2009 Annual Report

Transforming passionate commitment to wildlife into effective conservation

CONSERVATION BREEDING SPECIALIST GROUP

CONTENTS

OUR MISSION

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

By:

- **developing innovative and interdisciplinary methodologies,**
- **providing culturally sensitive and respectful facilitation,**
- **promoting global partnerships and collaborations, and**
- **fostering *ex situ* contributions to species conservation,**

CBSG transforms passion for wildlife into effective conservation.

REFLECTION, REFOCUSING, AND RENEWED COMMITMENT

2009 was a transformational year, distinguished by honest reflection, heightened focus, and steadfast dedication to our mission.

It was a year of refocusing CBSG's strategic directions to address emerging needs and opportunities, of reorganizing our governance structures to more actively engage our members and improve our ability to deliver effective conservation, and of reaffirming our commitment to both *in situ* and *ex situ* conservation. As the distinction between wild and intensively managed populations blurs, it is more important than ever for us to recognize the unique contributions the *ex situ* community can make to *in situ* conservation and for us to enhance the impact of our work in both areas.

To help achieve our renewed commitment to this mission, we conducted a thorough review of the activities of the global CBSG and mapped these, and future desired actions, against our mission. The result was the identification of nine themes: engagement and collaboration; evaluation; intensive management of populations; species conservation planning; disease risk and metamodel tool development; training in CBSG processes; assisting zoos with welfare and standards; field project prioritization; and promoting change through public education. Two of these themes are highlighted in the pages of this Annual Report.

In order to deliver on these areas, we reconstituted our Steering Committee into a Strategic Committee. The primary purpose of the Strategic Committee is to help identify emerging conservation needs and new opportunities, specifically related to the themes mentioned above, to which the resources of CBSG (its membership, staff, and partners) can be effectively applied. In addition, we formed a new CBSG Advisory Committee to provide guidance on matters of tactical significance and to respond to requests for help, information and advice from the Chair and Director. These committees will play a critical role in the future of our organization.

We are extraordinarily grateful for the contributions made by these committees, and for the intellectual and financial support of our members and donors. You are the heart of CBSG—the community that enables us to transform passion for wildlife into effective conservation.

Dr. Onnie Byers, *Executive Director*

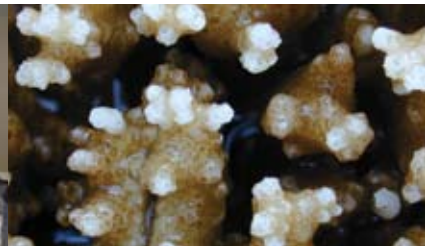
LEADING TO SOLUTIONS

CBSG has a long history of responding to difficult issues in species conservation by mobilizing the collective talent and energy of our networks. From the formation of the International Species Information System, to pioneering scientific methods for population management, to developing the Population and Habitat Viability Assessment process, to initiation of the Amphibian Ark – CBSG has used the power of collaborative networks to find effective ways to move conservation forward.

We are now leading two strategic initiatives that again respond to important needs. Our work with the IUCN Species Survival Commission (SSC) to develop species conservation planning tools is aimed at moving beyond compilation of data on species status, categorization of levels of threat, and planning – to the delivery of effective conservation strategies that will save species. At the same time, we are bringing together partners from the zoo and aquarium community to identify and overcome obstacles to sustaining populations of species that need intensive care.

Although these initiatives may seem to represent two alternative directions in conservation – *in situ* and *ex situ* actions – we will link and integrate approaches. Zoos and aquariums can be powerful allies and partners in holistic species conservation efforts. At the same time, comprehensive plans to save species will identify when, how, and for what species the special contributions of *ex situ* programs are needed. Optimal management of those breeding programs will then assure that they meet the current and future needs.

CBSG has a unique capacity to develop solutions to difficult challenges of species conservation, because we consist of a unique combination of a global network of conservation professionals, regional networks empowering local expertise, partnerships with many specialist groups of the SSC, and collaborative projects with zoos and aquariums. Our broad and open perspective further provides us with an ability to convene partners from academia, governments, and NGOs. We greatly value the contributions of all of our members and partners, and we appreciate the opportunity to use our unique position to enable, promote, and amplify the successes of their conservation efforts.



Robert C Lacy

Dr. Robert C. Lacy, *Chairman*

A VIRTUAL MEETING FOR MALAS

Mala Facts

- The mala, or rufous-hare wallaby (*Lagorchestes hirsutus*), was once widespread and common in arid Australia.
- The species was important in the cultural and culinary life of Aboriginal Australians.
- The collapse of populations in the early 1900s was associated with the impact of European settlement, including a reduction in Aboriginal land management practices and the introduction of exotic predators.
- The last known wild population was wiped out by wildfire in 1991. Remaining wild mala, of a different subspecies, are restricted to two offshore islands in Western Australia

"The CBSG mala workshop was an exciting collaboration in a virtual environment that allowed us to establish with more certainty the way forward for managing mala into perpetuity. Areas for further research were identified and are currently underway with Macquarie University, and key management issues were identified and will be implemented in the field."

— Nick Atchison, Curator of Zoology, Alice Springs Desert Park

The Situation

Despite conservation efforts dating back to the 1960s, mala are extinct in mainland Australia. In the 1980s, captive populations were established as a basis for future reintroduction efforts. Wild releases are unable to move forward in the presence of exotic predators, but the insurance population has been sustained and is currently distributed among six predator-proof enclosures in three Australian States and Territories. Workshop organizers identified the need to manage these populations as a single, high-performing metapopulation.

The Process

This workshop took place entirely in a web-based environment. The project team, comprised of participants from three countries spanning four time zones, met online weekly in a specially designed CBSG workspace where they were able to share sound and vision. Model parameters and management scenarios were discussed, results presented, and tasks assigned. A web-based workspace was provided for driving activity in between these live events. A secondary purpose of the workshop was to test the utility of web-based tools as an alternative to the traditional CBSG workshop environment, and live sessions were punctuated with surveys and feedback requests.

The Results

A 2004 population model for mala was successfully refined and used to establish or reinforce key requirements for long-term sub-population viability. The resulting recommendations have helped ensure a high standard of fire management at Watarrka National Park and pursuit of a more robust population size. Anonymous surveys indicated that participants felt part of a collaborative effort, found the web-based environment better than expected, and judged the planning outcomes to be as good, or better, than those expected from a face-to-face workshop. Their feedback has helped craft guidelines for CBSG workshop organizers considering the web as a workshop venue.

