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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.
The wonderful thing about producing an annual report is that it gives us the opportunity to reflect on the past year, tally our accomplishments, measure them against our targets, and set new aspirations for the coming year. The results of our reflection on 2014, described in the pages of this document, show the many accomplishments of our staff, regional branches, and members, including completion of 28 species conservation planning workshops in ten countries, a few of which are highlighted here.

First, we paused to assess our contribution toward achievement of the SSC Strategic Plan targets. We are proud to report that currently, at the halfway point in the IUCN quadrennium, we are far more than 50% of the way toward accomplishing the targets set for us in 2012 for planning, training, and tool development. We have also established new goals, and the initiatives you’ll read about in this report provide a glimpse of our plans for achieving them. Both the One Plan approach and the Species Conservation Planning Tools Library have wide-reaching implications for species conservation.

But this past year we did some additional reflection. Prompted by a water disaster in our offices, we did what we should have done years ago. We sorted through and then archived, scanned, gave away, or discarded over two decades worth of material stored in file cabinets, drawers, bookshelves, and boxes. Since every one of our 400 species conservation plans and workshop reports—produced from 1989 to today—are digitally archived, much of what we found was clearly meant for the recycle bin. However, we did unearth the occasional treasure. For example, we found Ulie Seal’s original birth certificate buried between bill stubs and copies of letters faxed in 1987. His children were pleased to have it and intrigued to learn that their grandmother’s name wasn’t Vivian after all.

Some of the most valuable finds in all these papers were historical documents that, taken together, tell the story of CBSG’s evolution: Sir Peter Scott’s invitation asking Ulie to lead the IUCN’s Captive Breeding Specialist Group, documents from the first meetings of the group that would later become the International Species Information System, reports on discussions related to the establishment of the first Species Survival Plans, and the initial thinking behind our name change from Captive to Conservation in 1994.

Reflecting on 2014 in light of this rich history and stunning progress makes clear to me three things:

1. CBSG is, and has always been, a truly amazing, incredibly productive organization built on the confidence, intellect, loyalty, and generosity of our hundreds of members and donors. In fact, the more things change, the more this fact remains the same.

2. We are alert, adaptable, and brave enough to take the risks required to spin off elements when appropriate, change direction when necessary, and develop new tools and processes in order to ensure that we are adding unique value in response to the needs of the conservation community and the species it serves.

3. There is, in fact, a method to our madness. Throughout our long and varied history, our journey from captive population management planning to wild population management to integrated planning according to the One Plan approach, CBSG has consistently fulfilled our mission to increase the effectiveness of conservation efforts worldwide.

The strength of CBSG’s legacy, the sustained dedication of our members, and the consistent support of our donors ensure that our continued innovation and evolution is as impressive as that of the past.

Dr. Onnie Byers, Chair
2014 AT A GLANCE

Who We Are
- 370 members
- 6 headquarters staff
- 10 regional networks
- 20 countries
- 524 species
- 51 mammals
- 30 birds
- 241 reptiles
- 201 amphibians
- 1 fish

2014 Highlights
- Ongoing Promotion of the One Plan Approach
  - Support of the One Plan approach continued to expand in 2014, serving as the framework for several species conservation planning workshops and becoming the focus of many zoo association conferences and SSC Specialist Group symposia.
- Approval and Publication of the Ex Situ Guidelines
  - After a comprehensive drafting and review process, the updated IUCN SSC Guidelines on the Use of Ex situ Management for Species Conservation were approved by the SSC Steering Committee in August 2014 and published on the CBSG and IUCN websites thereafter.
- Web-enabling the Species Conservation Planning Tools Library
  - CBSG spearheaded an effort to create a dynamic, web-based information resource for conservation planners. The result is an interactive tools library that will connect species conservation practitioners to a broad selection of planning tools and processes.

Where We Worked in 2014

83 Workshops
- 21 Conferences
- 14 Planning Workshops for Conservation Organizations
- 12 Training Workshops
- 8 Tool Development Workshops
- 28 PHVA and Species Conservation Planning Workshops

20 countries
BRINGING THE HAINAN GIBBON BACK FROM THE BRINK

Hainan Gibbon Facts
- The entire Hainan gibbon population of only 23-25 individuals is restricted to about 1.5km$^2$ of highly fragmented habitat.
- Gibbons live in dense forest canopies and avoid humans, so researchers rely on vocalizations to monitor the population. Sub-adults that leave their social group seldom call, making it challenging to monitor dispersal, survival, and potential colonization of new areas.
- Hainan gibbons can be bigamous, living in breeding groups of one male and two breeding females and their offspring. Females breed frequently—every two years. These attributes set Hainan gibbons apart from other gibbon species and support faster population growth, helping to stave off extinction.

