

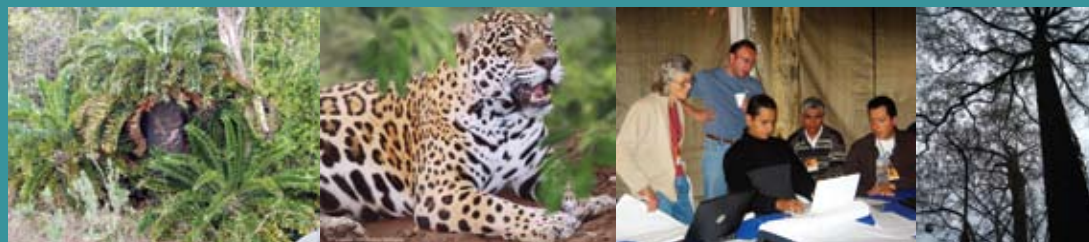
## 2006 Annual Report



Transforming passionate  
commitment to wildlife into  
effective conservation

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## OUR MISSION

**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.**



## MEASURES OF SUCCESS



In recent years, evaluation has been a prevalent issue in conservation conferences and the focus of discussion within the international zoo community. It has been a topic at CBSG Annual Meetings and is a key criterion in the development of recommendations in CBSG workshops. So naturally, when reflecting on the past year, I began thinking in terms of evaluation.

There are some standard parameters we can use to evaluate CBSG as an organization, including top-line parameters such as organizational longevity, staff retention, and financial status. 2006 was CBSG's 28th year as an IUCN/SSC Specialist Group and Bob Lacy's 20th year in various roles within CBSG, from volunteer to Strategic Associate and, ultimately, Chairman. Three headquarters' staff members, four of our eight Regional Networks, and 53% of our Steering Committee members have been serving CBSG for over a decade. CBSG has experienced steady financial growth and remarkable donor continuity, with 60% of our donor institutions contributing for more than 12 years.

There are also more specific performance-based parameters to help us evaluate whether we are being true to our mission to transform passion for wildlife into effective conservation. CBSG catalyzed the work of 720 people in 25 workshops in 2006. Examples of these projects are highlighted in the Success Stories section of this report. The past two annual reports outlined three new CBSG initiatives: 1) expanding the capacity of our system of Regional and National Networks; 2) assisting the zoo and aquarium community in their commitment to field conservation; and 3) responding to the amphibian extinction crisis. As you will read in the following pages, progress has been made on all of these fronts.

But CBSG is no ordinary organization, so it is not sufficient to use ordinary metrics to evaluate our success. How do you measure the energy and enthusiasm generated in a CBSG workshop? How do you evaluate the commitment and passion felt by workshop participants, or the motivation inspired by a productive CBSG Annual Meeting? To me, these parameters are essential for success, and CBSG's immeasurable ability to generate these emotions in all of us is what keeps us coming back year after year, and now decade after decade.

CBSG enjoys longevity, staff continuity, financial stability, and solid, performance-based successes. We continue to fulfill our mission and achieve our goals, and are proud to share with you some highlights of 2006. I hope that our energy, enthusiasm, commitment, and passion come through in the pages of this Annual Report.

A handwritten signature in cursive script that reads "Onnie Byers".

**Dr. Onnie Byers** Executive Director



## LOOKING AHEAD

What should CBSG be in five years? Considering our notable successes in facilitating the conservation contributions of many people and organizations, we could be excused and even praised if we just continue with that record of accomplishments. However, the world is not standing still and neither should CBSG. The Global Species Assessments, being conducted by the IUCN Species Survival Commission, show that more and more species are in decline, and an increasing number are threatened with extinction.

CBSG can and will do even more to reverse the loss of species. CBSG will:

- Involve a broader array of conservation professionals and scientists from zoological institutions and other *ex situ* conservation centers.
- Shift from an organization with much of its technical expertise based in the USA to one that has comparable activity in Latin America, Europe, Africa, Asia, and Australasia.
- Grow our relationships with zoo and aquarium associations as they work to deliver global species management programs for *ex situ* populations, globally share data and animals, and provide training to make knowledge in each region available to all.
- Provide more opportunities for our partners to become active contributors to conservation projects around the world.
- Develop new approaches to conservation planning and action. I am excited about our work with colleagues to develop tools that will better integrate diverse fields of knowledge to tackle complex conservation issues, as well as our leadership of an SSC Species Conservation Planning Task Force that is developing a framework for species conservation plans that lead to effective conservation action.



This progress won't result from the work of our small CBSG staff, our primary contributors, our biggest sponsors, or my own dedication alone. CBSG's real evolution and growth will come from a broader base of partners, including conservation scientists, zoos and aquariums, zoo associations, conservation organizations, agencies responsible for conservation in more countries, and partners in the private and corporate worlds.

I will very much value your suggestions and support to move us toward the future that I predict!



*Robert C. Lacy*

Dr. Robert C. Lacy Chairman

## BACKGROUND

### About CBSG

The Conservation Breeding Specialist Group (CBSG) is a global network of conservation professionals dedicated to saving threatened species by increasing the effectiveness of conservation efforts worldwide. CBSG is recognized and respected for its use of innovative, scientifically sound, collaborative processes that bring together people with diverse perspectives and knowledge to catalyze positive conservation change.

CBSG is a part of the Species Survival Commission of the IUCN – World Conservation Union, and is supported by a non-profit organization incorporated under the name Global Conservation Network. Our ties to IUCN are essential to the strength of CBSG and its position as a vital link among governments, conservation organizations, and others in the conservation community.



Founded in 1948, the World Conservation Union brings together states, government agencies and a diverse range of non-governmental organizations in a unique world partnership: over 1,000 members spread across some 150 countries. As a Union, IUCN seeks to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable.



The Species Survival Commission is the largest of IUCN's six volunteer Commissions, with a global membership of 8,000 experts. SSC advises IUCN and its members on the wide range of technical and scientific aspects of species conservation and is dedicated to securing a future for biodiversity.