ATTACKING DISEASE IN AFRICAN LIONS WITH METAMODELS

Lion Facts

- Most lions (*Panthera leo*) drink water daily if available, but can go four or five days without it. Lions in arid areas seem to obtain needed moisture from the stomach contents of their prey.
- When males take over a pride, they usually kill any cubs. The females come into estrus and the new males sire other cubs.
- Lions usually spend 16 to 20 hours a day sleeping and resting, devoting the remaining hours to hunting, courting or protecting their territory.

"The workshop has assisted SANParks in identifying bovine tuberculosis research priorities to guide the development of management strategies for the disease in the KNP lion population." —Dr. Peter Buss, Senior Manager, Veterinary Unit, Kruger National Park

The Situation

Bovine tuberculosis (BTB) is believed to have entered South Africa's Kruger National Park (KNP) in the 1950s and has since become well established in the park's cape buffalo and kudu populations. As these species are preferred prey for the resident lions, there is growing concern regarding the impact BTB will have on the lion population in KNP – one of the country's last strongholds of lions. A specialist workshop was proposed to identify knowledge gaps, determine the potential long-term effects of BTB on lions, and identify appropriate strategic directions toward managing the disease.

The Process

At the request of South Africa National Parks, CBSG convened a meeting of experts in lion population biology, veterinary medicine and wildlife management. This was the first application of CBSG's new metamodeling approach to species risk assessment. Using specialized software developed by CBSG and collaborators, workshop participants linked the *Outbreak* disease epidemiology simulation model with a detailed model of lion population and social dynamics developed by researchers at the University of Minnesota, USA. This expanded approach allowed experts on lion biology and disease dynamics to exchange information and collaborate in new and exciting ways to improve lion management.

The Results

The workshop provided a platform that solicited input from a broad range of stakeholders and helped build mutual understanding. The explicit linkage of lion demographic and disease models prompted ecologists and veterinarians to think and work collaboratively in ways that were previously impossible. Based on the workshop outcomes, SANParks has implemented a six–year demographic study of KNP lions and initiated research projects to develop and validate antibody and interferon based diagnostic tests for BTB in lions. Additional work is needed to fill critical knowledge gaps concerning the epidemiology of BTB in lions and buffalo, demographics of KNP lions, and BTB transmission rates in lions.

THE TAO OF BREEDING PANDAS

Giant Panda Facts

- About 23% of giant panda habitat was destroyed by the May 2008 earthquake in Sichuan province, and the remaining habitat was highly fragmented by landslides.
- Most (87%) of the world's captive giant pandas live in China. While most births have occurred in China, cubs have also been born in the U.S., Japan, Thailand, Mexico, Spain and Austria.
- Female pandas are able to care for only one cub at a time; however, 50% of all pregnancies result in twins. Keepers care for one cub while the second stays with the mother, and then cubs are switched every few days – allowing both to survive and benefit from maternal care.

"CBSG has greatly enhanced communications and extensive cooperation among the giant panda stakeholders in China. Through biomedical surveys, workshops and technical meetings, CBSG provides technical support and greatly assists in ensuring the health and reproduction of giant pandas in the future. " —Zhang Zhihe, Director, Chengdu Research Base of Giant Panda Breeding

The Situation

About 1,600 giant pandas (*Ailuropoda melanoleuca*) inhabit the mountain bamboo forests of south-central China. This endangered carnivore is tied closely to its obligate bamboo habitat, and is at risk due to habitat loss, fragmentation, climate change, and disease. An iconic symbol of conservation worldwide, giant pandas remain immensely popular with zoo visitors, but pandas have been plagued with reproductive difficulties in captivity in the past. A healthy, viable captive population has the potential to benefit the conservation of this species on many levels, from raising awareness and financial support to supporting reintroduction efforts.

The Process

In 1996 CBSG began a long-term collaboration to assist the international *ex situ* community in developing a self-sustaining, genetically diverse captive panda population. Since establishment of the Chinese Committee of Breeding Techniques for Giant Pandas in 2002 (a joint program of the Chinese Association of Zoological Gardens and the State Forestry Administration), CBSG has facilitated annual masterplan sessions to review the population status and program goals and to promote effective genetic management. Major efforts both within China and through international collaboration have led to improved husbandry and increased reproduction and cub survival.

The Results

With only 152 giant pandas in captivity in 2002, zoo managers estimated that it would take 20-25 years to reach the target size of 300. Thanks to the immense efforts to improve reproductive success and cub survival, the population reached its target in only eight years, with 300 pandas currently in 50 institutions worldwide. Genetic diversity is high (97% of the original diversity) and population growth strong, leading the Committee to adopt more ambitious population goals – to maintain 90% gene diversity for 200 years with about 500 pandas, and to serve as a source of pandas for reintroduction. This goal is not only achievable but may be necessary given current and projected habitat loss due to earthquakes and climate change.

PARTNERS IN AVERTING EXTINCTION

Kihansi Spray Toad Facts

- Kihansi spray toads are among a few amphibians that are viviparous, giving birth to fully formed, and incredibly tiny, toadlets.
- At 2 hectares, their natural range of the species was one of the smallest of any tetrapod.
- The call of the male Kihansi spray toad includes an ultrasonic component higher than that of bats and presumably helps them communicate in the noisy waterfall environment.
- Adult Kihansi spray toads are tiny, no more than 1.9cm when fully grown.

"Since the PHVA, the progress made in Tanzania toward achieving a realistic reintroduction program is very impressive. Tanzania's scientists and governmental representatives are passionate about the toad, proud of their role in the project's success to date, and recognize the opportunity to apply what has been learned from this project to amphibian recovery and reintroduction projects both in Tanzania and abroad." –Dr. Jennifer Pramuk, Curator of Herpetology, Wildlife Conservation Society

The Situation

The tiny Kihansi spray toad (*Nectophrynoides asperginis*) was discovered in 1996, living in the mist zone of a single waterfall in Tanzania. Despite extensive efforts to save these toads from the effects of the construction of a hydroelectric dam, as well as pollution and disease (amphibian chytridiomycosis), the species disappeared from its native habitat, and in 2009 the IUCN recognized it as Extinct in the Wild.

