

CBSG NEWS

- Annual Meeting Working Group Reports
- Ulysses S. Seal Award
- Network Reports
- Donor News



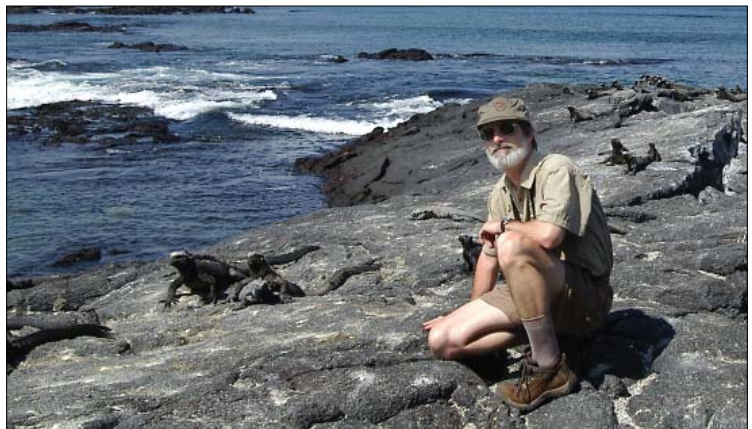
Newsletter of the Conservation Breeding Specialist Group, Species Survival Commission, The World Conservation Union

From The Chairman

News about *CBSG News*

This may be the last *CBSG News* that you receive by post. We have decided to move toward electronic distribution of *CBSG News* and other documents to the extent possible. There are a variety of reasons for this change, including the obvious conservation impact and message, and also some practical benefits for you and for CBSG.

With more than 500 members, more than 100 sponsors, and hundreds of other colleagues who wish to receive *CBSG News*, printing and distributing all paper copies of newsletters that are long enough to give even brief summaries of our work uses a lot of paper, and involves transporting that paper to readers around the world. Even if the use of resources is perhaps much less than that of a single day's newspaper that we each might read, as a conservation organization it is important to demonstrate in every way we can what people can do for conservation. In addition, the cost to CBSG to print and distribute the newsletter is about US \$6,000 per year, and requires more staff time than will be the case with mostly electronic distribution. We would rather use those resources to more directly help with species conservation.

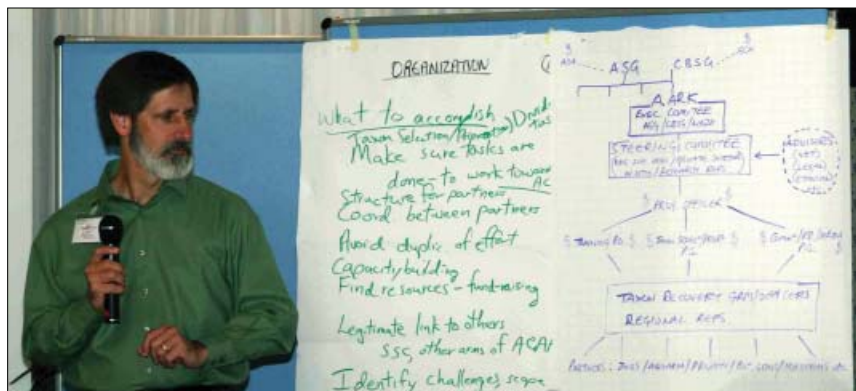


We also believe that electronic distribution of *CBSG News* will provide benefits to most of you. Packages sent by post often require up to 6 weeks to reach many parts of the world, and delivery is not always reliable. We can get an electronic version to you the day that we finish compiling it. By distributing *CBSG News* as a PDF file, we can provide user-friendly bookmarks, the issues will be easily searchable when you or we need to locate reports on past work, and we can provide hyper-links to other information on the CBSG and other websites. Although we understand that some of you will need or want to continue to receive *CBSG News* in printed form, we hope that most of you will comfortably switch to reading the electronic version or printing it locally. We absolutely do not want this change to cause you to stop reading it!

In a related change, we also feel that we must work to reduce our impact on the climate, by minimizing our contribution to greenhouse gases in the atmosphere. This may be difficult for CBSG because we are a global and highly

Notice to CBSG Members and Donors: *CBSG News* Goes Electronic

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mobile organization! One development of which I am proud is our increasing use of expertise in CBSG networks around the world to assist with species conservation. As you will see in the reports in this issue, we have recently used CBSG skills from Mexico to help in the USA, Colombia, and Japan; from India to help in Mexico; from Indonesia and South Asia to help in Viet Nam; from Europe to help in Brazil; and from Costa Rica to help in Cuba. We brought people from all of our regional

networks to a training course in Mexico. All of this air travel impacts the environment negatively, but we do feel that the conservation work accomplished is important and urgent. We will work to reduce our travel by further developing capacity in all of our networks so that we can more often rely on experts from nearby countries in our workshops. Perhaps we can allocate the savings from electronic distribution of *CBSG News* to pay for carbon offsets to compensate for our travel, while simultaneously protecting and restoring wildlife habitat in forest regeneration projects.

The one CBSG activity that probably adds the most greenhouse gases to the atmosphere is our Annual Meeting. The meeting is essential to our vitality, as it is when many members can interact with those from afar, when you can learn about CBSG activities over the year, and when you can contribute to the planning and work of CBSG. This year, we are asking our meeting participants voluntarily to add a small amount to your registration fee so that we can purchase carbon offsets sufficient to balance the release of greenhouse gases caused by your travel to the meeting. Whether or not you can make this contribution, I very much hope that many of you will join us in Budapest, Hungary in August, where I know that we will have presentations and working groups as important to our work for species conservation and as interesting as those last year in Leipzig, Germany.

Our *CBSG News*, our monthly member updates, and our annual meeting are all important ways that we keep in touch with our diverse member network, and we are working to make all of these fora more effective. Please watch for future reports on all that we will undertake with partners in 2007, including a Lowland Tapir PHVA, workshops with the Japanese Association of Zoos and Aquariums, a rapidly growing Amphibian Ark initiative, further capacity building and activity in our regional networks, and work with an SSC Task Force to help define more effective methods for Species Conservation Planning by the taxonomically focused SSC Specialist Groups.

Very best regards,

Dr. Robert C. Lacy
Chairman, CBSG

CBSG News

CBSG News is published by the Conservation Breeding Specialist Group, Species Survival Commission, IUCN, the World Conservation Union. *CBSG News* is intended to inform CBSG members and other individuals concerned with the conservation of plants and animals, of the activities of CBSG in particular, and the conservation community in general. We are interested in exchanging newsletters and receiving notices of your meetings. Contributions of US \$35 to help defray cost of publication would be most appreciated. Please send contributions or news items to:

CBSG News

Editor: Virginia Lindgren
12101 Johnny Cake Ridge Road
Apple Valley, MN 55124-8151 USA
Phone: 01-952-997-9800
Fax: 01-952-997-9803
email: office@cbsg.org

Staff:

Chairman: Robert C. Lacy, PhD
 Chairman 1979-2003: Ulysses S. Seal, PhD
 Executive Director: Onnie Byers, PhD
 Senior Program Officer: Philip Miller, PhD
 Program Officer: Kathy Traylor-Holzer, PhD
 Amphibian Program Officer: Kevin Zippel, PhD
 Administrative Assistant: Virginia Lindgren
 Administrative Assistant: Elizabeth Townsend

Regional Network Convenors:

Sally Walker, CBSG South Asia
 Yolanda Matamoros, CBSG Mesoamerica
 Amy Camacho, CBSG Mexico
 Jansen Manansang, CBSG Indonesia
 Hiroshi Hori, CBSG Japan
 Yolanda Friedmann, CBSG Southern Africa
 Bengt Holst, CBSG Europe
 Patricia Medici, CBSG Brasil

Strategic Associates:

Doug Armstrong, Omaha's Henry Doorly Zoo
 Jon Ballou, Smithsonian National Zoological Park
 Susie Ellis, International Rhino Foundation
 Don Janssen, San Diego Zoo
 Mike Maunder, Fairchild Tropical Botanic Garden
 Sanjay Molur, Zoo Outreach Organisation
 Paul Paquet, University of Calgary
 Lee Simmons, Omaha's Henry Doorly Zoo
 Ron Tilson, Minnesota Zoo
 Dominic Travis, Lincoln Park Zoo
 Harrie Vredenberg, University of Calgary
 Sally Walker, Zoo Outreach Organisation
 Frances Westley, Gaylord Nelson Institute for
 Environmental Studies
 David Wildt, Smithsonian National Zoological Park

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www.cbsg.org

2006 CBSG Annual Meeting Presentations

Confronting Amphibian Decline and Extinctions

Kevin Zippel, CBSG/WAZA Amphibian Program Officer

There are well over 6,000 species of frogs, toads, newts, salamanders and caecilians known to science. Nearly 50% of these species have been described since 1985, and surely hundreds if not thousands more await discovery. They inhabit diverse niches, from the treetops to caves and deserts, and a few even range into the Arctic Circle.

Amphibians' thin skins help them drink and breathe, but also makes them susceptible to environmental contaminants, including agricultural, industrial and pharmaceutical pollutants. Amphibians are therefore like canaries in the coal mine; just as miners used sensitive canaries to warn them of toxic gases in the mines, amphibians might be warning us of unsafe environmental conditions that could eventually seriously impact our health.



Amphibians have thrived for over 360 million years. They survived the reign and extinction of the dinosaurs, yet today we are on the verge of losing much of this spectacular vertebrate class. A recent global assessment indicates that nearly half of all amphibian species are declining, one-third to one-half are threatened with extinction,

and over 120 species have gone extinct in recent years. For every threatened species of bird or mammal, there are 2-3 amphibian species facing extinction.

The causes of the amphibian extinction crisis are diverse, likely synergistic, and poorly understood in general. By far, habitat loss affects more species than any other threat. However, one particular disease

is of great concern because of its tendency to drive species to extinction and the rate at which it proceeds. *Batrachochytrium dendrobatidis* or amphibian chytrid fungus has been associated with amphibian die-offs on every continent where amphibians are found. It is currently unstoppable and untreatable in the wild. The current hypothesis is that chytrid fungus originated in South Africa but was spread around the world from the 1930s through today via African clawed frogs, which were broadly distributed for use in medicine, research, and the pet trade. When chytrid arrives in a new region, its effects are generally rapid and severe. For example, it is believed to have arrived in Central America in the late 1980s and has since spread in a wave-like manner at 28 km per year, decimating montane amphibian communities as it progresses. Within three months of the arrival of chytrid, 50% of amphibian species and 80% of individuals may disappear. Amphibian chytrid has now been introduced onto every amphibian-inhabited continent. All indications are that it will continue to spread across suitable habitats, leading to widespread amphibian extinctions.

The global conservation community responded to this threat with an Amphibian Conservation Summit in Washington, DC, convened by Conservation International and the IUCN in September 2005. There, a Declaration was produced calling for an Amphibian Conservation Action Plan (ACAP) to address the extinction crisis and a new IUCN/SSC branch - the Amphibian Specialist Group (ASG) - to carry out that plan. The ACAP calls for four lines of action: Research, Assessment, Conservation, and Rapid Response (emergency intervention with imminent extinctions).

In conservation, the highest priority is clearly *in situ* conservation, i.e., saving species in their natural habitat. However, some traditional *in situ* conservation measures are too slow or ineffective in the case of amphibian chytrid. Park borders might stop poachers, but not disease. In these cases, *ex situ* conservation is required, bringing assurance populations into captivity to stave off extinction until *in situ* threats can be mitigated. This is the case for hundreds of amphibian species, especially those that are classified as Critically Endangered or Extinct in the Wild.

The *ex situ* community (zoos, aquariums, etc.) is uniquely suited to help, with more than 1,200 institutions, 100,000 employees, and 600 million visitors per year (1 in every 10 people in the world!). Zoos can

assist with rapid response rescues, captive assurance colonies, providing animals for release and research, conservation education, capacity building, fundraising, and helping to develop recovery plans. Not only are zoos uniquely qualified to help in these matters, but the scientific and conservation community at large has charged them to do so. Calls to action have come from the IUCN, and are included in the Global Amphibian Assessment as well.

CBSG has come together with the World Association of Zoos and Aquariums (WAZA) and the Amphibian Specialist Group (ASG) to form the Amphibian Ark (AArk) to help keep threatened amphibian species afloat. AArk will utilize short-term *ex situ* management to ensure long-term survival in nature of amphibians for which protection in the wild is not currently possible. The first emphasis is on programs within the range countries of the species, and coupling the *ex situ* work with efforts to secure species *in situ*. AArk will provide global coordination for cooperative *ex situ* programs, including leading training courses, taxon management, and public relations. It will also lead zoos in a globally coordinated public awareness campaign "2008: The Year of the Frog". The awareness campaign will enable zoos and zoo associations to lead capital campaigns to pay for their own amphibian programs. With approximately 500 major zoos in the world and perhaps as many as 500 species requiring *ex situ* help, AArk is asking each zoo to commit enough resources to save one species. To help divide up responsibility for the world's amphibians, AArk is also recommending that each regional zoo association take responsibility for nearby regions.

