CBSG News

Inside...

2005 CBSG Annual Meeting

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Newsletter of the Conservation Breeding Specialist Group, Species Survival Commission,The World Conservation Union (CBSG, SSC, IUCN)

Responding to Emerging Issues

A year ago, I admitted in the *CBSG News* that I am not a fan of annual meetings, as I usually would rather be spending my time working more directly on urgent conservation issues. However, I think that I have become a fan of CBSG annual meetings. The theme of our recent meeting, "Urgent Responses to Emergent Issues", describes well what the past 12 months have been like for the CBSG, and the work done at our annual meeting by hard-working and enthusiastic colleagues has helped us respond as we must to the increasing challenges of species conservation. I know that I am not alone in feeling that the meeting helped us to renew our passion for tackling difficult conservation issues, provide direction for our future work, and identify areas in which we are still struggling to find the common ground among disparate viewpoints that are needed to achieve long-lasting conservation successes. The opening welcome by Chiefs Oren Lyon and Sid Hill of the Onondaga Nation (the original caretakers of the land where we met in central New York State) reminded us that leadership requires passion, commitment to ethics, trust and respect, valuing diversity in the environment and in people, and scientific as well as cultural knowledge. Every meeting of the Onondagas starts with expressions of thanks for our health and wisdom, for our friends and neighbors, and for all of the interconnected parts of the natural world in which we live. The decisions made in their meetings are aimed at doing the right thing for the world and for the people seven (and more) generations into the future. There is much in common between the philosophy and approaches followed by the CBSG and by the Onondagas (they just learned it 500 years before many of the rest of us), but I suspect that we could still learn more from them about collaborative stewardship of the environment.

The working group reports in this *CBSG News* describe some of the progress made at our meeting on such difficult but important issues as the continued acquisition of wild-caught birds by zoos, the proper roles for elephants in zoos, improved understanding and management of wildlife disease, engagement of zoos in field conservation programs, conservation programs for rodents, and the potentially damaging effects of mariculture practices on the environment. The discussions in two of the working groups at the annual meeting have already led to

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significant further work. Sally Walker has been working with colleagues in CBSG and WAZA (the World Association of Zoos and Aquariums) to help bridge the divide between the zoos with significant monetary resources and those without – to help both be more effective contributors to *ex situ* and *in situ* conservation. The CBSG has also been working with partners in WAZA and in the IUCN to promote and coordinate the huge effort that will be required by the zoo and aquarium community to help with the emergency responses needed to stop the current rapid decline of amphibian populations and loss of species. As reported in this newsletter, a number of zoos and aquariums quickly responded to a call for help, and we have hired Kevin Zippel as an Amphibian Program Officer to lead the CBSG/WAZA joint effort.

We enjoyed the participation of 85 colleagues from 24 countries at our annual meeting this year. I thank you for contributing your expertise and energy to the CBSG and to our work in conservation and, on behalf of all of you, I want to thank some of the people who were critical to the success of our 2005 Annual Meeting – Anne Baker, Director of the Rosamond Gifford Zoo in Syracuse that was our host for the meeting; many of the staff of the zoo; and especially Anne's assistant, Linda Legg, and my assistant, Ann Phelps. I am looking forward to our next annual meeting in Leipzig (24-27 August 2006), and I hope to see many of you there.

Sincerely,

Robert C Lacy

Dr. Robert. C Lacy
Chairman

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.

CBSG News

CBSG News is published by the Conservation Breeding Specialist Group, Species Survival Commission, World Conservation Union. *CBSG News* is intended to inform CBSG members and other individuals and organizations 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:

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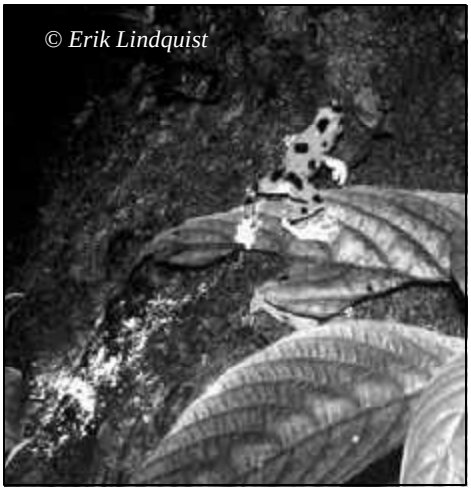


Presentation of the Ulysses S. Seal Award for Innovation in Conservation to Dr. Georgina Mace

Most of you knew Ulie Seal, the truly remarkable leader of the CBSG for our first two decades, and I often presume that everyone in the world *had* to know Ulie, since he seemed to be everywhere, doing everything, and influencing the professional and personal lives of nearly everyone. However, I realize that there are some newcomers to the CBSG who perhaps did not have the pleasure of meeting and working with Ulie before he died two years ago. Therefore, before I make the presentation of the 2005 Ulysses S. Seal Award for Innovation in Conservation, I want to describe just a few of the characteristics that made Ulie such a powerful and effective force in species conservation. First, Ulie was insistent that conservation problems could only be solved if we applied good science, backed by data, and analyzed with rigor. He simultaneously understood that good science was not quite the same as what we are taught in the universities–for example, much of it is published, which is the only forum of communication considered legitimate by many academics, but much of the knowledge is still in our heads and in our notebooks. He also recognized that many people without PhDs have great scientific knowledge, as well as some good common sense, to offer to our conservation programs. Ulie knew that applying good science meant using all the available knowledge, however much or little that might be, and recognizing and acknowledging our uncertainties, but not letting those uncertainties stop us from thinking and doing what we can with the knowledge that we do have.

Ulie's career was also characterized by developing collaborations, and giving to others knowledge, techniques, ideas, and opportunities – rather than jealously guarding them to promote one's own career at the expense of other people and at the expense of finding the best solutions to problems. Ulie also recognized that solutions to conservation problems had to arise from truly transdisciplinary efforts, not just narrowly focused analyses by one discipline or another. Ulie knew that long-term collaborations had to be based on honesty and openness – even to the point of bluntness at times – but tempered by warmth and good humor.

This year's recipient of the Ulysses S. Seal Award–Dr. Georgina Mace of the Zoological Society of London–wonderfully exemplifies all of these characteristics, and she has used them to make huge contributions to species conservation.

