZA member association) are developed for the collective benefit;

• That the data in such studbooks are held under the stewardship of the studbook authority;

• That, for such studbooks, the studbook keeper is the curator of the data and neither the studbook keeper nor the institution at which that person is employed is the owner of the dataset;

• That the studbook dataset should be made available to the zoo and aquarium community in the most useful and compatible format, this usually being as a database in electronic form (e.g. a SPARKS dataset).

Adopted at the WAZA Administrative Session of 6 October 2005 – 60th Annual Meeting, held at New York City, USA, 2005.

WAZA Guidelines on the use of Transponders for animal identification

RECOGNISING the wide use of coded-microchip implants for the individual identification of animals;
RECOGNISING the potential of this method of marking to assist with the maintenance of accurate animal records for specimens, in particular those moved between institutions;

TAKING NOTE of CITES Resolution Conf. 8.13 (Rev.) on the "Use of coded-microchip implants for marking live animals in trade";

CONCERNED that any such method employed to identify live animals be standardised in its application;

CONSIDERING that the International Organization for Standardization (ISO) has adopted the standards ISO 11784 and ISO 11785;

AWARE that the IUCN/SSC Conservation Breeding Specialist Group has undertaken a review of the application of coded-microchip implants;

THE WORLD ASSOCIATION OF ZOOS AND AQUARIUMS

RECOMMENDS that:

a) zoos and aquariums, where possible and appropriate, without excluding the use of other methods, adopt the use of ISO compliant implantable transponders bearing permanent, non-programmable, unalterable and permanently unique codes for the identification of live animals;

b) microchip transponders be implanted where consistent with the well-being of the specimens concerned; and

c) the location of implanted transponders in each animal be standardized according to the advice from the IUCN/SSC Conservation Breeding Specialist Group; and

d) zoos and aquariums not re-use transponders, in particular where the animals concerned are, or are likely to be, recorded in the International Species Information System data base; and

e) member associations encourage their member institutions to follow WAZA recommendations a) – d) above.

DIRECTS:

a) the WAZA Executive Office to liaise with the CITES Animals Committee with regard to CITES requirements with respect to transponder use.

Adopted at the WAZA Administrative Session of 6 October 2005 – 60th Annual Meeting, held at New York City, USA, 2005.

WAZA Guidelines on Animal Transfers between Regions

Background
WAZA recognises that the majority of movements of animals between regions are carefully considered and mutually beneficial. However, the WAZA notes that, in the past, some animal transactions between regions have resulted in:

• The removal of key animals from coordinated programs in the sending region, thereby disrupting local programs;

• The dispersal to another region of animals genetically surplus to the receiving region, to the detriment of the local program.

WAZA aims to support the development and maintenance of coordinated programs to manage *ex situ* animal populations for their long-term sustainability. Further, WAZA promotes the principle of mutual support amongst regional associations for regional species management structures.
Accordingly, WAZA urges all regional associations and program coordinators to follow the guidelines outlined below. The guidelines outline WAZA's view on the responsibilities of sending and receiving institutions and species coordinators in the respective regions.

Guidelines for Animal Transfers between Regions

Prior to the transfer of an animal from one region[1] to another both sending and receiving institutions are responsible for ensuring:

• That the transfer is endorsed by the coordinator of the relevant species management program[2] operating in their own region, where such a program exists;

• That the proposed transaction is not counter to recommendations made by the relevant advisory body[3] in their own region (for example, a Taxon Advisory Group);

• That the counterpart institution has confirmed the same for its own region.

Prior to endorsing the transfer of an animal out of or into a species management program:

The coordinator of the species management program is responsible for determining:

• That the transfer of the animal is not detrimental to the species management program;

• That the transfer of the animal is endorsed by the coordinator of the relevant species management program in the other region, where such a program exists.

Adopted at the WAZA Administrative Session of 6 October 2005 – 60th Annual Meeting, held at New York City, USA, 2005.