### History

Since its inception in 1979, CBSG has grown into a global volunteer network of over 550 professionals, coordinated by a headquarters staff of six, assisted by eight Regional and National Networks on five continents. CBSG began as a liaison between IUCN and the zoo community, and was instrumental in developing the tools and processes for the scientific management of captive animal populations. As wildlife populations became increasingly threatened, CBSG recognized the need for similar intensive management for many species in the wild, and expanded its scope to small population management and the linking of *in situ* (in the wild) and *ex situ* (in zoos) scientific expertise.

CBSG embraces a global and stakeholder-inclusive philosophy and has assisted in the development of conservation plans involving over 180 species through more than 270 workshops held in 65 countries. CBSG has collaborated with more than 170 zoos and aquariums, 150 conservation non-governmental organizations (NGOs), 60 universities, 40 government agencies, and 30 corporations. By applying unique conservation tools, and training others in their use, CBSG contributes to the long-term sustainability of endangered species and ecosystems around the globe.



## Our Approach to Conservation

The environmental problems facing our complex world today impact, and are impacted by, people with widely varying perspectives and needs. To promote effective and comprehensive conservation action, CBSG emphasizes the exchange of information across diverse groups to reach agreement on the important challenges facing humans and wildlife.

Our interactive, participatory workshops provide an objective environment, expert knowledge, and thoughtful group facilitation designed to systematically analyze problems and develop focused solutions using sound scientific principles. This process enables workshop participants to produce meaningful and practical management recommendations that generate political and social support for conservation action – from local communities to national political authorities. Rapid dissemination of these recommendations allows them to be used almost immediately to influence stakeholders and decision makers, and maintains the momentum generated at the workshop.



# 2006 PHVA AND CAMP WORKSHOPS/SPONSORS

## **Albany Cycad PHVA**

Norwegian Agency for Development Co-operation;  
South African National Biodiversity Institute

## **Assateague Island Horse PHVA**

US National Park Service

## **Costa Rican Psittacids CAMP**

Mesoamerican Psittacids Network

## **Cuban Parrot PHVA**

Ministerio de Economía, Cuba;  
Ocean Park Conservation Foundation

## **Colorado Greater Sage Grouse PHVA**

Colorado Division of Wildlife

## **Hellbender PHVA**

Saint Louis Zoo; WildCare Institute

## **Mexican Jaguar PHVA**

African Safari; Alina Telcel; World Wildlife Fund (WWF);  
Comisión Nacional de Áreas Naturales Protegidas (CONANP);  
Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (CONABIO); Ecociencia

## **Mexican Primates CAMP**

African Safari; CONANP; Universidad Veracruzana

## **Mexican Mantled Howler Monkey PHVA**

African Safari; CONANP; Universidad Veracruzana

## **Oribi PHVA**

The Lomas Wildlife Protection Trust;  
Maloti Drankensberg Transfrontier Project

## **South African Bearded Vulture PHVA**

Maloti Drankensberg Transfrontier Project





## WHAT WE DO

### The PHVA Workshop

Population viability analysis (PVA) has been widely recognized as an important tool to quantify the impacts of human activities on the risk of extinction of wildlife species or populations. Historically, this tool has often been used within a narrow biological focus – largely ignoring important information from other disciplines and perspectives that can enhance the input to PVA as well as expand the utility of the resulting recommendations. Our Population and Habitat Viability Assessment (PHVA) workshop process directly addresses this critical issue. We combine traditional PVA methodologies with structured tools for issue formulation and problem solving across a broad range of disciplines. Through this integration, stakeholders develop more effective recommendations for species conservation action, including the identification of personal responsibilities and timelines so the recommendations can become reality.

### The CAMP Workshop

The Conservation Assessment and Management Plan (CAMP) workshop is a rapid, broad-based evaluation of a selected group of species that occupy a particular country or region. The diverse expertise among workshop participants is applied to the IUCN's quantitative Red List system to categorize each species' degree of endangerment, based on estimates of the threats to these populations and their habitat. Through this process, the CAMP helps to establish priorities for global and regional species conservation, emphasizing the wise use of limited conservation resources. A computerized database is used to assemble and summarize all available information, and allows CAMP data to be queried and analyzed by all interested parties. Workshop reports include basic recommendations for conservation research and management activities.

#### 2006 PHVA Workshops

Workshops	9
Species	10
Countries	4
Participants	243
Organizations Represented	162

#### 2006 CAMP Workshops

Workshops	2
Species	52
Countries	2
Participants	33
Organizations Represented	19





## WHAT WE DO

### Organizational and Species Conservation Planning

The unique combination of CBSG's process design tools in concert with our knowledge-based facilitation skills can be applied to a wide variety of conservation planning needs. CBSG works with wildlife agencies, conservation organizations, zoological parks, and similar organizations to develop strategic conservation plans for individual species, protected areas, or conservation organizations. From strategic planning for national wildlife refuges to developing zoo conservation master plans, CBSG leads stakeholders through the exploration of issues and the development of goals to guide future actions.

### Facilitation and Risk Assessment Training for Conservation Professionals

CBSG offers courses in both facilitation and risk assessment for wildlife conservation. Facilitation course participants learn to apply skills in group dynamics, facilitation, structured problem solving, and communication and collaboration – all essential to implementing effective conservation action. Courses in risk assessment provide participants with an overview of population biology and conservation planning. Primary focus is placed on the use of simulation methods for evaluating the risk of population extinction, and guidance on the skills needed to make population projections an effective part of a broader conservation assessment process.