In about 1990, Ulie recognized that the then-current system of classifying species as to their level of endangerment–the Red List–was not using our best science, was not open and well-documented, and was not structured well to use all of the information that we collectively have about species status. While some others proposed eliminating the Red List altogether, Ulie instead gave Georgina the challenge of developing a scientifically sound methodology that could work in practice–in spite of huge uncertainties in the data and constant pressures to bend the assessments to meet political and personal agendas. Most people would have considered that to be an impossible challenge, and for anyone with a less broad and deep understanding of population biology, ecology, evolution, databases, and conservation than Georgina commands, it would have been an impossible task. Working with an evolving network of colleagues, Georgina has led the effort to develop criteria for categorizing threats based not just on intuition but based on applying all available data in a rigorous analytical approach, grounded in fundamental understanding of population dynamics and wildlife ecology. Georgina further has led for the past decade an extensive, exhausting, and probably sometimes painful process to test the criteria

and the methods of assessment on a wide array of species, refine the criteria, and then put them into practice. As an example of the power of this system, the Global Species Assessments that apply the new system to all species are having major impacts in how we view species conservation priorities, and what needs to be done to address an extinction crisis the magnitude of which was previously only the subject of conjecture.

Georgina is well known for her leadership in developing the Red List criteria and the methods to apply them, and she continues in this work as the Chair of the IUCN Red List Committee. Georgina has made a number of major contributions to conservation science and practice over the years, and her other contributions similarly display the same characteristics that I described in Ulie. I will give you just one example. When I was first getting involved in conservation and species management, I was at a workshop at Omaha's Henry Doorly Zoo and saw the need for better software to guide the genetic analysis and management of our captive populations. Some of you know about the Genes and PM2000 software that I subsequently developed and distributed. What most of you may not know is that the first version of that software came about because in Omaha, Georgina handed me some computer programs that she had developed, and she told me to use them and improve on them in whatever ways I thought would be most useful. The first version of the Genes software was a minor revision of Georgina's program, and much of the conceptual groundwork for genetic management of populations was developed first by her. When I reminded Georgina of this, she chuckled and commented that it demonstrates well the value of groups working together – in which tasks can be handed off to whoever is ready and able to take the next step.

Georgina doesn't need another award. She was the first non-US scientist to be a Pew Scholar in Conservation and the Environment, and I think that it was because of her undeniable worthiness for that award that the Pew Foundation woke up to the value of recognizing people outside of the USA. Georgina is also a Fellow of the Royal Society, and was honored as an Officer of the British Empire. Georgina received the President's Medal of the Chicago Zoological Society, the Marsh Award for Conservation Biology from the Zoological Society of London, and a Distinguished Service Award from the Society for Conservation Biology. Although Georgina doesn't need another award, and she truly is a humble person, it is very appropriate for her to be the recipient of the Ulysses S. Seal Award, and I am certain that Ulie would be delighted with our choice.

Dr. Georgina Mace, Recepient of the 2005 Ulysses S. Seal Award

Georgina Mace is the Director of Science for the Institute of Zoology at the Zoological Society of London. She has held several zoological-related research posts, and has written and co-authored a number of scientific papers. Georgina's main area of research is conservation biology, emphasizing evolutionary, ecological and genetic aspects for the formulation of conservation policy. Georgina currently sits on the Council of the Royal Society for the Protection of Birds, the IUCN Red List Committee, and the Natural Environment Research Council's Science & Technology Board, and between 1997 and 2001 she edited the Cambridge Journal Animal Conservation. She was awarded the Order of the British Empire in 1998, and in 2002 was elected a Fellow of The Royal Society. Georgina has also been a member of Durrell Wildlife's Council since 1998.

Project Golden Frog: Saving Panama's Endangered Amphibians

Efforts to save amphibians in Panama are a good example of how to handle conservation when the species in question needs urgent care, but occurs in a region *without* existing facilities and/or resident expertise. The goal is "Rescue Coupled with Capacity Building". Although a proximate action to save critical species from immediate extinction is sending them to the nearest existing captive facilities with available space and management expertise, the ultimate goal is to enable the range countries currently lacking facilities and expertise to care for their own species. This allows outside experts to free up their time and space to begin the process anew with other species in other regions of the world. These two activities – rescue and capacity building – must occur together or at least sequentially. If outside institutions become inundated with specimens from their initial efforts, they will be unable to assist elsewhere and we will fail to reach our primary goal. Success for any program is achieved when a given species is sustainably managed by its own range country experts and there is no longer a need for outside zoos to hold any specimens of that species. Ultimately, every region should only need to manage their own species, although tropical regions might continue to require help from temperate due to overwhelming volume.

Project Golden Frog

In response to the threat of extinction of Panama's golden frogs, a group of concerned biologists convened and formed Proyecto Rana Dorada (Project Golden Frog, or PGF), an international, multi-institutional conservation initiative. This project originated in 1997 between Ohio State University and the Columbus Zoo, but was formalized in 1999 by the Baltimore Zoo, Círculo Herpetológico de Panamá, Lee University, the Smithsonian Tropical Research Institute, and the Wildlife Conservation Society. Other important participants in the project have been the Cleveland Zoo, Denver Zoo, Detroit Zoo, Messiah College, and the University of Michigan. PGF now involves many institutions and works in collaboration with the U.S. Fish and Wildlife Service and Autoridad Nacional del Ambiente (ANAM) in Panama.

Golden Frogs © Paul Crump

Conservation components of this project fall into three general categories: field studies, captive breeding, and education.

Field Studies

Project researchers are studying every aspect of the species' biology, from behavior to genetics, as well as conducting general population and habitat assessments. This information helps us understand how the frogs use their environment and provides valuable data for captive husbandry. PGF researchers are also studying the distribution, skin toxins, calls, and genetics of different golden frog populations and those of their relatives in a larger systematic analysis of all **Central American** *Atelopus* species.

Captive Breeding

As a precautionary measure against extinction of golden frogs in the wild, PGF zoologists breed them in captivity in the United States. A studbook ensures long-term maintenance of genetic diversity. If chytridiomycosis (a fungal disease) decimates wild populations, captive animals could serve as the breeding stock to repopulate habitat throughout the former range in Panama. Currently, plans are being established with several zoological facilities in Panama for an in-country exhibit and captive breeding program. The offspring produced through this program could potentially be used to satiate the in-country demand for golden frogs as pets and exhibit animals, thereby helping to alleviate unsustainable collecting pressures on wild populations.