Zoos have a long way to go to meet the challenges ahead. I estimate that the global zoo community can



currently manage viable populations of about 50 amphibian species, which amounts to perhaps 10% of those requiring *ex situ* intervention. An appropriate response will include construction of additional biosecure facilities, training keepers, and ensuring that resources are appropriately allocated to support these requisite actions. Of course, some zoos are already making valuable contributions to amphibian conservation. Some are constructing dedicated facilities on their grounds, and some are helping to develop facilities in other regions of the world.

Amphibians are an important component of the global ecosystem, as indicators of environmental health and contributors to human health. They watched the dinosaurs come and go, but today one-third to one-half of them are threatened with extinction. The global conservation community has formulated a response in the ACAP. An integral part of that response is the Amphibian Ark, in which select species will be maintained in captivity until they can be secured in the wild.



Amphibian photos courtesy Brian Kubicki and Dante Fenolio

2006 Ulysses S. Seal Award for Innovation in Conservation Recipient: Dr. Jonathan Ballou

Presentation by Robert Lacy

One of the most important – and fun – things that I get to do as the Chair of CBSG is to recognize the remarkable contributions that colleagues have made to conservation. The most significant opportunity to do this is in the annual presentation of the *Ulysses S. Seal Award for Innovation in Conservation*. This award is very appropriately viewed as one of the foremost awards given in conservation.

I want to read an excerpt from the statement that was prepared by the CBSG Steering Committee when the Ulie Seal Award was created:

“Ulie’s great passion and talent was his creative thinking about how new science could be most effectively applied to solving the problems of wildlife conservation. His contributions were amplified many times over by his further ability to recognize, encourage, and utilize others who also were making such innovative contributions. Fittingly, CBSG has chosen to honor Ulie by creating the Ulysses S. Seal Award for Innovation in Conservation. Each year, CBSG considers nominations for this award. The contributions of a nominee need not have been through work connected with CBSG, but should reflect the CBSG values of creative thinking that results in improved conservation action.”



Previous recipients of the award are Nate Flesness, Frances Westley, and Georgina Mace. As many of you know, the combined contributions of those three have had tremendous impacts on how zoos collect and share data on the animals in their care, how CBSG brings together expertise from diverse fields to achieve conservation, and how the world classifies endangered species.

I am extremely happy to announce that the recipient of the 2006 Ulysses S. Seal Award for Innovation in Conservation is Dr. Jonathan Ballou from the Smithsonian Institution’s National Zoo in the United States.

I have known Jon for almost all of my professional life, going back to when I first started to work at a zoo and in conservation. In fact, to a considerable extent the reason that I entered the conservation and zoo world was because of two people – Jon Ballou and Ulie Seal. Jon, working with colleagues such as Kathy Ralls, did the analyses in the 1970s and 80s to show that inbreeding was damaging many of our captive populations. Largely because of that work, the world began to recognize that genetic and demographic management of populations was an essential component of conservation. Ulie was one of the first to recognize the importance of this work, and he dove enthusiastically into working with others – including Jon and Nate and Georgina – to develop methods for the scientific management of wildlife populations. I was hired because the Brookfield Zoo recognized that these guys were onto something big and important. Brookfield decided that they should contribute to these advancements, and wanted a population biologist from Brookfield to contribute as well. Most of my research in the subsequent 20 years has been driven by the need to explore questions that Jon first raised, to test his ideas, and to work with him to develop improved methods for conservation.

The nominators, the award review committee, and the CBSG Steering Committee were enthusiastic in their support of Jon as this year’s recipient. One of the nominators said:

“It is our great pleasure to nominate Dr. Jonathan D. Ballou of the Smithsonian Institution for the 2006 Ulysses S. Seal Award. Jon Ballou is a pioneer in the fields of captive breeding, pedigree analyses, population viability analyses, and conservation planning. His international conservation concerns and collaborative nature has led to invitations to participate in countless endangered species planning events from around the world.”



Jon's accomplishments vary from software development to mentoring postdoctoral fellows to reintroducing golden lion tamarins and giant pandas back to the wild. He pioneered with Kathy Ralls the first studies on the effects of inbreeding in captive populations, which documented for the first time the deleterious effects of inbreeding on a large variety of wildlife species and highlighted the importance of genetic concerns in small populations.

Jon also developed the theoretical basis for the mean kinship breeding strategy, now used globally for the genetic management of populations of endangered species, and co-authored and edited books on small populations and conservation genetics.

He helped develop the analytical software used internationally for scientific management of small populations in zoos, and is a member (and past Chair) of the International Committee for the Conservation and Management of Lion Tamarins.

While steeped in academic credentials, Jon's fundamental dedication is to international conservation. He is a master of low key discussions on controversial topics with participants from around the world. He can make the most complicated of situations quite simple, and help everyone leave feeling like they have won. He will patiently work with anyone from a forest ranger to a population modeler – he draws no lines on who deserves his time or fullest attention. In the true spirit of Jon's mentor, Ulie Seal, we can think of no more deserving person for this award.

I will also share with you just a few of the comments I received when I asked the CBSG Steering Committee for their vote on the nomination of Jon for the award:

"I have been reading Jon's work for the entire time I have been in zoos...and before that, at University. A great choice."

"I am totally, absolutely, 100% supportive of giving the award to Jon! He's had a big impact on my professional life."

"I think it is a splendid choice. Jon has worked a lot behind the scenes without making any fuss of all his achievements and all his hard work."

And finally, a short comment that I think says it best: "Superb selection. Ulie will be pleased."

He will indeed. Jon, it is with great pleasure that I present to you the 2006 Ulysses S. Seal Award for Innovation in Conservation. The medallion that recognizes this award, which has a wonderful likeness of Ulie on it, was generously provided by Omaha's Henry Doorly Zoo.

Congratulations!



2006 CBSG Annual Meeting Working Group Reports

CBSG Europe Working Group

Participants: Christian Schmidt, Fiona Fiskén, Gloria Svampa-Garibaldi, Willie Labuschagne, Brad Andrews, Yolanda Matamoros, Tiit Maran, Lena Linden, Heribert Hofer, Jean-Luc Berthier, Bruce Read, Mark Craig, Bengt Holst, Paul Pearce-Kelly, Kristin Leus, Kristina Thomasova, Danny de Man, Bjarne Klausen, Emily Brickell, Olivia Walter, Frands Carlsen, James Cretney, Neil Maddison, Miranda Stevenson

This working group was established to assist CBSG Europe in the development of a conservation action plan. The group generated three problem statements, and split into three subgroups to address as much as possible within the limited time available. The three subgroups were:

- Identification of European CBSG workshops
- Involvement of membership
- Fundraising for CBSG Europe

The final reports from the three subgroups are shown below.

Identification of European CBSG Workshops

Problem Statement

CBSG has not yet conducted any PHVA, CAMP, CCP, etc. workshops in the European region. This is a problem because it is part of the described tasks

for CBSG Europe and because such workshops can be used to generate further support (human and financial) to CBSG activities in general and to get the membership actively involved in CBSG work.

Proposed Actions

- Production and distribution of fliers etc.
- Be visible at national and international meetings and conferences.
- Work more closely with organizations already working on conservation programs.
- Conduct workshops and invite all conservation agencies.
- Link into *Red List of European Mammals*.
- Conduct Europe-wide CAMP reviews of animal groups to demonstrate wide-ranging vulnerability and need for such processes.
- Work toward better integration with support from EAZA.
- Assure potential partners of the non ownership of the CBSG process.
- Focus on animal species from European overseas "territories" and make zoos take responsibility.
- Identify CBSG supporters within the European zoo community.
- Raise visibility of CBSG Europe.
- Critical need to follow up the workshop outputs.



Involvement of Membership

Problem Statement:

CBSG Europe has a substantial number of members, but only a few of those are actively involved in CBSG activities. This is a problem because the membership constitutes a huge conservation potential, and because there is an increasing request from the members to become actively involved. Furthermore, active involvement of the members is essential for the continued support of CBSG and for the recruitment of new members/supporters. Currently CBSG Europe has no answer when people inquire as to how they can help. The group brainstormed about what CBSG Europe can offer members.

Proposed Actions

- Prepare a list of European CBSG members so CBSG team can talk to them directly.
- Give CBSG Poster to CBSG members to put up at other meetings.
- Ask volunteers for translation into more languages.
- Design a continuously updated list of ongoing activities (not only workshops but also continuing working groups, follow-up activities, etc.) on a website.
- Make workshop topics of annual CBSG meeting available much sooner
- Offer facilitation course in Europe (different language).
- Present CBSG at Euro-Asian Regional Association of Zoos and Aquariums (EARAZA) meeting to promote CBSG to Russian speaking countries and other Eastern European countries.
- Ask each current active European CBSG member to present poster and leaflets at their regional zoo association meeting.
- Compile a list of activities for members and associated benefits.
- Invite people to suggest what they can do to become involved.

Fundraising for CBSG Europe

Problem Statement

There is a lack of funding for CBSG running costs and for specific CBSG activities. There is a huge potential in Europe and all CBSG activities are based on voluntary donations from its "membership" and other supporters.

Strategy/actions

- *Produce case for support*
 - Produce draft case for support.



- Group will comment on draft.
- Create a final draft of case for support for use at EAZA Conference.
- Use this case for support as the basis for all communication/requests for funding.
- *Increased funding issues*
 - Define needs.
 - Initially, focus on increasing the amount of funding from existing members and donors.
 - Increase amount of funding from donors – project by project basis (e.g. workshop funding).
 - Develop invitation for membership (activities) and donors.
 - Increase the number of CBSG donors.
 - Use networking approach to engage the Zoo community.

These working group reports will be used by the CBSG Europe team to develop a CBSG Europe Action Plan. This plan will provide the basis for the future work in Europe and will be used as inspiration for further developments. Thank you to all participants for their enthusiasm!

Amphibian Working Group

Participants: Richard Gibson, Bob Lacy, Joe Mendelson, Dan Wharton, Anne Baker, Amy Camacho, Bart Hiddinga, Susan Hunt, Lena Linden, Kazushi Kuwabara, Linda Malek, Patty McGill, Lee Simmons, Brandie Smith, Kevin Zippel



The working group opened with presentations on current amphibian conservation activities and taxon prioritization, then split into two groups to focus on organization of amphibian conservation efforts and communication among organizations working to conserve amphibians.

Organization

The organization subgroup formalized an organizational structure called the Amphibian Ark or AArk for amphibian conservation within the *ex situ* community. This structure would include a steering committee representing CBSG, WAZA and the Amphibian Specialist Group, as well as representatives from regional zoo associations, the private sector and stakeholders.

Group members envisioned an Amphibian Program Officer working with three new employees: a Training Officer to plan and execute management training workshops around the world; a Communications & Development Officer to plan and coordinate global awareness and capital campaigns; and a Taxon Survival Officer to coordinate efforts among taxon recovery groups, which would in turn work with WAZA members, regional zoo association members, private sector partners and other approved *ex situ* facilities (e.g. universities and wildlife agencies) to manage survival-assurance populations for species that would otherwise go extinct in the wild.

Communication

In the time available, this subgroup focused on two issues: articulating the message, including a call to

action to be delivered at the WAZA conference in Leipzig and beyond, and creating a selection of options for zoos and aquariums to take action.

The Message

Addressing the amphibian extinction crisis presents the greatest species conservation challenge in the history of humanity. Without immediate captive management as a stopgap component of an integrated conservation effort, hundreds of species will become extinct. This conservation challenge is one that we, the *ex situ* community, are uniquely capable of addressing. Never before has the conservation community at large charged zoos and aquariums with a task of this magnitude. This is an opportunity for every zoo and aquarium, regardless of size, to make a vital conservation contribution, and for our community to be broadly acknowledged as a credible conservation partner. Supporting this call to action is clearly within the financial capacity of all zoos and aquariums, and engages the diverse expertise found within all institutions. Our goal is 100% participation of WAZA zoos and aquariums and the regional associations. If we do not respond immediately and on an unprecedented scale, much of an entire vertebrate class will be lost, and we will have failed in our most basic conservation mission as defined in the *World Zoo and Aquarium Conservation Strategy*. This is simply unacceptable.

Zoos Taking Action

Working group members identified several ways in which zoos can become involved.

1. Expand and support capacity-building (facilities and expertise), at home institutions and in range countries.
 - Send staff to participate in training courses or internships at institutions with existing capacity, or sponsor someone in need.
 - For institutions with facilities and appropriate collections, host a training workshop.
 - Assess, upgrade and expand amphibian facilities.
2. Contribute financially to supporting a dedicated staff position in global (WAZA/CBSG/ASG amphibian officers) or regional (AZA, EAZA, etc.) coordination (not a traditional animal manager, but a full time dedicated coordinator).
3. Immediately support and expand existing efforts:
 - Rescue programs
 - Field surveys
 - Regional programs, e.g. SSP, EEP, ASMP, APP
 - Research, especially husbandry, disease

- Local amphibian conservation projects
3. Develop information and deploy awareness programs targeted for strategic stakeholders.
 - Web sites, zoo graphics
 - Education materials
 - Media releases
 4. If each WAZA institution commits to saving a single species, our goals will be met. Therefore, each institution should have a rescue center, either on site or in an area in need of capacity building, and preferably both.
 - These efforts should cover one 'species equivalent' – that is, each center should have capacity for at least 500 animals in a managed program (the target per species), not necessarily all representatives of any given species. For example, two institutions might both develop space for 250 specimens from each of two target species.
 - The number one priority for all centers should be native species.
 - Each institution should also be involved with exotic taxa (as guided by regional TAGs), preferably in the range country; out-of-range species programs should be coupled with range-country capacity building efforts.