Practical implications of the Inter-regional Acquisition & Disposition Policy

Institution in Region A – sender	Institution in Region B - receiver
Scenario 1	
No program	Program
Sending institution: a) checks with relvant TAG, RCP, Association that the move is not contrary to regionally agreed strategy; b) seeks assurance from recieving institution that the transfer is endorsed by program in receiving region.	Receiving institution: • seeks endorsement from program coordinator in receiving region.
Scenario 2	
Program	Program
Sending institution: • seeks endorsement from program coordinator in sending region; • seeks assurance that recieving institution has done same. Program coordinator in sending region: • informs both sending institution and program coordinator in receiving region of endorsement of the transfer.	Receiving institution: • seeks endorsement from program coordinator in receiving region; • seeks assurance that sending institution has done same. Program coordinator in receiving region: • informs both receiving institution and program coordinator in sending region of endorsement of the transfer.
Scenario 3	
Program	No Program
Sending institution: • seeks endorsement from program coordinator in sending region.	Receiving institution: c) checks with relvant TAG, RCP, Association that the transfer is not contrary to regionally agreed strategy; d) seeks assurance from sending institution that the transfer is endorsed by program in sending region.
Scenario 4	
No Program	No Program
Sending institution: e) checks with relevant TAG, RCP, Association that the move is not contrary to regionally agreed strategy; f) seeks assurance that receiving institution has done same.	Receiving institution: g) checks with relvant TAG, RCP, Association that the transfer is not contrary to regionally agreed strategy; h) seeks assurance that sending institution has done same.

(Footnotes)
[1] A 'region' is a geographic area represented by a WAZA-recognised regional zoo and aquarium association.
[2] A species management program is a program for the coordinated management of the taxon across the relevant region, endorsed by the relevant regional association.
[3] An advisory body is one run under the auspices of, or endorsed by, the relevant regional association.

WAZA Branding of *in situ* or *ex situ: in situ* Projects

Note from SAZARC Director : The article below relates to an article in December issue of ZOOS' PRINT in which the WAZA project branding has been explained. This is a continuation in detail of how this works and an information for SAZARC zoos which would like to try for partners with the additional help of being aligned with the World Association of Zoos and Aquariums. There are many advantages for projects to be linked to WAZA including the obvious prestige value, possibility of obtaining outside expertise, in kind or modest financial support, and simply being part of a world wide effort by zoos to integrate ex situ with genuine in situ conservation.

In the years 2000/2001 WAZA organised three "*In situ* Conservation Workshops" looking for a strategy on how WAZA should get involved in *in situ* Conservation. One recommendation was that WAZA should brand suitable projects. This recommendation was part of Ulie Seal's report adopted by the Perth Annual Conference (2001). When the WAZA Executive Office tried to implement that decision, problems were encountered as there was some opposition in principle from certain corners, and no agreement on a policy, criteria and a process was reached at the San José Annual Conference (2003)[1]. Already at the Mid-Year Meeting 2003, however, Council had agreed that to a pilot phase during which two projects received the brand. At its Mid-Year Meeting 2004, WAZA Council decided that the Office could go ahead with promoting *in situ* projects in a pragmatic way provided that the projects concerned are carried out or supported by WAZA Members, that they are well-established and not controversial. In particular the Office could give the WAZA brand to and publish on the WAZA website projects that were part of the CITES *ex situ: in situ* exercise or that were presented in a WAZA publication (Magazine, News, Proceedings).

Projects (or programmes) are branded on application. Applications may be submitted by either the project organisation or by a WAZA member supporting the project.

In order to obtain some standardised information on the projects, the WAZA Executive Office has developed an application form.

Getting the WAZA brand means:
WAZA branded projects will remain independent. WAZA will in no way interfere with the execution of a project. The only thing WAZA has to insist on is that the project is executed in compliance with the applicable international and national legislation and that it also follows IUCN guidelines where such guidelines exist.

WAZA branding is not exclusive, but could be a co-branding. The brand may relate to a project as such or to the zoo support for a project. The latter may be the preferred option in cases where many stakeholders are involved and the "ownership" of the project is either not clear or complicated.

WAZA will call a branded project "A WAZA Project" for the purpose of promoting both the project itself and the *in situ* conservation efforts of the global zoo community, but even if promoting it as part of the global zoo community's efforts WAZA will always recognize who owns / implements / coordinates the project (the project organisation). In a way it is like participating in a SSP, EEP or similar programme: The animals "are in the EEP" but they are still owned by the individual zoo (which is normally keen to tell its visitors about the EEP participation).

The project organisation may use the WAZA Logo in conjunction with the mention "A WAZA Project" in their publications, on their stationery, website etc. It is, however, up to the project organisation to what extent they wish to make use of this opportunity.

The project organisation receives 15 x 30 cm self-adhesive stickers for use on vehicles, buildings, enclosures, information panels etc.