Education

PGF educators have been disseminating information from the field studies and captive program to raise awareness among the Panamanian public regarding the plight of this culturally important animal. Range country education initiatives have included conducting teacher workshops, providing educational graphics where golden frogs are exhibited, and posting notices to inform Panamanians about chytridiomycosis and what they can do to avoid spreading it. For more information on this project, including how to participate or provide financial support, contact Kevin Zippel at *zippelk@yahoo.com.*

Using the groundwork laid by PGF in Panama, two independent projects have arisen and taken the efforts to a new level.

ARCC

In December 2004, some of the top researchers in the field of amphibian decline, conservation experts, and captive breeding specialists were called to an emergency meeting in Atlanta to address the amphibian extinction crisis from a practical, hands-on angle. Their stated goal was to prevent further amphibian extinctions, initially with emergency collections into *ex situ* programs, and ultimately with complementary range country training activities. This group is known as the Amphibian Recovery and Conservation Coalition (ARCC). Panama was chosen as the inaugural site because of the expertise of the participants and the chytrid-induced extinctions currently occurring there. Data showed the nearly complete decimation of amphibians from El Cope, Panama, one of the most populous and diverse amphibian sites in Central America.

Breaking Ground at EVACC *© Paul Crump*

Researchers at El Cope witnessed the mass mortality and rapid disappearance of some of the world's rarest amphibian taxa. Based on past and current research at this site and at other sites where amphibian populations have declined, the team was able to predict which species may disappear. The priority list of species was formulated using a complex decision tree, based on many factors, including susceptibility to chytrid, endemism and availability. Coordinators were able to work ahead of and behind the current path of the chytrid fungus, collecting animals predicted otherwise to be killed by disease for the start of captive assurance colonies in Atlanta. The specimens were tested, and treated if necessary, for chytrid fungus before exportation. All treatments were successful in clearing infected frogs. Healthy frogs were then exported to Atlanta for long-term breeding and maintenance. It will be a challenge to establish breeding colonies for some species, as many have never been kept in captivity for any length of time. However, this is another part of the experiment, and realistically we are in a position where we have nothing to lose, and much to gain, as many of these species have virtually no chance of survival in the wild. For more information on this project, including how to participate or provide financial support, contact Joe Mendelson at *jmendelson@zooatlanta.org*.

EVACC

It was a primary goal of both PGF and ARCC to establish a captive breeding program in Panama, where Panamanian biologists can be trained to raise golden frogs and other Panamanian amphibians. In so doing, project leaders would phase themselves out of the programs and turn over responsibility for the range country conservation initiatives to their Panamanian colleagues.

In January 2005, the Houston Zoo began planning and raising money for EVACC, the El Valle Amphibian Conservation Center. They have secured significant funding and begun designing an amphibian conservation facility in El Valle, Panama. El Valle is a perfect location for this project: it is within the prior range of the golden frog, the climate is ideal, it draws many tourists, and it is home to the El Nispero Zoo. Groundbreaking began in August 2005, and construction should be complete by spring 2006. The facility will be 2400 square feet, with about 50% of the space dedicated to public exhibits and the rest to behind-the-scenes space for breeding and research projects. Should the extinction front overtake this region of Panama prior to the completion of EVACC, native specimens will still be available from ARCC facilities for return to the EVACC, and hopefully someday, back to the wild. For more information on this project, including how to participate or provide financial support, contact Paul Crump at *pcrump@houstonzoo.org*.

Submitted by Kevin Zippel, CBSG/WAZA Amphibian Program Officer

Use of Wild Caught Birds Working Group Report

Participants

Randall Arguedas, Dan Brands, Ted Fox, Bart Hiddinga, Larry Kilmar, Ginger Lindgren, Kristin Leus, Sarah Long, Chelle Plasse, Yolanda Matamoros, Patty McGill, Ken Reininger, Stan Searles, Brandie Smith, Beth Stevens

A working group met to discuss options that may be available to the zoo community should the ability to import wild caught birds diminish further or cease. Our management techniques must change and improve if the zoo community wishes to continue to exhibit birds at current levels.

Present captive bird populations are unsustainable without the periodic recruitment of new founders, and records regarding the origins of current birds in zoo collections are incomplete. With better data, a model of future populations could be made, and we could better decide on possible courses of action. The data required include: ISIS/SPARKS data on wild imports, population management models from RCPs/ PMPs hatches/deaths/mortality in zoos, general biology data on bird survivability, and data modes of future populations.

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

© Disney's Animal Kingdom

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

All changes will undoubtedly require a larger financial commitment of resources and a significant adjustment in the ways zoos acquire birds. In order to exhibit birds at current levels, zoos must invest in training for specialized staff, hiring appropriate collectors, cooperative collections and acquisitions, and support for in country conservation projects. The zoo community should be proactive in developing appropriate solutions before it is pressured by outside sources and before it is too late to affect strategies.

Actions

- Design an inclusive workshop during one or more regional AZA meetings to present information and work on future strategies
- Get representatives from regional zoo associations to co-author a paper together, presenting their joint challenges with acquisitions
- Organize a session on acquisition issues across taxa at the September 2006 AZA Annual Conference in Tampa, FL. (e.g. small mammals, birds, prosimians, fish)
- Use Lincoln Park Zoo Risk to model avian populations in zoos
- Enlist ISIS to pull avian data together for analysis
- EAZA will need to also demonstrate that many zoo populations in their region are not sustainable.
- Continue representative exchanges at EAZA and AZA Bird TAG conferences
- Given that many bird populations are not sustainable without importation of founders, we must develop strategies for zoos to do limited, legitimate, well-managed, conservation-benefiting importations, and improve the way we manage and keep birds so we work towards sustainability by using more off-show breeding areas, coordinated breeding, and better captive programs.