“The 2014 workshop constituted an invaluable milestone in Hainan gibbon conservation, and the recommendations identified at the workshop are already providing a baseline for guiding on-the-ground management actions to help better conserve this Critically Endangered species.”—Samuel Turvey, Zoological Society of London

The Situation
The Hainan gibbon (Nomascus hainanus) is one of the most endangered primate species in the world, due primarily to past habitat loss and poaching. About 23-25 individuals remain, all in one population inhabiting the Bawangling National Nature Reserve (BNNR) on the island of Hainan, China. A 2003 conservation planning workshop for this Alliance for Zero Extinction (AZE) species sparked numerous conservation management activities, including efforts to protect and restore potential gibbon habitat and stabilize the population. Despite these positive actions, the small size of this single population puts it at high risk due to stochastic events and other threats, precipitating the need for further planning.

The Process
In conjunction with BNNR, the IUCN China Primate Specialist Group, and the Zoological Society of London, CBSG facilitated and provided modeling support at an international workshop for Hainan gibbons. Over 50 participants, including representatives from local communities, developed their vision for expanding the gibbon population, both in size and number of populations, into several large areas as part of intact biodiverse forest ecosystems on Hainan. Recommendations targeted the effective protection of current habitat, expansion of gibbons into additional areas, improved understanding of breeding group formation and dispersal, and development of an emergency plan in the event of a crisis situation.

The Results
The workshop report formed the basis for a formal Chinese Species Action Plan for the Hainan gibbon, which is currently being ratified by the Chinese authorities. Bioacoustic and call-playback monitoring trials will begin at BNNR in June 2015 to improve population estimates. A wide-scale community interview survey is underway to determine the presence of any additional gibbons surviving in other areas across Hainan. Forest quality mapping and an associated gibbon habitat suitability analysis project have begun, which may lead to identification of suitable forest patches and canopy bridge trials. Plans are underway to discuss the development of an Emergency Response Plan.
META-POPULATION PLANNING FOR NEW ZEALAND’S TAKAHĒ

The Situation
By 2014, an estimated 246 takahē (Porphyrio hochstetteri) remained in existence: 166 occupying eight protected release sites and seven captive facilities, and approximately 80 birds populating one wild site in the Murchison Mountains. The Takahē Recovery Group invited CBSG to collaborate on developing a plan for the management of remaining takahē as two distinct meta-populations: one focused on the northern islands and the other on southern areas. This approach would foster adaptation in two contrasting bioclimatic zones, substantially reducing the need for long-distance translocation of birds and eventually replacing the now extinct North Island takahē, Porphyrio mantelli, with an ecological equivalent.

Takahē Facts
- The takahē is the largest living member of the rail family. It is flightless and occurs only in New Zealand.
- Two different species existed historically: one on the South Island, Porphyrio hochstetteri, and a second on the North Island, P. mantelli.
- A combination of hunting, habitat destruction, and introduced predators reduced the range of both species dramatically, and by the early part of the 20th century, they were considered extinct.
- A small population of 250 – 300 birds was rediscovered in a remote region of the South Island in 1948.

The Process
The project took place over several months and involved both virtual meetings and a face-to-face workshop. CBSG worked with collaborators to develop goals for meta-population management, formulate broad strategies for managing risk and improving population performance, and determine optimal breeding and transfer recommendations for 2014-2015. The final plan considers the founding, growth, and capacity phases of the proposed North Island meta-population and the requirements for demographic and genetic viability. It allows for ongoing support to the South Island population as needed. Protocols for data management, annual program review, and revision are also included.

The Results
The meta-population plan has been endorsed and its implementation is underway, coordinated through the Takahē Recovery Group. A first-year review is scheduled for late 2015. This project is notable because it draws together the management of several discrete island populations of birds under a single umbrella of demographic and genetic management, using tools and techniques designed for zoo populations. To encourage sustainability, it advocates a staged progression from high to low intensity management once specific population viability milestones are reached. This creative approach may provide a useful model for other New Zealand species, many of which are relegated to island refuges to escape mainland threats from introduced predators.