#### 2006 Conservation Planning Workshops

Workshops	10
Countries	7
Participants	453
Organizations Represented	293

#### 2006 Training Workshops

Workshops	1
Countries	1
Participants	20
Organizations Represented	18



# 2006 CONSERVATION PLANNING AND TRAINING WORKSHOPS/SPONSORS

## Organizational and Species Conservation Planning Workshops

### Amphibian Conservation for Latin America

Africam Safari; Asociación Mexicana de Criaderos; Zoo Conservation Outreach Group; Zoológicos y Acuarios de México (AZCARM)

### CBSG/WAZA Amphibian *Ex Situ* Conservation Planning Workshop

Bristol Zoo; Chester Zoo; Columbus Zoo; Houston Zoo; Nordens Ark; Omaha's Henry Doorly Zoo; Rosamond Gifford Zoo; Saint Louis Zoo; SeaWorld; Sedgwick County Zoo; Zoo Leipzig; Zoo Zurich

### Costa Rican Amphibian Conservation Strategy Workshop

Chester Zoo; Denver Zoo; FUNDAZOO; Sea World; Twycross Zoo; The University of Berkeley, California; World Association of Zoos and Aquariums (WAZA)

### Costa Rican Cetacean Researchers and Interest Group Conservation Strategy Workshop

### IUCN/SSC Freshwater Fish Specialist Group Meeting: Developing a Global Strategy for Freshwater Fish Conservation

Chester Zoo

### Mexican Wolf Reintroduction Site Evaluation Workshop

Africam Safari; Albuquerque Biological Park; CONANP; Defenders of Wildlife; Phoenix Zoo; Turner Endangered Species Fund; US Fish and Wildlife Service (USFWS); Zoo New England

### Okinawa Rail Population Viability Analysis (PVA) Workshop

Conservation and Animal Welfare Trust; Okinawa Bank; Veterinarians for Saving the Okinawa Rail and Other Animals; WWF Japan

### Pan African Sanctuaries Alliance (PASA) Primate Reintroduction Workshop

Pan African Sanctuary Alliance; UK Department of Environment, Food, and Rural Affairs (DEFRA)

### South African Human-Wildlife Conflict Management Workshop

CapeNature; Endangered Wildlife Trust; National Council of SPCAs

### Tsushima Leopard Cat Conservation Planning Workshop

Pro Natura Foundation; Asahi Glass Foundation; Conservation and Animal Welfare Trust; Japanese Ministry of the Environment

## Facilitation and Risk Assessment Training Workshops

### CBSG Regional Modeler Training Workshop

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); WAZA



## SAVING JAPAN'S TSUSHIMA LEOPARD CAT

*"An evolution is happening in my brain. I have realized the true value of the Tsushima leopard cat and our local nature through this workshop."*

*Mr. Yoshiyuki Matsumura,  
Mayor of Tsushima, Japan*



### Tsushima Leopard Cat Facts

- In 1971, Japan established the Tsushima leopard cat as a National Nature Monument.
- This distinct subspecies of the leopard cat is thought to have arrived in Tsushima from the Asian continent about 100,000 years ago.
- This species is threatened by feline leukemia and feline immunodeficiency viruses spread by domestic cats.
- The first leopard cat observed on Shimojima Island in over two decades was recently photographed by a researcher's automatic camera, providing evidence that the species still exists on this island.

### The Situation

The Tsushima leopard cat (*Prionailurus bengalensis euptirura*) is a small, spotted cat native to the Tsushima islands, located in the strait between Japan and Korea. A survey in the 1960s estimated the population at only 250-300 animals and, despite a conservation plan, recent evidence suggests that the population has declined to fewer than 110 animals isolated in northern Kamishima Island. As island towns expand, wildlife habitat continues to shrink, and leopard cats face increased threats of being hit by vehicles, being trapped for their fur, and contracting diseases carried by domestic cats.

### The Process

CBSG Japan conducted a Conservation Planning Workshop for the Tsushima leopard cat to address the direction of future conservation goals and actions. Key stakeholders, including local and national government representatives, the Japanese Association of Zoos and Aquariums, local residents, and scientists, participated in crafting action plans. A population viability analysis suggested that as few as five road kills each year may lead to the total extinction of the Tsushima leopard cat in the near future. The ability to prevent road kills and other human-related sources of mortality will be essential to saving this small wild population.



### The Results

Workshop participants, along with members of local and national government, established a committee responsible for addressing the issue of road kills. An open symposium was held to inform island residents of conservation action plans. Workshop results were presented to local and national government authorities, and most recommendations have already been implemented, including the development of a cooperative captive breeding program in Japan. The participants agreed to continue using the workshop results to direct conservation actions in the coming years.

## BORDERLESS CONSERVATION FOR BEARDED VULTURES

*“The PHVA demonstrated the ongoing serious decline in bearded vultures in southern Africa. It also helped to prioritize conservation actions, resulting in a focused plan that has been more attractive to and hence supported by funders.”*

*Ian Rushworth, Ecological Advice  
Coordinator uKhahlamba (Ezemvelo  
KwaZulu-Natal Wildlife)*



### Bearded Vulture Facts

- Females lay as many as three eggs, but only one chick survives as the largest and strongest chick pushes its siblings out of the nest.
- This raptor will drop bones from great heights onto rocks to crack them open and gain access to nutritious bone marrow.
- This vulture’s long tongue is grooved but smooth along the edges, and is used to scoop out brains, and marrow from bones.
- Vulture species provide a valuable ecological service as nature’s recyclers, cleaning up animal carcasses, which reduces the spread of disease.

### The Situation

Scientists believe bearded vulture (*Gypaetus barbatus meridionalis*) populations to be declining worldwide, and there is considerable concern surrounding the status of this species in southern Africa. Based on small and declining population size, restricted and contracting range, and susceptibility to several specific threats, this species has been classified as Endangered in southern Africa over the last century. A reduction in food supply and reduced availability of livestock carcasses resulting from improved animal husbandry have likely contributed to species decline.

### The Process

Bearded vultures have existed across three provinces and three countries (South Africa, Lesotho and Ethiopia) in Africa. To address conservation concerns for all three countries, a PHVA workshop was conducted by CBSG Southern Africa at Sterkfontein Dam with participants from the three countries. The goals of the workshop were to set a conservation target for the southern African population and to determine top priority conservation interventions required to achieve this target over the next 10 years.

### The Results

The workshop facilitated the establishment of a Bearded Vulture Task Force, which incorporates all organizations working toward the conservation of bearded vultures in the region. The conservation objectives adopted at this workshop were halting population decline and stabilizing numbers at about 420 adult birds (145 breeding pairs) over the next 10 years, and expanding the population to a sustainable level based on available data. The Task Force has met several times since the workshop and is actively implementing the PHVA recommendations and outcomes.