The Process

Several conservation organizations worked together to rescue the Kihansi spray toad from total extinction. Starting in 2000, the Wildlife Conservation Society orchestrated a rescue mission, bringing about 500 toads to the US for captive breeding. Subsequently, the species has been sustained by a breeding program at the Toledo Zoo and Bronx Zoo. In 2007, CBSG and the Amphibian Ark facilitated a PHVA for the species, creating a plan to manage the remaining toads. This workshop set the stage for reintroduction, and a captive breeding facility has been created at the University of Dar es Salaam in Tanzania. In 2009 the IUCN Amphibian Specialist Group conducted a reintroduction planning workshop.

The Results

This effort has connected US zoos, the Tanzanian government, and international partners, providing training for pathologists, technicians, and veterinarians in Tanzania. Several Tanzanian biologists have been sent to the AZA Amphibian Biology and Conservation School in preparation for bringing toads back to their native country. The first toads from the US breeding program are expected to return to Tanzania in July 2010, with reintroduction to follow before the end of the year.

CONSERVATION OF CARIBBEAN CORALS

Acropora Coral Facts

- More than 50% of the *Acropora* populations within the Caribbean are now gone.
- Corals can reproduce asexually and sexually. In asexual reproduction, new clonal polyps bud off from parent polyps to expand or begin new colonies.
- SECORE has reared sexual recruits from elkhorn coral, which are now being grown in public zoos and aquaria around the world as an informal "live bank".
- Asexual fragments from staghorn coral are now being used to expand declining reefs throughout the Caribbean.

"This workshop built the foundation of the consortium that will continue to actively engage in the sexual and asexual propagation of these endangered species and directly support the recovery of elkhorn and staghorn corals. The workshop report has been instrumental in the drafting of the sections of the recovery plan focused on population enhancement." —Jennifer Moore, ESA Corals Listing and Recovery Coordinator, Protected Resources Division NOAA, Fisheries Service

The Situation

Coral reefs are some of the oldest and most diverse ecosystems on our planet, providing invaluable ecosystem benefits, nurseries and feeding grounds for fish and invertebrates, natural storm barriers for coastlines, and potential sources for pharmaceuticals. Elkhorn coral (*Acropora palmata*) and staghorn coral (*Acropora cervicornis*) are critical Caribbean reef-building species that once formed dense thickets and stands. As a result of multiple anthropogenic and natural impacts, these species have declined 80-99% from their historical population levels, negatively impacting the structure and function of reefs throughout their range. Both species are classified as Critically Endangered by the IUCN Red List.

The Process

Recognizing that coordinated management initiatives must be developed for coral reefs, the Smithsonian Institution and the National Oceanic and Atmospheric Administration (NOAA) invited CBSG to facilitate a workshop to take the first steps toward filling these gaps. In November, 42 conservation professionals from five countries came together for an intensive workshop. The group addressed the multiple threats affecting these corals, and identified initiatives to rebuild and recover degraded populations.

The Results

Significant progress was made during and after the workshop, including drafting of the contents of a best practices manual for propagation, outlining an outplanting strategy, and establishing an international coral propagation consortium. These are critical steps toward developing standardized asexual and sexual propagation techniques, and for managing health and genetic concerns in coral populations. In addition, consensus recommendations were made to pursue establishing an Acroporid population management plan, and draft a paper describing the experience, expertise and passion of the *Acropora* restoration community.

PRIORITY AREAS AND ACTIONS FOR JAGUARS

Jaguar Facts

- The jaguar is the largest cat of the Americas, and the only living representative of the genus *Panthera* in the Western Hemisphere.
- Jaguars are found in five of Brazil's six biomes: the Amazon rainforest, the semi-arid Caatinga, the cerrado grasslands, the Pantanal floodplain, and the Atlantic forest. Habitats, population status, threats, and attitudes towards jaguars vary greatly throughout these biomes.
- The range of jaguars once extended from the southwestern United States to northern Argentina.

"We consider the expertise of CBSG Brasil essential for the success of this event. The valuable contribution of its representatives during the workshop and in the pre and post–workshop process, including the composing and editing of the final document, certainly bound a great partnership with the Brazilian Government and local institutions aiming success on the conservation of threatened carnivores."
—Rogerio Cunha de Paula, Jaguar Action Plan Coordinator, CENAP/ICMBio

The Situation

Half of the world's jaguar (*Panthera onca*) population currently lives in Brazil, where habitat loss and fragmentation, retaliation killings, and loss of prey due to poaching are considered the main threats. Since over 85% of Brazil's wilderness is private land, conservationists need to create and deploy new and innovative strategies to maintain habitat suitable for jaguars as well as viable populations on private land.

The Process

To create a Jaguar National Action Plan, methods from the IUCN/SSC Species Conservation Planning handbook were added to traditional CBSG PHVA workshop dynamics. A status review exercise applied the IUCN's Red List Regional Guidelines to the Brazilian biomes, prioritizing needs by region. In addition to population viability analysis modeling, ecological niche models using the Maxent software package were developed for each biome and a participatory mapping exercise analyzed Jaguar Conservation Units. Finally, objectives of the Action Plan were reviewed and prioritized for each biome.

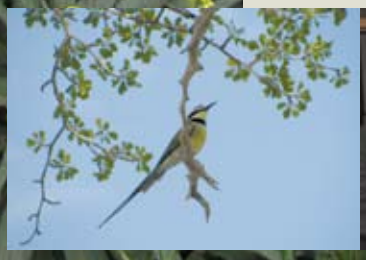
The Results

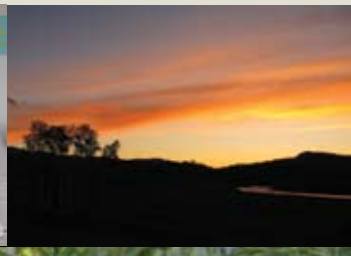
The global population of jaguars is listed as Near Threatened but this workshop categorized smaller populations as Critically Endangered in the Atlantic Forest and Caatinga, Endangered in the Cerrado, and Near Threatened in both the Pantanal and the Amazon. The mapping exercise showed that jaguars live in less than 50% of Brazil, with 85% of the Amazon and less than 50% of the Pantanal remaining as suitable habitat for the species. Mapping and population viability analysis identified 24 priority areas for jaguar research and conservation; among these, eight were classified in urgent need of conservation action.