WAZA links the project' organisation's website to www.waza.org, and expects the project organisation to do the same reciprocally.

The project organisation has the opportunity of using WAZA publications for promoting the project. This could be an article in the WAZA Magazine. The English version of this summary would not be published but would serve as the basis for summaries in German, French and Spanish which would be provided by the WAZA Executive Office. The number of pictures should be 6 to 10 (photographs, ev. map), which should be submitted as separated JPG files. The dissolution should be 300 dpi or higher). The WAZA Magazines are produced in an edition of at least 1400 copies, most of them about 2400 copies, and are sent not only to our members but to the members of the International Zoo Educators Association (IZE), to CITES Authorities world wide, international convention secretariats (CITES, CMS, CBD, RAMSAR), some major NGOs etc.

WAZA Magazines are normally focussed on specific themes. If there should be no issue under preparation where the project would fit in, alternatively a shorter article (300 signs including spaces), 2-3 Photographs could be published in the WAZA News. WAZA News are produced in an edition of 400 and distributed primarily to WAZA members.

A project entry is made on www.waza.org. This includes a background story explaining what the conservation issue is, a description of the project, a list of stakeholders and some pictures.

The project entries are linked to the "MORE" pages of the supporting institutions and *vice-versa.*

The WAZA Executive Office is looking into the possibility of raising funds for "WAZA Projects" through the web site and other means.

As no proper procedure has been agreed yet, there are no formal reporting obligations. In case the procedure would be set up one could anticipate that the "WAZA projects" would have to submit annually a short report.

(Footnotes)

[1] The following criteria have been proposed at the San José Conference by the WAZA Executive Office, based on the recommendations resulting from the Cologne Workshop (2000):

The Project must be realistic and have clearly achievable goals; must be based on sound scientific and management principles; should have a potential for raising public awareness; should have the potential for attracting sufficient funds to achieve its goals; must comply with relevant international and national regulations; should be compatible with national and international conservation strategies and programmes; may focus either on species or habitat conservation.

The project, if *in situ* , should work in partnership with local stakeholders; should have the support of relevant local and national governments and organisations; should lead to a self-sustaining conservation effect.

The project, if *ex situ* must have an actual or potential *in situ* link or component;

The project, if not run by a member must have an evident zoo or aquarium link by institutions providing animals, expertise, skills or money, or creating awareness for the project.

The WAZA Project Sticker : Format 15 x 13 cm, self-adhesive, non-fading

A WAZA Project

The World Association of Zoos and Aquariums

- United for Conservation -

1. The Scharnstein Waldrapp Project

2003/04: WAZA Project Sticker on a trike used by Johannes Fritz and his team for flying with a flock of waldrapp ibises from Upper Austria to Tuscany

2. The Gobi B Takhi project

2003/04: WAZA Project Sticker on a Land Rover used by Chris Walzer (International Takhi Group) and his team for post-release observation of reintroduced Przewalski horses in the Gobi B National Park, Mongolia

Application for WAZA Branding

For a conservation project / programme ☐ **For *support to* a conservation project / programme** ☐

1 Applicant (Name, First name, Title)	2 Institution	
3 Address	4 ZIP	5 City, Place
6 Country	7 State / Province, if applicable	
8 Email address	9 Web site on which the project is presented	

10.Title of the conservation project / programme								
11.Country / Region / Place where the project / programme is carried out								
12."Owner" of the project / programme								
13. Short description of the problem which was at the source of the project/ programme -- use back of page								
14. Mission/Goals of the project / programme								
15. Short description (Narrative) of the project / programme – use back of page								
16. Focus and activities (Key words) of the project / programme								
a) Focus on habitat	Yes ☐	No ☐	b) Type of biome					
c) Focus on species	Yes ☐	No ☐	d) Species					
e) Environmental education	Yes ☐	No ☐	f) Research	Yes ☐	No ☐			
g) *ex situ* breeding	Yes ☐	No ☐	h) Release to the wild	Yes ☐	No ☐			
i) Land purchase	Yes ☐	No ☐	j) in situ management	Yes ☐	No ☐			
k) Sustainable development	Yes ☐	No ☐	l) Benefit sharing	Yes ☐	No ☐			
17 Time frame The project/programme was started in: The project/ programme will end:……								
18 The project/programme is supported by the following zoos / aquariums /zoo and aquarium associations								
19 Other partners supporting the project/programme								
20 Financial aspects (total costs or annual budgets, sources of funding)								
21 Place and Date			22 Signature					