## BEACH MICE: LIVING IN THE EYE OF THE HURRICANE

*"Through the workshops we were able to bring diverse stakeholders to the table and gain new insights into beach mouse population dynamics. This has assisted us in our ongoing beach mouse conservation efforts."*

*Rob Tawes, Biologist,  
Fish and Wildlife Service,  
Daphne Field Office, AL*



### Beach Mouse Facts

- Beach mice are lighter in color than mainland mice in order to match the white sands of coastal beaches.
- Beach mouse populations are highly dynamic, crashing when hit by hurricanes but typically recovering quickly in the absence of other threats.
- The Alabama beach mouse is the western most subspecies. Four other subspecies live along the Florida Gulf coast, while two more inhabit the Atlantic coast. All but one are Endangered or Threatened.
- In an ironic twist of fate, beach mice have helped to reduce hurricane damage to people and buildings. Building restrictions to protect mouse habitat mean that homes and condominiums are set back far enough from the water to protect them from the brunt of hurricanes.

### The Situation

Native to the coastal dunes of Alabama, the endangered Alabama beach mouse (*Peromyscus polionotus ammobates*) inhabits vegetated sand dunes along some of the most highly prized waterfront property in the southeastern United States. Increasing commercial and residential development can negatively impact beach mouse populations through habitat loss and fragmentation, increased human-related mortality, and increased vulnerability to storms. Hurricanes can destroy large portions of beach mouse populations and habitat, leaving them vulnerable to feral cats and other threats.

### The Process

In 2004, CBSG began a two-year process to assist the U.S. Fish and Wildlife Service (USFWS) in assessing the viability of Alabama beach mouse populations. Soon after the PHVA workshop in 2004, Hurricanes Ivan, Dennis and Katrina swept through beach mouse habitat, while plans for additional development threatened to further restrict habitat. In light of these events, CBSG worked with the USFWS in 2005 and 2006 to re-evaluate Alabama beach mouse viability and to assess the importance of habitat corridors, private lands, and the use of translocation to re-establish mouse populations devastated by storms.



### The Results

The results of the workshops contributed to the development of a Cumulative Impact Assessment for this subspecies and have been used by the USFWS in reviewing permit proposals for additional development. A sophisticated population model now exists that can be revised as new data or situations develop, and can be adapted for viability projections for other endangered beach mouse subspecies. USFWS is considering new management actions to reduce the risk of extinction for beach mice – including conducting a CBSG-facilitated workshop in 2007 to explore the feasibility of establishing captive beach mouse populations.

## PRESERVING CUBAN PARROTS

“This meeting allowed Cuban scientists to discuss the situation of their parrots and propose effective actions for their conservation.”

Elssie Perez, President,  
Cuban Zoo Association



### Cuban Parrot Facts

- People have kept parrots as pets for at least 500 years, and Cuban parrots now sell for more than US\$500 each.
- Factors contributing to the decline of these parrots include habitat loss due to farming, hurricane damage to nesting trees, and capture of both adults and chicks for the international pet trade. The Cuban parakeet is also persecuted as a crop pest.
- The Cuban macaw (*Ara tricolor*) became extinct in the 1800s due to over-collection for human consumption and the pet trade.

### The Situation

When Europeans arrived in the Caribbean and Cuba in 1492, there were 34 parrot species in the region. Only two species remain in Cuba today — the Cuban parrot (*Amazona leucocephala leucocephala*) and the Cuban parakeet (*Aratinga euops*). Species loss is linked to human activity, including loss of habitat, hunting, introduction of exotic species, and poaching of young birds for the pet trade. Additionally, the parrots rely on woodpecker holes for their nests, and are dependent on the survival of the woodpecker to provide nesting cavities in the palms.

### The Process

CBSG Mesoamerica convened a workshop in Havana, Cuba to address the situation facing these two remaining parrot species. Participants analyzed the status of the two parrot species and the woodpecker, considering issues of population viability, habitat, illegal trade, and education of local people. Population viability analysis was used to evaluate threats to all three species, and concluded that a 20% increase in mortality rates in these species may likely lead to extinction. Specific objectives and actions were proposed to ensure both the short- and long-term survival of these three bird species.

### The Results

Since the workshop, the Cuban government has reduced threats to the parrots and woodpecker by protecting several areas containing the palm trees used for nests. Cuban parrot specialists continue to research population biology issues, including use of nesting sites, mortality rates of adults and young, and poaching. Scientists are monitoring the populations in protected areas. Cuban specialists are also working to find gaps in the protected areas used by parrots and other threatened species, and to redesign the National Protected Areas System.



## RETURNING MEXICAN WOLVES TO THE SIERRA MADRE

*"This is a dream come true. After more than 20 years working with Mexican wolves in captivity and exploring potential areas for its reintroduction, finally a group of wolf specialists and the Mexican government sat together to decide where to release the species in the wild."*

*Jorge Servín  
President, National Committee for  
the Recovery of the Mexican Wolf*



### Mexican Wolf Facts

- The Mexican wolf is currently extinct in the wild in México.
- In 1998 captive-reared Mexican wolves were first returned to the wild in the Blue Range Wolf Recovery Area in eastern Arizona, United States.
- Despite an ancestry tracing back to only seven wild individuals, the current Mexican wolf captive population has grown to about 300 animals and is genetically healthy.

### The Situation

The Mexican wolf (*Canis lupus baileyi*) once roamed in Arizona, New Mexico, Texas, and México. The subspecies was exterminated in the wild, due to conflicts with livestock operators, trapping and poisoning. In 1977, five animals were captured in México for captive breeding, at which time only an estimated 50 wolves remained. Today there are about 100 wolves in captive facilities in Mexico. For 10 years, Mexican federal wildlife agencies have been working for the recovery of the species in captivity and the successful reintroduction of wolves back into the wilds of México.

### The Process

Reintroduction of an endangered species, especially a carnivore, requires substantial detailed planning to maximize the chance of success. A critical step in the process is the selection of appropriate release sites. At the request of Mexican wildlife agencies, CBSG México organized a Mexican Wolf Reintroduction Workshop to determine the best sites and protocol for release of this species in México. The workshop gathered together wolf experts from México and the USA, and represented a collaborative effort among both governments as well as key conservation organizations.



### The Results

Collaboration between México and the United States is important to achieve successful reintroduction of Mexican wolves. Potential sites for the release of wolves in México were established, and a draft reintroduction protocol was developed. Three different areas were identified and evaluated as optimal sites for the reintroduction of this species in Mexico. The workshop identified site selection tools, and determined a need for ongoing training of field biologists in wolf monitoring techniques.