ADVANCING SPECIES CONSERVATION PLANNING

The conservation of individual species or groups of species in their natural habitats – from mosses and beetles to cycads and whale sharks – remains a primary focus of biodiversity management around the world. The Species Survival Commission (SSC) of the International Union for Conservation of Nature (IUCN) focuses its collective effort on disseminating information on the biology of species and their role in ecosystem health and integrity. This information forms the basis of species conservation planning projects that are developed by species experts and range country decision-makers, in consultation with SSC authorities within its diverse Specialist Group structure. CBSG has a wealth of experience with *in situ* species conservation planning, conducting more than 120 Population and Habitat Viability Assessment workshops (PHVAs) for species ranging from mountain gorillas to goblin ferns, in locales from Poland to Papua New Guinea. The PHVA, developed almost 20 years ago, has become CBSG's signature product, and is a globally recognized and valued contribution of CBSG to the species conservation community.

The SSC's Species Conservation Planning (SCP) Task Force recently developed a set of valuable guidelines for creating a Species Conservation Strategy, or SCS. These guidelines provide a general approach with a number of fundamental elements. Some of these core elements are similar to those that define a PHVA, while some represent significant enhancements. One of the SSC's top priorities is the development of the SCS process into a major emphasis of the IUCN over the coming years. To realize this, the SSC has formed a new SCP Subcommittee, with which CBSG will be working as close partners.





In light of the:

- increasingly urgent need for effective species conservation plans,
- desire for continued evolution of CBSG's planning tools,
- advancements provided by the SSC's SCS guidelines,
- the complex challenge of applying these tools at various scales (taxonomic and geographic), and
- the wide array of urgent conservation scenarios (e.g., climate change) to which these tools will be applied,

CBSG is committing time and resources to the development of Species Conservation Planning tools. The new Species Conservation Planning tools will combine strategic planning methods developed in the business sector with lessons from social science about how to forge effective partnerships among diverse interests, and with the latest developments in quantitative risk assessment and robust decision analysis. The primary goal of this initiative is to determine how CBSG and its global network of species conservation planning experts can most effectively contribute to the improvement and implementation of species-based conservation planning.

This initiative was launched at a workshop in May 2010 that brought together CBSG's global team of facilitators and invited participants from the SSC and other leading conservation NGOs to share and evaluate the components of diverse species planning processes. The product of this analysis will be a tool kit that defines these various process design elements and the conditions under which each might be most appropriately applied, not only by CBSG and other Specialist Groups within the SSC, but by conservation practitioners worldwide.

THE CHALLENGE OF MANAGING SPECIES FOR CONSERVATION

For many endangered species, the threats to their survival are not ones that we can counter at present, even when we have the will. Amphibian species threatened by fungal diseases, corals threatened by warming and acidification of the oceans, and island species threatened by introduced predators are just a few examples. For such species that cannot be currently assured of persistence in the wild, protection within intensively managed populations – in traditional zoos and botanic gardens, in specialized breeding centers, or in isolated preserves – is often necessary to guarantee that we will still have the species for future restoration into wild habitats.

Although serving as an ark has long been one purpose of zoos and botanic gardens, there are significant challenges to meeting this critical need, such as:

- How do we determine which species need such intensive care?
- How large a sample of the genetic diversity needs to be secured? How can we minimize any changes in captivity that would prevent the species from ever being returned to the wild?
- When should captive populations be sustained in isolation and when should we make use of exchange with wild populations?
- Which of the techniques developed for assessing viability of wild populations also can be used to project the future of intensively managed populations?

- What techniques perfected for management of breeding programs in zoos can be used to help safeguard populations in wild habitats?

As implied by these questions, the view that species conservation can be cleanly separated into "*in situ*" protection of species in natural habitats vs "*ex situ*" preservation in captivity needs to be replaced by the integrated use of actions that range across a spectrum of more vs less intensive management.

With support from the Zoological Society of San Diego, Columbus Zoo, and all of the CBSG Conservation Council donors, CBSG is providing the forums for experts from zoos, aquariums, botanic gardens, and other propagation centers around the world to address jointly the above issues. We plan to produce globally embraced goals, assessments of current status, identification of means to overcome obstacles, new management techniques, and measures of success. This initiative will guide the use of intensive management of populations as sustainable and successful components of integrated conservation strategies for species.

2009 PHVAS AND SPECIES CONSERVATION PLANNING WORKSHOPS AND SPONSORS

Acropora Coral Conservation Workshop, USA
Smithsonian National Zoological Park

Amphibian Disease Control & Bioresource Banking Workshop, USA
San Diego Zoo

Analysis of Issues Facing *Ex Situ* Costa Rican Wildlife, Costa Rica
CBSG Mesoamerica; Wildlife Section of the National Animal Health Service (SENASA)

Auckland Regional Marine Debris Forum, New Zealand
Auckland Regional Council; Auckland Zoo; Resonance Research

Brazilian Jaguar National Action Plan Workshop, Brazil
Instituto Chico Mendes de Conservação da Biodiversidade (ICMBio); Centro Nacional de Pesquisas para a Conservação dos Predadores Naturais (CENAP); Panthera; Pro Carnivoros

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

Chiapas Amphibian Conservation Workshop, Mexico
Government of Chiapas (INHE)

Clouded Leopard & Small Felid Conservation Summit, Thailand
Clouded Leopard Project; Smithsonian National Zoological Park

Costa Rican Jaguar PHVA, Costa Rica
Simon Bolivar Zoo; VOLCAFE

First Southern Paraiba River Conservation Workshop, Brazil
ICMBio; Centro Nacional de Pesquisa e Conservação de Peixes Continentais (CEPTA); Centro Nacional de Pesquisa e Conservação de Repteis e Anfibios (RAN); Companhia Energetica de Sao Paulo (CESP)

Giant Panda Technical Meeting, China
Smithsonian National Zoological Park; Chengdu Research Base of Giant Panda Breeding

Hoolock Gibbon Strategic Planning Workshop, India
US Fish and Wildlife Service; Wildlife Areas Development Trust