Note : Obviously this form is not to be filled as it is. Zoos which are involved with SAZARC can get a soft copy by writing to the SAZARC (ZOO) office after carefully reading the information about eligibility. In the case of South Asia, we have an unusual membership situation in that zoo personnel generally are not in charge of their own funds and protocols. Thus, in order to be more inclusive, SAZARC simply considers all zoos in the region as members as long as their behaviour and facility standards are in line with WAZA Code of Ethics and Welfare. Naturally before recommending a project to WAZA, SAZARC Core Committee would want at least one or two people to have seen and interacted with the zoo applying. In the same way, a government office, NGO, or scientific institution could theoretically suggest a project or even apply for WAZA branding, but it must be associated with a zoo in the region which is felt to be managed consistently with WAZA and SAZARC Code of Ethics. *SAZARC Director.*

CBSG Working Groups

Ed. Note : many thanks to CBSG for permitting us to use almost completely edited versions of the CBSG Working group reports before publication in their own Newsletter. Some reports have been radically summarised. One report from the Field Conservation Prioritisation Project working groups will be published in the next issue of ZOOS' PRINT as it is a mix of several meetings around the globe.

Amphibian Working Group

Participants: *Ginger Lindgren, Laura Hungerford, Jim Jackson, Lin Hua-Ching, Sanjay Molur, Kevin Zippel, Dan Brands, Jorge Rodríguez, Rebecca Soileau, Randall Arguedas, Eric Miller, Alex Rubel, Ivan Rehak, Bob Lacy, Mark Stanley Price, Bart Hiddinga, Lee Simmons*

This working group convened to discuss the current amphibian extinction crisis, and the response of CBSG, the IUCN, and the larger zoo and aquarium community to that crisis. The magnitude of the current situation and the urgency of action to prevent the extinction of species requires immediate action from a range of bodies with diverse relevant expertise and resources. CBSG is an organization of experts in the establishment and maintenance of captive assurance populations through facilitation and collaboration with its members and partners in the implementation of best practice in: capture, transport, quarantine, husbandry, housing, breeding, and population management. However, CBSG as part of IUCN, is part of the broader conservation community which includes zoos and aquariums, and to effect positive change, there is a need for organization and better communication to further implementation of an amphibian conservation plan. To accomplish this, absolute clarity is needed on how the plan for the amphibian crisis will be structured.

Issue Statement: How should CBSG and the Global *Ex-situ* expert community respond to the amphibian crisis?

A mandate to the zoo, aquarium, and botanical gardens is the most important immediate step to help the rescue effort. The mandate should probably come from the IUCN. Several reasons were sited for why a mandate would be useful.

CBSG Priorities:

• An IUCN mandate, and a request to other organizations calling for action. There are many beneficial reasons to have such a mandate. It would provide authority for taking action, clearing political hurdles and expediting permitting. It would stimulate more zoos, aquariums, and botanical gardens and associations to become partners in responding to the crisis and in turn, it would help the zoos by providing influence with CITES, the conservation community and governments and might allow for some immediate ex-situ response. From the public relations perspective it would assist in fundraising and serve as a hook for news generation.

• Administrative structure for the *ex-situ* component of the overall conservation action plan
There are components of the structure that are necessary to have in place such as who has responsibility for prioritizing species and actions

• CBSG can provide population management guidance
This area is one of CBSG's core competencies that they need to mobilize to assist in the crisis

• Communication and education
Both within the expert community and to the public with opportunities for support both financial and political

• Collection planning coordination
This is another component of potential action plans that CBSG with its partners who have expertise

It is important that mandates and any emergency measures are carefully constructed so that they do not open back doors to taking of species from countries. They should be specific to endangered and threatened species or those recognized as at risk as part of this program by the authorities within a coordinated effort.

It is important to communicate to multiple levels of agencies and not just from the top down. The IUCN will have to dedicate resources to this communication and find ways to accomplish tasks at individual levels.

Actions

• Draft a Mandate from IUCN to CBSG and request to others as a call to action

• Present a draft statement of CBSG's position on the issue will to WAZA

• Dedicate at least one person within CBSG to this effort as soon as possible.

• Immediately communicate Amphibian Crisis to the CBSG community

• Communicate and work with IZE starting with the 2005 meeting in New York and the conservation education community to bring their expertise into addressing the amphibian extinction issues.