“Collaborating with CBSG has provided the recovery team with a clear way forward for best practice management of our takahē meta-population. With limited resources and an increasing number of sites and birds, an appropriate method of prioritizing management effort was critical. The work has raised our awareness of the impact that management of genetic and demographic parameters can have on our chances of long-term success.”—Glen Greaves, Takahē Recovery Group
CONSERVATION BREEDING SPECIALIST GROUP 2014

DESIGNING A PROCESS FOR ZOO CONSERVATION PLANNING

The Situation
Zoological organizations are increasingly involved with, and drivers of, endangered species conservation. The leadership at the Kansas City Zoo in Missouri was determined to weave conservation more integrally into the fabric of the zoo and enhance their contribution to conservation. The zoo wanted to take a proactive approach to identifying where and how they would be involved in conservation projects. Zoo management invited CBSG and CBSG North America to design and facilitate a strategic planning workshop that would result in the development of a comprehensive Conservation Strategic Plan to direct the zoo’s future conservation efforts.

The Process
To design a process to best meet Kansas City Zoo’s needs, CBSG initially met with the zoo director and several senior animal management staff. The group discussed the history of conservation culture at the zoo, their current conservation projects, their motivation for developing a conservation strategy, and future goals. This meeting helped CBSG develop an understanding of the zoo’s philosophy regarding certain critical parameters. On the basis of this in-depth discussion, it was agreed that the scope of planning would be 25 years, the planning team would be expanded to include senior managers from all departments, and the project would be conducted in a series of workshops.

Facts about Strategic Planning for Conservation Organizations

- To create an organizational strategic plan, CBSG’s process design tools are combined with knowledge-based facilitation skills that can be applied to a wide variety of conservation planning needs.
- In the past 10 years, CBSG has facilitated strategic conservation planning processes for over 70 organizations, including zoos, zoo associations, conservation alliances, and government agencies.
- Kansas City Zoo has a number of conservation initiatives, including a successful propagation project for 14 mussel species.

“The conservation planning workshop facilitated by CBSG went far beyond my expectations. They did an outstanding job of creating a process that engaged and inspired staff beyond the people who were able to attend the workshop.”—Randy Wisthoff, Executive Director/CEO of the Kansas City Zoo

The Results
Over the course of two workshops, the planning team drafted a vision for conservation at the Kansas City Zoo that identified three major themes: conservation of species, resource conservation at the zoo and in the community, and influencing others to become more active conservationists. Goals, objectives, and actions were developed around each of these themes, resulting in a comprehensive conservation plan for the entire organization. As a result, Kansas City Zoo is eliminating the use of palm oil to help save orangutans in the wild, directing a portion of each admission price to conservation, implementing priority conservation projects, and making meaningful progress toward fulfilling its new conservation vision.
MODELING THE IMPACT OF POACHING ON INDIAN RHINOS

**Indian Rhino Facts**
- The abundance of Indian rhinos in the wild rebounded from fewer than 200 animals in the early 20th century to more than 3,000 individuals today.
- Flooding events along the Brahmaputra River, forming the northern boundary of Assam’s Kaziranga National Park, may increase in frequency and intensity in the coming years, leading to higher risk of rhino mortality if they are unable to find high ground.
- Indian rhinos are poached due to demand for their horn, which is used for medicinal purposes in Asia.

“The Information from the Indian Rhino Workshop will be invaluable to the wildlife biologists, managers of rhino habitat areas, and key decision makers who work to ensure the growth of the rhino population in Assam and sustain the future of Indian rhinos.”—Dr. Bibhab Kumar Talukdar, Chair of the IUCN SSC Asian Rhino Specialist Group

**The Situation**
Greater one-horned rhinos (Rhinoceros unicornis) roam the protected areas across northern India and southern Nepal. Also known as Indian rhinos, over 75% of the population is found in northeastern India’s state of Assam, largely within the borders of the famous Kaziranga National Park. While the species has recovered from the brink of extinction in the last century, poaching pressure now poses a serious threat to local populations. To address this threat, the program “Indian Rhino Vision (IRV) 2020” was created to reduce rhino extinction risk across Assam by translocating animals to multiple protected areas.

