2005 Annual Report





CONTENTS

- From the Executive Director
 - From the Chairman
 - About CBSG
- 2005 PHVA and CAMP Workshops / Sponsors 6 2005 Conservation Planning and Training
 - Workshops / Sponsors 9

Success Stories:

- The Leopard: Common Cat or Conservation Concern? 10
 - Helping Hoolocks in Bangladesh 11
 - Protecting Penguins in the Galápagos 12
 - Rediscovering the Felids of Colombia 13
 - Lion Tamarins: Forest Treasures of Black & Gold 14
 - Hope for Madagascar Tortoises 15

Special Report:

The Global Amphibian Species Extinction Crisis 16

Core Team:

- CBSG Steering Committee 18
- CBSG Regional Networks 19
- CBSG Conservation Council 20
- CBSG Staff, Strategic Associates & Financial Board 21
 - Financial Information 23
 - 2005 Sponsors of CBSG Participation in
 - Workshops and Meetings 24
 - 2005 Ulysses S. Seal Award 24



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.



TRANSFORMING PASSIONATE COMMITMENT TO WILDLIFE INTO EFFECTIVE CONSERVATION



The essence of CBSG is transformation: it is embedded in all aspects of our history, it is expressly stated in our mission, and it is present in our current philosophy and practice. Never has this been more evident than over the past year as CBSG recognized and responded to the global amphibian extinction crisis. As part of a global plan to save the Earth's amphibians, CBSG was charged by the newly formed Amphibian Specialist Group with guiding the implementation of *ex situ* goals. So, while continuing the vital work for which the organization is known, CBSG shifted gears to direct considerable attention to amphibians, and transformed our staff by hiring Dr. Kevin Zippel as our Amphibian Program Officer. With his leadership, we are assisting the zoo and aquarium community in focusing its response to the amphibian crisis.

CBSG is known for conducting collaborative processes through which participating individuals and organizations transform themselves, making their conservation efforts more powerful and effective. A successful response to the amphibian extinction crisis will require an unprecedented level of cooperation and collaboration among zoos, regional zoo associations, range country wildlife agencies, and the broader conservation community. CBSG has begun this collaborative effort through the establishment of the joint CBSG/World Association of Zoos and Aquariums (WAZA) amphibian initiative, and by convening workshops to identify promising solutions and develop amphibian-focused conservation partnerships. We are confident that amphibian conservation will benefit from this process of transformation.

Amphibian experts came to CBSG with their passionate concern about the crisis facing this group of animals. They looked to us to focus their energy and provide direction, and CBSG was uniquely positioned to accept this challenge. Because we are a small operation with a large membership of conservation professionals and a committed and responsive donor base, we had considerable expertise to draw upon and the resources to get us started. Expanding our focus and hiring our first taxon-specific program officer was a risk for CBSG, both programmatically and financially, but we knew that our steering committee and financial board would support this bold decision. We are extremely proud that CBSG accepted this urgent challenge. We welcome the opportunity to share this past year's transformation, plans, and progress with you in the pages of this Annual Report and in our other communications over the next year.

Jomie Bages

Dr. Onnie Byers Executive Director



WHAT IS "CONSERVATION BREEDING"?

In my travels and work for CBSG, people often ask me what "conservation breeding" means. Our name arose from an earlier incarnation as the Captive Breeding Specialist Group - initially focused on providing expertise in the scientific management of breeding populations in zoos. We quickly, however, embraced experts from outside of the zoo community into our network, and we increasingly applied our expertise to help save species in habitats that ranged from zoo enclosures to the confines of natural preserves to patchworks of wild and human-dominated landscapes. The "captive" in our name was changed to "conservation" to clarify that many non-captive wildlife populations also require intensive management. Although wise management of wildlife involves much more than breeding - as we need to attend to survival, dispersal, behavior, and more - continued use of the word "breeding" helps to identify the essential importance of continuity across generations.



While the term "conservation breeding" is still confusing to some people, it has been better defined over the years by what our organization does, rather than what we are called. The mystery of our name may even be an advantage, in that it forces us to define conservation breeding for others, and occasionally to reexamine for ourselves what we are and what we can be: conservation breeding is a species conservation strategy. It employs the scientifically managed breeding of threatened wildlife for creation and maintenance of populations that serve to enable, support, or enhance the conservation of species in their wild habitats.

CBSG as an organization and as a collection of talented and dedicated individuals does much more than provide technical expertise on conservation breeding. We also apply our expertise in convening (people, ideas, data, resources), innovation (of approaches, tools, and solutions), rigorous analysis and assessment, training, and evaluation - all to facilitate collaborative and successful conservation action. While our focus is on any population or species in need of special care to ensure its survival, our expertise and unique contribution is to provide the integration among the knowledge systems that is necessary for intensive management of wildlife that are imperiled by human actions. I am very pleased that our Annual Report demonstrates how the Conservation Breeding Specialist Group continues to be very active, very productive, very successful, and challenged to do even more for wildlife conservation.