• Work with other partners to propose and help create the administrative structure for the *ex-situ* component of the overall conservation action plan.

• Define a series of workshops with the first one in 6 months. This workshop would be on best practices for population management, husbandry, and disease management. A Briefing Book would be prepared in advance.

• Identify issues where cross community communication is necessary and facilitate it.

• Serve as a communications portal to disseminate information about the crisis.

Use of Wild Caught Birds Working Group

Participants
Chelle Plasse, Stan Searles, Larry Kilmar, Ginger Lindgren, Sarah Long, Kristin Leus, Bart Hiddinga, Dan Brands, Christian Schmidt, Ken Reininger, Ted Fox, Randall Arguedas, Yolanda Matamoros

Our present captive bird populations are unsustainable without the periodic recruitment of new founders.
A working group met to discuss options that may be available to the zoo community should the ability to import wild caught birds diminish further or cease. If wild-caught birds are no longer readily available, dramatic changes will be needed to continue to exhibit and maintain birds within our zoos. Our present management techniques must change and improve. All these changes will undoubtedly require a larger financial commitment of resources, and a significant adjustment in the ways zoos acquire birds.

The zoo community should be proactive in developing appropriate solutions, (before it is pressured by outside sources) and before it is too late to affect strategies. Present bird populations are unsustainable without the periodic recruitment of new founders, and records regarding the origins of current birds in zoo collections are incomplete. With better data, a model of future populations could be made, and we could better decide on possible courses of action.

- *Isis/sparks data records: wild imports*
- *Population management models from rcps/pmps*
- *Hatches/deaths/mortality-in zoos*
- *General biology date records: bird survivability*
- *Data model of future populations*

The working group hopes that wild bird acquisition, when done, will first and foremost benefit the wild birds and wild places that are their homes. Possible sources of imported birds are confiscations from within the country, rehabilitated animals from within the country, approved/collaborative collections from the wild, and other innovative collection strategies.

Should the ability to import wild caught birds diminish further or cease, dramatic changes will be needed to continue to exhibit and maintain birds within our zoos. Zoos may face decreases in the diversity of their collections, and become unable to maintain large walk-through exhibits as they have in the past. Current management techniques must change and improve to provide the space requirements, exhibit modifications and husbandry improvements necessary for zoos to continue to exhibit birds. Collaborative regional programs might become a source of additional birds without recruitment from the wild.

All changes will undoubtedly require a larger financial commitment of resources, and a significant adjustment in the ways zoos acquire birds. In order to exhibiting birds at current levels, zoos must invest in training for specialized staff, hiring appropriate collectors, cooperative collections and acquisitions, and support for in country conservation projects.

CBSG Disease Risk Assessment Process working Group

Participants: Heribert Hofer, Laura Hungerford, Don Janssen, Mike Jordan, George Kollias, Frederic Launay, Eric Miller, St. Louis Zoo, Philip Miller, Akira Murayama, William Rapley, Ivan Rehak,
In what areas of disease risk assessment should CBSG become or remain active?

- Integration with considerations of invasive species of animals and plants
- Development of a more comprehensive approach
- Closer work with the Reintroduction Specialist Group (RSG)
- Small population epidemiology
- Consequences of disease on wildlife population viability
- Integration with government programs e.g. Agriculture, Import/Export, OIE
- Continue to raise the profile of disease issues in wildlife conservation programs
- Better use of visual, systems-level modeling approaches
- Use of approaches in risk-based decision making
- Promotion of cross-disciplinary collaborations
- Development of sample tissue banks for research at later dates
- More careful identification of assumptions we make, in order to more effectively direct our approaches
- Providing technical expertise for specific species/issues in workshops
- Better empirical validations of models
- Dedicated “export” of disease risk assessment knowledge and tools to the regions
- Assessments of relative risk
- on terms of cost/benefit analysis
- Determination of ways to hand off other processes

-- Farm out to free up time to increase focus on disease issues

- More effectively recruit human resources from Veterinary Specialist Group (VSG)

-- Shape directions of both organizations

- Explore available Web sites and data sources
- Develop a more thoughtful balance across wildlife threats
- Careful determination of relative risk and the relationships among risks
- Improved communication between vet and wildlife communities
- Make some of these tools easier to use
- Better involvement of 4 of the 5 Specialist Groups: CBSG, VSG, RSG, and Invasive Species SG
- Stimulate improved methods of baseline data collection. West Nile Virus, or Algonquin wolves example, need to know regular cycles and parasites loads and need to know regular pattern. Then, disease monitoring can be used to see when there are departures from these. Need these data to put into Vortex and similar programs. Short-term don’t. So, ask for these data but don’t do research to collect these.