**The Results**
The PVA highlighted the severe consequences of poaching just one to two animals each year from a small population like that in Manas National Park, where nearly 20 rhinos have been introduced since 2008. PVA models developed at the workshop suggested that unless poaching is significantly reduced, continued reintroduction of rhinos is unlikely to result in a viable population in Manas, and the rhino population there could decline to extinction within 30 years. These analyses have been presented to local, regional, and national governmental authorities in order to mobilize resources for more effective protection of rhinos in Manas and more aggressive anti-poaching efforts in and near the park.

**The Process**
CBSG was invited by the International Rhino Foundation, the IUCN SSC Asian Rhino Specialist Group, and the Government of Assam to conduct a population viability analysis (PVA) for the state’s rhinos. The resulting workshop was developed to review progress of IRV 2020 translocation programs to date and to predict the translocation effort needed to establish viable populations in selected protected areas. The meeting, which was attended by numerous park directors, wildlife wardens, and other park staff, focused on the current and potential impacts of poaching on current or future rhino populations in the park.
ASSESSING COSTA RICA’S AMPHIBIANS AND REPTILES

Costa Rican Herpetofauna Facts

- Costa Rica’s location in the neotropics and the varied ecosystems within its borders make it one of the most biologically diverse countries in the world.
- For every 10,000 km², the country has 47 reptile species and 39 amphibian species.
- Amphibians and reptiles in Costa Rica are threatened primarily by habitat loss and chytrid fungus.
- CBSG Mesoamerica has organized three Conservation Assessment and Management Planning (CAMP) workshops for Costa Rican herpetofauna since 2001.

The Situation

CBSG Mesoamerica has a strong history of collaboration with herpetologists in Costa Rica, helping to produce several broad-based evaluations of amphibians and reptiles in the country. Data from these evaluations have been used in the IUCN’s Global Amphibian Assessment (GAA) and Global Reptile Assessment (GRA), field research, and workshops for in situ and ex situ conservation. In recent years, the Costa Rican government requested that scientific organizations complete conservation status assessments of the country’s wildlife using methodologies with strong scientific basis. In response, the Universidad de Costa Rica invited CBSG Mesoamerica to facilitate a 2014 workshop to assess Costa Rican herpetofauna, and chose the Guidelines for Application of IUCN Red List Criteria at Regional and National Levels as the preferred approach.

The Results

A total of 241 reptile species and 201 amphibian species were assessed, of which 15 (6%) and 43 (21%) species respectively were categorized as at risk of extinction. A total of 59 reptiles and 112 amphibians were recommended to be the focus of further research in taxonomy, population monitoring, distribution, or ecology. The workshop report was made available to herpetologists to inform them of the updated threat status and the research actions recommended for different species. The report was officially presented to the wildlife manager at the Costa Rican National System of Conservation Areas (SINAC) and will be presented to the IUCN for endorsement in 2015. The workshop is a culmination of the long-standing and ongoing partnership between CBSG Mesoamerica and the Costa Rican herpetologist community.
NEW IUCN GUIDELINES ON EX SITU MANAGEMENT FOR CONSERVATION

The revised guidelines apply to:

- all taxonomic groups (e.g., animals, plants, fungi) and all taxonomic levels (e.g., species, subspecies);
- all live entities (e.g., whole living organisms, cryopreserved gametes, seed banks);
- taxa with existing ex situ populations as well as those for which there currently is no ex situ management;
- both short-term and long-term ex situ activities that may or may not involve breeding; and
- only ex situ populations with clearly defined conservation goals and objectives that contribute to species viability as part of an overall conservation strategy.

These newly revised guidelines bring the latest cutting-edge thinking from both conservation science and conservation practice to a critically important issue. They provide wildlife managers and the ex situ community alike with a tool to make a transparent and informed decision on the merits of ex situ activities for the conservation of a species and, along with other IUCN guidelines and policies, will support more effective and integrated species conservation planning.”—Simon Stuart, Chair of the IUCN Species Survival Commission

The Situation
As ecosystems become increasingly altered and populations evermore impacted by human activities, a growing number of taxa will require some form of intensive management of individuals and populations. Effective species conservation planning should consider all options when assessing what actions are necessary to address a taxon’s conservation pressures. While the IUCN first published technical guidelines on the management of ex situ populations for conservation in 2002, there was a growing need for a revision of these guidelines to provide clearer guidance on how to decide if and when ex situ activities should be included in the overall conservation activities for a taxon.