Nobert 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.

WWW.iucn.org

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.

History

Since its inception in 1979, CBSG has grown into a global volunteer network of 550 professionals, coordinated by a headquarters staff of eight, 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 for over 160 species through more than 223 workshops held in 65 countries. CBSG has collaborated with more than 170 zoos and aquariums, 152 conservation non-governmental organizations (NGOs), 61 universities, 39 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.

www.iucn.org/themes/ssc

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.





Our Approach to Conservation

The environmental challenges facing our complex world today affect and are affected by people with widely diverse 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.

2005 PHVA AND CAMP WORKSHOPS/SPONSORS

American Burying Beetle PHVA

Saint Louis Zoo, US Fish and Wildlife Service (USFWS), WildCare Institute

Asiatic Golden Cat PHVA

South East Asian Zoo Association (SEAZA), Zoological Parks Organization of Thailand

Baird's Tapir PHVA

Africam Safari, Beardsley Zoo Conservation Fund, Bergen County Zoological Park, BREC's Baton Rouge Zoo, Brevard Zoo, Chicago Board of Trade Endangered Species Fund, Chicago Zoological Society, Lee Richardson Zoo, Conservation International's Critical Ecosystem Partnership Fund, Franklin Park Zoo, Houston Zoo Inc., IUCN/SSC Tapir Specialist Group Conservation Fund, Jacksonville Zoo and Gardens, Los Angeles Zoo, Louisiana Purchase Zoo, Milwaukee County Zoological Gardens, Nashville Zoo, Omaha's Henry Doorly Zoo, an Diego Zoo, Sedgwick County Zoo, USFWS-Division of International Conservation, Virginia Zoo, Wuppertal Zoo, World Association of Zoos and Aquariums (WAZA), Xcaret Zoo, Private Donations

Galápagos Penguin PHVA

Charles Darwin Foundation, Chicago Board of Trade Endangered Species Fund, Chicago Zoological Society, Darwin Initiative, Parque Nacional Galápagos, Saint Louis Zoo, SeaWorld/Busch Gardens

Southern Ground Hornbill PHVA

Endangered Wildlife Trust, The Endangered Wildlife Trust's Ground Hornbill Working Group, Johannesburg Zoological Gardens, National Zoological Gardens of South Africa, Sasol

Hoolock Gibbon PHVA

Apenheul Primate Park, Columbus Zoo, Great Ape Fund, Primate Action Fund/Margot Marsh Biodiversity Foundation, Twycross Zoo, USFWS

Lion Tamarin PHVA III

Basel Zoo, Bristol Zoo, Cleveland Metroparks Zoo, Colchester Zoo, Conservatoire pour la Protection des Primates, Copenhagen Zoo, Disney Wildlife Conservation Fund, Instituto Brasileiro do Meio-Ambiente (IBAMA), Lisbon Zoo, Odense Zoo, Paradise Wildlife Park, Parco Zoo, Plock Zoo, Whipsnade, Zoo la Palmyre

Madagascar Tortoise PHVA

Conservation International, Ministry of Environment, Water and Forests (MINENVEF), SeaWorld/Busch Gardens, Wildlife Conservation Society

Maned Wolf PHVA

American Association of Zoo Keepers (AAZK), Associação Pró-Carnívoros, Audubon Zoo, AZA, Canid Specialist Group, Centro Nacional de Pesquisa para a Conservação de Predadores Naturais (CENAP), Cheetah Species Survival Plan (SSP), Connecticut's Beardsley Zoo Conservation Fund, Dickerson Park Zoo, Fossil Rim Wildlife Center, Houston Zoo Inc., IBAMA, Maned Wolf SSP, IUCN/SSC, Little Rock Zoo, Memphis Zoo, Oklahoma City Zoo, San Diego Zoo, Sedgwick County Zoo, White Oak Conservation Center, Wild Dog Foundation, Wildlife World Zoo

South African Leopard PHVA

The Davies Foundation, Department of Environmental Affairs and Tourism, Endangered Wildlife Trust, The Lomas Wildlife Protection Trust

> Costa Rican Cetacean CAMP Fundación Pro Zoológicos de Costa Rica (FUNDAZOO)

WHAT WE DO

The PHVA Workshop

Many endangered species conservation plans now in use around the globe lack the depth of scientific analysis that is so important for setting reasonable and credible quantitative targets for recovery. Our Population and Habitat Viability Assessment (PHVA) workshop directly addresses this critical need. Detailed data on species biology, genetics, and ecology are integrated with estimates of human-based threats, such as current and projected land use patterns. Sophisticated computer models use this information to evaluate the risk of wildlife population decline or extinction under alternative future management scenarios. These models serve as an excellent tool for scientists and wildlife managers in their quest to make better decisions about conservation. PHVA workshop participants develop detailed recommendations for action, including the explicit identification of personal responsibilities and timelines so that the recommendations become a 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 body of workshop participants uses the IUCN's quantitative Red List system to categorize each species' degree of endangerment, based on estimates of the threats to the 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.