Elephant Working Group Report

Participants

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

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

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

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

Proposed GTAG Tasks

- Draft structure of the GTAG, membership selection, reporting structure, etc. for WAZA approval
- Develop Vision for the role of the *ex situ* community in elephant management and conservation on a global scale
- Develop an action plan for the implementation of the vision
- Develop recommendations for a global analysis of elephant management based on existing data
- Develop recommendations for a coordinated elephant global research and conservation plan.
- Develop recommendations for a document (MOU/Cooperation) that integrates management-plans/husbandry guidelines of different regions.
- Develop recommendations for a Global PR and Communication Plan
- Consider the expertise to investigate and fund the investigations needed to address the identified research and conservation issues
- Make recommendations to WAZA and the Regional Associations on how to encourage compliance with recommendations.

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

Amphibian Working Group

Participants

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

This working group convened to discuss the current amphibian extinction crisis, and the response of CBSG, the IUCN, and the larger zoo and aquarium community to that crisis. The magnitude of the current situation and the urgency of action to prevent the extinction of species require immediate action from a range of bodies with diverse relevant expertise and resources. CBSG is an organization of experts.

Through facilitation and collaboration with its members and partners, CBSG can assist in the development of guidelines for the establishment and maintenance of captive assurance populations, including the best practice in amphibian capture, transport, quarantine, husbandry, housing, breeding, and population management. To effect positive change, there is a need for absolute clarity on how the plan to respond to the amphibian crisis will be structured.

A Mandate

How should CBSG and the global *ex-situ* expert community respond to the amphibian crisis?

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

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

The IUCN has endorsed the Declaration of the Amphibian Conservation Summit, at which the various partners working with Species Survival Commission developed an Amphibian Conservation Action Plan (ACAP). In that Declaration, the IUCN and its partners call upon governments, the business sector, civil society, and the scientific community to adopt and urgently implement the ACAP. Among the emergency responses called for in that plan are prioritized captive survival assurance programs for species that cannot be secured in the wild with currently available conservation management strategies. ***Thus, the* ex-situ *conservation community has its mandate to provide a critical component of the overall conservation plan for amphibians, and the CBSG is now working hard to fulfill our obligations to amphibian conservation.***

It is important that mandates and any emergency measures are carefully constructed so that they do not open back doors to the taking of species from countries. They should be specific to endangered and threatened species in need of captive breeding, or those recognized as part of a coordinated global effort. The programs should be primarily within the range countries of the species, and must be coordinated with actions to mitigate threats and conserve the wild populations.

Actions

- Draft a Mandate from IUCN to CBSG and request to others as a call to action (our mandate from the IUCN is contained within the ACAP Declaration, and we are now actively working with others to carry out the needed actions).
- Present a draft statement of CBSG's position on the issue to WAZA (completed, October 2005).

WAZA responds to the crisis!
At their Annual Conference, WAZA adopted a resolution calling on all zoos and aquariums to take action to address the crisis, and WAZA is working with the CBSG to help coordinate and support this response.

- Dedicate at least one person within CBSG to this effort as soon as possible (completed, October 2005 – see below!).
- Immediately communicate the Amphibian Crisis to the CBSG community (ongoing).
- Communicate and work with International Zoo Educators (IZE) starting with the 2005 meeting in New York and the conservation education community to bring their expertise into addressing the amphibian extinction issues.
- Work with other partners to propose and help create the administrative structure for the *ex-situ* component of the overall conservation action plan (discussions are underway).
- Define a series of workshops with the first occurring in six months. This workshop would focus on best practices for population management, husbandry, and disease management. A briefing book would be prepared in advance (scheduled for February 2006).

Just as the ACAP (the Amphibian Conservation Action Plan) is the document that outlines the Amphibian Specialist Group plan to address all aspects of amphibian conservation at the global level, **ESCAP** (the ***Ex-Situ* Conservation Action Plan**) is the document that will be drafted at the February meeting outlining our plan to address the captive component of the more inclusive ACAP. Do not think of ESCAP as representing plans for a mass exodus of species from the range countries; on the contrary, our primary goal is to build capacity so native species can remain in (or eventually be returned to) range countries. Do think of ESCAP as our attempt to *help imperiled amphibians to ESCAPe extinction*.

- Identify issues where cross-community communication is necessary and facilitate it.
- Serve as a communications portal to disseminate information about the amphibian crisis (a new website is coming soon!).

New Program Officer at CBSG!

CBSG and WAZA are pleased to announce the creation of a position dedicated to achieving the ESCAP goals. We welcome Kevin Zippel as the new Amphibian Program Officer, working on behalf of the joint CBSG/WAZA initiative! If you have any questions about the amphibian extinction crisis, the CBSG/WAZA response, or how you can help, please contact Kevin at *zippelk@yahoo.com*

Engagement with Poorly Maintained Zoos Working Group

Participants

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

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

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

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

Substandard LCC zoos have limited access to modern diets, medications and equipment. Basic costs, postage, customs duty and cost-expansion from low-rate currency can inflate prices to three times higher than those paid by zoos in wealthy countries. The working group recognized that LCC zoos need assistance in obtaining these materials at affordable prices.

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

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

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

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

Mariculture Working Group Report

Participants

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

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

The working group identified the following five topics of concern:

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

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

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

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

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

Actions

- Conduct CAMPs in countries that have high components of aquaculture
- Find sustainable means to develop aquaculture in low currency countries
- Global assessment of fish management
- Cross-cutting meeting on implication of current management and ecological effects on mariculture and current fisheries management for zoos, aquariums and restaurants
- Develop a set of quantitative tools to assist decision-making, and assess sustainability of current fisheries and mariculture practices
- Tools like *Vortex* to evaluate sustainability (such as Sea Food Watch)
- Communication within the broader community, including policy makers, educational opportunities, and the use of zoos and aquariums to disseminate information.

Field Conservation Project Initiative

Participants

Anne Baker, Evan Blumer, Jeff Bonner, Onnie Byers, Frands Carlsen, Lesley Dickie, Sonia DiFiore, Fiona Fisken, Randy Fulk, Suzanne Gendron, Jo Gipps, Heribert Hofer, Don Janssen, Mike Jordan, Devra Kleiman, Bjarne Klausen, Lena Linden, Yolanda Matamoros, Ed Plotka, Bill Rapley, Peter Riger, Ken Reininger, Christian Schmidt, Gloria Svampa-Garcia, Chris West

Introduction

The international zoo and aquarium community, with over 600 million visitors each year and unparalleled expertise in the care of wildlife, has the potential to impact conservation like no other industry – if its efforts are coordinated and sustained. CBSG, in collaboration with WAZA, proposes to assist with the realization of this potential through the development of 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.