## EFFECTING POSITIVE CHANGE FOR ZOOS AND ANIMALS

*"The response to educational material about zoo standards is very positive. It helps people conceptualize how a conservation-conscious zoo is developed ... They understood the concept that a conservation-careless zoo should not necessarily be closed, but could be led by helpful zoos, the community and government into conservation consciousness."*

Satyabhama Das, Science Teacher,  
USAK High School, India



### Zoo Facts

- Zoo associations throughout the world are dedicated to improving standards of zoos so that animal welfare and wildlife conservation may continue to improve.
- As many as 9,000 zoos need contact with accredited zoo professionals to learn best zoo practices and improve.
- Many accredited zoos conduct special fundraising events in support of *in situ* conservation all over the world, from conservation education and community development to reintroduction, purchase of wild lands, and other programs.

### The Situation

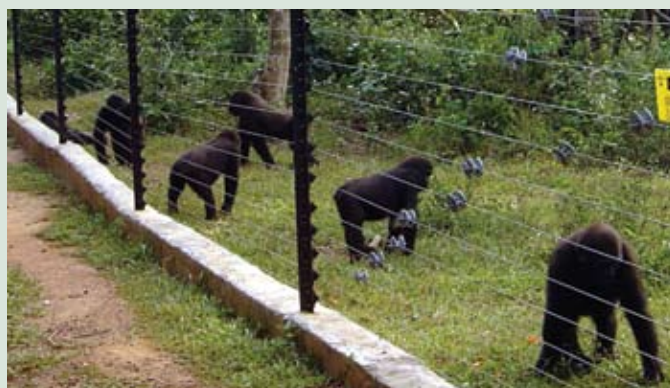
Zoos can support wildlife conservation through education, research, and reinforcing small wild populations. Unfortunately, not all zoos adhere to international management standards. Illegal or inappropriate capture of wild animals for exhibition, substandard management, high death rates in captivity, unsuitable release protocols, and other factors can contribute to the virtual extinction of wild populations. Closing substandard zoos can have negative consequences for the welfare of animals housed there, possibly impacting well-managed zoos that might be forced to absorb these animals. Helping zoos improve their operations is a far better solution both for conservation and for animal welfare in the long term.

### The Process

For over 15 years, CBSG has helped Zoo Outreach Organisation, India to generate improvements within the zoo community in India. CBSG's South Asia Network has assisted in assembling the region's zoos into a professional association, providing a platform for spearheading improvements in regional zoo management. CBSG's CAMP and PHVA workshop processes, followed up by recommended education and training, continue to provide a framework for much needed linkage between *in situ* and *ex situ* institutions and agencies.

### The Results

At CBSG's 2005 Annual Meeting, a statement of concern addressing the issue of zoo quality was addressed to WAZA. WAZA responded by forming a group to create guidelines for action, and a second working group of CBSG members was convened by CBSG South Asia in 2006 to discuss public awareness of zoo quality. CBSG South Asia will continue to encourage zoo improvement by doing what CBSG does best: linking disparate agencies, providing objective facilitation, capacity building and support, and promoting positive action.



## LAUNCHING THE AMPHIBIAN ARK



[www.amphibianark.com](http://www.amphibianark.com)

Between one half and one third of the world's 6,000 amphibian species are threatened with extinction and over 120 species have disappeared in recent years. If the conservation community – and particularly the zoos and aquariums of the world – does not respond to this crisis immediately, many of the world's amphibians may be lost forever. CBSG has made a commitment to respond to this crisis and, in partnership with the World Association of Zoos and Aquariums (WAZA) and the IUCN Amphibian Specialist Group (ASG), has formed a new organization – the Amphibian Ark (AArk).

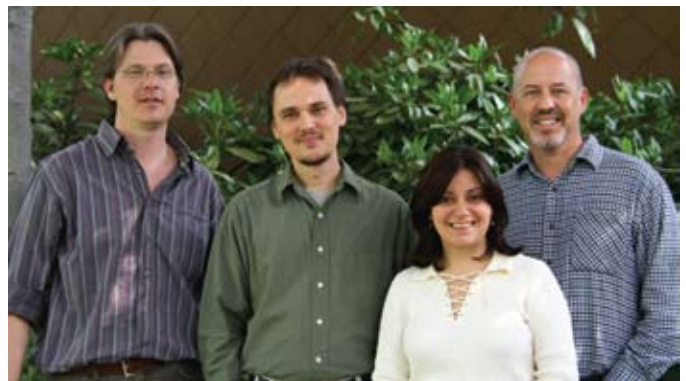
The vision of AArk is *amphibians safe in nature*, and its mission is to work in partnerships to ensure the global survival of amphibians, focusing on those species that cannot be safeguarded in nature. This is the biggest challenge that the world's zoos and aquariums have ever faced, and if successful, may save hundreds of unique amphibian species from extinction.

The initial Amphibian Ark meeting brought together delegates representing regional zoo associations and representatives from the three founding organizations – CBSG, WAZA and ASG – to form the new AArk Steering Committee. AArk immediately began planning the first global, zoo-based awareness and capital campaign for 2008, called "Year of the Frog". The main goal of this campaign is to generate public awareness and understanding of the amphibian extinction crisis as the greatest species conservation challenge in the history of humanity. The publicity campaign will help leverage a concurrent capital campaign. Funds raised by this global campaign will support regional

initiatives such as training and organizational workshops, rescues, cooperatively managed *ex situ* breeding centers and coordination of activities within each region.

CBSG manages the financial aspects of AArk activities as part of our commitment to AArk's success. To date, AArk members and partners have committed over US\$400,000 to this global effort, as well as additional contributions to individual conservation programs for amphibian species. Programs are underway to build *ex situ* facilities at sites around the world, train new amphibian caretakers, and alert the world to the frightening situation that many amphibian species are facing.