2005 PHVA Workshops

| Workshops | 10 |
|------------------------------|-----|
| Species | 14 |
| Countries | 8 |
| Participants | 396 |
| Organizations Represented | 232 |

2005 CAMP Workshops

| Workshops | 1 |
|------------------------------|----|
| Species | 31 |
| Countries | 1 |
| Participants | 10 |
| Organizations Represented | 9 |

2005 Organizational and Species Conservation Planning Workshops

| · · · | |
|------------------------------|-----|
| Workshops | 17 |
| Countries | 6 |
| Participants | 627 |
| Organizations Represented | 319 |

2005 Facilitation and Risk Assessment Training Workshops

| Workshops | 11 |
|------------------------------|-----|
| Countries | 10 |
| Participants | 235 |
| Organizations Represented | 108 |

WHAT WE DO

Comprehensive Conservation Planning

The Comprehensive Conservation Planning (CCP) process is a tool for strategic conservation management planning in national parks and protected areas. Stakeholders, including park managers, nearby landowners, users of the park, and local governments, develop a vision for the future of the protected area by exploring key issues affecting its role within the larger landscape, agreeing to management goals, and developing detailed objectives for reaching those goals. The product of the CCP workshop serves as a guide for the future management of the park or protected area, with support from those who will be impacted by that management.

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. These courses have an intensive focus 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.



2005 CONSERVATION PLANNING AND TRAINING WORKSHOPS/SPONSORS

Organizational and Species Conservation Planning Workshops

Alabama Beach Mouse PVA III / USFWS

AZA Wild Bird Acquisition Working Group Planning Workshop / AZA

AZA Directors' Elephant Meeting / AZA

CBSG Amphibian Crisis Response Workshop / CBSG, Conservation International

CBSG, South Asia/Reintroduction Specialist Group Joint Annual Meeting / Chester

Channel Island Fox Integrated Recovery Team Annual Meeting / National Park Service, USFWS

Channel Island Fox PVA Working Group Meeting / USFWS

Eastern Massasauga Rattlesnake PVA Symposium / Parks Canada

Gaylord Nelson Institute for Environmental Studies Strategic Planning Workshop / Gaylord Nelson Institute for Environmental Studies Great Lakes Listening Workshop / USFWS

International Black-footed Ferret Recovery Workshop / Calgary Zoo, Parks Canada, World Wildlife Fund (WWF) National Conservation and Management Plan for Felids in Colombia Meeting / Ministerio de Ambiente, Vivienda y Desarrollo Territorial Southern African Cheetah Conservation Planning Workshop / Classic Escapes, Cheetah Conservation Fund, Columbus Zoo, Endangered Wildlife Trust, Wildlife Conservation Network

Upper Mississippi Institutional Arrangements Workshop / US Army Corps of Engineers

ZIMS Data Standards Workshop, Rotterdam / ISIS, Rotterdam Zoo

ZIMS Data Standards Workshop, **Orlando** / ISIS, Disney's Animal Kingdom/The Living Seas <u>ZIMS Data Sharing Workshop</u> / ISIS, Baltimore Aquarium

Facilitation and Risk Assessment Training Workshops

Conservation Genetics Training, Stockholm, Sweden / Stockholm University PHVA Facilitator's Course, Jersey, Channel Islands, UK / SDurrell Wildlife Conservation Trust Husbandry and Management of Hoolock Gibbons, Bangladesh / Twycross Zoo Training in Field Techniques for Bats and Rodents, Dhaka, Bangladesh / Bat Conservation International, Chester Zoo, Knowsley Safari Park Training in Field Techniques for the Study of Volant and Non-Volant Small Mammals, Randenigala, Sri Lanka / Bat Conservation International, Chester Zoo, Knowsley Safari Park Training Workshop Development, Brookfield, Illinois, United States / Brookfield Zoo Vortex Training, Antananarivo, Madagascar / Wildlife Conservation Society (WCS)

Vortex Training, Calgary, Canada / Calgary Zoo, Parks Canada

Vortex Training, Nazare Paulista, Brazil / Instituto de Pesquisas Ecológicas (IPE)

Vortex Training, Puebla, México / Universidad de las Américas-Campus Puebla

ISIS/ARKS/ZIMS Training, Coimbatore, India / South Asian Zoo Association for Regional Cooperation South Asian Zoo Association for Regional Cooperation







THE LEOPARD: COMMON CAT OR CONSERVATION CONCERN?

"The multi-stakeholder workshop has opened communication channels between different leopard projects and provided a platform for developing a management plan for the species. The formation of the South African Leopard Forum will guarantee that the management plan is implemented and that leopards are effectively managed and conserved in South Africa well into the future."

Quinton Martins – The Cape Leopard Trust, South Africa



Leopard Facts

- Leopards are highly variable in size, depending on productivity of the habitat.
- Savannah and woodland leopards are generally largest, while mountain and desert leopards tend to be smaller.
- Leopards can survive without surface water, but will drink when water is available.
- Expert swimmers, leopards take to water readily. There is a welldocumented example of a leopard that adapted to a diet of fish.