Kruger National Park Lion Disease Risk Assessment and PHVA, South Africa
Animal Health for the Environment and Development (AHEAD); Chicago Board of Trade Endangered Species Fund; The Davies Foundation; Disney's Animal Kingdom; Jacksonville Zoo and Garden; John Ball Zoo Society; Omaha's Henry Doorly Zoo; South African National Parks

Mala PHVA, Cyberspace
Alice Springs Desert Park; Auckland Zoo; CBSG Australasia

Maned Wolf Action Plan Implementation Workshop, Brazil
ICMBio; CENAP

Maui Dolphin PVA Workshop, New Zealand
Auckland Zoo

Rio Grande Silvery Minnow Risk Assessment/ PVA Technical Meetings (3 Meetings), USA
Middle Rio Grande Endangered Species Collaborative Program; US Fish and Wildlife Service

Scimitar-horned Oryx Conservation & Reintroduction Workshop, United Arab Emirates
Al Ain Wildlife Park and Resort; Sahara Conservation Fund

South African Cheetah PHVA, South Africa
De Beers Consolidated Mines; Endangered Wildlife Trust; Howard G. Buffett Foundation

Sumatran Tiger Studbook Update Meeting, Indonesia
Zoological Society of London

Tiger SSP Masterplan Meeting, USA
Minnesota Zoo

PHVA and Species Conservation Planning

Using CBSG's structured tools for issue formulation and problem solving across a broad range of disciplines, stakeholders collaborate in development of effective recommendations for species conservation action, including the identification of personal responsibilities and timelines to ensure that the recommendations can become reality. Our Population and Habitat Viability Assessment (PHVA) process combines this approach with traditional population viability analysis (PVA) methodologies to enhance both the process and product of the species conservation planning workshop.

In 2009, CBSG led 21 PHVA and Species Conservation Planning Workshops on 30 species in 13 countries, involving a total of 763 people from 447 organizations.

Planning for Conservation Organizations

CBSG works with conservation organizations, including wildlife agencies, zoological parks, associations of conservation professionals, and similar groups to develop plans for conservation action. From strategic planning for national wildlife refuges to developing zoo conservation master plans, CBSG leads stakeholders from the establishment of an agreed vision through the exploration of issues and the development of goals to develop a conservation culture and to guide future actions.

In 2009, CBSG led 5 Planning Workshops for Conservation Organizations in 2 countries, involving a total of 145 people from 82 organizations.

2009 PLANNING WORKSHOPS FOR CONSERVATION ORGANIZATIONS AND SPONSORS

Amphibian Ark Strategic Planning, USA
Al Ain Wildlife Park and Resort; Amphibian Ark; Chester Zoo

CBSG Steering Committee Meeting, United Arab Emirates
Al Ain Wildlife Park and Resort

Cleveland Zoo Strategic Planning, USA
Cleveland Zoological Society

Saint Louis Zoo Research Institute Planning Meeting, USA
Saint Louis Zoo

Whooping Crane Eastern Partnership Review (4 Meetings), USA
International Crane Foundation

2009 TOOL DEVELOPMENT WORKSHOPS AND SPONSORS

Advanced Modeling/Disease Risk Workshop, USA
Chicago Zoological Society

Climate Change Metamodeling Meeting, USA
Chicago Zoological Society

Kruger National Park Lion Disease Risk Assessment Modeling (2 Meetings),South Africa and USA
Chicago Board of Trade Endangered Species Fund

Metamodeling Research Meeting, USA
Chicago Zoological Society

2009 TRAINING WORKSHOPS AND SPONSORS

Bat Taxonomy and Echolocation Training Workshop, India
Bat Conservation International; Chester Zoo

Chinese Association of Zoological Gardens Studbook Training, China
Chinese Association of Zoological Gardens

Envirovet 2009, USA
University of Illinois; White Oak Conservation Center

Field Techniques Training for Research and Conservation of Small Mammals, Bhutan
Bat Conservation International; Chester Zoo

Human Elephant Co-existence (9 workshops), Bangladesh, Nepal, Sumatra
AG Zoologischer Garten; Cologne Zoo; Columbus Zoo; Elephant Family; Tiergarten Schönbrunn; Twycross Zoo; Universities Federation for Animal Welfare; US Fish and Wildlife Service

IUCN Red List Assessment Training for the Eastern Himalayas, Nepal
IUCN (MacArthur Foundation grant)

Population Management Training, Australasian Zoo Association, Australia
Auckland Zoo, ZAA

Population Management Training, Taronga Zoo, Australia
Taronga Conservation Society

Population Management Training, Taiwan
Taipei Zoo

Training for Senior Staff of Kabul Zoo, Afghanistan
North Carolina Zoological Park

Vortex Training, South Africa
De Beers Consolidated Mines; Howard G. Buffett Foundation

Tool Development

One of CBSG's most valuable and consistent strengths is in development and application of a variety of tools designed to help conservation professionals manage biodiversity. These tools can range from quantitative simulation software rooted in the science of population biology and decision analysis, to sophisticated facilitation techniques intended to identify levels of agreement across alternative conservation strategies among diverse stakeholder groups. We are committed to evaluating the contents of our "conservation toolkit" and to improving those tools and processes that evolve through expert research. In addition, collaboration with other conservation organizations gives us access and exposure to new tools that can help us broaden our capabilities and increase our effectiveness.

In 2009, CBSG conducted 5 Tool Development meetings, *involving a total of 18 people from 12 organizations.*

Training in Conservation Techniques

CBSG offers training courses in a variety of skills that build capacity and promote effective conservation. Facilitation courses allow participants to hone their skills in structured decision making, communication, group dynamics and conflict resolution. Courses in risk assessment and modeling provide an overview of population biology and conservation planning, focusing on the use of simulation methods for evaluating extinction risk under various management strategies. Training is also available in *ex situ* population management principles, techniques, and software. Other types of conservation-related training courses are offered periodically to meet the specific needs of organizations or regions.

In 2009, CBSG led 19 Training Workshops in 11 countries, involving a total of 451 people from 298 organizations.

ABOUT CBSG

The Conservation Breeding Specialist Group (CBSG) is a global volunteer network of over 500 conservation professionals, coordinated by a headquarters staff of six, assisted by nine Regional and National Networks on six continents. This network is 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 – The International Union for the Conservation of Nature, and is supported by a non-profit organization incorporated under the name Global Conservation Network.