- All programs should be consistent with global (AArk) and regional plans.
 - These centers should conform to husbandry standards as set by the workshop held in Panama in 2006.
6. Fundraising individually and collectively to support above.

Above photo courtesy Brian Kubicki

Amphibian Conservation Resolution

Addressing the amphibian extinction crisis represents the greatest species conservation challenge in the history of humanity. A third of the world's 6,000 amphibian species are threatened with extinction. The status of many more is unknown but believed to be imperiled, bringing the percentage of threatened species potentially as high as 50%. This is significantly more than any other group of organisms: by comparison, 12% of bird species and 23% of mammal species are threatened. Recent amphibian extinctions exceed 120 species and one entire family is already lost.

The IUCN has urged that "All Critically Endangered and Extinct in the Wild taxa should be subject to *ex situ* management to ensure recovery of wild populations." (IUCN, 2002). Comparable calls to action are included in the Global Amphibian Assessment and other IUCN documents. Without immediate captive management as a stopgap component of an integrated conservation effort, hundreds of species will become extinct.

This conservation challenge is one that we, the *ex situ* community, are uniquely capable of addressing. Never before has the conservation community at large charged zoos and aquariums with a task of this magnitude. This is an opportunity for every zoo and aquarium, regardless of size, to make a vital conservation contribution, and for our community to be broadly acknowledged as a credible conservation partner. Supporting this call to action is clearly within the financial capacity of all zoos and aquariums, and engages the diverse expertise found within all institutions.

Our goal is 100% participation of WAZA zoos and aquariums and the regional associations. If we do not respond immediately and on an unprecedented scale, much of an entire vertebrate class will be lost, and we will have failed in our most basic conservation mission as defined in the *World Zoo and Aquarium Conservation Strategy*. Through the AArk initiative, we will respond appropriately, we will save many species that would otherwise be lost forever, and we will demonstrate to the world that the zoos and aquariums are essential contributors to nature conservation.

Field Project Prioritization Working Group

Participants: Brad Andrews, Susanne Boardman, Emily Brickell, Onnie Byers, James Cretney, Lesley Dickie, Fiona Fiskén, Jo Gipps, Heribert Hofer, Bengt Holst, Bjarne Klausen, Lena Linden, Neil Maddison, Yolanda Matamoros, Patty McGill, Eric Miller, Harry Schram, Miranda Stevenson, Gloria Svampa-Garibaldi, Olivia Waters, Chris West

The Field Project Prioritization (FPP) initiative was born along with the publication of the *World Zoo and Aquarium Conservation Strategy* (WZACS) and is intended to help zoos of all types and sizes to fulfill the visions set out in the Strategy. Specifically, WZACS calls on all zoos to be directly associated with conservation programs in the wild; to integrate all aspects of their work with conservation activities; and to become a worldwide force for conservation, contributing to conservation in the wild by providing knowledge, skills and resources.

It is clear that many zoos currently contribute to field conservation, and many more want to do so. We know that if efforts are focused and sustained the international zoo and aquarium community has the potential

to impact conservation like no other industry. CBSG, in collaboration with WAZA's Conservation Committee, has been working opportunistically over the past few years to develop tools that zoos and aquariums can use to identify and prioritize field conservation projects on the basis of conservation need and opportunity for significant impact.

Last year at the CBSG and WAZA Annual meetings the working group developed the first draft of an FPP tool - a set of criteria against which conservation projects might be evaluated. The tool has since been revised into a questionnaire and we are now ready to test its ability to narrow down a large number of field projects and help decision makers to identify projects of both high conservation potential and institutional suitability.

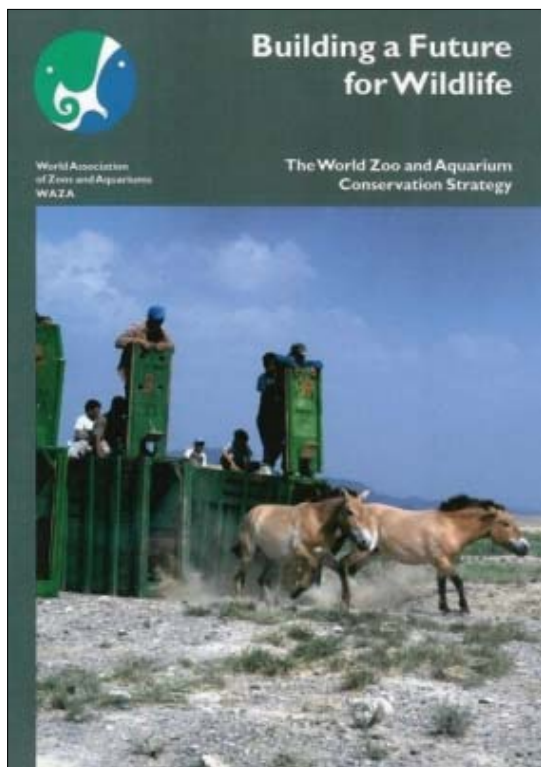
The goals for this working group were to: review the EAZA field projects database and assess whether the information necessary for completing the FPP decision tool is contained within the database; discuss incentives for use of the FPP tool and a global field conservation database; and learn about the World Land Trust's approach to project selection and compare project selection criteria

EAZA Database

EAZA's *in situ* conservation database uses the FPP criteria, and a review of the database resulted in the unanimous conclusion that the database is an exceptional tool that will fulfil its original purposes of promotion of the work of EAZA institutions and the facilitation of partnerships. EAZA members can input information directly into the database and all EAZA zoos will be required to update their information annually. The database is an incredible step forward and the data collected and the analysis and reports it enables will help tell the story of the *in situ* contributions being made by the zoo and aquarium community. The goal is for this database soon to become global so that all zoos and zoo associations will have the opportunity to populate the database and to query the information it contains.

The questions in the FPP decision tool are almost 100% compatible with the information requested of projects entered into the database. The only elements missing from database appear to be a measure of conservation urgency (this can be fixed by including fields for IUCN Red List category and criteria, and for habitat protection status) and an ongoing evaluation component.

There are some issues that need to be addressed if the



database is to be expanded and used as a tool identifying suitable field projects, rather than simply reporting on on going zoo-based projects. We need to consider allowing for the input of projects being conducted by researchers and NGOs outside of the zoo community.

The next steps are to draft clear and complete definitions and working notes to accompany the FPP tool, developing and including in the accompanying materials several worked examples, and to clarify what is meant by dome fields. The *in situ* conservation database is a powerful tool and, if used effectively and in conjunction with the FPP tool, will help bridge the internal and external credibility gaps facing zoos.

Incentives to Use FPP Tool and Database

Directors and others who traditionally make decisions as to how to spend conservation funds have their own (not necessarily explicit) systems. They must be offered the new FPP database and decision tool and convinced that there is some advantage to changing their decision-making techniques. The group discussed incentives for the use of the FPP tool and global *in situ* conservation database. These include:

- Inclusion of an institution's work in regional and global zoo association reports
- The program provides reports that enable an institution to summarize and promote its collective work both internally and externally.
- Ability to easily obtain data to include in messages to the media
- Help in decision-making by making it less subjective
- The tools do not ask too much of the user but offer a great deal of benefit.

These benefits need to be made clear in the FPP and database accompanying materials.

World Land Trust Project Selection Criteria

We were fortunate to have with us at this meeting Emily Brickell, Projects Coordinator for World Land Trust (WLT). WLT is interested in helping zoos identify suitable *in situ* conservation projects for sustainable management of biodiversity. The working group was able to learn from each other's approaches and see where we might collaborate.

Emily described in detail the selection criteria they use to select projects. The WLT process is subjective and transparent. It is not a scored system, which allows WLT to retain flexibility. WLT makes a trip to each project site each year but they are interested in revising and improving their own monitoring and evaluation component.

It was of tremendous value for the group to discuss the FPP approach in terms of the WLT selection criteria and to identify the strengths of each. We identified several areas of common interest and intend to continue communicating as we further develop tools to help zoos fulfill their potential and become a worldwide force for conservation.

Actions

- Get from WLT information on their project proposal requirements.
- Revise FPP tool and EAZA database to capture missing components.
- Provide input into the WAZA workshop on WLT and FPP.
- Distribute tool for testing and revise as necessary.



California Condor

Global Species Management Programs Working Group

Participants: Paul Pierce-Kelly, Kristin Leus, Olivia Walter, Yolanda Matamoros, Danny de Man, Bruce Reed, Brad Andrews, Christian Schmidt, Willie Labaschagne, Antoinette Kotze, Laura van Meer, Kazuyoshi Itoh, Jeffrey Bonner, Fred Launay, Sherman Wong, Jansen Manansang, Mark Craig, Phil Miller, Karin Schwartz, Onnie Byers, Frands Carlsen, Kathy Traylor-Holzer, Suzanne Boardman, Kristina Tomasova, Jonathan Wilcken

Background

The Committee on Inter-Regional Conservation Cooperation (CIRCC) has developed a framework for the management of global *ex situ* programs. The working group explored the issues surrounding establishing global programs including: the need for global programs; what global programs might look like; how a globally managed breeding program might relate to regional breeding programs; obstacles which might face global programs; and the minimum requirements for a globally managed breeding program.

Definition

A global program involves managing a particular taxon with agreed set of goals, to an agreed strategy, across more than one region (ideally all regions), with the aim of involving all regions in the program.

Types of Programs

Global programs can cover a range of structures, from closely centrally coordinated programs to semi-autonomous regional programs with strategic links among them to achieve common goals:

Issues and obstacles may include logistic constraints when transporting animals, data needs, the lack of commonly agreed goals, costs, animal ownership issues, regional differences, and human factors such as personal and political conflicts. Successful programs will need effective and appropriate species selection, quality program coordination and management, and strong, effective communication, especially when problems arise.

Species Prioritization

Discussion on a process for identifying candidate species focused on two processes. A reactive process, responding to interest, involves communicating clearly to potential stakeholders the need for and prerequisites of a program, and responding to applications. A proactive process would involve identifying species in need and soliciting an application for global management. The proactive process may result in identifying species in need without 'program readiness' in place, or a process to achieve this. Nevertheless, at least in some cases, a clear need has been expressed, e.g. elephants (Elephant Working Group, 2005 CBSG Annual Meeting), that requires a response. A hybrid



2005 Elephant Working Group



approach was proposed, making use of regional prioritization structures (taxon advisory groups and regional associations).

Actions

The working group recommended the following actions:

- Review the current Roles and Responsibilities of the Management Team to allow for greater flexibility in identifying program coordinators.
- Establish a reference body made up of coordinators of 'successful' and 'problematic' programs.
- Review the successful models to identify factors in common in well coordinated programs.
- Write guidelines to assist management teams that identify the skill sets required, suggested working procedures, etc.
- Design a training course for a global program management teams, based on the guidelines for management teams.
- Using case studies of successful programs, compile examples of: the need for global collaboration and the benefits of global collaboration. Provide this to the WAZA Marketing Committee.
- Identify key audiences within the zoo and aquarium community, relevant government agencies, and the wider community.
- Develop publicity materials outlining the case for global species management for wide circulation, inclusion on web sites, etc.
- Develop a simple tool to assess and assist with achieving program readiness using the reintroduction decision-tool (IUCN Reintroduction Specialist Group) as a template.
- Request TAGs, and regional zoo associations to identify potential candidate species for global management.
- Cross-check responses for species commonly identified and assess against assessment criteria
- Communicate back to regional associations and request assistance in development of global programs for these species.

- Request that WAZA Council champions the development of global species management programs for elephants.

Evaluation of Global Programs

It was agreed that the subject of program evaluation was substantial and needed to be separately addressed.

Integrated, Seamless Conservation Working Group

Participants: Claes Andren, Brad Andrews, Anne Baker, Jean-Luc Berthier, Emily Brickell, Ginny Busch, Jeff Bonner, Luis Carillo, James Cretney, Lesley Dickie, Fiona Fiskin, Gloria Svampa-Garibaldi, Jo Gipps, Heribert Hofer, Mike Jordan, Lena Linden, Bengt Holst, Susan Hunt, Bjarne Klausen, Antoinette Kotze, Neil Maddison, Tiit Maran, Eric Miller, Akira Murayama, Christian Schmidt, Harry Schram, Lee Simmons, Miranda Stevenson, Hassan Syed, Chris West, Kevin Zippel



Background

Zoos are the only conservation organizations that have the opportunity to position themselves as (and actively be) completely holistic conservation organizations, seeking to provide integrated, seamless conservation from zoos to the wild. Yet, zoos are unsure as to how to accurately describe their *ex situ* work. What do they feel is a conservation action and what is simply an activity to run the zoo as a visitor attraction? Can the totality of their actions that contribute to positive conservation outcomes be described and communicated both to an internal institutional audience and an external audience? Better reporting may enable a systematic review of activities to be undertaken, and, if required, a re-distribution of resources.

Problem Statement

Field activities can be labelled 'conservation', regardless of whether any attempts have been made to measure the real impact of those actions. Many zoo staff implement action in the field, and this is relatively

easy to describe, with zoos routinely reporting on these activities in annual reports and reviews. However, describing which aspects of the work carried out within zoos has been less defined.