The World Zoo and Aquarium Conservation Strategy (WZACS) was launched in May 2005, and articulates the ways in which zoos and aquariums can contribute to the conservation of species and their habitats. The initiative described here is intended to help zoos of all types and sizes to implement the recommendations in WZACS. After initial discussion of this initiative at the CBSG Steering Committee meeting, a task force was established to further develop the concept. This group met in July and identified two levels of need: 1) the small zoo that has a desire to meet the vision of WZACS – their involvement in *in situ* conservation. They need an answer to the question of where they should put their monies; and 2) large budget zoos that have the capacity and the desire to form consortia around sites or species in need of conservation attention. The group focused primarily on the first of these two levels. They developed the first draft of a paradigm designed to assist zoos and aquariums in contributing to field conservation, and to increase the sustainability and effectiveness of their projects by identifying areas of discrete conservation concern where zoos and aquariums can add particular value. A set of criteria, against which conservation projects might be evaluated, was identified and defined.

Next, a series of extremely productive sessions were held at the 2005 CBSG Annual Meeting during which this paradigm and the criteria were presented to the working group of over 30 people from 11 countries. The group crafted a set of principles to guide the application of this emerging decision-making tool, and reviewed and revised the criteria. These principles and criteria are listed below. Each criterion has a detailed description as well as definitions for rankings of high, medium and low.

Immediately following the CBSG Annual Meeting, the product of this working group was brought to the WAZA Annual Conference where a broad, conceptual-level discussion took place. The questions raised in this session will be extremely helpful in the next phase of development of both the tool to assist small budget zoos in choosing among existing *in situ* conservation projects, and one to help large budget zoos identify sites/species in need of conservation attention and partners with which to collaborate. The tools are meant to help zoos and aquariums achieve the vision outlined in the WZACS, and to make decisions about where to invest their *in situ* conservation resources. They are not meant to simply validate "business as usual", nor are they designed as a conduit to acquiring animals.

The Principles

Zoos will select Field Projects using the criteria listed below, but only after the following principles have been accepted:

- Maximize conservation impact from invested resources;
- Seek partnerships with organizations whose skills complement the skills of the zoo/ aquarium;
- Commit for as long as it takes (and no longer);
- Conduct a comprehensive ethical review (human, animal and environmental factors);
- Conduct objective evaluation of all projects to determine measures of success (and failure);
- Report and prioritize success to promote insider support;
- Recognize that there is no need for a zoo to have a species in its collection for support of a field program, but this will often be the case; and
- Recognize that conservation programs do not need to have a captive breeding element.

The Criteria

These are divided into 2 categories – 'Conservation' criteria and 'Institutional' criteria.

Conservation Criteria

- Anticipated conservation impact
- Applicability of existing skill sets (of the types found in zoos and aquariums)
- Capacity building
- Conservation relevance
- Conservation urgency
- Measurable outcomes
- Relevance of conservation breeding

Institutional Criteria

- Cost/benefit analysis
- Infrastructure and methodology
- Ease of entry
- Extent of local support
- Fundability
- Institutional specialty
- Public appeal
- Risk analysis

Next Steps

Much progress has been made in this initiative and there is a great deal more to do before this set of tools is available for testing. The focus to date has been on the decision tool, perhaps used in conjunction with the EAZA (soon to be available worldwide) conservation projects database, to assist zoos in choosing among existing projects. This tool will be accessible at the institutional level but it is envisioned as being most effective and having the greatest conservation impact when regionally and collaboratively applied.

While furthering the work on this decision tool, next steps include renewed attention to the second level of need listed above, namely the identification of sites/species in need of conservation attention from the zoo and aquarium community. This will require adoption of an established field conservation site or species prioritization scheme or development of a set of prioritization criteria to identify these sites/ species for coordinated conservation program development, and then the establishment of consortia of zoos around each program. Through these prioritized projects, zoos and aquariums have the potential to make effective, measurable contributions to field conservation to a degree not possible when working independently.

This Field Conservation Project Initiative, called for from all sectors of the global zoo community, will result in the establishment of integrated, long-term, field conservation programs leading to protection of countless currently threatened species. In addition, it has the potential to increase significantly the quality and quantity of conservation efforts in the international zoo and aquarium community, thereby gaining acknowledgement of this sector as a respected and effective force for conservation.

Submitted by Onnie Byers, Jeffery Bonner, Jo Gipps

Disease Risk Assessment Process Working Group Report

Participants

Heribert Hofer, Laura Hungerford, Don Janssen, Mike Jordan, George Kollias, Frederic Launay, Eric Miller, Philip Miller, Akira Murayama, William Rapley, Ivan Rehak

Since 1999, CBSG has put significant effort into developing a methods toolkit and associated procedures manual directed towards the broad issue of disease risk assessment within the zoo and wildlife veterinary and management communities. Productivity in this project was high in 2002-2003, but since then there has been less success in keeping the team together and working effectively. CBSG is dedicated to resurrecting this project by re-engaging the existing team and expanding the group of experts that can contribute to the development of new tools and their practical application in wildlife conservation programs.

To help achieve this goal, CBSG convened a special series of four presentations during the 2005 Annual Meeting to help kick off discussions on how CBSG can best serve the disease risk community. Following this Symposium, Bob Lacy led the audience in a brief brainstorming session on the areas in which CBSG should and should not become or remain active in the field of disease risk assessment. On the next day, a small group of participants gathered for a brief working group session to take these ideas and move them forward in the form of practical recommendations to the organization.

The generated ideas have two distinct areas of focus. One was concentrated on more of the technical side of the process. For example, the group feels it is important to gain a more complete understanding of disease epidemiology in small wildlife populations, and the consequences of disease on wildlife population viability. The second area of focus in these discussions was the broader plane of effective collaboration between organizations and institutions. CBSG's effort has suffered from a lack of coordinated, intensive involvement with others in the disease risk assessment and animal management communities, most notably those appropriate Specialist Groups within the SSC. Specifically, the effort requires formal involvement in this process from the Veterinary, Reintroduction, or Invasive Species Specialist Groups.