IUCN

www.iucn.org

The International Union for Conservation of Nature (IUCN) brings together states, government agencies, and a diverse range of non-governmental organizations in a unique world partnership that seeks to influence, encourage and assist societies throughout the world in conserving the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable.

SSC
Species Survival Commission

http://www.iucn.org/about/work/programmes/species/about_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.

History

Since its inception in 1979, CBSG has assisted in the development of conservation plans involving over 198 species through more than 385 workshops held in 67 countries. CBSG has collaborated with more than 190 zoos and aquariums, 160 conservation non-governmental organizations (NGOs), 65 universities, 50 government agencies, and 35 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

CBSG promotes effective and comprehensive conservation action, by emphasizing 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 at all levels – 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.



2009 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 2009 Ulysses S. Seal Award was presented to Lena Lindén, the founder of Nordens Ark, in recognition of her significant achievements in wildlife conservation. Since its establishment as a breeding center for endangered species in 1988, Nordens Ark has become a unique force for conservation, including a graduate school, international research school, a farm for native rare breeds, a research and field station, breeding facilities for endangered species ranging from raptors to amphibians, and educational exhibits. Lena's work has led the Swedish government to declare Nordens Ark a tool for Sweden to fulfill its commitment to the Convention on Biodiversity.

In addition to founding and directing Nordens Ark, Lena has served as the treasurer of ISIS, the CBSG representative on the Amphibian Ark Executive Committee, and a member of advisory committees and boards for Swedish agencies and foundations and university programs. She serves on CBSG's GCN Financial Board and Strategic Committee, and also holds a professorship at the University of Gothenburg.

Ulysses S. Seal Award Winners

2009 Lena Lindén, Nordens Ark, Sweden

2008 Sally Walker, Zoo Outreach Organisation, India

2007 Paul Pearce-Kelly, Zoological Society of London, UK

2006 Jonathan Ballou, Smithsonian National Zoological Park, USA

2005 Georgina Mace, Natural Environment Research Council (NERC) Centre for Population Biology, Imperial College, London, UK

2004 Frances Westley, University of Waterloo, Canada

2003 Nathan Flesness, International Species Information System, USA

CBSG DONORS

$50,000 and above

Chicago Zoological Society
Inspiring Conservation Leadership

$20,000 and above

Minnesota Zoo
SeaWorld Adventure Park
Busch Gardens
TorontoZoo
ZSL Living Conservation
Omaha's Henry Doorly Zoo

$15,000 and above

Columbus Zoo and Aquarium
Disney's Animal Kingdom
Saint Louis Zoo
Wildlife Conservation Society
Bronx Zoo
WAZA

$10,000 and above
Nan Schaffer
San Diego Zoo
White Oak Conservation Center

$5,000 and above
Al Ain Wildlife Park and Resort
Cleveland Metroparks Zoo
Evenson Design Group
Forestry Bureau of the Council of Agriculture, Taipei
Linda Malek
Toledo Zoo
Zoo and Aquarium Association

$2,000 and above
Albuquerque Biological Park
Auckland Zoological Park
Bristol Zoo Gardens
British and Irish Association of Zoos and Aquariums
Chester Zoo
Cincinnati Zoo and Botanical Garden
Gladys Porter Zoo
Japanese Association of Zoos and Aquariums
Marwell Wildlife
Milwaukee County Zoo
North Carolina Zoological Park
Paignton Zoo
Point Defiance Zoo and Aquarium
Schönbrunner Tiergarten – Zoo Vienna
Sedgwick County Zoo
Wilhelma Zoo
Zoo Zürich
Zoologischer Garten Köln

$1,000 and above
Aalborg Zoo
Allwetterzoo Münster
Audubon Zoo
Calgary Zoological Society
Central Zoo Authority, India
Colchester Zoo
Conservatoire pour la Protection des Primates
Copenhagen Zoo
Cotswold Wildlife Park
Detroit Zoological Society
Dickerson Park Zoo
Everland Zoological Gardens
Fort Wayne Children's Zoo
Fota Wildlife Park
Hong Kong Zoological and Botanical Gardens
Kansas City Zoo
Laurie Bingaman Lackey
Los Angeles Zoo
Ocean Park Conservation Foundation
Palm Beach Zoo at Dreher Park
Parco Natura Viva – Garda Zoological Park
Perth Zoo
Philadelphia Zoo
Pittsburgh Zoo and PPG Aquarium
Prudence P. Perry
Ringling Bros., Barnum and Bailey
Rotterdam Zoo
Royal Zoological Society of Antwerp
Royal Zoological Society of Scotland – Edinburgh Zoo
Saitama Children's Zoo
San Antonio Zoo
Swedish Association of Zoological Parks and Aquaria
Taipei Zoo
The Living Desert
Thrigby Hall Wildlife Gardens
Twycross Zoo
Union of German Zoo Directors
Wassenaar Wildlife Breeding Centre
Woodland Park Zoo
Zoo Frankfurt
Zoo Madrid – Parques Reunidos
Zoological Society of Wales – Welsh Mountain Zoo
Zoologischer Garten Rostock
Zoos South Australia

$500 and above
Banham Zoo
Edward and Marie Plotka
Friends of the Rosamond Gifford Zoo
Givskud Zoo
Jacksonville Zoo and Gardens
Katey and Mike Pelican
Kerzner International North America, Inc.
Knuthenborg Park and Safari
Lisbon Zoo
Nordens Ark
Oregon Zoo
Ouwehands Dierenpark
Riverbanks Zoo and Garden
Wellington Zoo
Wildlife World Zoo
Zoo de la Palmyre

$250 and above
Apenheul Primate Park
Bramble Park Zoo
Brandywine Zoo
Ed Asper
International Centre for Birds of Prey
Lee Richardson Zoo
Lincoln Park Zoo
Little Rock Zoo
Racine Zoological Gardens
Roger Williams Park Zoo
Rolling Hills Wildlife Adventure
Sacramento Zoo
Tautphaus Park Zoo
Tokyo Zoological Park Society
Topeka Zoological Park

$100 and above
African Safari – France
Aquarium of the Bay
Lion Country Safari
Mark Barone
Miami Metrozoo
Safari de Peaugres
Steinhart Aquarium
Steven J. Olson
Touroparc – France