ZSL has produced a draft framework for a zoo-based conservation audit and this will be tested in 2006/07. This draft framework formed part the working group discussion.

Challenges

- Define what is meant by 'zoo-based conservation',
- Formulate criteria with which to describe and identify conservation actions of zoos (with particular reference to *ex situ* activity).

There was great diversity in views but an agreement that zoos should be able to accurately describe their conservation work.

How do we define conservation in zoos?

There then followed a discussion around the topic of education in zoos and whether or not there can be a split between 'basic' education and 'conservation' education. Suggestions and ideas for measuring conservation impact included the following: zoos doing part of schools' conservation curriculum; ZSL has produced definitions to enable collation of activities and decide whether they are conservation or not; audit the zoo's environmental impact; and measure how many hectares and species are conserved in the wild. There are things that can be audited to measure our impact – quantitative measure and qualitative measures will be needed.

The Cambridge Conservation Forum has described seven core types of conservation action:

1. Site management
2. Species management
3. Policy and legislation
4. Livelihood enhancement and alternatives
5. Training and capacity building
6. Education and awareness raising
7. Research and conservation planning

This is a useful means of grouping activities, and permits clearer identification of areas of activities. The ZSL audit refers to these areas as ultimate activities.

- *Ex situ* management 1 – ARK species: maintaining species that are extinct in the wild (locally or globally) and would become completely extinct without *ex situ* management. e.g. *Partula spp.*, Socorro dove.

- *Ex situ* management 2 – Rescue species: maintaining species that are in imminent danger of extinction (locally or globally) and are being managed in captivity as part of the recommended (by a recognized authority such as IUCN) conservation action. E.g. Bali mynah (*Leucospa rothschildi*).
- *Ex situ* management 3 – Supplementation: maintaining species for which *ex situ* management may benefit the wild population through breeding for supplementation as part of the recommended conservation action (by a recognized authority e.g. IUCN). This is regardless whether or not the supplementation takes places (with respect to a time frame appropriate to the species) e.g. Corncrake (*Crex crex*) Action: consider inclusion of these species as a separate category.
- Conservation research: specific applied research that contributes to the conservation of a threatened species or a related species (undertaken *ex* or *in situ*). The term *research* in this instance also applies to the development of new procedures/practices. E.g. Greek killifish surveys.
- *In situ* habitat management: carrying out actions with the specific intent of maintaining, restoring or creating habitats with the intent of this leading to conservation benefits for threatened species or habitats. This can be in the boundaries of the zoo or external to the zoo.
- Training for conservation: imparting techniques or information with the specific intent of enabling those trained to carry out activities that will lead to conservation benefits for threatened species or habitats.
- Capacity building for conservation: donating monies or equipment with the specific intent that targeted projects will lead to conservation benefits for threatened species or habitats.
- Conservation education/interpretation: delivering conservation education/interpretation messages (*in* or *ex situ*) with the specific intent of effecting behavioral change through improved knowledge and attitude.
- Conservation Fundraising: undertaking activities with the specific and focused intent of generating funding for defined activities, which lead to conservation benefits for threatened species or habitats.
- Technical support: providing expertise and skills to enable colleagues (internal or external) to carry out activities that lead to conservation benefits for threatened species or habitats, e.g. assisting with customs seizures.
- Conservation policy development and advocacy: the development of ideas that help define a position and/or assist in the development of thinking that ultimately benefits conservation. Contributing to a process that brings about legislative change of benefit to conservation.

Where Now?

To create a generic product that WAZA zoos can apply to their own institutional activities.



WAZA Initiative to Engage Poorly Maintained Zoos Working Group

Participants: Sally Walker, Hang Lee, Danny de Man, Jansen Manansang, Sherman Wong, Amy Camacho, Mike Jordan, Laura Van der Meer, Kenichi Kitamura, Kanako Tomisawa, Hiroko Ogawa, Hiroko Somura, Etsuo Narushima, Ed Asper, H. Jorg Adler, Brij Raj Sharma, Kathy Traylor-Holzer, Juan Cornejo, Reuben Ngwenya, Antoinette Kotze, Harry Schram, Kazuyoshi Itoh, Hiroshi Hori

This working group built upon the work done at the 2005 CBSG Annual Meeting and the WAZA project to address the issue of substandard zoos; specifically, the working group discussed the following issues involving what can be done by zoo visitors to help improve standards for all zoos.

1. Other than zoos, who can assist substandard zoos meaningfully, effectively and constructively?
2. If people are taught how to identify aspects of a good zoo, will this help adjust their perspective towards zoos?
3. If people are better informed about what makes a good zoo, can they be involved in improving substandard zoos?
4. If a visitor can identify a substandard zoo, can they help improve the situation? If so, we need to educate visitors on how to do this effectively.

The working group held a brainstorming session and generated the following points for discussion, which consider both the potential risks and benefits of involving the public.



Over-regulation could stifle zoos. Depending on the country, zoo standards legislation could be good or bad. Public involvement could also affect self-regulation by national or regional associations.

It is possible that efforts to improve zoo standards could lead to the public criticizing all zoos unnecessarily. Focusing on zoo quality could distract people from important conservation efforts and shift emphasis from conservation to welfare. If the public has a negative perception, people may try to police zoos rather than support positive zoos and programs. An evaluation form could possibly be used as a weapon by anti-zoo groups against good zoos, but the working group felt that public education is critical to minimize these risks.



Risks are not limited to evaluations by the general public, but may extend to evaluations within the zoo community. Criticism from a regional zoo association could turn a zoo against relationships with those associations that support zoo evaluations. Evaluations by regional associations could be perceived as a source of negative publicity and lead to isolation of the zoo from the global and regional zoo community. Evaluations could lessen the chances of non-member zoos becoming members of regional associations, they may no longer want to join, or they may not meet established evaluation criteria.

The public might create societies in support of zoos, which would help them improve. There are many good examples of such societies throughout the world. The public could also be guided to contact regional and national zoo associations who could help mentor struggling zoos. Giving the public information on how to help to improve zoos and not just identify substandard zoos is crucial, as is encouraging the public to join associations related to zoos that need improvement as a way to invoke change.

It is important to take a positive approach and try to help zoos improve rather than condemning them. This is a means of avoiding massive zoo closures, which would result in the need to relocate animals, a task that might be placed on already burdened “good” zoos. If good zoos are not able to accommodate this need, they would likely be perceived negatively by the public. Displaced animals such as those from circuses also need to be cared for, perhaps through the creation of rescue centers as has been done in India.

We must encourage improvement at every level, so as not to categorize zoos in black-and-white, but rather to define minimal standards below which zoos should not go, such as unacceptable traveling menageries. Additional criteria may be useful but are not critical, and standards will vary from region to region.

Public reading material may initially convey criteria in black-and-white. In any materials produced, we should emphasize that all zoos may have good and bad aspects, and that visitors should take that into consideration.

Approaches to the problem of substandard zoos have been different in various countries. AZA is trying to avoid legislation by keeping high criteria and standards for its membership, while India has very strict government regulation of zoos, which has drastically improved the quality of zoos in that country.

Governments should be involved in developing zoo evaluation programs so that they are aware of the effort and can contribute. Zoos should be made aware of evaluation campaigns before they are launched so that they have the opportunity to improve.

Many other suggestions and perspectives were represented. Overall, the group decided that positive effects of zoo evaluations were:

- Evaluations force improvement or closure.
- Evaluations may be a strong influencing force.
- Evaluations could enact positive legislation.
- Evaluations could enable self-regulation.
- Evaluations could guard against anti-zoo publicity.
- Evaluations may result in the creation of a zoo support group.
- Evaluations are a way to help the public interact with local zoo associations.



*Overcrowding in a zoo exhibit.
Photo courtesy R. Marimuthu, Zoo Outreach Organisation*

- Public education gives people tools for positive action.
- Evaluations might improve public perception of animals in general with positive conservation impact.

However, zoo evaluations may have negative effects on zoo improvement as well. The group identified the following concerns:

- Can visitors identify a poor zoo?
- Evaluations can affect zoo attendance and finance.
- Dangerous to over-simplify problems.
- Evaluations can over-influence legislation.
- Evaluations may be over-critical of “good” zoos.
- Focus may shift to welfare instead of conservation.
- Could be influenced by anti-zoo publicity.
- Could break links to formal zoo support groups.
- Focus on negative aspects of zoo’s work.
- Could place an additional burden on good zoos if substandard zoos close.

IUCN Species Information Service and the Zoo and Aquarium Community Working Group

Participants: Jim Ragle, Frands Carlsen, Karin Schwartz, Yolanda Matamoros, Suzanne Boardman, Dan Wharton, Fred Launay, Sanjay Molur, Bob Lacy, Hassan Syed, Willie Labuschagne, Nate Flesness, Heribert Hofer, Onnie Byers, Bart Hiddinga, Olivia Walter

Background

The Species Information Service (SIS) will be a database on species that may include such information as habitat, threats, use/trade, range of distribution and occurrence, life history, Red List assessment, conservation actions, ecosystem service, and how species contribute to human livelihoods. SIS will support and improve the delivery of accurate, current, comprehensive species-based biodiversity data from the expert data providers to organizations that need such data to guide their decisions. It is expected that SIS will be available to all within SSC to use to obtain information and available for managing information if appropriate. Ideally SIS could offer data input to assist in CBSG processes, and conversely, data obtained in these processes could contribute to the SIS database.

SIS, ISIS and Specialist Groups

SIS was initially planned to meet the needs of Specialist Groups, but CBSG may have different needs than Taxon Specialist Groups in using SIS to assist in CAMP and PHVA processes. The zoo/aquarium community collects information on individual specimens and groups in ISIS, and this information could also be used to assist in CBSG processes.

The Reintroduction Specialist Group is interested in conservation-related status of species in a thematic group. Users from this Specialist Group might extract information on populations that could lead to action such as captive breeding, reintroduction or translocation. Conservation needs may be determined for a specific population or area of concern.

ISIS members would benefit from SIS in management of animals in captivity. Conversely, information in ZIMS (the new web-based ISIS Zoological Information Management System that is soon to be deployed) would be useful to assist those working on the Red Listing and CBSG processes.

ISIS members would benefit from being able to access SIS while working within ZIMS. Information that would be useful for captive management includes status in the wild, reason for threatened status, habitat information, and life history information. Zoos that are looking for



field programs to support would want to know the priorities for species action plans. ISIS will need SIS to use the IUCN version of taxonomy for regulatory purposes, as well as the Red List status and reason for that status. It would also be beneficial to have a link between ZIMS and SIS so users could access information from both programs simultaneously.

SIS as a Service Tool

SIS will contain information generated within the SSC at a species level and potentially at a higher level and not in terms of individual specimens. Users will be able to go into the SIS web site and type in a species name and get all of the information in one place. It would be very useful to have a tool available to integrate information not only by species but by range (area) – to draw a line through different layers of SSC information and find out what is available for a specific geographical region or area.

Development of SIS

Time frame for development of the proposed core system is 9 months to 1 year after initial work begins. IUCN estimates cost of US \$125,000 to \$150,000. Fundraising initially may be marketed by requesting funds to support the Red Listing process. A core of information will be developed, and will expand with the possible addition of features or modules for specific groups.

Action Plan

There are three main groups that need to understand each other's processes before collaboration can be defined.

1. IUCN – SSC: Red Listing (Global Assessment) process
2. CBSG – CAMP and PHVA processes
3. ISIS – ZIMS

A meeting of key representatives from these three groups will be organized to begin collaboration. In preparation for the meeting, information will be exchanged on the different processes. The meeting was held in London, England, on 26-27 November 2006. Hassan Syed (ISIS) will be conducting a ZIMS Webex session for key representatives, to increase their understanding of ZIMS.



Mitigation

Zoo and aquarium based efforts to mitigate institution impacts on global warming could be effective, and zoos could consider the following actions to raise awareness of climate change, and act to reduce their own impact.

- Zoo operations – emissions reduction impact.
- Lead by example.
- Factor into zoo design.
- Act locally – think globally.
- Use of zoo education programs.
- Zoo visitors can be more immediately engaged – i.e. can take action immediately.
- Recognize all programs have a global climate change impact.

Actions: Climate Change Mitigation

- Assemble database of known climate change biodiversity threat and mitigation education/awareness materials and initiatives, key institutions and specialists .
- Produce CBSG climate change impact position statement.
- Champion development of zoo-based educational materials; encourage zoos to incorporate into education programs.
- CBSG to provide case studies (with measured confidence levels) of why species are endangered by climate change – for awareness raising – and provide to WAZA.

General Considerations

Every SSC group should feed into the processes – this requires improved data/analysis exchange with CBSG.

CBSG level of species and site resolution is not usually addressed in climate change impact analysis– may be able to draw on students / researchers, etc.



Proposed CBSG Statement of Concern for Consideration by WAZA

'Given the severity of the climate change threat facing species, habitats and biomes around the world, we urge the international zoo and aquarium community to prioritize commitment to reducing the global warming threat as a key focus of its public education programs.

To this end, a WAZA-led campaign to increase awareness of the global warming threat to biodiversity and to reduce global greenhouse gas emissions is urgently required.'