### Amphibian Ark Staff



**Richard Gibson**  
Taxon Officer

**Kevin Zippel**  
Amphibian Program  
Officer

**Lisette Pavajeau**  
Communications and  
Development Officer

**Kevin Johnson**  
Taxon Officer



## PARTNERS IN CONSERVATION

### World Association of Zoos and Aquariums



WORLD ASSOCIATION  
OF ZOOS AND AQUARIUMS

[www.waza.org](http://www.waza.org)

WAZA is an umbrella organization for the international zoo and aquarium community. WAZA promotes effective stewardship of the natural world by encouraging its members to bring people close to living animals, applying and advancing *in situ* and *ex situ* conservation, science, and education, and setting standards of excellence in animal welfare and environmental responsibilities. WAZA unifies 228 zoos and aquariums, 23 regional or national federations representing another 1,000 zoos and aquariums, and 12 zoo-related organizations.

### Amphibian Specialist Group



[www.amphibians.org](http://www.amphibians.org)

The ASG is a global network of stakeholders, united under the framework of The World Conservation Union (IUCN), that works to stimulate, develop, and execute practical programs and policies to conserve amphibians and their habitats around the world.



# CONSERVATION BREEDING SPECIALIST GROUP

## CBSG Headquarters Staff



**Robert Lacy**  
*Chairman*



**Philip Miller**  
*Senior Program Officer*



**Virginia Lindgren**  
*Administrative Assistant*



**Onnie Byers**  
*Executive Director*



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**Elizabeth Townsend**  
*Administrative Assistant*

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**Jonathan Ballou**  
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**Harrie Vredenburg**  
University of Calgary

**Sally Walker**  
Zoo Outreach Organisation

**Frances Westley**  
Gaylord Nelson Institute for  
Environmental Studies

**David Wildt**  
Smithsonian National Zoological Park





## CBSG Regional Networks

Our Networks take CBSG tools and principles into the local institutions of a region or country, allowing stakeholders to work with our basic conservation techniques and adapt them to meet their own needs. This level of freedom to shape a Network according to the needs of the culture, society, and services of the individual country is a requirement for success. Regional and National Networks of CBSG are not just desirable but necessary due to the sheer magnitude of the problem of biodiversity loss on this planet, as well as the diversity in environment, culture and social systems, economic conditions, policy and governance, and philosophy in different countries and regions.



## EXPANDING CBSG MODELER EXPERTISE

As an integral step in building capacity in conservation planning, CBSG conducted a training workshop for its Network staff in October 2006. Twenty biologists from 13 countries across six continents came together in México for seven days of intensive training in population modeling and species risk assessment for conservation planning. Topics included the translation of field data into valuable biological models and communicating correctly interpreted model results to a diverse stakeholder audience. An additional outcome was the creation of a tight-knit network of CBSG modelers around the globe who now serve as an invaluable resource.

Capacity building is a continuing process. 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. Many are spreading their newly gained expertise within their regions by teaching university courses or seminars. Our continuing investment in this group of dedicated conservationists will greatly enhance CBSG's ability to promote effective conservation for threatened species around the world.

## CBSG Regional Network Convenors



**CBSG Brasil**  
Patricia Medici  
Institute for Ecological Research



**CBSG Japan**  
Hiroshi Hori  
Nasu World Monkey Park



**CBSG South Asia**  
Sally Walker  
Zoo Outreach Organisation



**CBSG Europe**  
Bengt Holst  
Copenhagen Zoo



**CBSG Mesoamerica**  
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Simon Bolivar Zoo



**CBSG Southern Africa**  
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Endangered Wildlife Trust



**CBSG Indonesia**  
Jansen Manansang  
Taman Safari Indonesia



**CBSG México**  
Amy Camacho  
Africam Safari

# CONSERVATION BREEDING SPECIALIST GROUP

## CBSG Conservation Council

These generous contributors make the work of CBSG possible.

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### \$20,000 & above



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### \$7,000 & above

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White Oak Conservation Center

### \$1,000 and above

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Audubon Zoo  
Bristol Zoo Gardens  
British and Irish Association of Zoos and Aquariums  
Calgary Zoological Society  
Chester Zoo  
Cincinnati Zoo  
Colchester Zoo  
Copenhagen Zoo  
Detroit Zoological Park  
Dickerson Park Zoo  
Durrell Wildlife Conservation Trust  
Dutch Federation of Zoos  
El Paso Zoo  
Everland Zoo  
Fort Wayne Children's Zoo  
Fort Worth Zoo  
Friends of the Rosamond Gifford Zoo  
Gladys Porter Zoo  
Great Plains Zoo & Delbridge Museum  
Hong Kong Zoological and Botanical Gardens  
Japanese Association of Zoos and Aquariums  
Kansas City Zoo  
Laurie Bingaman Lackey  
Los Angeles Zoo  
Marwell Zoological Park  
Milwaukee County Zoological Society  
North Carolina Zoological Park  
Ocean Park Conservation Foundation  
Paignton Zoo  
Palm Beach Zoo at Dreher Park  
Parco Natura Viva – Italy  
Perth Zoo

Philadelphia Zoo  
Phoenix Zoo  
Pittsburgh Zoo & PPG Aquarium  
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 – Southern Australia  
Saitama Children's Zoo  
San Antonio Zoo  
San Francisco Zoo  
Sedgwick County Zoo  
Schönbrunner Tiergarten  
Taipei Zoo  
The Living Desert  
Thrigby Hall Wildlife Gardens  
Toledo Zoo  
Twycross Zoo  
Union of German Zoo Directors  
Utah's Hogle Zoo  
Wassenaar Wildlife Breeding Centre  
Wilhelma Zoo  
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Zoo Frankfurt  
Zoo Zurich  
Zoologischer Garten Köln  
Zoologischer Garten Rostock

### \$500 & above

Aalborg Zoo  
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Kerzner International North America, Inc.  
Knuthenborg Safaripark  
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Lisbon Zoo  
Little Rock Zoo  
Naturzoo Rheine  
Nordens Ark  
Odense Zoo  
Oregon Zoo  
Ouwehands Dierenpark

Riverbanks Zoological Park  
Svenska Djurparksförningen  
Wellington Zoo  
Wildlife World Zoo, Inc.  
Zoo de Granby  
Zoological Society of Wales – Welsh Mountain Zoo