Given these issues, more effective communication between the various groups interested in the continued evolution of CBSG's Disease Risk Assessment (DRA) workshop process will be necessary. To achieve this, the group recommended a 4-day Disease Risk Assessment process development and training workshop, co-organized by CBSG, the Veterinary Specialist Group, and the Reintroduction Specialist Group with help from the Invasive Species Specialist Group, to facilitate greater exposure of the current CBSG DRA Workbook, and expand the current network of DRA experts.

The primary expected output of such a project includes a revised CBSG DRA Workbook that has wider applicability to the conservation community. On a more conceptual level, the project would give a clearer sense of the shared responsibility of risk in conservation programs among the many players working together. Procedurally, the project could help to develop (semi-) formalized agreements between Specialist Groups (perhaps in the form of one or more MoUs) in order to establish recognized communication pathways as a means to more effectively share information and experiences. Finally, the results could lead to a more detailed review of current IUCN Guidelines in the context of disease risk considerations.

The proposed Meeting Organization Committee includes Philip Miller and Bob Lacy from CBSG; Fred Launay, Doug Armstrong, and Mike Jordan from the Reintroduction SG; and Richard Kock and William Karesh from the Veterinary SG. Lacy, Launay and Kock are members of the SSC Steering Committee, the group hopes that their formal connections to our parent organization can facilitate the development and implementation of the workshop and the many activities that will emerge from it. We expect the meeting to take place in 2006, with Germany (associated with the 2006 CBSG Annual Meeting) and South Africa (associated with the CBSG Mid-Year Meetings) seen as candidate locations.

Small Mammal Conservation Strategies Working Group

Participants

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

This working group met to discuss a central issue: That the various regional zoo associations are not presently cooperating on small mammal conservation strategies, and to date only EAZA has a regional "small mammal plan." The group focused on finding methods to prioritize needs for a global effort, developing the framework to create this global effort,

and methods for procuring and prioritizing conservation funding when competing with charismatic mega-vertebrates. The group chose to defer captive management issues (e.g., boom or bust phenomenon of rodent populations, decreasing representation of small mammal populations in zoos).

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

Together, the group defined the following problems facing in situ conservation of small mammals: limited

funding, lack of a prioritized global conservation plan, no information on species' status in some high biodiversity regions, lack of local training, (particularly in field techniques and taxonomy), no knowledge of which species need help, and the lack of local awareness of small mammal conservation issues.

Actions:

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

CBSG South Asia

Conservation Education

One of the most important activities in conservation is public education. To create support for conservation activities, people need to appreciate wildlife and its habitat, their environment, and the individuals and institutions that are trying to save it. Ulie Seal recognized the importance of public education and tried to make education a more or less permanent working group in CBSG with a strong link to the International Zoo Educators Association (IZE). CBSG's regional network for South Asia has honored Ulie's efforts by giving attention to this crucial conservation activity.

CBSG South Asia's host and partner, the Zoo Outreach Organization (ZOO), and its network partners continuously expand the focus on conservation education, enhancing its sophistication and effectiveness as a result of adding new partners and their skills. ZOO makes and distributes educational materials year-round for many events, but we get the best results from Wildlife Week, an event in October each year.

Response of Educators to Wildlife Week

This year for Wildlife Week we had requests for educational teaching kits and other items from over 100 departments and institutions in India, many of which are new to educating the public. Our programs all are designed to help other institutions organize events and programs of their own using our teaching kits. In this way we reach thousands of people. We design some of our booklets so that kids will go to parents or older siblings for help, spreading the conservation message.

Each teaching kit consists of the following items: t-shirts, packets, posters, stickers, booklets, masks, and more. These items are themed for different taxon groups, many of which have been featured in our CAMP and PHVA workshops and others that have species "crisis" value. We also cover issues related to wildlife, such as wild animal welfare, proper visitor behavior in zoos, and the wildlife trade. Dozens of designs have been created and distributed over a four-year period for wildlife education events each year. Donations for such materials and for our educator training over 4.5 years totaled over $200,000.

This year's Wildlife Week list is a good indication of the kinds of institutions that order our material. Kits were ordered by forest divisions, zoos, volunteer organizations, tiger reserves, education institutes, schools, botanical gardens, and universities. We ask recipients to commit to interacting with and engaging their audience in an education program for which we supply basic guidelines. Each institution that orders from us educates up to 200 individuals about wildlife conservation or wildlife welfare in a meaningful way, and also learns more about teaching.

Some of the biologists we train in field techniques have also taken up public education. We believe it is useful for them to meet local villagers and tribal people on their surveys, and to engage school classes and civic groups. Some Indian zoos without education departments receive help from a number of organizations that order our material and organize a program at the zoo.

Using this education program, created to meet the needs of a specific region that lacks education officers and attractive educational materials, ZOO and CBSG, South Asia are partnering and helping zoos to partner in education with many different groups, as recommended in the *World Zoo and Aquarium Conservation Strategy*. ZOO has initiated a new education network for South Asia with an official link to the IZE called SAN-IZE, the South Asian Network of IZE. We're sure Ulie would approve!

Submitted by Sally Walker, CBSG, South Asia

CBSG Mexico

During 2005, the CBSG Mexico team participated in workshops from Calgary, Canada to Cali, Colombia. As facilitators, modelers and participants, we assisted in workshops on five species. We also launched an e-bulletin for former PHVA attendees and published three reports. Most recently, CBSG Mexico facilitated a PHVA workshop on Baird's tapirs, which was the next step in a collaboration between the Tapir Specialist Group and CBSG involving a series of PHVA workshops on tapirs.

Baird´s Tapir Conservation and PHVA Workshops

Baird´s tapirs are listed as Endangered by the IUCN, and are protected by the governments in all of their range countries (Colombia, Panamá, Costa Rica, Nicaragua, Honduras, Guatemala, Belize and México). The species is presently listed as Endangered in the IUCN *Red List of Threatened Species* (2004), meaning that this species is facing a high risk of extinction in the wild. The IUCN/SSC *Tapir Status*

Survey and Conservation Action Plan (Brooks *et al.* 1997) and previous results from long-term field projects have identified that the Baird's tapir survival is threatened primarily by habitat destruction and hunting. The slow reproductive rate of tapirs (interbirth interval of two years and generally only one young per pregnancy) makes it difficult for these species to recover from low population numbers, especially if we consider that most of the habitat has been almost completely fragmented in recent years. Local extinction or population decrease may trigger adverse effects in the ecosystem, causing disruptions of some key ecological processes (*e.g.* seed predation and dispersal, nutrient recycling), and eventually compromising the long-term integrity and biodiversity of the ecosystem.