The Situation

In South Africa, leopard populations are relatively small, but leopards are not classified as Endangered and are often persecuted due to the perception that they threaten livestock and desirable game species. In 2004, the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) doubled the number of leopards that could be legally hunted in South Africa without an evaluation of the potential impact on the leopard population. A lack of information on illegal killing of leopards, and insufficient ecological information to guide appropriate decision making, made it impossible for South Africa to make scientifically sound conservation or management decisions, thus putting the fate of leopards in South Africa at risk.

The Process

CBSG Southern Africa facilitated a workshop with participants representing the conservation community, the South African Department of Environmental Affairs and Tourism, academic institutions, SANParks, provincial conservation departments, private game reserves, and the Professional Hunters Association of South Africa. Using *Vortex* modeling software, participants tested different management strategies and hunting quotas to forecast risk of population decline or extinction. Within the context of a region employing sustainable use policies for the conservation and management of wildlife, the model results suggested that many factors must be considered to ensure the survival of local populations.



The Results

The PHVA resulted in the development of an effective leopard conservation and management plan. Another outcome was the formation of the South African Leopard Forum, developed to serve as an advisory group, coordinate research activities, and drive the implementation of the Leopard PHVA. Workshop results and recommendations were presented to CITES officials and the government biodiversity directorate and, in the interim, no additional leopard hunting permits have been issued. The PHVA report is being considered as the primary input into this decision-making process.

HELPING HOOLOCK GIBBONS IN BANGLADESH

"The Hoolock Gibbon PHVA, organized and facilitated by CBSG South Asia and Wildlife Trust of Bangladesh (WTB) has energized all of us to increase our efforts to aid protection of the hoolock gibbon and its habitat across its range in NE India, Bangladesh and Myanmar as well as to generate public awareness at all levels, work for sensitization of policy makers, and educate the local forest people about conservation importance."

Dr. A. K. Gupta – Chief Conservator of Forests, Senior Professor, Wildlife Institute of India, Dehra Dun, U.P.



Hoolock Gibbon Facts

- Hoolock gibbons come in two varieties or subspecies. Western hoolock gibbons (Hoolock hoolock hoolock) are found only in India and Bangladesh. Eastern hoolock gibbons (Hoolock hoolock leuconedys) are found in Myanmar, China, and a very restricted area of India.
- Hoolock gibbons are one of 13 gibbon species living throughout Asia.
- A charming appearance and pleasant disposition have historically led to the capture of hoolock gibbons for pets and exhibition.
- Forest gibbons use the upper tree canopy to travel at speeds as high as 55 kilometers per hour.

The Situation

The hoolock gibbon *(Hoolock hoolock hoolock)* is a small, longarmed ape native to India and Bangladesh. This intelligent and diminutive relative of the great apes is listed as Endangered in India and Critically Endangered in Bangladesh. Today, only 14 fragmented populations of hoolocks remain in the patchy forests of Bangladesh, some with only 30-40 individuals and others with as few as 2-3. Eight populations of hoolock gibbons in Bangladesh have become extinct in the last few years, likely due to habitat loss.

The Process

CBSG South Asia conducted a Population and Habitat Viability Assessment Workshop for hoolock gibbons in February 2005 to address the many threats facing this species. Field researchers, foresters and other stakeholders from Bangladesh and India made recommendations for further studies and direct conservation action and discussed the possible consequences of a proposed petroleum pipeline that will run through Lawachara National Park, home to the country's largest hoolock gibbon population.

The **Results**

The workshop analyses concluded that 80% of the 22 hoolock gibbon populations in Bangladesh were too small to be sustainable, and were in immediate danger of becoming extinct. Participants generated a report outlining quantified and powerful facts to address the governments of Bangladesh and India with succinct and viable recommendations for hoolock gibbon conservation. A team of educators will use the facts from the report to create political and other appeals that encourage the local population to support existing laws and/or pass new legislation aimed at protecting the hoolock gibbons and their habitat.



PROTECTING PENGUINS IN THE GALÁPAGOS

"Success in the conservation of the Galápagos penguin will mean success in the conservation of biodiversity in the Galápagos Islands."

F. Hernán Vargas – Wildlife Conservation Research Unit, University of Oxford UK, and Charles Darwin Research Station (CDRS), Isla Santa Cruz, Galápagos, Ecuador



The Situation

Living only in the Galápagos Archipelago, the Galápagos penguin (*Spheniscus mendiculus*) is one of the most threatened species in that region. In the early 1970s almost 2,000 penguins called the islands' cold waters home. During the strong El Niño weather events of the early 1980s and late 1990s, the penguin population declined.Despite recoveries after El Niño events in past centuries, the 2004 census counted only 858 penguins, indicating that the population may not have been able to recover in recent decades. Other threats to Galápagos penguins include recently introduced mosquitoes and the diseases they can carry, and disturbance from human activity such as illegal fishing and oil spills.