CBSG to assist with relevant information – seek assistance from WAZA

2006 CBSG Regional Network Updates

CBSG South Asia

CBSG South Asia has pioneered a very useful combination of regional specialist groups' workshops for the last four years, conducting joint meetings of CBSG and the Reintroduction Specialist Group (RSG) in four different Asian countries. The last two meetings featured the same themes: namely the current issues being discussed, analyzed and promoted by the groups. The theme for RSG was issues related to the creation of Rehabilitation Guidelines and for CBSG, issues relating to substandard zoos.

In 2005, the Joint Meeting was held in India, and 42 participants attended from several states in India as well as Pakistan, Sri Lanka, Nepal, and the United Kingdom. This year, the meeting was limited to a presentation and two working groups at the South East Asian Zoo Association (SEAZA) meeting, but we believe the presentation and working groups were effective in introducing our topics to many South East Asian zoo and wildlife personnel and answering their questions.

During the 2005 meeting, a working group on substandard zoos developed minimum standards which could be used to assess South Asian zoos. Many participants seemed to find confidence in the meeting because this topic was out on the table instead of being ignored. More than 40 delegates participated in the next working group on substandard zoos (2006). These delegates raised issues such as finding the term "substandard"



objectionable, that good and bad practices can happen at any zoo, concerns about cost-effectiveness of improvements and the importance of building relationships based on mutual trust and respect.

The combined CBSG and RSG meeting is extremely useful as our two groups have so much in common and attract many of the same, highly interested conservationists. These CBSG/RSG meetings are sponsored by the Chester Zoological Gardens and the Universities Federation for Animal Welfare. Another meeting of CBSG RSG South Asia is planned for Nepal in 2007 in connection with the South Asian Zoo Association for Regional Cooperation (SAZARC).

Submitted by Sally Walker, Convenor, CBSG South Asia



CBSG Japan

In Japan, it is uncommon to hold strategic meetings on endangered species conservation with a variety of stakeholders or local residents, and the CBSG workshop process is different from the typical Japanese approach to problem analysis and planning. CBSG Japan has adopted a new theme of “How Japan will benefit from adopting conservation techniques and processes that have been successfully introduced in other countries”, and it is our hope that promoting the PHVA process will lead to more CBSG workshops in Japan, benefiting Japanese species.

In September 2006, CBSG Japan organized a symposium at the annual meeting of the Japanese Society of Zoo and Wildlife Medicine (JZWM). The symposium evaluated the effectiveness of the Tsushima Leopard Cat Conservation Planning Workshop, and provided a general introduction to the CBSG workshop process for Japanese wildlife and zoo practitioners.

About 400 people attended the symposium, at which CBSG’s Phil Miller presented an overview of world conservation trends and CBSG work, additional presentations were made on the golden lion tamarin conservation program, the recent reintroduction of the Oriental White Stork in Japan, and background and impact of the CBSG-led Tsushima Leopard Cat Workshop. As a conclusion, a presentation addressed the effectiveness of the strategic meetings such as the PHVA workshop. This symposium was followed by a three-hour lecture about the PHVA process. For many participants, it provided a chance to understand the philosophy of PHVA



workshops. After the symposium and lecture, many young conservation practitioners and PhD students expressed a strong interest in the PHVA process.

Through using well-established CBSG processes and tools, CBSG Japan is beginning to better understand how to achieve our goal of saving species native to Japan and its neighboring countries. We are hoping to plan more training courses and PHVA workshops to improve our own knowledge and skills for future conservation activities.

Submitted by Hori Hiroshi, Convenor, CBSG Japan



CBSG Europe

Last year CBSG Europe made an effort to get the European CBSG membership more involved in the daily work of the organization. Since then we have included dedicated people who have volunteered to translate CBSG documents into local languages, and the first documents have already been translated. So far we have translators doing German, French, Spanish and Portuguese translations, and we are actively looking for people from other European countries to do translations into their own local language.

CBSG Europe has participated in a number of workshops as facilitators and modelers in different parts of the world. In Europe, Frands Carlsen helped facilitate the Primate Reintroduction Workshop in Apenheul, The Netherlands on 19-22 April with Onnie Byers, and Bengt Holst gave presentations about CBSG at various zoo meetings. Kristin Leus worked as a modeler at several CBSG workshops overseas and assisted in teaching a Population Modeling training workshop in Mexico.

A New Web Site for CBSG Europe

One of the major problems for CBSG in Europe is communication. Communication among the CBSG members is crucial in order to keep people informed about CBSG activities and CBSG developments, and to get people actively involved. But so far this has been a pretty weak point, especially in Europe. For example, CBSG Europe was involved in five CBSG conservation



workshops including training workshops in 2005 we plan for a Green Toad PHVA (Population and Habitat Viability Assessment) workshop in Sweden in 2007. However many of our members have been unaware of this because our communication has simply not been good enough. To improve communication, we launched a new CBSG Europe web site (www.cbsgeurope.eu) to keep closer contact with our members and to inform them about CBSG Europe and its activities.

Submitted by Bengt Holst, Convenor, CBSG Europe



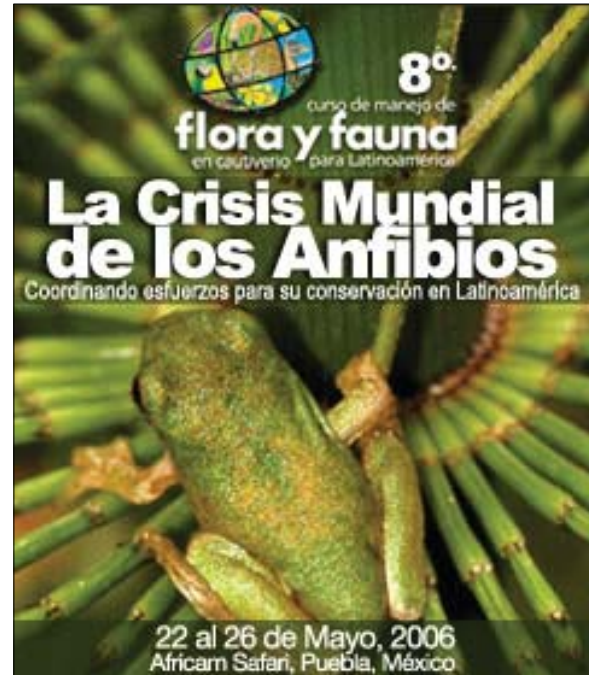
CBSG Mexico

Last year was a very busy, productive and rewarding year for CBSG Mexico. We began forming a partnership with the Comisión Nacional de Áreas Protegidas (CONANP- www.conanp.gob.mx), an organization that manages the Priority Species Program within Mexico. In this process, the Mexican Government accepted and adopted the methodologies used by CBSG for the assessment and evaluation of wildlife species in Mexico.

This partnership led us to plan and develop a series of workshops on behalf of the conservation of Mexican species, such as the Mexican wolf reintroduction site prioritization and release protocol, the Mexican Amphibian conservation workshop, the Mexican Primate CAMP/Mantled-Howler Monkey PHVA, and the Mexican Jaguar PHVA.

We were also lucky to travel internationally to help others in the conservation of wild species in other regions. Thanks to the training received during different workshops and training courses conducted by CBSG, individuals from the CBSG Mexico team either conducted or helped to conduct various workshops, among them the National Conservation and Management Plan for Felids in Colombia, the Tsushima Leopard Cat Conservation Planning Workshop in Japan and the Greater Sage Grouse Conservation Workshop in the U.S.

During this year we worked actively to inform our colleagues and the Mexican conservation community



about CBSG, the workshops we have been conducting, and other conservation information through the CBSG Mexico e-bulletin. So far we have produced three editions of the e-bulletin, and are looking forward to the next issue.

Submitted by Amy Camacho, Convenor, CBSG Mexico



CBSG Brasil

The CBSG Brasil team decided to keep the network at very low profile in 2006 because two members of the staff are finishing their PhDs (Arnaud Desbiez and Anders Gonçalves da Silva), and two members are starting their PhDs (Patrícia Medici and Leandro Jerusalinsky). In 2007 we should be able to go back to our regular activities, conducting two PHVA workshops and possible training courses (*Vortex* and facilitation skills) per year.

While we intend to limit ourselves to two workshops a year, we hope to be able to continue contributing to the successful implementation of the action plans developed during the workshops. Workshop participants will be encouraged to work with CBSG modelers to improve the models developed during the workshop, to run models for specific populations or regions in which they work, and to use this information in reports or as a fundraising tool for specific actions. By maintaining ties with the workshop organizers, and continuing to provide assistance with the use of the models developed we hope to strengthen the outcome of the PHVAs we conduct.

CBSG Brasil prepared two workshop reports in 2006; the Lion Tamarin PHVA Report, available December 2006, and the Maned Wolf PHVA Report, which will be available in early 2007.



CBSG Brasil is planning to hold two workshops in 2007. The first will be a Lowland Tapir PHVA in Sao Paulo, Brazil, which we expect will have 80 participants from all range countries of the lowland tapir. We also plan to hold a facilitation skills training course in May 2007, with instructors from CBSG and about 20 participants.

Submitted by Pati Medici, Convenor, CBSG Brasil



CBSG Indonesia

CBSG Indonesia has been actively involved in several projects in recent months, and has thrown its support behind initiatives raised at the WAZA Conference and CBSG Annual Meeting in Germany and also at the 15th South-East Asian Zoos' Association (SEAZA) conference in Ho Chi Minh City, Vietnam.

As a direct result of these meetings, a working group on climate change is being formed. This global challenge is arguably the most difficult task facing CBSG Indonesia and other organizations in developing countries and elsewhere. The new working group will focus on its effect on the various habitats within the Indonesian archipelago and seek ways to cooperate with other bodies to lessen its impact.

Zoo standards have been an issue of concern across the region. Because some endemic species rely on zoos for their future survival, it is vital that CBSG Indonesia play an active role in monitoring the standard of zoos in the area. Recognizing that so-called "sub-standard zoos" often lack the necessary funds and expertise to improve their facilities, CBSG Indonesia supported the recent SEAZA move to have the subject of "zoos seeking to improve" highlighted during the Vietnam conference. In fact, its theme – Zoos on the Fringe – and the opening speech focused on this topic. Working with Sally Walker and the Zoo Outreach Organisation, an enlightening workshop was held during the conference, and recommendations will be passed on to the new WAZA working group on such zoos.

Within Indonesia, CBSG has supported SEAZA's work to assess zoos, including checking zoos and providing them with recommendations for changes and improvements. Breeding programs and other initiatives at various zoos in the country will continue to be monitored by CBSG Indonesia.

CBSG Indonesia is also working toward having fully-trained CBSG staff in our region, and our organization was excited to have a biologist attend the recent modeler training course in Mexico. The importance of PHVAs and other CBSG workshops cannot be underestimated and we are pleased that the training of local modelers is continuing.

Just as our colleagues in other countries, CBSG Indonesia faces challenges, but it is reassuring to know that we can work closely with other groups in this country, and in the region and that we are part of the world-wide structure that is CBSG.

Submitted by Jansen Manansang, Convenor, CBSG Indonesia

Sumatran Elephant Conservation

At the 2006 CBSG annual conference held in Halle, Germany, CBSG Indonesia reported on the Sumatran elephant conservation effort. Since the original CBSG assessment at the 1993 PHVA workshop in Indonesia, the population has continued to decline. A 2006 Sumatran elephant population survey shows a 7.6% decline in the combined wild and captive population compared with a survey in 2000. This is consistent with an overall downward trend of the Sumatran elephant population since surveys were begun in 1983.

As with many endangered species, the main inter-related threats to the Sumatran elephant continues to be human conflict and habitat destruction. The current transmigration of Indonesians to the island of Sumatra by the Indonesian government, as well as a highly profitable lumber and paper product market, will most likely cause these threats to increase rather than decrease in the short term. In summary, new conservation efforts are needed, and existing efforts need to be re-energized, to curb the decline and eventual extinction of the Sumatran elephant population.

CBSG Mesoamerica

Cuban Psittacids PHVA 13-16 February 2006 La Havana, Cuba

There are two species of Cuban psittacids: the Cuban Amazon parrot (*Amazona leucocephala*) and the Cuban parakeet (*Aratinga euops*). These two species live in the palm holes made by the churrozo woodpecker, *Colaptes fernandinae*. The two species of parrots and the woodpecker were analyzed at the workshop, as the threats for these birds and their habitat are similar. This workshop was facilitated by Yolanda Matamoros of CBSG Mesoamerica. The modelers were Jon Paul Rodriguez and Kate Rodriguez-Clark from Venezuela and Jorge Rodriguez from Costa Rica. During the beginning of this workshop we had a ceremony to celebrate 10 years of CBSG work in Cuba, with the participants and representatives of 12 Cuban conservation institutions.

Costa Rican Cetaceans Specialist Group Conservation Strategy

After finishing the Costa Rican cetaceans CAMP report, the specialists decided to continue working together. They organized themselves as a specialist group and proposed a conservation strategy for Costa Rican cetaceans. They met four times in 2006 to work on this strategy, and their meetings were facilitated by Yolanda Matamoros and Randall Arguedas from CBSG Mesoamerica. A first draft of the report is finished, and is being reviewed by the participants.