The main objectives of this workshop were to review the conservation status of the species and identify conservation actions along its range. The PHVA workshop was a forum to bring together, for the first time, field researchers from across the species' range to share experiences, exchange information, and compare national conservation strategies. Through this process, a truly regional Action Plan can be more effectively achieved. Specifically, the workshop succeeded in creating a more complete understanding of the mechanisms of threats to tapir populations and the relative magnitude of their consequences. Working groups engaged in focused discussions on aspects of habitat and population management strategies, sociocultural aspects of tapir conservation, and captive population management.

For representatives of zoological parks, this PHVA provided a unique opportunity for zoo staff from a wide variety of zoos in range countries and elsewhere to meet and develop ways to jointly improve their regional collection management. The workshop ended with participants gathering together by country and, where desirable, adapting the larger groups' conservation actions to serve their own national needs more effectively. With this combination of national and regional focus, the PHVA offered a tremendous opportunity to improve the future of the species.

Submitted by Amy Camacho, CBSG Mexico

CBSG Indonesia

Most South East Asian countries are developing nations, not blessed with unlimited funds to develop plans to ensure the survival of endangered species. Usually, they have to depend on their more affluent colleagues for assistance in developing conservation plans. However, in the spirit of cooperation, CBSG Indonesia and the South East Asian Zoo Association (SEAZA) joined forces to bring that expertise and knowledge closer to home. This year, with the support and encouragement of SEAZA, CBSG Indonesia was active in taking a very important step toward filling the need for conservation planning within the region.

In early December 2004, at Taman Safari Indonesia, CBSG staff from the U.S. and Europe conducted a training workshop to develop local and regional facilitators for PHVAs and other CBSG workshops. Participants were also introduced to population modeling using *Vortex*. The two-day workshop was an important investment in becoming more self-sufficient when conducting future PHVAs. Several participants demonstrated the ability to become CBSG facilitators and a small core of participants interested in and capable of eventually mastering *Vortex* modeling was identified. A Proboscis Monkey PHVA workshop followed the training workshop which participants from the training were able to practice skills learned during training. These workshops were sponsored by CBSG Indonesia, CBSG Japan, SEAZA, PKBSI (Indonesian Zoo Association) and Taman Safari Indonesia, and both

forums should prove vital - both directly and indirectly - to the future of wildlife in the region.

In early September 2005, a PHVA on the Asiatic golden cat in Thailand was held. Members of the CBSG Indonesia team who had participated in the December training worked with an experienced CBSG facilitator and a CBSG *Vortex* modeler to conduct this workshop at Khao Kheow Open Zoo in Chonburi, Thailand. This experience was the next stage in their training as facilitators and another step along the road to developing a capable *Vortex* modeler within this CBSG network. The PHVA proved valuable in identifying how much is *not* known about the golden cat in Thailand and was vital for continuing the facilitators' training.

The CBSG PHVA was held concurrently with an *ex situ* management workshop, conducted by SEAZA, which examined the management of golden cats in captivity across the region. Conducting both workshops in the same location allowed participants from each workshop to mingle outside formal sessions and exchange ideas and information. When the final report of each workshop is available, SEAZA and CBSG Indonesia will analyze both, which will provide an overview of the species both *ex situ* and *in situ*. Already, the captive management workshop has come up with an action plan, and the PHVA report will add to the pool of knowledge of the status of this increasingly rare species.

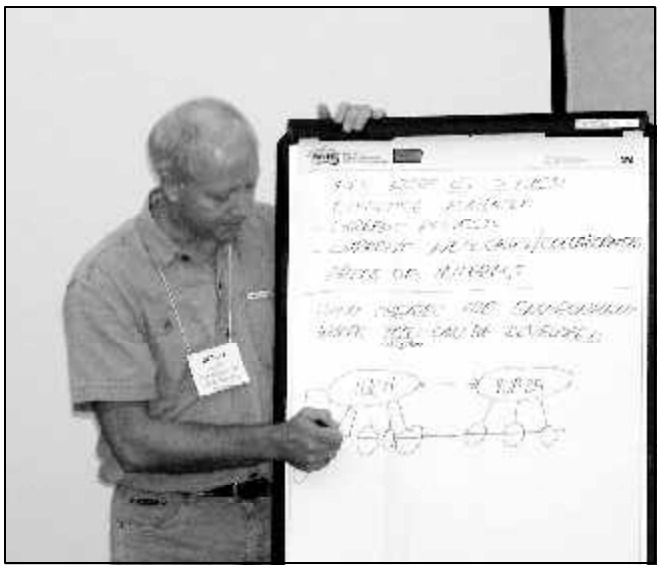
Submitted by Jansen Manansang, CBSG Indonesia

CBSG Europe

During CBSG's recent quadrennial membership update, lists of regional CBSG members were sent to all the regional convenors for review. CBSG Europe received a list of approximately 180 people from different parts of Europe –some very active and some less active. Going through the list I cannot help thinking about what we could achieve if we brought all these dedicated people together to work actively for conservation planning within the framework of CBSG. At present only a few are actively involved in CBSG activities – not because they do not want to be, but because there are no obvious tasks for them to take on if they are not trained in specific CBSG skills such as facilitation and modeling.

It is a waste of valuable expertise and enthusiasm when the majority of our members are not directly involved in conservation planning activities in different parts of the world. And there is a lot of work to be done. We need people who can help us translate different documents into local languages; we need people who can function as conservation ambassadors in their region; we need inspiration from new members to develop conservation tools further; and we need people who can identify conservation planning needs in their own country and help us conduct conservation planning workshops to develop strong and realistic conservation action plans in specific regions.

However, to convert the huge potential of European members into active CBSG work, I need an indication from each one of you, in Europe, members or members-to-be, whether you want to become a more active member of CBSG Europe, or if you are satisfied with the present situation. At present most CBSG work is done by the trained CBSG Europe staff, and the rest of the members are considered supporters. Please don't get me wrong. We are happy for all of the support we can get, moral, financial and active support. We need it all. So, if you prefer to remain a "passive supporter" we



are glad to have you in that capacity. I just want to invite those of you who would like to play a more active part to become more involved in CBSG's activities.