The Process

Thirty-one participants from 15 institutions and six countries met in February 2005 to analyze the status of the species, determine the probabilities of penguin extinction in Galápagos over the next 100 years, and analyze the status of current habitat. The workshop benefited greatly from the expertise shared by colleagues who had experience with related species of penguins facing similar threats in Peru, Chile, Argentina, and South Africa. An action plan and recommendations were produced to minimize threats with the support of the local human communities, Galápagos National Park, and the Charles Darwin Foundation.

Penguin Facts

- There are 17 species of penguins living on four continents: Africa, Antarctica, Australia (and New Zealand), and South America.
- Galápagos penguins are the smallest and most northerly of the warm weather penguins and are found only on the Galápagos Islands off the coast of Ecuador.
- Galápagos penguins live on the equator, but they are dependent on a cold ocean current that brings abundant food to the islands.
- Penguins have only one or two chicks in each clutch, and only about a third of the chicks survive in normal years. During El Niño years, the warmer water keeps away the fish they feed on, so very few of the pairs successfully raise chicks.

The Results

Participants at the workshop created a conservation strategy for the penguins, which will also directly benefit other island-dwelling birds and animals affected by similar threats, and can be used as a model for the conservation of other species in similar areas. This conservation strategy will be incorporated and used in both the Galápagos National Park and the Marine Reserve. The implementation of the basic recommendations will allow the penguin population to survive, withstanding the expected increasing severity of El Niño events as global warming continues to alter our climate.



REDISCOVERING THE FELIDS OF COLOMBIA

"Thanks to the methodology used during this workshop, the staff of the National Environmental System (SINA) and members of the Colombian conservationist community were able to identify and develop actions for the management and conservation of the six felid species that inhabit Colombia, which were used to develop the Colombian Felids Conservation and Management Program."

Claudia Rodríguez – Bióloga-Funcionaria de la Dirección de Ecosistemas, Ministerio de Ambiente, Vivienda y Desarrollo Territorial



Neotropical Felid Facts

- The common names of the six species of felids are: jaguar, puma, ocelot, margay, jaguarundi, and spotted cat.
- Felids are solely carnivorous and are the top predators in tropical forests.
- The capture of these beautiful animals for the pet trade and other uses is controlled under guidelines of the Convention on International Trade in Endangered Species (CITES).
- As with other carnivores, felids play an important role in ecosystem stability by controlling prey populations.
- Felids see and hear extremely well, with tremendous binocular color vision.

The Situation

Colombia is one of the most biologically diverse countries in South America. However, there is very little information about its six native species of felids (cats), which play a vital role in maintaining ecological balance in a variety of Colombian ecosystems. The spotted cats were historically hunted for their valuable fur; today their biggest threat is habitat degradation and destruction. To protect the felid populations in Colombia, immediate action must be taken by national and international authorities to minimize the risk that these beautiful carnivores may become extinct.

The Process

At the request of Colombia's Minister of the Environment, Housing and Development, CBSG México brought together a diverse group of stakeholders, including NGOs, government agencies, research institutes, universities, and zoological institutions, who identified important issues for all six Colombian felid species and their habitat. The participants added their personal knowledge and observations of felids to the discussion, providing valuable information that is not available in traditional publications. Participants focused on the five biogeographic areas of Colombia and developed detailed actions with accompanying timetables.



The Results

A National Conservation Management Plan for Colombia's felids was developed, based directly on the results and recommendations from the participants. The Plan will guide managers of Natural Protected Areas, field biologists, private reserve managers, and other stakeholders toward the successful protection of the felid species of Colombia. At the meeting, participants reported on the exciting discovery of a small population of the elusive Andean cat (*Oncifelis colocolo*) in Southern Colombia, which had previously been unknown in the area. If this finding is confirmed, it will be the seventh felid species in Colombia.

LION TAMARINS: FOREST TREASURES OF BLACK & GOLD

"The recommendations from the Lion Tamarin PHVA will be used to prioritize the allocation of funds available for lion tamarin conservation."

Onildo João Marini-Filho, Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA)



Lion Tamarin Facts

- Estimated numbers in the wild: golden lion tamarin ~1,400; golden-headed lion tamarin 6,000-15,000; black lion tamarin ~1,500; black-faced lion tamarin ~350.
- Four species of lion tamarins are endemic to the Atlantic rainforests of Brazil.
- Black-faced lion tamarins are only found in the wild. The other three species have managed populations in zoos around the world.
- All lion tamarins in the world, including the zoo populations, belong to the Brazilian government.
- Conservation actions originating from previous PHVAs as well as reintroductions of tamarins from zoos to protected areas have contributed to a recent change in the IUCN Red List category for the golden lion tamarin from Critically Endangered to Endangered.
- Fragmentation of the forest is one of the major threats to lion tamarins.