Jaguar and Harpy Eagle Education Workshop 28 February-3 March 2006

Randall Arguedas and Yolanda Matamoros from CBSG Mesoamerica joined staff from the Simon Bolivar Zoo, the Bronx Zoo, the Costa Rican Public Education Minis-



try, the Environmental Ministry, and Corcovado Foundation for five days of education activities about jaguars and harpy eagles in the Osa Peninsula. Twenty-eight teachers and two schools also participated in these activities.

Costa Rican Psittacids CAMP, 17-18 August 2006 Simón Bolívar Zoo, San José, Costa Rica

This workshop was requested by the Mesoamerican Psittacids Conservation Network. The status of the Costa Rican populations of 17 species was evaluated according to the IUCN Red List Criteria, and a distribution map for each species was developed. The most endangered species evaluated is *Ara ambiguus*, and *Amazona auropalliata* was classified as vulnerable.

Costa Rican Amphibian Conservation Strategy Workshop. 28 September 1 October 2006 Simón Bolívar Zoo, San José, Costa Rica

Sixty herpetologists, representing 30 institutions and four countries met at Simón Bolívar Zoo in Costa Rica to develop a Conservation Strategy for native amphibians of Costa Rica. Presentations on research and evaluations in the area, as well as projects in Panama and Ecuador and future projects, gave workshop participants a background for their work. The participants analyzed the problems of amphibians, and proposed objectives and actions to solve them. A Conservation Strategy was developed and an Ad-hoc Committee was constituted to follow the recommendations.

Submitted by Yolanda Matamoros, Convenor, CBSG Mesoamerica



CBSG Southern Africa

NEMBA / Taxon Internet Database

CBSG Southern Africa and the Endangered Wildlife Trust (EWT) have developed an online database for the Department of Environmental Affairs and Tourism (DEAT) of threatened and protected South African species, which will allow expert taxon groups to input species data and interrogate available data in a transparent, systematic manner.

<http://www.taxondb.org.za/>

Species Red Listing Project

CBSG Southern Africa has developed an interactive web-based version of the CAMP database, for threatened South African species that will accommodate ongoing updates to species lists and their associated data. The web site will also be used for online assessment review.

<http://www.redlistingsa.ewt.org.za/>

PDF Download Web Site

CBSG Southern Africa has a substantial library of Adobe Acrobat (PDF files) workshop reports and documents, which have been made freely available over the Internet to reduce costs and comply with improved environmental standards. This process has been very successful and has enabled CBSG reports and information to be accessed by stakeholders globally.

<http://za.pdflibrary.ewt.org.za/>

Bearded Vulture PHVA, 6-10 March 2006

Based on the bearded vulture's small and declining population size, restricted and contracting range and susceptibility to several threats in Lesotho and South Africa, it is classified as Endangered (Barnes 2000). Twenty-nine participants from 3 countries attended the PHVA to set a conservation target for the southern African population of bearded vultures and determine the priority conservation interventions required to achieve the target over a ten year period.

Human-Wildlife Conflict Workshop, 10-13 April 2006

The EWT, CBSG Southern Africa, CapeNature and the National Council of SPCAs convened 55 experts in the field of human-wildlife conflict within South Africa to explore various techniques for keeping wildlife out of farming lands, develop a manual of guidelines for best practice on non-lethal "problem animal" control, and develop a proposal for a revision of the relevant legislation. The workshop brought together stakeholders from across South Africa to share information and ideas and improve collaboration on this contentious issue.

Oribi PHVA, 19-22 June 2006

This workshop addressed the need for a national conservation strategy for one of the country's most threatened antelope species and its equally threatened grassland habitat. Thirty-six participants attended the workshop and identified the main causes of oribi decline as habitat loss due to agriculture through the conversion of grassland to livestock pastures and persecution. The workshop resulted in substantial progress being made towards developing a conservation strategy for the species.

Albany Cycad PHVA, 17-21 July 2006

The South African National Biodiversity Institute (SANBI) requested CBSG Southern Africa to run a PHVA for the Albany cycad (*Encephalartos latifrons*), a Critically Endangered plant species that is endemic to the Bathurst region in the Eastern Cape and the only critically endangered species in the province. Between 30 and 70 individuals remain and all wild plants exist on privately owned land. This workshop assessed the viability of the current population and determined actions and a strategy for its recovery and ongoing conservation.

PAAZAB Conservation Award

In 2005, the African Association of Zoos and Aquaria (PAAZAB) Conservation Award was given to CBSG Southern Africa. The award is given to honor individuals or an organization that have made a significant contribution to the conservation of African species, diversity or ecosystem. In this case, CBSG Southern Africa's production of the *Red Data Book for Mammals of South Africa* is regarded as a significant and outstanding contribution to the conservation of two African species.

Submitted by Yolan Friedmann, Convenor, CBSG Southern Africa



CBSG Schedule

Dates	Meeting Description	Location
February		
5-8	Butler's Garter Snake PHVA	Madison, WI, USA
12-14	Raptor Center Strategic Planning	St. Paul, MN, USA
15-16	Conservation Medicine Lectures	Ithaca, NY, USA
15-16	Amphibian Ark Steering Committee Meeting	Atlanta, GA, USA
22-25	Turtle Survival Alliance Strategic Plan Workshop	Orlando, FL, USA
26-28	Gunnison/White-tailed Prairie Dog PVA 1	Denver, CO, USA
26-2 Mar	Colombian Amphibian Management and Conservation Training	Cali, COLOMBIA
March		
2-4	Gerenuk Biomaterials Risk Assessment	White Oak Plantation, FL, USA
7-9	Beach Mouse Captive Population Feasibility Workshop	Santa Rosa Beach, FL, USA
13-15	Wildlife Toxicology Workshop	Washington DC, USA
22-23	CBSG Steering Committee Mid-Year Meeting	Hunnebostrand, SWEDEN
28-1 Apr	Hainan Gibbon PHVA	Haikou, Hainan Island, CHINA
26-4Apr	Nordens Ark Conservation Workshop	Hunnebostrand, SWEDEN
April		
11-13	SSC Steering Committee Meeting	Cape Town, SOUTH AFRICA
14-19	Lowland Tapir PHVA	Sorocaba, BRAZIL
14-19	Amphibian Biology and Management Course	Toledo, OH, USA
May		
11-12	SPMAG Mid-year Meeting	San Diego, CA, USA
10-17	Kihansi Spray Toad PHVA	Bagamoyo, TANZANIA
21-24	JAZA Annual Meeting	Osaka, JAPAN
June		
11-15	European Green Toad PHVA	Hunnebostrand, SWEDEN
19-24	Small Mammal Field Techniques Training	NEPAL
July		
15-16	Tiger SSP Master Plan	Seattle, WA, USA
August		
23	CBSG Steering Committee Meeting	Budapest, HUNGARY
24-26	CBSG Annual Meeting	Budapest, HUNGARY
26-30	WAZA Annual Conference	Budapest, HUNGARY

CBSG DONOR NEWS



CBSG FEATURED DONOR

Evenson Design Group

For over 27 years, CBSG has responded to urgent needs in wildlife conservation by facilitating conservation planning and action throughout the world. We have shared many successes with our members and donors in newsletters and specialized communiqués over the years, and in 2005, we produced our first formal Annual Report. This report reflected our updated mission statement, highlighted case studies, and is part of a deeper commitment to inform our stakeholders of CBSG's many conservation activities. A new CBSG brochure was also developed in 2004, and incorporated our new, updated look.

CBSG's new Annual Reports and brochure are invaluable tools that enable us to share our mission, successes, and urgent needs with others in a way that was



Stan Evenson

not previously possible. These beautiful materials were designed and produced by the Evenson Design Group (EDG). EDG has very generously donated both time and resources to make the CBSG Annual Report a reality. We are very grateful for their support, and pleased to profile EDG as our featured CBSG donor.

After designing album covers for many top recording artists at A&M Records back in the 70s,

Stan Evenson, the Principal and Creative Director of Evenson Design Group (EDG) opened a full-service design/branding firm located in Culver City, California. Since 1976, EDG has worked with a variety of large and small clients creating many successful solutions for brand identity, advertising, packaging, corporate collateral, environmental signage, exhibit design, web and interactive media. "EDG has served clients as far away as China and as close as our next-door neighbor," proclaims Stan. "It's a global economy and the world class branding that EDG provides has a real human touch, like what we created and delivered for CBSG."

EDG's client roster includes an impressive list of companies including Sony Pictures, Harcourt Brace, NFL Properties, Crayola (Binney & Smith), MGM, Vivendi Universal, Pacific/McGeorge School of Law, St. Francis Medical Center, NBC, Warner Bros, WellPoint, Yokohama, Universal Studios, and several others across the globe.



Like many people who turn 30, EDG has undergone a profound awakening and as a result their mission is clearer than ever: to create inspired designs for companies seeking to sustain market value in an increasingly interdependent world. For years, EDG has created designs that aesthetically demonstrate balance, simplicity and efficiency—the underlying core values of the emerging environmental movement. Each core value represents a different way of apprehending one central, universal theme: integrity. Integrity is the common denominator of all sustainable systems, and graphic design is no exception. "The integrity of our work comes through in our ability to develop brands and marketing campaigns that produce enduring results in the marketplace without imposing harsh enduring effects on the fragile world we share," says Stan.



CBSG Brochure designed by EDG



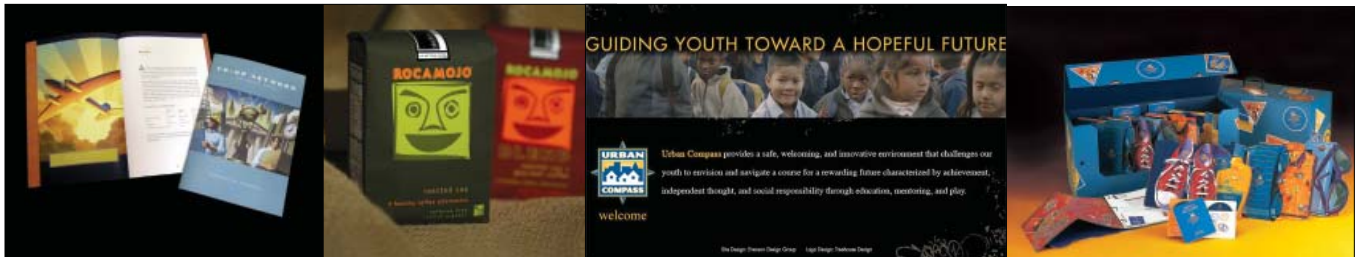
CBSG Annual Report

Stan and his creative team continually influence their clients to use less packaging materials, print with soy-based inks and use recycled papers, as well as communicate with e-announcements rather than use timber. As the father of three children, Stan wants to be able to look each of them in the eye and say, "I honestly did my best to sustain the precious environment. "

Another of Stan's passions has been assisting non-profit organizations that generally cannot afford high-end design. Recently, EDG created an effective web site for Urban Compass, an organization who assists kids in gaining an avenue to a brighter future in South Central Los Angeles, and helped For Grace, a national organization helping women in pain, to CoAbode, a professional association serving single mothers house sharing, as Stan strongly believes in giving back to his community.

Stan and his design firm have received numerous awards, including two projects selected for the permanent collection of the Library of Congress; numerous awards from the American Institute of graphic Arts (AIGA); and had his firm's work featured in international publications like *Graphis*, *HOW*, *Step-by-Step*, and *Publish Magazine*. Stan received his Bachelor of Fine Arts degree in Advertising Design from the Art Center College of Design in 1974. He has served as the President of the Los Angeles Chapter of the American Institute Graphic Arts and also as a member of its Advisory Board.

Stan lives with his wife, Tricia, and three children in Culver City, California, USA.



EDG Receives Award for CBSG Annual Report Design!

We are pleased to announce that EDG won an American Graphic Design Award from *Graphic Design: usa* for the design of the 2004 CBSG Annual Report.

Graphic Design:usa is the premiere business-to-business magazine for professional graphic designers and related creative and production professionals. It reaches the design field's freshest, most targeted business-to-business circulation at design firms, corporations, ad agencies and publishers. The magazine covers the latest in news, trends, people, events, projects, products, services and ideas.



New and Increasing Donors



Adelaide Zoo

The Adelaide Zoo in South Australia is located on an 8 hectare site that houses over 3,400 animals, including almost 300 species of exotic and native mammals, birds, reptiles, and fish. The zoo's focus is on endangered and rare animals found on continents that long ago made up the supercontinent Gondwana. The Adelaide Zoo is the second oldest zoo in Australia and is also a botanic garden.

<http://www.adelaidezoo.com.au/home.php>



Africam Safari

Africam Safari near Puebla, Mexico was founded in 1972 by Carlos Camacho, and is home to over 3,000 animals of 250 species. The animals at Africam Safari are free to roam their section of the park, which is divided into 4 sections: African, American International, Tiger Heaven, and the Children's Zoo. Tours can be experienced by car or bus, and the park includes a picnic area and boat rental so visitors can enjoy Valsequillo Lake, located in the park. Africam Safari is also the host organization for CBSG Mexico!

<http://www.africamsafari.com.mx>



Nordens Ark
ger hotade djur en framtid

Nordens Ark

Nordens Ark is located on the scenic west coast of Sweden and houses both wild and domestic animals. Nordens Ark is committed to providing a future for endangered species through breeding programs, reintroduction programs, and research and information. The Ark offers various activities, playgrounds, and restaurants throughout the year.