-- Serengeti lion, hyena, and cheetah projects can show are

exciting it can be to have collaborative process in place
Develop criteria for screening protocols – are current methods sufficiently effective? Relative risks. Example – truckloads of animals confiscated and then put into lakes or islands
• Guidelines for translocation program, should pre-release exposure to local agents be part of a more thoughtful release protocol (This can be developed as a addendum to the current RSG Guidelines)

In what areas of disease risk assessment should CBSG NOT become or remain active?
• Pure disease risk quantification
• Disease health screening etc (better served by Veterinary or Reintroduction SGs)
• Disease management recommendations

How do we stimulate more effective communication by the various groups interested in the continued evolution of CBSG's Disease Risk Assessment workshop process?

Action: To organise a 4-day development & training workshop that is truly co-organised by CBSG, VSG, and RSG. Such a project would:
1. Facilitate greater exposure of CBSG DRA Workbook
2. Expand the current network of DRA experts
3. Investigate future funding opportunities for evolution of process and tools
4. Include other partners, such as:
AZA, AAZV, WDA, AAWV, WAWV, USDA, EAZA, EAZWV, JAZV (Japan), CAZV (Canada), OIE, USGS, South African Wildlife Association, WCS, SEWDC

The expected output of such a project includes:
1. A revised CBSG DRA Workbook that has wider applicability to the conservation community (VSG, RSG)
2. A clearer sense of the shared responsibility of risk in conservation programs – the vet is not asked to make a recommendation to "prevent" a disease outbreak as a result of the program
3. Creation of (semi-) formalised agreements between Specialist Groups (perhaps in the form of one or more MoUs?), and established communication pathways
4. A detailed review of current IUCN Guidelines in the context of disease risk considerations (e.g. Confiscation and Rehabilitation Guidelines, etc.)

Proposed organisation committee:
CBSG: Philip Miller, Bob Lacy [SSC Steering Committee]
RSG: Fred Launay [SSC Steering Committee], Doug Armstrong (New Zealand), Mike Jordan
VSG: Richard Kock [SSC Steering Committee], William Karesh

Workshop funding options:
1. Consider historical sources or earlier DRA funding
2. Function of who and where [Toronto Zoo, South Africa – Holly Dublin, WAZA - Berlin]

Possible workshop dates:
1. Check schedules of European Congress of Conservation Biology
2. Late August 2006: WAZA, Leipzig, Germany
3. Mid-May 2006: PAAZAB Annual Meeting / CBSG Steering Committee Meeting, South Africa

Elephant Working Group Report

Participants
Bengt Holst, Miranda Stevenson, Beth Stevens, Saman Senanayake, Sonia DiFiore, Bernhard Harrison, Suzanne Boardman, Michael Fouraker, Willie Labuschagne, Fiona Anne Fisken, Eric Tsao, Jansen Manansang, Kazuyoshi Itoh, Kumar Pillar, Charles Doyle, Larry Killmar, Bruce Read, Brandie Smith, Pat Thomas, Kristina Tomasova, Dvur Kralove

At the 2004 Annual Meeting, a working group concluded that zoos can play an important role in elephant conservation through education and fundraising, however, none of the existing regional zoo populations of elephants are self-sustaining. Analyses have revealed that the European and American populations of elephants will disappear within 70 years, or perhaps less, while other zoos throughout the world also have small, isolated elephant populations. If zoos are to contribute to elephant conservation through education, they need a sustainable elephant population.

There is an obvious need for better communication and cooperation between different regions/elephant populations. Breeding programmes must be integrated in order to secure sustainability, and common ground must be found between regions with regard to elephant management in general (vision and action plan). The zoo community must become proactive in its response to the criticism from outside and make sure that the response mirrors the actual situation. Elephant management must be based on sound knowledge about elephant biology and with respect of regional differences. Approved standards must be met and must be revised at a regular basis.

The working group recommends that WAZA set up a global taxon advisory group (GTAG) consisting of the regional TAG chairs and the stud book keepers of the regions. This GTAG must develop the vision for the role of the *ex situ* community in elephant management and conservation on a global scale. They must develop global management guidelines based on the regional TAGs and representatives of the regions that do not have TAGs recognising and respecting regional differences. The GTAG would have the responsibility to integrate the management plans of the different regions.