The Situation

Of the four species of lion tamarins living in the remaining fragments of the Atlantic rainforest in Brazil, the golden and golden-headed lion tamarins are both listed as Endangered on the IUCN Red List, and the black and black-faced lion tamarins as Critically Endangered. In 1990, CBSG together with IBAMA (Brazilian Institute for the Environment and Renewable Natural Resources) conducted a Population Viability Assessment (PVA) workshop for lion tamarins in Brazil, resulting in a recovery plan and the establishment of the International Recovery and Management Committee (IRMC, now ICCM) for lion tamarins. In 1997, another PHVA workshop was conducted, and by 2005, most action steps from the first two workshops had been implemented. These lion tamarin recovery programs were considered some of the most progressive and successful conservation programs in the world.

The Process

CBSG Europe and CBSG Brasil combined efforts to organize the third lion tamarin PHVA. Over 50 field researchers and conservationists, wildlife reserve directors, veterinarians, zoologists, and zoo personnel developed new conservation action plans for the four tamarin species, using up-to-date information on biology, distribution, population, and habitat status. Important issues identified by participants allowed them to evaluate the effects of threats to the four species and the possible impact of identified conservation actions on their future status.



The Results

Data analyses using the tools and information at the workshop suggested that while several of today's lion tamarin populations may be self-sustaining, others will survive only if they are connected to other tamarin groups, and if conservation actions work hand in hand with sustainable socio-economic development. Action plans were developed for each of the four species, including expanding habitat, use of corridors, metapopulation management, partnerships with zoos around the world, and improved research. Efforts to preserve lion tamarins continue to be one of the most successful conservation stories for endangered species.

SUCCESS STORIES

HOPE FOR MADAGASCAR TORTOISES

"The PHVA helped to restore respect for the local taboos, which will encourage and assist tortoise conservation. The respect for these customs will help the local ethnic groups see protection of tortoises as positive to their beliefs, a way of increasing the 'blessing' to the community, and ensuring a future for tortoises in Madagascar."

Sambemana – Mayor of Marovato, Commune rurale; Longin Louis Fanantera – Mayor of Tranovaho, Commune rurale; Goly Justin – Mayor of Tsihombe, Commune rurale



Tortoise Facts

- Weighing up to 35 pounds, the radiated tortoise is the largest of the beautiful "starred" tortoises, sporting a dark shell with striking yellow lines, or stars, radiating from each peak.
- Several invasive species of prickly pear cactus in Madagascar are a favorite food and nesting resource for tortoises.
- Radiated tortoises reach sexual maturity at about 20 years of age, and may live to be over 100 years old.
- The Mahafaly and Antandroy people have a taboo (*fady*) against touching or eating tortoises, which is believed to bring bad luck.

The Situation

Two species of endemic tortoise, the radiated tortoise (*Geochelone radiata*) and the smaller spider tortoise (*Pyxis arachnoides*), inhabit the dry spiny forest of southern Madagascar. Tortoise populations have plummeted dramatically over the past two decades due to habitat loss and unsustainable illegal collecting. Both species are protected by Malagasy law, but illegal trade continues. Large tortoises are collected as delicacies to be consumed at holidays and weddings, while small tortoises find their way into the pet trade. Tortoises hold significant cultural value for the local villagers, who recognize a taboo against even touching tortoises, but poachers from other areas continue to decimate the tortoise population. If current harvest rates continue, radiated tortoises may become extinct within 50 years, and spider tortoises soon after.

The Process

CBSG was invited by Madagascar's Ministry for the Environment, Water and Forests to conduct a PHVA workshop for the two endemic tortoise species. Pre-PHVA meetings encouraged full participation by local residents, community leaders, law officers, biologists and wildlife managers who collectively analyzed the key issues and estimated population numbers, range, harvest levels and other data needed for risk analysis. A population model was developed to guide management activities promoting tortoise preservation.

The Results

The desire of the local community members to assume an active role in enforcement of anti-poaching laws, and the commitment of the provincial government officials to support them, was evident as participants focused on making recommendations that promote the 85% reduction in harvest needed to prevent further decline. The results of this workshop have the potential to be tremendously valuable for local communities and wildlife managers in Madagascar, for setting future directions and priorities for management, and serving as a model for preservation of other threatened species living in this unique ecosystem.



THE GLOBAL AMPHIBIAN SPECIES EXTINCTION CRISIS

CBSG's Amphibian Initiative

Published in 2004, the IUCN's Global Amphibian Assessment revealed a startling fact: scientists are no longer merely speculating upon the reality of moderate amphibian population declines, but are clearly faced with an amphibian species extinction crisis.

One third to one half of all amphibian species are threatened with extinction, and at least 122 species have likely become extinct since 1980. Whole species groups are being decimated, and a unique reproductive strategy has already been lost with the extinction of the two species of gastric brooding frogs.

Compounding the problems of habitat loss, pollution, and climate change, a new disease (chytridiomycosis) is destroying frog populations on every continent where amphibians exist. If current trends continue unchecked, much of an entire class of vertebrates could be lost, with unknown but potentially devastating ramifications for ecological communities around the world. At this time, there are no means to stop the spread of chytridiomycosis in the wild, or to treat wild amphibian populations that are infected.