<http://www.nordensark.se/engelska/eng.html>



Palm Beach Zoo at Dreher Park

The Palm Beach Zoo at Dreher Park is located on over 23 acres of land and holds 1,100 animals from Florida, Asia, Australia, and Central and South America. The zoo has many exhibits and attractions, including the Florida Pioneer Trail, Tiger Falls, the Interactive Play Fountain, and the "ultimate" jaguar habitat. The Palm Beach Zoo recently received two rare Malayan tigers and has one of the oldest living tigers in captivity on exhibit at the zoo.

<http://www.palmbeachzoo.org/>

New and Increasing Individual Donors

Laurie Bingaman Lackey
Margie Lindberg
Prudence Perry
James & Pam Seal Sebesta

31 December 2006

Thank you!



Photo courtesy Dante Fenolio

CBSG Conservation Council

\$50,000 and above

Chicago Zoological Society
-Chairman Sponsor
SeaWorld/Busch Gardens

\$20,000 and above

Evenson Design Group
Minnesota Zoological Garden
-Office Sponsor
Omaha's Henry Doorly Zoo
Toronto Zoo

\$15,000 and above

Africam Safari
Columbus Zoo and Aquarium -The
WILDS
Disney's Animal Kingdom
Saint Louis Zoo
Wildlife Conservation Society - NYZS
World Association of Zoos and
Aquariums (WAZA)
Zoological Society of London

\$7,000 and above

Australian Regional Association of
Zoological Parks and Aquariums
(ARAZPA)
Cleveland Zoological Society
Nan Schaffer
San Diego Zoo
White Oak Conservation Center

\$1,000 and above

Adelaide Zoo
African Safari Wildlife Park
Albuquerque Biological Park
Al Ain Zoo
Alice D. Andrews
Allwetterzoo Münster
Anne Baker
Apenheul Zoo
Association of Zoos and Aquariums
(AZA)
Audubon Zoological Gardens
Bristol Zoo Gardens
British and Irish Association of Zoos and
Aquariums (BIAZA)
Calgary Zoological Society
Chester Zoo
Cincinnati Zoo
Colchester Zoo
Copenhagen Zoo
Detroit Zoological Park
Dickerson Park Zoo
Dutch Federation of Zoos
Durrell Wildlife Conservation Trust
El Paso Zoo
Everland Zoo
Fort Wayne Zoological Society
Fort Worth Zoo
Gladys Porter Zoo

Great Plains Zoo & Delbridge Museum
Hong Kong Zoological and Botanical
Gardens
Japanese Association of Zoos and
Aquariums (JAZA)
Kansas City Zoo
Laurie Bingaman Lackey
Los Angeles Zoo
Marwell Zoological Park
Milwaukee County Zoological Society
North Carolina Zoological Park
Oceanpark Conservation Foundation
Paignton Zoo
Palm Beach Zoo at Dreher Park
Parco Natura Viva - Italy
Perth Zoo
Philadelphia Zoo
Phoenix Zoo
Pittsburgh Zoo
Point Defiance Zoo & Aquarium
Prudence P. Perry
Randers Regnskov Tropical Zoo
Ringling Bros., Barnum & Bailey
Robert Lacy
Rotterdam Zoo
Royal Zoological Society - Antwerp
Royal Zoological Society - Scotland
Royal Zoological Society - South
Australia
Saitama Children's Zoo
San Antonio Zoo
San Francisco Zoo
Sedgwick County Zoological Society
Schönbrunner Tiergarten
Taipei Zoo
The Living Desert
Thrigby Hall Wildlife Gardens
Toledo Zoological Society
Twycross Zoo
Union of German Zoo Directors
Utah's Hogle Zoo
Wassenaar Wildlife Breeding Centre
Wilhelma Zoo
Woodland Park Zoo
Zoo Frankfurt
Zoologischer Garten Köln
Zoologischer Garten Zurich

\$500 and above

Aalborg Zoo
Akron Zoological Park
Banham Zoo and Sanctuary
BioSolutions Division of SAIC
Cotswold Wildlife Park
Fairchild Tropical Botanic Garden
FOTA Wildlife Park
Givskud Zoo
Granby Zoo
Jacksonville Zoo and Gardens
Kerzner International North America, Inc.
Knuthenborg Safaripark

Lincoln Park Zoo
Lisbon Zoo
Little Rock Zoo
Naturzoo Rheine
Nordens Ark
Odense Zoo
Oregon Zoo
Ouwehands Dierenpark
Riverbanks Zoological Park
Rosamond Gifford Zoo
Svenska Djurparksföreningen
Wellington Zoo
Zoological Society of Wales/Welsh
Mountain Zoo
Wildlife World Zoo, Inc.

\$250 and above

Alice Springs Desert Park
Arizona - Sonora Desert Museum
Birmingham Zoo
Bramble Park Zoo
Edward and Marie Plotka
Emporia Zoo
Lee Richardson Zoo
Mark Barone
Montgomery Zoo
Racine Zoological Society
Roger Williams Park Zoo
Sacramento Zoo
Tokyo Zoological Park Society
Topeka Zoo, Friends of

\$100 and above

Aquarium of the Bay
Bighorn Institute
Brandywine Zoo
Ed Asper
Elias Sadalla Filho
International Center for Birds of Prey
James & Pam Seal Sebesta
Lincoln Children's Zoo
Lion Country Safari, Inc.
Miami Metrozoo
Rolling Hills Zoo
Steinhart Aquarium
Steven J. Olson
Tautphaus Park Zoo

\$50 and above

Alameda Park Zoo
Margie Lindberg
Miller Park Zoo
Oglebay's Good Children's Zoo
Safari Parc de Peaugres - France
Stiftung Natur-und Artenschutz in den
Tropen
Touro Parc - France

31 December 2006

Hellbender PHVA

7-10 August 2006

Saint Louis, MO, USA

Arkansas State University

Alan Christian
Stan Trauth
Ben Wheeler

CBSG

Onnie Byers
Kathy Traylor-Holzer
Kevin Zippel

CBSG/University of Mississippi

David Reed

Detroit Zoo

Andy Snider

Fort Worth Zoo

Diane Barber

Indiana Dept. of Natural Resources

Zack Walker

Jacksonville State University

George Cline

Mark Twain National Forest

Jody Eberly

Missouri Dept. of Conservation

John Ackerson
Jeff Briggler
James Civiello
Tom Johnson

Missouri State University

Brian Greene
Alicia Mathis

National Park Service

Victoria Grant

North Carolina Zoological Park

John Groves

Omaha's Henry Doorly Zoo

Jessi Krebs

Saint Louis Zoo

Jeff Etting
Mark Wanner

Saint Louis Zoo/Missouri Dept. of Conservation

Karen Goellner

Clemson University

Jeff Humphries

The Wilds

Adam Davis

U.S. Fish & Wildlife Service

Chris Davidson
Richard Shelton
Jill Utrup

University of Florida

Max Nickerson
Amber Pitt
Joe Tavano

University of Missouri- Rolla

Yue-wern Huang

Wonders of Wildlife Zooquarium

Rich Collister



Photo courtesy Jeff Briggler, MO Dept. Conservation

Mexican Primate CAMP & Spider Monkey PHVA

16-21 October 2006

AZCARM

Perla Cifuentes

CONAP

Olivia Rendón

Guatemala

Gabriela Ponce

Investigador

Ricardo Valenzuela
Kimberly Williams-Guillen

Panamá

Ariel Rodríguez Vargas

Universidad de Barcelona

Cristina Domingo B.
Joaquín. J. Veá
Jurgi Cristóbal A.
Pedro Duarte
Victor Arroyo R.

Universidad de Costa Rica

Marlene Rosales
University of Michigan
Kim Williams
Liliana Cortés Ortiz

Universidad Veracruzana

Aralisa Shedden G.
Ariadna Rangel Negrín
Brenda Solórzano
Edith Carrera
Edward Ellis
Ernesto Rodríguez-Luna
Guadalupe Medel Palacios
Manuel Martínez
Selene Jiménez
Yetlaneci Aguilar Domínguez

ZOOMAT

Pedro Aguilar

Jaguar PHVA

21-24 November 2006

Cuernavaca, Mexico

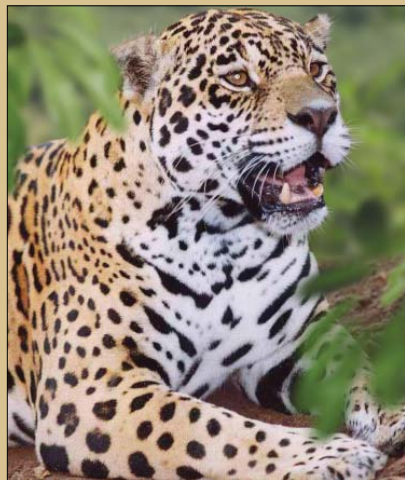
Alternativa Sostenable A.C

Rosa María Balvanera

Lisette Leyequien

Arizona Game and Fish Department

Bill Van Pelt



CBSG Mexico

Luis Carrillo

Juan Cornejo

CONANP

Patricia Oropeza

Dibyssa

Dino Rolando Rodriguez Villanueva

Ecosafaris

Antonio Rivera

Hombre Jaguar Nayarit A.C.

Erik Saracho

IHNE Zoomat, Chiapas

Epigmenio Cruz Aldán

IHNE, Tuxtla Gutierrez Chiapas

Mariana Díaz Negrete

Instituto de Ecología, UNAM

Gerardo Ceballos

Cauhtémoc Chávez

Rurik List

Melissa López

Rodrigo Medellín

Heliot Zarza

Naturalia A.C.

Gerardo Carreón

Onca Maya A.C.

Carlos Navarro

Probatuza Peninsula de Yucatán, A.C.

Juan Carlos Faller

Pueblo Jaguar, A.C.

Francisco Verastegui

Diego Woolrich B.

Reserva Chamela-Cuixmala, Hojanay, A.C

Rodrigo Núñez

Unidos Para la Conservación A.C.

Danae Azuara

Universidad Autonoma del Estado de Mexico

Octavio Monroy

Other

Iván Lira Torres

Albany Cycad PHVA

17-21 July 2006

East London, South Africa

Biodiversity and Coastal Management

Ricky Hannan

CBSG

Phil Miller

CBSG Southern Africa/EWT

Brenda Daly

Kerryn Morrison

Yolan Friedmann

Cycad Society of South Africa

Frikkie Conradie

Morne Ferreira

Department of Economic Affairs, Environment and Tourism

Solly Duna

Mike Eksteen

Quintus Hahndiek

Jaap Pienaar

Thembinkosi Tyali

Wendy Schultz

Endangered Wildlife Trust

Nick King

IUCN Cycad Specialist Group/SANBU

John Donaldson

Landowners/Private Citizens

Colin Fletcher

Tommy Gleaves

Ian Burden

Simon Childs

TRAFFIC East/Southern Africa

David Newton

South African National Biodiversity Institute (SANBI)

Werner Voigt



CBSG Annual Meeting Participants

25-27 August 2006

Leipzig, Germany

Africam Safari/CBSG Mexico Amy L. Camacho Luis Carrillo Juan Cornejo	Bruce Read	Jeffrey P. Bonner Robert Eric Miller
African Safari Wildlife Park Edward D. Asper	Hiroshima City Asa Zoological Park Kazushi Kuwabara	Seoul National University Hang Lee
Al Ain Zoo Mark Craig	ISIS Nathan Flesness Hassan Syed	Simon Bolivar Zoo/ CBSG Mesoamerica Yolanda Matamoros
Allwetterzoo Münster H. Jörg Adler	IUCN-The World Conservation Union James Ragle	Tama Zoological Park Etsuo Narushima Hiroko Ogawa
Aquamarine Fukushima Yoshitaka Abe	Institut für Zoo- und Wildtierforschung (IZW) Hofer Heribert	Taman Safari Indonesia/ CBSG Indonesia Jansen Manansang
ARAZPA Jonathan Wilcken	International Elephant Foundation Laura van der Meer	Tallinn Zoological Gardens Tiit Maran
Asian Wildlife Research Center Foundation Hiroko Somura	JAZA Kenichi Kitamura	The Toledo Zoo Anne Baker
AZA Brandie Smith	KASA Elias Sadalla Filho	Tsushima Wildlife Conservation Center Akira Murayama
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Bristol Zoo Gardens Jo Gipps Neil Maddison	Marwell Zoological Park James Cretney	Ueno Zoological Gardens Kazuyoshi Itoh Teruyuki Komiya
Brookfield Zoo Patricia McGill	Miejski Ogród Zoologiczny Ryszard Topola	UIZA Gloria Svampa-Garibaldi
Busch Entertainment Corporation Brad F. Andrews Ginny Busch	Milwaukee County Zoo Karin Schwartz	Wassenaar Wildlife Breeding Centre Jan Louwman
CBSG Onnie Byers Robert Lacy Philip Miller Rebecca S. Soileau Kathy Traylor-Holzer Kevin Zippel	Museum National d'Histoire Naturelle Jean-Luc Berthier	World Land Trust Emily Brickell
Central Park Zoo Danny Wharton	Nasu World Monkey Park Hiroshi Hori	Zoo Atlanta Joseph Mendelson III
Central Zoo Authority Brij Raj Sharma	National Zoological Gardens Antoinette Kotze Willie Labuschagne Msongelwa Reuben Ngwenya	Zoo Dvur Králové Kristina Tomasová
Chester Zoo Mike Jordan	Nordens Ark Claes André Lena Maria Lindén	Zoo Frankfurt Christian R. Schmidt
Clemson University David Tonkyn	North of England Zoological Society Gordon McGregor Reid	Zoo Leipzig Jörg Junhold Stefanie Irlé Kathleen Raschke
Copenhagen Zoo/CBSG Europe Frands Carlsen Bengt Holst	Odense Zoologisk Have Bjarne Klausen	Zoo Outreach Organisation/ CBSG South Asia Sally R. Walker Sanjay Molur
EAZA Danny de Man Bart Hiddinga Harry Schram	Omaha's Henry Doorly Zoo Lee Simmons	Zoological Society of London Lesley Dickie Fiona Fiskén Richard Gibson Paul Pearce-Kelly
Environment Agency - Abu Dhabi Frederic Launay	Perth Zoo Susan Hunt	
Feld Entertainment, Inc.	Prague Zoo Ivan Rehak	
	Provincial Environmental Authority Saman Senanayake	
	Royal Zoological Society of Antwerp/ CBSG Europe Kristin Leus	
	Royal Zoological Society of S. Australia Chris West	
	Saint Louis Zoo	

Expanding CBSG Modeler Expertise

For one week in late October, Mexico became the center for much of CBSG's collective population modeling brainpower, as Africam Safari hosted the long anticipated CBSG Regional Modeler Training Workshop. Over 15 months in planning, this workshop brought together 20 biologists from 13 countries across 6 continents for 7 days of intensive training in all aspects of population modeling for CBSG PHVA workshops. All 8 CBSG National and Regional Networks were represented, working in pairs to develop, analyze and present results from species models using Vortex, and mentored by four experienced CBSG modelers.