The Process
Based on discussions at the 2010 CBSG Annual Meeting, a proposal for the revision was approved by the SSC Steering Committee in December 2010. CBSG coordinated a drafting team with representatives from all SSC Subcommittees and the Reintroduction Specialist Group. From 2011 to 2013, a series of drafts were submitted for increasingly wide review to all levels of the SSC and to a range of non-UCN entities, including wildlife health professionals, botanical collections, zoo and aquarium associations, and various organizations in the fields of conservation, welfare, sanctuaries, agriculture, and science. The final draft was approved by the SSC Steering Committee in August 2014 and has been translated into Spanish and Portuguese.

The Results
The revised guidelines outline a five-step decision-making process that helps conservationists decide whether to implement an ex situ conservation activity. They address the question “Is ex situ management an appropriate conservation tool for this species?” and help define the structure and feasibility of the ex situ program, if appropriate. They recognize that ex situ activities have the potential to address primary threats, buy time in emergency situations, offset population instability, and/or restore wild populations. These guidelines can be an integral and complementary component to existing species conservation planning processes as part of a One Plan approach to species conservation.
Stakeholder inclusive, science-based plans are the backbone of effective species conservation work. The process of creating these plans is complex. It involves identifying and assembling stakeholders; reaching agreement on long-term conservation goals; identifying the obstacles or threats to achieving them; developing and testing strategies and actions aimed at addressing those threats; and building a shared responsibility among key stakeholders for on-the-ground delivery of priority actions towards improved status for the species.

CBSG’s conservation planning workshops incorporate a range of tools that help conservationists navigate their way through these planning stages. These tools fulfill specific functions within a planning process, from guiding stakeholders through the generation of a vision for the future, to helping large groups prioritize effectively, to providing transparent methods for comparing alternative approaches to management.

Over the past few decades, other groups involved in conservation planning have developed their own tools and planning frameworks. To learn more about this broader planning landscape and to continue the evolution of CBSG’s planning approach, CBSG convened a diverse group of conservation planners for a Species Conservation Planning Tools workshop in Abruzzi, Italy in 2010. Participants worked for three days to identify the similarities and differences between their respective approaches and to characterize the strengths and weaknesses of each in the context of different planning circumstances.
The participants reached agreement on a single sequence of conservation planning steps encompassing the spectrum of approaches represented at the workshop, and compiled a list of tools for completing one or more of the planning steps defined. They then created a framework for selecting the most appropriate set of these tools for any given planning situation.

Following the workshop, these outputs were further refined and, in 2014, the CBSG office engaged a web developer to convert the product to an interactive, online format. The web-enabled library includes a Species Conservation Planning Cycle diagram created by the Abruzzi workshop participants, a discussion of issues to consider before selecting tools for a specific task or project, and an interactive table that organizes a list of tools by specific characteristics, situations, and steps in the planning process. The site was recently released to a group of beta-testers, and will launch more broadly in advance of the 2015 CBSG Annual Meeting.

The IUCN SSC Species Conservation Planning Tools Library, a collaborative effort between CBSG and the SSC Species Conservation Planning Subcommittee, will connect species conservation practitioners to well-tested planning tools suitable for use in a variety of planning situations. It has the potential to be an accessible and dynamic information resource, responsive to the needs of the conservation community and to the evolving state of science in the field of endangered species conservation.
The One Plan approach (OPA) to species conservation planning is the explicit integration of intensively managed populations with their wild counterparts by the creation of one comprehensive conservation plan for the species.

In recent years, the OPA has generated much enthusiasm from the international zoo and aquarium community. An alphabet soup of zoo associations, including WAZA, AZA, EAZA, SEAZA, and ZAA, made the OPA the theme of their annual conferences. The concept influenced the thinking behind AZA’s SAFE program, inspired the establishment of a One Plan Species Management Committee at Auckland Zoo, and was the subject of several articles published in zoo association magazines. The approach is strongly endorsed in the pages of the newly revised World Zoo and Aquarium Conservation Strategy.