IUCN Global Amphibian Assessment

Responding to the Crisis

CBSG has stepped forward to respond appropriately and urgently to the amphibian extinction crisis.

IUCN has endorsed the Declaration of the Amphibian Conservation Summit, at which partner organizations working with the Species Survival Commission developed an Amphibian Conservation Action Plan (ACAP). In that Declaration, 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 *ex situ* survival assurance programs for species that cannot be secured in the wild with currently available conservation management strategies. The zoo and aquarium community has been given a mandate to provide a critical component of the overall conservation plan for amphibians, and CBSG is now working hard to fulfill our obligations to amphibian conservation.

What We Need to Make It Happen

The next steps in implementation will be for the participants from the February 2006 Panama Workshop to present the *ex situ* plan for consideration at regional meetings (in Europe, North America, Latin America, Australia, Africa, South Asia, and elsewhere), followed by regional species selection workshops in collaboration with Amphibian Specialist Group (ASG) members. Simultaneously, CBSG staff and members will continue their work in capacity building to better enable range country biologists to manage their own threatened amphibians.



A Conservation Challenge for Zoos and Aquariums

Perhaps the only way to safeguard hundreds of species of amphibians until methods for prevention or treatment of chytridiomycosis are found is to bring representative specimens into facilities outside of the habitats where they remain highly vulnerable. In terms of the numbers of species that could face imminent extinction, the impacts on ecological communities, and the critical role that such *ex situ* efforts must fill, the amphibian extinction crisis is perhaps the most important species conservation challenge ever faced by the zoo and aquarium community. Following our mission to save threatened species by increasing the effectiveness of conservation efforts worldwide, CBSG has leapt into a proactive response.

CBSG staff has arranged sponsorships for five Latin American biologists to attend the 2006 AZA Amphibian Biology & Management School. These students will take the expertise gained through CBSG and AZA and return to their home institutions where they can apply that expertise in their management programs and share their knowledge with other amphibian biologists in their region. CBSG México will host a similar course on amphibian conservation, with a Mexican participant from the AZA school serving as a trainer for his colleagues. The Houston Zoo's El Valle Amphibian Conservation Center (EVACC) is dedicated to the captive management, research, and exhibition of western Panama's threatened amphibians. This new facility will be a model for similar projects in other countries that are facing imminent loss of their extensive amphibian faunas.

CBSG Steering Committee (as of December 31, 2005)

Brad Andrews SeaWorld/Busch Gardens, USA

Danudirdjo Ashari Indonesian Zoological Parks Association

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Jeffrey Bonner Saint Louis Zoo, USA

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Peter Dollinger WAZA (World Association of Zoos and Aquariums) Switzerland

Holly Dublin IUCN/SSC, South Africa

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Chris West Zoological Society of London, UK

Frances Westley Gaylord Nelson Institute for Environmental Studies, USA

Jonathan Wilcken ARAZPA (Australasian Regional Association of Zoological Parks and Aquaria)

David Wildt Smithsonian National Zoological Park, USA

CBSG Regional Networks

Regional Networks take CBSG tools and principles deep 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.



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Nasu World Monkey Park



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The CBSG Conservation Council

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\$500 & above

Aalborg Zoo Banham Zoo & Sanctuary **BioSolutions Division of SAIC** Cotswold Wildlife Park Fairchild Tropical Botanic Garden Fort Worth Zoo FOTA Wildlife Park Granby Zoo Knoxville Zoological Gardens Knuthenborg Safari Park Lincoln Park Zoo Little Rock Zoo Naturzoo Rheine Odense Zoo Oregon Zoo Ouwehands Dierenpark Palm Beach Zoo at Dreher Park Riverbanks Zoological Park Rosamond Gifford Zoo Swedish Association of Zoos

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Alice Springs Desert Park Arizona Sonora Desert Museum Bramble Park Zoo Dr. Edward and Marie Plotka Emporia Zoo Friends of the Topeka Zoo Lee Richardson Zoo Montgomery Zoo Racine Zoological Society Svenska Djurparksföreningen Tokyo Zoological Park Society

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African Safari – France Alex Rübel Bighorn Institute Brandywine Zoo Central Zoo Authority - India Chahinkapa Zoo Folsom Children's Zoo International Center for Birds of Prey Lisbon Zoo Nigel Hewston Poznan Zoo Steven J. Olson Rolling Hills Zoo Steinhart Aquarium Tautphaus Park Zoo

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Bengt Holst Copenhagen Zoo **Jim Jackson** Fossil Rim Wildlife Center

John Knowles Marwell Zoological Park

Lee Simmons Omaha's Henry Doorly Zoo

David Wildt Smithsonian National Zoological Park



Notes to 2005 Financial Statements

We had an overall surplus of about US\$44,000 for the year in 2005. Our unrestricted activity (general operations) accounted for approximately US\$39,000 of the increase with the remaining US\$5,000 increase related to restricted activity. As of December 31, 2005, we had an unrestricted net asset reserve of US\$180,000, or about seven months of operating expenses. Two components make up the temporarily restricted net asset reserve at year-end; US\$16,000 is for the Amphibian Initiative and about US\$12,000 is for 2006 operations. The information on the opposite page was taken from the 2005 audit. Copies of the full audit can be obtained by contacting the CBSG office.