Proposed GTAG Tasks
• Draft structure of the GTAG, membership selection, reporting structure etc. for WAZA approval
• Develop Vision for the role of the *ex situ* community in elephant management and conservation on a global scale
• Develop an action plan for the implementation of the vision
• Develop recommendations for a global analysis of elephant management based on existing data
• Develop recommendations for a coordinated elephant global research and conservation plan
• Develop recommendations for a document (MOU/

Cooperation) that integrates management plans/husbandry guidelines of different regions
• Develop recommendations for a Global PR and Communication Plan
• Consider the expertise to investigate and fund the investigations needed to address the identified research and conservation issues
• Make recommendations to WAZA and the Regional Associations on how to encourage compliance with recommendations

CBSG can facilitate the establishment of the GTAG by planning for a common meeting and can help the GTAG develop the stated vision and action plans through facilitation.

Mariculture Working Group Report

Participants
Brad Andrews, Liz Follese, Frands Carlsen, Bengt Holst, Suzanne Gendron, Beth Stevens, Bernard Harrison, Laura Hungerford, Doug G? Rebecca Seal-Soileau, Jon Ballou

The practice of mariculture-the cultivation of marine animals for commercial purposes-provides food and livelihood for people around the world. It provides food for our livestock and pets, fish for agricultural products, and fish for mariculture feed (protein conversion). Many questions have been raised about current mariculture practices and the sustainability of mariculture in the long term. A working group convened to discuss mariculture around the world, and considered sustainability, environmental degradation, genetics, disease and invasive species issues facing current mariculture practices.

The working group identified the following five topics of concern:

Sustainability
Including over fishing, by-catch, waste (shark finning), and the potential collapse of the ocean food chain.

Environmental Degradation
Including loss of natural habitat, the effects of pollution from mariculture practices, and the effect of pollution on mariculture, and sedimentation

Genetics
Including mariculture species prone to genetic drift and declines in heterozygosity in captive populations

Disease
Including introduction of diseases into the wild, epidemiology of diseases in the captive population, and wild-harvested fish as indicators of disease prevalence

Invasive Species
Including the effect of escaped animals, such as Atlantic species in the Pacific Northwest

The group identified the following positive actions, communication within communities, and with the broader community, quantifying how aquaculture can be sustainable, using tools like Vortex to evaluate sustainability, and performing CAMPs in countries with high levels of aquaculture. Mariculture issues are often in parallel to the use of fishes from the wild.

Positive Forward Actions
• Ornamental fish supply
• CAMPs in countries with high levels of aquaculture
• Tools like Vortex to evaluate sustainability (such as Sea Food Watch)
• Comunication within the broader community, including policy makers, educational opportunities, and the use of zoos and aquariums to disseminate information

Recommended Actions
• Conduct CAMPs in countries that have high components of aquaculture
• Find sustainable means to develop aquaculture in low currency countries
• Global assessment of fish management
• Cross-cutting meeting on implication of current management and ecological effects on mariculture and current fisheries management for zoos, aquariums and restaurants.
• Develop a set of quantitative tools to assist decision-making, and assess sustainability of current fisheries and mariculture practices

Small Mammal Conservation Strategies Working Group

Participants: Luis Carrillo Pete Riger, Pat Thomas, Kathy Traylor-Holzer, Deborah Kleinman, Sally Walker, Brandie Smith, Sanjay Molur, Karin Schwartz, Mike Jordan, Jorge Rodriguez, Eric Tsao, Mark Stanley-Price

This working group met to discuss a central issue: The various regional zoo associations are not presently cooperating on small mammal conservation strategies, and to date only EAZA has a regional “small mammal plan.” The group focused on finding methods to prioritize needs on a global effort, develop the framework to create this global effort, and methods for procuring and prioritizing conservation funding when competing with charismatic mega-vertebrates. The group chose to defer captive management issues.

Many species of small mammals are threatened, in fact, 65% of threatened mammal species are small mammals, and more than 50% of recent mammalian extinctions are rodents. Small mammal conservation planning is made more difficult by the lack of regional plans to use as models, and the lack of data on the status of small mammals, especially rodents. Certain regions, such as the Gulf Coast or Southeast Asia may be “crisis prone” and species could be lost from single perturbations.