### \$250 & above

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Apenheul Zoo  
Arizona – Sonora Desert Museum  
Birmingham Zoo  
Bramble Park Zoo  
David Traylor Zoo of Emporia  
Edward and Marie Plotka  
Lee Richardson Zoo  
Mark Barone  
Montgomery Zoo  
Racine Zoological Society  
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Sacramento Zoo  
Tokyo Zoological Park Society  
Topeka Zoo, Friends of

### \$100 & above

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

### \$50 & above

Alameda Park Zoo  
Darmstadt 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

## CBSG Steering Committee (as of December 31, 2006)

### **Brad Andrews**

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### **Evan Blumer**

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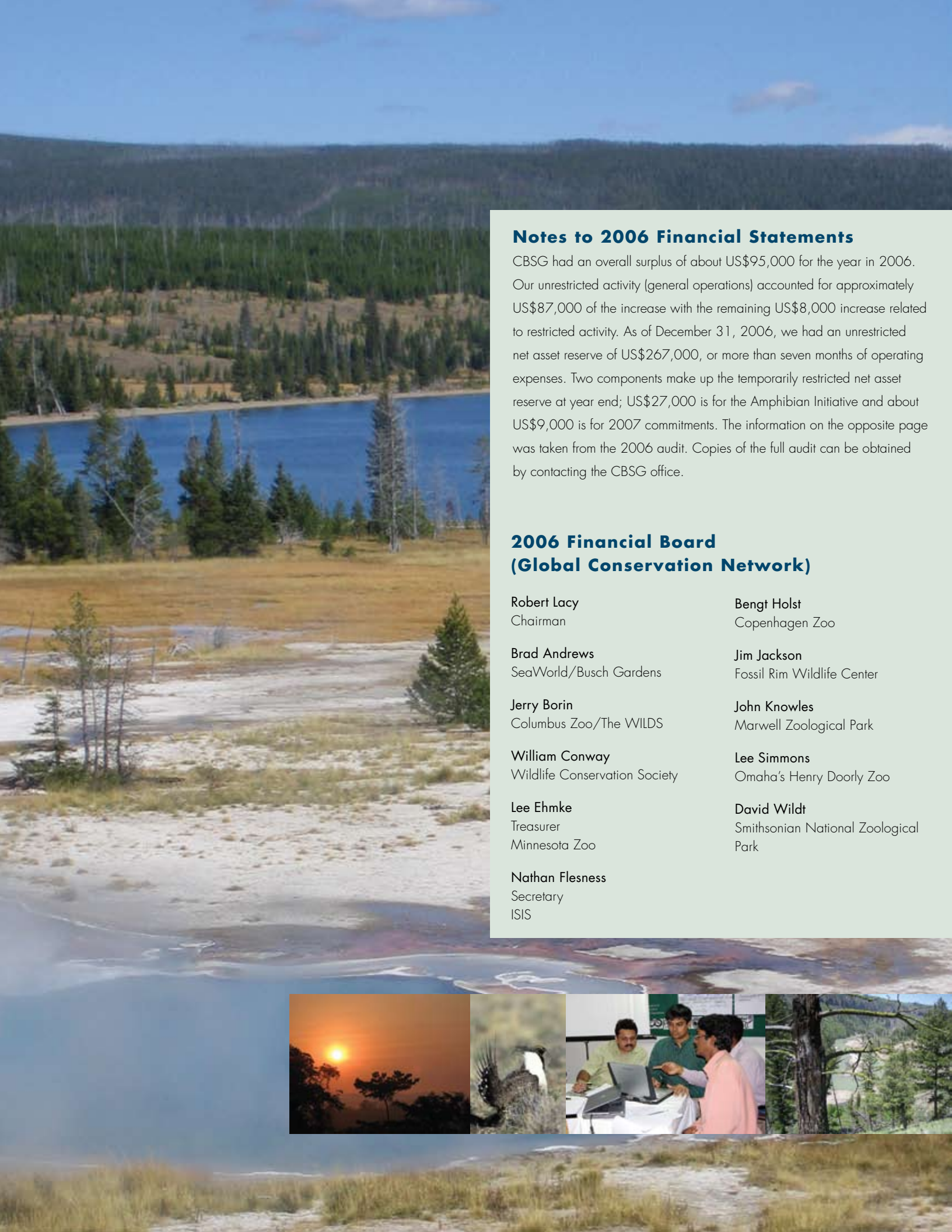
Gaylord Nelson Institute for Environmental Studies, USA

### **Jonathan Wilcken**

ARAZPA (Australasian Regional Association of Zoological Parks and Aquaria), Australia

### **David Wildt**

Smithsonian National Zoological Park, USA



## Notes to 2006 Financial Statements

CBSG had an overall surplus of about US\$95,000 for the year in 2006. Our unrestricted activity (general operations) accounted for approximately US\$87,000 of the increase with the remaining US\$8,000 increase related to restricted activity. As of December 31, 2006, we had an unrestricted net asset reserve of US\$267,000, or more than seven months of operating expenses. Two components make up the temporarily restricted net asset reserve at year end; US\$27,000 is for the Amphibian Initiative and about US\$9,000 is for 2007 commitments. The information on the opposite page was taken from the 2006 audit. Copies of the full audit can be obtained by contacting the CBSG office.

## 2006 Financial Board (Global Conservation Network)

**Robert Lacy**  
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**Brad Andrews**  
SeaWorld/Busch Gardens

**Jerry Borin**  
Columbus Zoo/The WILDS

**William Conway**  
Wildlife Conservation Society

**Lee Ehmke**  
Treasurer  
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**John Knowles**  
Marwell Zoological Park

**Lee Simmons**  
Omaha's Henry Doorly Zoo

**David Wildt**  
Smithsonian National Zoological  
Park





**Statement of Activities and Changes  
in Net Assets for the Year Ending  
December 31, 2006**

	Unrestricted	Temporarily Restricted	Total
<b>Support and Revenue:</b>			
Contributions	US\$537,972	US\$36,305	US\$574,277
Workshops and Contracts	65,387	–	65,387
Other Program Service Fees	2,483	–	2,483
Miscellaneous Income	–	–	–
Investment Income	28,919	–	28,919
Net Assets Released from Restrictions:			
Satisfaction of Time Restrictions	28,241	(28,241)	–
<b>Total Support and Revenue</b>	<b>663,002</b>	<b>8,064</b>	<b>671,066</b>
<b>Expense:</b>			
Program Services	405,388	–	405,388
Support Services:			
Management and General	115,942	–	115,942
Fundraising	54,863	–	54,863
<b>Total Support Services</b>	<b>170,805</b>	<b>–</b>	<b>170,805</b>
<b>Total Expense</b>	<b>576,193</b>	<b>–</b>	<b>576,193</b>
Change in Net Assets	86,809	8,064	94,873
Net Assets - Beginning of Year	180,017	28,241	208,258
<b>Net Assets - End of Year</b>	<b>US\$266,826</b>	<b>US\$36,305</b>	<b>US\$303,131</b>