Statement of Activities and Changes in Net Assets for the Year Ending December 31, 2005

| | Unrestricted | Temporarily Restricted | Total |
|--|--------------|---------------------------|-------------|
| Support and Revenue: | omounded | Roomerou | loidi |
| Contributions | US\$421,662 | US\$28,241 | US\$449,903 |
| Workshops and Contracts | 136,404 | _ | 136,404 |
| Other Program Service Fees | 1,837 | - | 1,837 |
| Miscellaneous Income | _ | - | _ |
| Investment Income (Loss) | 9,630 | - | 9,630 |
| Net Assets Released from Restrictions: | | | |
| Satisfaction of Time Restrictions | 23,540 | (23,540) | - |
| Total Support and Revenue | 593,073 | 4,701 | 597,774 |
| | | | |
| Expense: | | | |
| Program Services | 416,725 | - | 416,725 |
| Support Services: | | | |
| Management and General | 99,621 | - | 99,621 |
| Fundraising | 37,462 | - | 37,462 |
| Total Support Services | 137,083 | - | 137,083 |
| Total Expense | 553,808 | - | 553,808 |
| Change in Net Assets | 39,265 | 4,701 | 43,966 |
| Net Assets - Beginning of Year | 140,752 | 23,540 | 164,292 |
| Net Assets - End of Year | US\$180,017 | US\$28,241 | US\$208,258 |

Statement of Financial Position at December 31, 2005

ASSETS Current Assets: Cash US\$232,937 Pledges Receivable 4,000 Contracts Receivable 15,000 Prepaid Expenses 3,009 Total Current Assets 254,946 Investments 102,563 Property and Equipment - Net 9,635 Total Assets US\$367,144

LIABILITIES & NET ASSETS

| Current Liabilities: | |
|----------------------------|---------|
| Accounts Payable | 6,498 |
| Accrued Salaries | 5,083 |
| Accrued Vacation | 10,260 |
| Deferred Workshop Revenue | 30,200 |
| Fiscal Agent Funds Payable | 106,845 |
| Total Current Liabilities | 158,886 |
| Net Assets: | |
| | 100 017 |

| Unrestricted | 180,017 |
|--------------------------------|-------------|
| Temporarily Restricted | 28,241 |
| Total Net Assets | 208,258 |
| Total Liabilities & Net Assets | US\$367,144 |



2005 Sponsors of CBSG Participation in Conservation Workshops & Meetings

Amphibian Conservation Summit Conservation International, IUCN Species Survival Commission

EnviroVet Lectures

University of Illinois

Emerging Wildlife Conservation Leaders Training Course, Jacksonville, Florida Defenders of Wildlife, USFWS

Emerging Wildlife Conservation Leaders Planning Meeting Defenders of Wildlife

Latin American Zoos and Aquariums Association Annual Conference Cali Zoo

SAZARC Annual Conference

Annapoorna Restaurant, Allwetterzoo Münster, Apenhuel Primate Park Conservation Trust, CBSG, Chester Zoo, Cleveland Metroparks Zoo, Coimbatore Zoological Park Society, Disney's Animal Kingdom, EAZA, ISIS, Köln Zoo, Lord Robin Russell/Woburn Safari Park, National Zoo of Sri Lanka, Paignton Zoo, Punjab Wildlife Department, Schönbrunn Zoo, Saint Louis Zoo, Toronto Zoo, Twycross Zoo, Universities Federation for Animal Welfare, WWF Pakistan, Zoo Outreach Organisation

Sumatran Orangutan Conservation Action Plan Workshop Conservation International

Tiger SSP Master Plan Meeting AZA

WAZA Annual Conference CBSG

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 utilize others who also were making such innovative contributions. Fittingly, the 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 a nominee need not have been through work connected with CBSG, but should reflect CBSG values of creative thinking that results in improved conservation action.

Special Acknowledgements

Evenson Design Group - 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 they enhance stakeholder communication and increase targeted development efforts, and has directed EDG in design of this Annual Report and other marketing and development tools.

Printing courtesy of Omaha's Henry Doorly Zoo

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The 2005 Ulysses S. Seal Award was presented to Dr. Georgina Mace, Director of Science for the Institute of Zoology at the Zoological Society of London, recognizing her leadership in developing the Red List criteria for categorizing threats to species, based on applying data in a rigorous analytical approach, grounded in fundamental understanding of population dynamics and wildlife ecology. Thanks to her work, the scientifically sound methodology works in practice, and the Global Species Assessments that apply the new system are having major impacts in how we view species conservation priorities, and what needs to be done to address an extinction crisis.





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