The primary focus of the workshop was an in-depth look at using Vortex to aid in species risk assessment and conservation planning. This includes the translation of often scant field data into a plausible biological model and the appropriate use of that model in risk assessment. Participants delved into the more advanced complexities of Vortex, which were coupled with refresher discussions on population biology and statistics. How do you incorporate complex mating structures into the model? What about testing translocation options? Or the creation of corridors among fragmented populations? These topics and more were dissected and discussed.

But being a good CBSG modeler requires more than just running computer models – it means being an effective communicator, instructor and facilitator. Modelers need to be able to describe complex concepts to a diverse stakeholder audience, glean critical information from workshop participants, translate suggested management actions into quantifiable model input, and communicate correctly interpreted results. Trainees in Mexico shared their past experiences handling these situations, discussed useful strategies, and had the



CBSG Europe

opportunity to practice some of these skills while presenting their team modeling efforts.

Just as important as honing modeling and communication skills was the development of a strong tight-knit network of CBSG modelers. Activities both in and out of the classroom provided team-building opportunities. This extended modeling “family” now circumvents the globe and is an invaluable resource for any CBSG modeler facing a challenging model situation.

Capacity-building of modeling expertise in the CBSG Regional Networks did not end in Mexico. The next step is for these modelers to practice and refine these skills at upcoming PHVA workshops, in some cases mentored by a more experienced modeler. Already 9 of the 16 trainees are scheduled as PHVA modelers in 2007. Many are also spreading their newly gained expertise within their regions through university courses or seminars. The investment in this group of dedicated conservationists will greatly enhance CBSG's ability to promote effective conservation for threatened species across the globe.



CBSG Brasil



CBSG South Asia



CBSG Southern Africa



CBSG Mesoamerica

This workshop was made possible by financial contributions from Africam Safari, Bogor Agriculture University, North West University, Bidvest – Global Payment Technologies, CBSG South Asia/Zoo Outreach Organisation, Smithsonian National Zoological Park, Bristol Zoo, Copenhagen Zoo, European Association of Zoos and Aquaria (EAZA), Australasian Regional Association of Zoological Parks and Aquaria (ARAZPA), and a training grant from the World Association of Zoos and Aquariums (WAZA).



CBSG Mexico

Submitted by Kathy Traylor-Holzer, CBSG

CBSG Modelers

- Anders Gonçalves da Silva, CBSG Brasil
- Arnaud Desbiez, CBSG Brasil
- Jorge Rodriguez, CBSG Mesoamerica
- Gustavo Gutierrez, CBSG Mesoamerica
- Juan Cornejo, CBSG Mexico
- Luis Carrillo, CBSG Mexico
- Kristin Leus, CBSG Europe
- Frands Carlsen, CBSG Europe
- Duncan Bolton, CBSG Europe
- Kerryn Morrison, CBSG Southern Africa
- Steven Evans, CBSG Southern Africa
- Sanjay Molur, CBSG South Asia
- B.A. Daniel, CBSG South Asia
- Shinichi Watanabe, CBSG Japan
- Hiroki Kobayashi, CBSG Japan
- Entang Iskandar, CBSG Indonesia
- Noviar Andayani, CBSG Indonesia
- Caroline Lees, Australasia (ARAZPA)
- Jon Ballou, National Zoo
- Phil Miller, CBSG
- Bob Lacy, CBSG
- Kathy Traylor-Holzer, CBSG

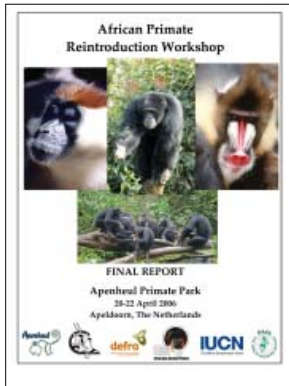


CBSG Indonesia / Australasia

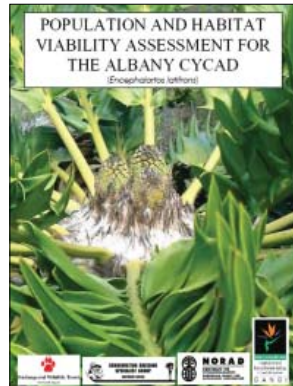


CBSG Japan

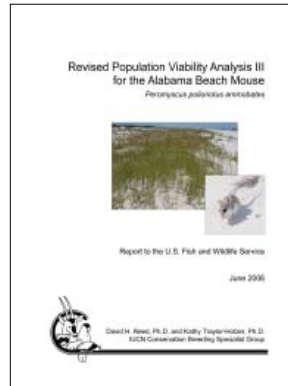
Recent CBSG Publications



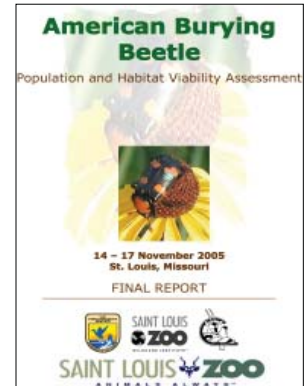
African Primate Reintroduction



Albany Cycad PHVA



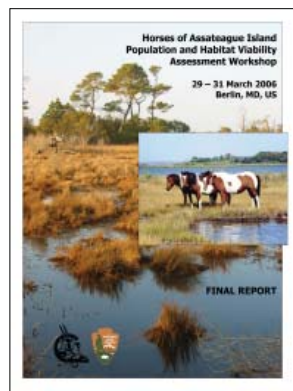
Alabama Beach Mouse PVA III



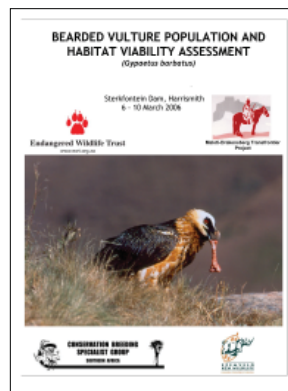
American Burying Beetle PHVA



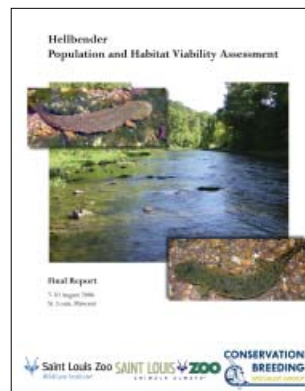
Amphibian *Ex-situ* Conservation



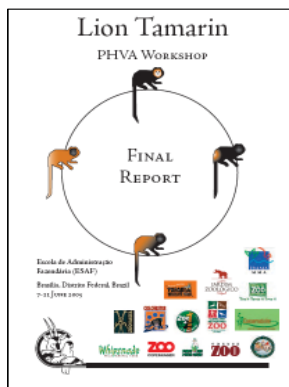
Horses of Assateague Island PHVA



Bearded Vulture PHVA



Hellbender PHVA



LionTamarin PHVA III



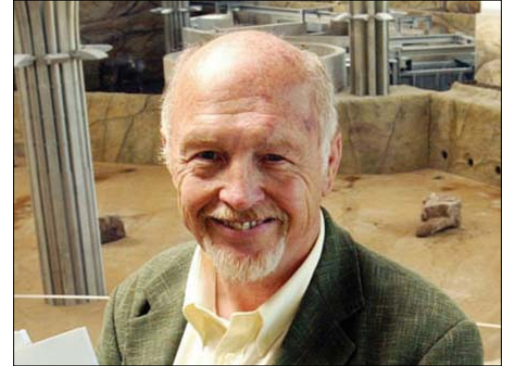
Tsushima Leopard Cat Conservation Planning

Reports may be downloaded from the CBSG website or ordered from the CBSG office for US \$35.

Announcements

2007 Heini Hediger Award

CBSG Steering Committee Member Gunther Nogge was selected by the WAZA Council to receive the prestigious Heini Hediger Award at the 2006 WAZA Annual Conference. Dr. Nogge was the Director of the Cologne Zoo from 1981-2006, and his many accomplishments include being a founding member of both ISIS and EAZA. He has served as the Chairman of EAZA (1998-2000), the President of WAZA (1993-1995), and helped found the European Endangered Species Program (EEP) in 1985. Dr. Nogge has served on CBSG's steering committee since 1991, and we are very grateful to him for his work on our behalf. Congratulations Gunther!



New IUCN Director

Ms. Julia Marton-Lefevre—a global expert and leader in development and conservation—has been appointed Director General of the World Conservation Union, and took up her new position on 1 January 2007. Ms. Lefevre is replacing Mr. Achim Steiner, who has moved on to lead the United Nations Environment Program. Ms. Lefevre was appointed after a three-month worldwide search process, and has been a member of the IUCN Commission on Education and Communication. We congratulate her on her appointment, and look forward to her leadership.

Notice to CBSG Members and Donors

If you have not been receiving electronic updates and other emails from CBSG, then we do not have your correct e-mail address in our files. We are changing the newsletter to an electronic format, and this is the last copy of the newsletter that will be sent to our members and donors by postal mail, so please e-mail us to make sure you are included on our contact list. If you want to continue to receive paper copies of the newsletter, please remember to contact us—we would be happy to send a hard copy to your mailing address.

To update your contact information, please write to: members@cbsg.org

Thank you!





Newsletter of the Conservation Breeding Specialist Group, Species Survival Commission, The World Conservation Union

CBSG's mission is to save threatened species by increasing the effectiveness of conservation efforts worldwide.

Through

- innovative and interdisciplinary methodologies,
- culturally sensitive and respectful facilitation, and
- empowering global partnerships and collaborations,

CBSG transforms passionate commitment to wildlife into effective conservation.

Staff Changes at CBSG

Liz Follese



The New Year has brought a few changes to the current staff at CBSG; sadly, one of them is Liz Follese's departure from the support staff. Liz has been on board with CBSG since June 2004, and has enjoyed her time here very much. She has seen many significant changes over the last few years with the design and development of the CBSG Annual Report, and the increasing number of workshops and meetings that CBSG program staff attend each year, as well as the launch of the CBSG/WAZA/ASG Amphibian Ark.

Liz primarily focused on the financial aspects at CBSG, and she was also an important part of the support staff at the main office and to the CBSG regional and national networks, working with each network regarding particular project funding. While she will miss helping Kathy and Phil with processing workshop income, updating Kevin on all of the new amphibian donors, and assisting Virginia with newsletter editing, she is very excited for her new adventures. She will especially miss her early morning budget talks with Onnie! Although she is moving to Chicago, Liz will keep up to date on current CBSG activities and following all of the great conservation work that is done by so many dedicated and loyal members. We wish her all the best!

Elizabeth Townsend



Elizabeth joined CBSG in December 2006 to take over for Liz and has been working very hard to absorb as much wisdom as she possibly can from her predecessor before Liz leaves. Elizabeth previously worked for an international infrastructure company and continues to work weekends at a small restaurant in Minneapolis. Though she grew up in Minneapolis, Elizabeth graduated from the University of Wisconsin-Madison with a degree in zoology and French. She spent her junior year in college studying in Rennes, France and, after college, spent several years working as a teaching assistant in a public high school in Marseilles.

Elizabeth has always had a keen interest in biology and conservation and spent much of her childhood at a local nature center taking classes and learning about the plants and animals in her neighborhood. One of her fondest childhood memories comes from a class she took there, where she got to bake and eat worm-chocolate chip cookies as part of a class on "Cooking from Nature". While her worm-eating days seem to be behind her, she remains interested in conservation and is thrilled to have the opportunity to work for CBSG. She would like to wish Liz the best of luck in her endeavors in Chicago and thanks her for the time she spent passing on her knowledge.