**Statement of Financial Position  
at December 31, 2006**

<b>ASSETS</b>	
<b>Current Assets:</b>	
Cash	US\$174,729
Pledges Receivable	12,180
Contracts Receivable	1,958
Prepaid Expenses	3,009
<b>Total Current Assets</b>	<b>191,876</b>
Investments	239,264
Property and Equipment - Net	5,455
<b>Total Assets</b>	<b>US\$436,595</b>
<b>LIABILITIES &amp; NET ASSETS</b>	
<b>Current Liabilities:</b>	
Accounts Payable	9,841
Accrued Salaries	6,093
Accrued Vacation	10,791
Deferred Workshop Revenue	4,069
Fiscal Agent Funds Payable	102,670
<b>Total Current Liabilities</b>	<b>133,464</b>
<b>Net Assets:</b>	
Unrestricted	266,826
Temporarily Restricted	36,305
<b>Total Net Assets</b>	<b>303,131</b>
<b>Total Liabilities &amp; Net Assets</b>	<b>US\$436,595</b>



## CONSERVATION BREEDING SPECIALIST GROUP

### 2006 Sponsors of CBSG Participation in Conservation Workshops & Meetings

Association of Zoos and Aquariums (AZA) Annual Meeting/ Chicago Zoological Society  
Biocomplexity Project Metamodel Development Meeting/ Chicago Zoological Society  
Brookfield Zoo Amphibian Planning Session/ Chicago Zoological Society  
Channel Island Fox Inter-Agency Recovery Team Meeting/ National Park Service; USFWS  
Committee on Interregional Conservation Coordination (CIRCC) Meetings/CBSG  
Conservation International Indonesia Marine Strategies Workshop/ Conservation International  
Cuban Zoo Association Meeting/ Cuban Zoo Association  
International Species Information System (ISIS) Board Meeting/ CBSG  
IUCN/SSC Biodiversity Assessments Sub-committee Meeting/ CBSG  
Emerging Wildlife Conservation Leaders Meeting/ Defenders of Wildlife; USFWS  
Envirovet Course Instruction/ White Oak Conservation Center; University of Illinois; University of California-Davis; The Nathan Cummings Foundation; The Geraldine R. Dodge Foundation; The Bay and Paul Foundation; Eli Lilly & Co.; Dr. Kim Hammond and Falls Road Animal Hospital; The Raynie Foundation  
Giant Panda Genetic Management Technical Meeting/ Smithsonian National Zoological Park  
International Symposium for Zoo and Wildlife Medicine/ Tsushima Wildlife Conservation Center; Japanese Society of Zoo and Wildlife Medicine; City of Toyooka; Prefecture of Hyogo; The 21st Century COE Program of Gifu University  
Mesoamerican Psittacids Network Annual Meeting/ CBSG  
Mesoamerican Manati Network Meeting/ CBSG  
Pan-African Association of Zoos and Aquaria (PAAZAB) Annual Conference/ CBSG  
Population Management Software Development Meeting/ ISIS  
South East Asian Zoo Association (SEAZA) Annual Conference/ Chester Zoo; Universities Federation for Animal Welfare (UFAW)  
Seoul National University Conservation Biology Symposium/ Seoul National University

South China Tiger Population Management Technical Meeting/ Minnesota Zoo Foundation through a grant from The Tiger Foundation; Suzhou Zoo; Shanghai Zoo  
Small Population Management Advisory Group (SPMAG) Mid-Year Meeting/ Chicago Zoological Society; CBSG  
Tiger Species Survival Plan Masterplan Meeting/ AZA  
Urban Ecology Workshop/ University of Louisville; National Science Foundation; US Environmental Protection Agency; US Forest Service; US Geological Survey  
World Association of Zoos and Aquariums (WAZA) Annual Conference/ CBSG  
Zoological Information Management System (ZIMS) Population Management II Meeting/ ISIS

### Special Acknowledgements

#### Evenson Design Group – [www.evensondesign.com](http://www.evensondesign.com)

The design of this Annual Report and other materials was donated by Evenson Design Group (EDG), a full service graphic design firm located in Culver City, California. Since 1976, EDG has worked with small to enterprise-level clients creating many successful solutions for brand identity, packaging, corporate collateral, environmental signage, exhibit design, and web/multi-media projects.

**Linda Malek** is a strategic planning, business development, and marketing specialist based in southern California. She currently donates her expertise to CBSG as we enhance stakeholder communication and increase targeted development efforts, and has directed EDG in the design of this Annual Report and other marketing and development tools.

#### Printing courtesy of Omaha's Henry Doorly Zoo

### 2006 Ulysses S. Seal Award for Innovation in Conservation

Ulie Seal'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 collaborate with others who were also making such innovative contributions. Fittingly, CBSG has chosen to honor Ulie, the founder and first Chairman of CBSG, by creating the Ulysses S. Seal Award for Innovation in Conservation. The contributions of recipients of this award need not have been through work connected with CBSG, but do reflect CBSG values of creative thinking that results in improved conservation action.



The 2006 Ulysses S. Seal Award was presented to Dr. Jonathan Ballou of the Smithsonian Institution's National Zoo, Washington, DC. A pioneer in pedigree analysis and population management, Dr. Ballou developed the theoretical basis for mean kinship used for genetic management of zoo collections worldwide, and helped develop analytical software for managing captive populations. For 23 years, he has been involved in the successful management and reintroduction of golden lion tamarins in Brazil, and has served as population management advisor for many endangered species, including black-footed ferrets, California condors, and giant pandas.