$50 and above
Alameda Park Zoo
Darmstadt Zoo
Elaine Douglass
Miller Park Zoo
Stiftung Foundation for Tropical Nature and Species Conservation

GCN FINANCIAL BOARD

Brad Andrews
SeaWorld Parks and Entertainment

Jerry Borin
Columbus Zoo and Aquarium

Amy Camacho
Africam Safari

William Conway
Wildlife Conservation Society

Lee Ehmke
Minnesota Zoo

Nathan Flesness
International Species Information System

Jo Gipps
Bristol Zoo Gardens

Bengt Holst
Copenhagen Zoo

Robert Lacy
Chicago Zoological Society

Lena M. Lindén
Nordens Ark

Lee Simmons
Omaha Zoo Foundation

Simon Tonge
Paignton Zoo

CBSG ADVISORY COMMITTEE

Jonathan Ballou
Smithsonian National Zoological Park

Jeffrey Bonner
Saint Louis Zoo

Jo Gipps
Bristol Zoo Gardens

Heribert Hofer
Leibniz-Institut für Zoo und Wildtierforschung

Bengt Holst
Copenhagen Zoo

Phil McGowan
World Pheasant Association

Patrícia Medici
Instituto de Pesquisas Ecológicas

Mark Stanley Price
University of Oxford

Frances Westley
University of Waterloo

Jonathan Wilcken
Auckland Zoo

2009 STRATEGIC COMMITTEE

Brad Andrews
SeaWorld Parks & Entertainment, USA

Jonathan Ballou
Smithsonian National Zoological Park, USA

Evan Blumer
Columbus Zoo/The WILDS, USA

Jeffrey Bonner
Saint Louis Zoo, USA

Amy Camacho
Africam Safari, México

William Conway
Wildlife Conservation Society, USA

Robert Cook
Wildlife Conservation Society, USA

Doug Cress
Pan African Sanctuary Alliance, USA

James Cretney
Marwell Wildlife, UK

Arnaud Desbiez
Royal Zoological Society of Scotland, Brazil

Gerald Dick
World Association of Zoos and Aquariums, Switzerland

Lesley Dickie
European Association of Zoos and Aquaria, Netherlands

Lee Ehmke
Minnesota Zoo, USA

Susie Ellis
International Rhino Foundation, USA

Nathan Flesness
International Species Information System, USA

Suzanne Gendron
Ocean Park Conservation Foundation, Hong Kong

Jo Gipps
Bristol Zoo Gardens, UK

Heribert Hofer
Leibniz-Institut für Zoo und Wildtierforschung, Germany

Bengt Holst
Copenhagen Zoo, Denmark

Hiroshi Hori
Yokohama Zoo/Nasu World Monkey Park, Japan

Mike Jordan
Endangered Wildlife Trust, South Africa

Lena M. Lindén
Nordens Ark, Sweden

Dave Mallon
Antelope Specialist Group, UK

Jansen Manansang
Taman Safari Indonesia, Indonesia

Yolanda Matamoros
Simón Bolívar Zoo, Costa Rica

Mike Maunder
Al Ain Wildlife Park and Resort, UAE

Phil McGowan
World Pheasant Association, UK

Gordon McGregor Reid
Chester Zoo, UK

Patrícia Medici
Instituto de Pesquisas Ecológicas, Brazil

Sanjay Molur
Zoo Outreach Organisation, India

Dave Morgan
African Association of Zoos and Aquaria, South Africa

Jackie Ogden
Disney's Animal Kingdom, USA

Theo Pagel
Zoologischer Garten Köln, Germany

Paul Pearce-Kelly
Zoological Society of London, UK

Bill Rapley
Toronto Zoo, Canada

Ivan Rehak
Prague Zoo, Czech Republic

Alex Rübel
Zoo Zürich, Switzerland

Rebecca Seal Soileau
US Army Corps of Engineers, USA

Lee Simmons
Omaha Zoo Foundation, USA

Mark Stanley Price
University of Oxford, UK

Miranda Stevenson
British and Irish Association of Zoos and Aquariums, UK

Stuart Strahl
Chicago Zoological Society, USA

Gloria Svampa
Museo Civico di Zoologia di Roma, Italy

Yasumasa Tomita
Tokyo Zoological Park Society, Japan

Kris Vehrs
Association of Zoos and Aquariums, USA

Sally Walker
Zoo Outreach Organisation, India

Chris West
Zoos South Australia, Australia

Frances Westley
University of Waterloo, Canada

Robert Wiese
San Diego Zoo, USA

Jonathan Wilcken
Auckland Zoo, New Zealand

David Wildt
Smithsonian National Zoological Park, USA

Statement of Activities and Changes in Net Assets for the Year Ending December 31, 2009

	Unrestricted	Temporarily Restricted	Total
Support and Revenue:			
Contributions	US$939,890	US$15,792	US$955,682
Workshops and Contracts	112,239	–	112,239
Other Program Service Fees	2,945	–	2,945
Sales Revenue (Net Cost of Goods Sold of $9,577 in 2009 and $27,611 in 2008)	(6,541)	–	(6,451)
Investment Income (Loss)	32,003	–	32,003
Other Income	–		–
Net Assets Released from Restrictions:			
Satisfaction of Program Restrictions	48,601	(48,601)	–
Satisfaction of Time Restrictions	7,000	(7,000)	–
Total Support and Revenue	1,136,137	(39,809)	1,096,328
Expense:			
Program Services	462,198	–	462,198
Support Services:			
Management and General	114,106	–	114,106
Fundraising	68,741	–	68,741
Total Support Services	182,847	–	182,847
Total Expense	645,045	–	645,045
Change in Net Assets	491,092	(39,809)	451,283
Net Assets - Beginning of Year	376,186	55,601	431,787
Net Assets - End of Year	US$867,278	US$15,792	US$883,070

Statement of Financial Position at December 31, 2009

ASSETS	
Current Assets:	
Cash	US$825,622
Contracts Receivable	–
Prepaid Expenses	5,430
Total Current Assets	831,052
Investments	149,526
Property and Equipment - Net	4,824
Total Assets	US$985,402
LIABILITIES & NET ASSETS	
Current Liabilities:	
Accounts Payable	2,422
Accrued Salaries	11,546
Accrued Vacation	14,541
Deferred Workshop Revenue	–
Funds held for Other Species Conservation Organizations	73,823
Total Current Liabilities	102,332
Net Assets:	
Unrestricted	867,278
Temporarily Restricted	15,792
Total Net Assets	883,070
Total Liabilities & Net Assets	US$985,402