Depending on the preferred level of involvement among European CBSG members, I would like to take the opportunity next year, when the CBSG Annual Meeting takes place in Europe, to focus on the issue: *How to get people more involved*. I hope you will be interested in participating in such a discussion and look forward to hearing from you. All comments are welcome and can be sent to me by mail *beh@zoo.dk* or by ordinary mail (CBSG Europe, c/o Copenhagen Zoo). The next CBSG workshops in Europe will be a European Mink PHVA and a PHVA for the Green Toad to be held in Sweden. Both are being planned for 2006.

Submitted by Bengt Holst, CBSG Europe

CBSG Mesoamerica

CBSG Mesoamerica has had a very busy year; we have facilitated or participated in eight workshops, and produced four reports. In the coming year, we are looking forward to a PHVA on Cuban Psittacids, to be held in February of 2006. Following are several highlights from 2005.

Galapagos Penguin PHVA

CBSG Mesoamerica facilitated a workshop to evaluate the status of the Galapagos penguin population, which has declined to fewer than 900 penguins. These penguins are extremely vulnerable to El Niño events, and with the current increases in the frequency and intensity of El Niño events, *Vortex* models showed probabilities of extinction as high as 30% over the next 100 years. The workshop participants wrote and signed a declaration on the conservation of Galapagos penguins, which provided urgent recommendations for the conservation of the species. It is hoped that the measures recommended by the workshop participants will allow the Galapagos penguin population to survive in spite of El Niño events.

Costa Rica Veterinary School Conservation Strategy

The Director of the Costa Rica's Universidad Nacional Veterinary School, asked us to help develop a Conservation Strategy. The school hopes to become more active in the conservation of Costa Rican natural resources. To initiate a process in which the teachers, researchers, students and administrators start thinking about the importance of conservation and how they could make positive actions, two forums were organized, one on invasive exotic species, and the other to discuss emergent diseases.

Costa Rican Cetaceans CAMP

With the collaboration of PROMAR, an NGO dedicated to the conservation of marine mammals, a CAMP workshop was organized to evaluate the status of 28 species of Costa Rican cetaceans. Seven scientists who study these species met at the Simon Bolivar Zoo. After analyzing the species, the participants recommended a PHVA workshop for the humpbacked whale, a threatened coastal species that requires urgent attention.

Submitted by Yolanda Matamoros, CBSG Mesoamerica

CBSG Brasil

CBSG Brasil has had a very busy first year after its first PHVA in June 2005. We have concentrated on the development of the organization and on planning and running of several workshops. This year, CBSG Brasil conducted PHVAs on Lion Tamarins and Maned Wolves, and a *Vortex* training course.

The *Vortex* Training course had 18 participants from IBAMA and different NGOs in Brazil. The course was designed to help the participants become familiar with the many benefits of the *Vortex* program and to identify potential modelers for CBSG Brasil. The course was taught by Kathy Holzer from the CBSG headquarters, Kristin Leus from CBSG Europe and Jonathan Ballou from the National Zoo – all experienced *Vortex* users and excellent teachers. The participants were asked to bring their own animal data to work on, and this turned out to be an excellent idea. Not only did the participants become familiar with *Vortex*, but they had an opportunity to get their own data analyzed under competent supervision.

In addition to the *Vortex* training and a lot of fun, we identified a group of potential modelers for CBSG Brasil. Some of these new modelers were already in action during the Baird's Tapir PHVA in August and the Maned Wolf PHVA in October of this year and did a great job.

The *Vortex* training course was a great success, and second training will be held in 2006. Other activities will include a Lowland Tapir PHVA. All in all, CBSG Brasil is off to a great start, thanks to a dedicated crowd of people and support from the CBSG Headquarters in Minnesota. Thank you!

Submitted by Pati Medici, CBSG Brasil, and Bengt Holst, CBSG Europe

2005 Annual Meeting Memories

The 2006 Annual Meeting will be held 24-27 August, in Leipzig, Germany

CBSG News

Newsletter of the Conservation Breeding Specialist Group
Species Survival Commission
IUCN – World Conservation Union

Special Thanks

At the Annual Meeting, Chairman Bob Lacy recognized the following individuals for their special role in CBSG.

Rebecca Seal Soileau

Rebecca Seal Soileau is Ulie Seal's daughter. Knowing how much Ulie impacted the lives and careers of so many of us, it should be no surprise that his passion for working with people to help ensure a healthy environment for the future has rubbed off on Rebecca. She currently works for the United States Army Corps of Engineers, and lives in St. Paul, Minnesota.

One of the first CBSG workshops Rebecca participated in was on the conservation of the Tana River primates in Kenya. Two species of monkeys are now restricted to living in the remnant forest patches along the sides of the meandering Tana River. Rebecca provided her expertise in river dynamics at that meeting, in what was a great example of the importance of integrating diverse kinds of science and knowledge to deal with conservation issues, and a great example of Ulie's ability to bring the right people together. Since then, Rebecca has assisted at several CBSG workshops, and currently serves on CBSG's Steering Committee.

Lee Simmons

Almost everyone in the zoo world knows Lee Simmons, the Director of Omaha's Henry Doorly Zoo, but few people know how important and special he has been to CBSG. Lee was a long-time collaborator of Ulie's, involved as a co-conspirator in many of Ulie's efforts to make zoos effective conservation forces–including getting ISIS up and running, sponsoring workshops on population management, and hosting meetings on disease risk assessments in species conservation.

When Ulie Seal became ill, one of the first people he contacted was Lee, who immediately responded as a dear friend and as a passionate supporter and part of CBSG. Lee stepped in as the Deputy Chair and made sure that the CBSG was administratively, financially, and professionally able to carry on during Ulie's illness. Lee continues to be a key supporter of our work and an advocate for carrying on Ulie's legacy. Lee created and sponsored the medal for the Ulysses S. Seal Award, and when we decided that we needed to put together an Annual Report to tell sponsors and potential sponsors about the CBSG, Lee immediately offered to provide the funds to pay for the printing of the report. In these and so many ways, Lee has come through for the CBSG whenever we needed him.