Together, the group defined the following problems facing *in situ* conservation of small mammals:
• Limited funding
• There is no prioritized global conservation plan

• Species' status is lacking in some high biodiversity regions
• There is a need for local training, particularly in field techniques and taxonomy
• It is unclear which species need help
• There is a lack of local awareness

Actions:
• Raise money for a workshop bringing in pertinent experts from TAGs and specialist groups
• Put together symposia at zoo association meetings
• Engage IUCN for more information on status of small mammal populations
• Create an assessment/list of regional needs to achieve effective conservation
• Regional zoo associations need to develop small mammal plans
• Develop a database of regional zoo association groups and conservation organizations that fund small mammal projects
• Develop a database of ongoing small mammal research through various regional mammal societies, universities
• Build momentum to develop interest in small mammals in SSC, CBSG
• Raise public awareness
• Link with various regional mammal societies and convince donors that these links are important.
• Inventory of species that zoos are currently supporting– marry this with list of species needing assistance.
• Zoos should pursue an ecosystem approach for in situ support. Small mammals can benefit from a "piggy-back" effect when protecting habitat for larger vertebrates.

Note to ZP readers and ZOO donors : This report does not reflect the views of Sally Walker and Sanjay Molur who have been running regional small mammal networks for some years without difficult for funding and with good success in creating interest in academic and governmental agencies, public awareness, training, etc. We would like to thank the generous donors who have supported our small mammal networks, and who may wonder what we were saying while this working group was going on !

Need for Engagement with Poorly Maintained Zoos

Participants
Sally Walker, Karin Schwartz, Neil Maddison, Reuben Ngwenya, B.S. Sharma, Kathy Traylor Holzer, Iain Boardman

There are substandard zoos all over the world, in which there are often desperate animal welfare issues that need to be addressed. These issues can include a lack of resources and husbandry expertise-leadingto improper diets, enclosures and substrates to meet the specific life-support needs of animals. The lack of knowledge and resources can also be detrimental to the psychological well-being of the animals due to inappropriate enclosure size, and a lack of behavioral enrichment or appropriate social groupings. Poorly managed collections can negatively impact wild populations as well. The high mortality rate of animals kept in poor conditions may necessitate replenishing the stock from wild populations. Excessive breeding may lead to indiscriminate release of surplus animals back into the wild. Currently there is no process in place to address the issue of animals kept in very poor conditions in establishments that suffer from lack of resources and expertise.

The newly published World Zoo and Aquarium Conservation Strategy states that "Institutions conducting field projects should make every effort to include, where practicable, local zoos and aquariums in the project. Such ties will help the local institutions to promote understanding and contribute to the sustainability of local wildlife management. It is not appropriate for a well-resourced zoo or aquarium involved in a field project to ignore or snub poorly maintained or under-resourced animal institutions in the region. Well-resourced institutions should attempt to work with local institutions to improve their standards and capabilities."

A working group met to discuss substandard and poorly managed zoos throughout the world, and the organized zoo community's level of moral and ethical responsibility to these institutions and the animals they hold. Although the original intent of the working group was directed at substandard zoos in low currency countries, it became evident that a position statement would be relevant to substandard zoos throughout the world.

Substandard zoos in low currency countries do not have the same kind of access to modern diets, medications and equipment as zoos in wealthy countries. The basic cost, postage, customs duty and cost-expansion from the low-rate currency can bring prices up to three times higher than what is paid by zoos in wealthy countries. The working group recognized that zoos in low currency countries need assistance in obtaining these materials at affordable prices.

The development of stronger regional zoo associations in Latin America, South Asia, South East Asia and Africa is necessary for us, as a global community to tackle this issue, as well as a vehicle to work through in the same or nearby regions. There have been an increased number of requests from these substandard zoos that require a proactive and professional response. The group found no obvious position statement on this issue within the organized zoo community at this moment.

It is imperative that the zoo community is united and seen to be responding to the issue of sub-standard zoos. There appears to be a clear need for WAZA to produce and implement a strategy on their relationship with sub-standard zoos. A potential strong starting point could be the production of a Policy on this issue.

The working group produced the following proposed Position Statement, which was presented at the Regions meeting of the WAZA annual conference in New York City on 2-6 October.

"We as a community of organized zoos have a moral, ethical and professional responsibility to engage with poorly maintained animal collections in order to improve, achieve conservation goals and benefit the animals they hold."