Notes to 2009 Financial Statements

The finances to support the work of CBSG and related species conservation activities are held and managed by the Global Conservation Network (GCN), a USA 501(c)3 not-for-profit organization. CBSG manages the financial aspects of Amphibian Ark activities as part of our commitment to AArk's success. GCN had an overall surplus of about US $451,300 for the year in 2009. Our unrestricted activity (general operations) accounted for approximately US $491,100 of the increase with a US $(39,800) decrease related to restricted activity. As of December 31, 2009, we had an unrestricted net asset reserve of US $867,300, or 18 months of operating expenses. Two components make up the temporarily restricted net asset reserve at year end; US $5,000 is for the Amphibian Ark Fund and about US $10,800 is for 2010 CBSG commitments. The information on this page was taken from the 2009 audit. Copies of the full audit can be obtained by contacting the CBSG office.

CBSG HEADQUARTERS STAFF

Robert Lacy
Chairman

Onnie Byers
Executive Director

Philip Miller
Senior Program Officer

Kathy Traylor-Holzer
Senior Program Officer

Virginia Lindgren
Administrative Assistant

Elizabeth Townsend
Administrative Assistant

CBSG NETWORKS

Regional Networks take CBSG tools and principles deep into the local institutions of a region or country, allowing stakeholders to work with our proven 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. Most of our activities within the regions where we have networks are organized by the staff of those networks, who also often assist with other CBSG activities around the world.

CBSG NETWORK CONVENORS AND STAFF

CBSG Australasia

Co-Convenor: Caroline Lees
Auckland Zoo

Co-Convenor: Richard Jakob-Hoff
Auckland Zoo

Maggie Jakob-Hoff
Resonance Research

Kevin Johnson
AArk, ZAA

Craig Pritchard
Auckland Zoo

Rebecca Spindler
Taronga Conservation Society Australia

Jonathan Wilcken
Auckland Zoo

CBSG Brasil

Convenor: Arnaud Desbiez
Royal Zoological Society of Scotland

Leandro Jerusalinsky
ICMBio/CPB–Instituto Chico Mendes de Conservação da Biodiversidade–Centro de Proteção de Primatas Brasileiros

Patricia Medici
Instituto de Pesquisas Ecológicas

CBSG Europe

Convenor: Bengt Holst
Copenhagen Zoo

Duncan Bolton
Birdworld

Frands Carlsen
Copenhagen Zoo

Kristin Leus
Copenhagen Zoo

CBSG Indonesia

Convenor: Jansen Manansang
Taman Safari Indonesia

Entang Iskandar
Primate Research Center, Bogor Agricultural University

Ligaya ITA Tumbelaka
Bogor Agricultural University

Noviar Andayani
Wildlife Conservation Society-Indonesia Program

CBSG Mesoamerica

Convenor: Yolanda Matamoros
Simón Bolívar Zoo

Randall Arguedas
Simón Bolívar Zoo

Jorge Rodriguez
CBSG Mesoamerica

Gustavo Gutiérrez
Universidad de Costa Rica

CBSG México

Convenor: Amy Camacho
Africam Safari

Luis Carrillo
Africam Safari

Juan Cornejo
Africam Safari

Alberto Parás
Africam Safari

CBSG South Asia

Convenor: Sally Walker
Zoo Outreach Organisation

B.A. Daniel
Zoo Outreach Organisation

R. Marimuthu
Zoo Outreach Organisation

S. Manju
Zoo Outreach Organisation

Sanjay Molur
Zoo Outreach Organisation

CBSG Southern Africa

Convenor: Brenda Daly
Endangered Wildlife Trust

Yolan Friedmann
Endangered Wildlife Trust

Harriet Davies-Mostert
Endangered Wildlife Trust

Kerryn Morrison
Endangered Wildlife Trust

Special Acknowledgements

Evenson Design Group – *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 Mohawk Fine Papers and B & G House of Printing, Inc.

Photography Courtesy of:

Onnie Byers
Guilherme Ferreira
Jerry Holzer
Caroline Lees
Kristin Leus
Virginia Lindgren
Phil Miller
Sanjay Molur, Zoo Outreach Organisation
Rita Steyn
Kathy Traylor-Holzer
Zoo Outreach Organisation

Success Story Photos:

Andre Botha: lion habitat photo, p. 5
Peter Buss : lion photo, p. 5
Paula Leão Ferreira: jaguar habitat photo, p. 9
Luke Hunter, Panthera: jaguar photo p. 9
Ken Johnson: mala photo, p. 4
Caroline Lees, mala habitat photo, p. 4
Jennifer Pramuk, Kihansi spray toad facility photo, p. 7
Long Xi Hong Kou Nature Reserve: panda habitat photo, p. 6
Julie Larsen Maher: Kihansi spray toad photo, p. 7
Raphael Ritson-Williams, Smithsonian Marine Station: coral photos, p. 8
Zhang Zhihe: giant panda photo, p. 6
©2005 Saint Louis Zoo: American burying beetle, inside front cover

Sustainability

We are proud to partner with Mohawk Fine Papers and B&G House of Printing in California to bring you our 2009 Annual Report. This report was printed on Mohawk Options Smooth Digital with i-Tone 100% PC White, which contains 100% PCW (post-consumer waste), FSC (Forest Stewardship Council) certified, and made with 100% Windpower. Only the exact number of Annual Reports required were printed.

In our continuing efforts to reflect sustainability within our own organization, please visit the CBSG website, which features the electronic version of the Annual Report.

Printed on 100% post-cconsumer fiber

MOHAWK
MOHAWK FINE PAPERS

FSC Recycled
Supporting responsible use of forest resources
www.fsc.org Cert no. BV-COC-080114
© 1996 Forest Stewardship Council

100%

Conservation Breeding Specialist Group (IUCN/SSC/CBSG)
12101 Johnny Cake Ridge Road, Apple Valley, MN 55124 USA
P 001-952-997-9800 • F 001-952-997-9803 • office@cbsg.org • www.cbsg.org