In 2014, the application of the OPA resulted in integrated conservation plans for species including takahē in New Zealand, greater sage grouse in Canada, and sand cat in the United Arab Emirates. CBSG was invited to present at the conferences of the Tapir and Flamingo Specialist Groups, the Brazilian Symposium on Conservation Biology, and a National Science Foundation sponsored symposium. We continue to encourage the engagement of field conservationists in this planning approach by publishing our successes in conservation journals, speaking at conferences, and working closely with SSC Specialist Groups.

Because it is integral to everything we do, many of our recent and ongoing initiatives enhance and complement the One Plan approach.

- The OPA calls for using the five-step decision process outlined in the new IUCN Guidelines on the Use of Ex situ Management for Species Conservation to develop an integrated conservation strategy for
a species. In addition to leading their revision (see p. 9), we now explicitly incorporate them into many of our planning processes and train others in their application.

- Implementing the OPA often requires sophisticated quantitative tools, such as Vortex and PMx. To ensure lasting support for and innovation of these tools, CBSG is partnering with the Chicago Zoological Society and Smithsonian Conservation Biology Institute to establish the Species Conservation Toolkit Initiative (SCTI). The SCTI will guarantee the longevity of tools that help conservationists make informed, meaningful species management decisions. Thanks to funding from a number of generous donors, a programmer has been hired to work closely with Robert Lacy and Jonathan Ballou to maintain current tools and develop new ones.

- A new version of CBSG's Conservation Assessment and Management Planning (CAMP) process is in development to fill an important planning need. Echoing the rapid, broad-based assessment format that the original CAMP process used, “CAMP 2.0” will integrate existing Red List assessments and focus on providing an increased level of detail around management and research recommendations. Two pilot projects are scheduled for early 2016. Feedback from those projects will further refine the process. Rooted strongly in the OPA philosophy, CAMP 2.0 will help conservation groups across the management spectrum set priorities and collaboratively develop integrated species conservation plans.

CBSG’s efforts, along with the work of the many organizations who have adopted this approach, will further amplify the OPA’s impact. We look forward to driving its development and evolution as a powerful, long-lasting approach to species conservation planning.
2014 PHVA AND SPECIES CONSERVATION PLANNING WORKSHOPS AND SPONSORS

African Penguin Chick Bolstering Working Group Meeting, South Africa
The Southern African Foundation for the Conservation of Coastal Birds (SANCCOB)

African Penguin Conservation Translocation Workshop, South Africa
SANCCOB

African Penguin Population Reinforcement Working Group Meeting, South Africa
SANCCOB

AZA Tiger Species Survival Plan Masterplan Meeting, USA
Minnesota Zoo Foundation; Smithsonian Conservation Biology Institute

Bilby PHVA Scoping Meeting, Australia
Save the Bilby Fund

Cat Ba Langur PVA, Virtual
Flora & Fauna International

Chiroptera Research Techniques and Conservation, Bangladesh
Bat Conservation International; Chester Zoo; Chiroptera Conservation and Information Network of South Asia; Food & Agricultural Organization

Colorado Pikeminnow PVA (6 meetings), USA
BHP Billiton

Conservation Status Assessments of the Amphibians and Reptiles of Costa Rica’s National Red List, Costa Rica
Fundación Pro Zoológicos (FUNDAZOO); Universidad de Costa Rica

Free-Roaming Cat Bioeconomic Model Development, USA
Alliance for Contraception in Cats and Dogs; National Wildlife Research Center

Giant Panda Annual Conference and Technical Meeting, China
Chengdu Research Base of Giant Panda Breeding; Chongqing Zoo; Smithsonian National Zoological Park

Greater Sage Grouse in Canada PHVA, Canada
Alberta Environment and Sustainable Resource Development; Calgary Zoo

Indian Rhino Vision 2020 PVA Workshop, India
Bodoland Territorial Council; Department of Environment and Forests, Government of Assam; International Rhino Foundation; United States Fish and Wildlife Service; World Wildlife Fund

International Conservation Planning Workshop for the Hainan Gibbon, China
Arcus Foundation; Mohamed bin Zayed Species Conservation Fund; Zoological Society of London

Norfolk Island Green Parrot PVA Workshop, New Zealand
CBSG Australasia; Parks Australia

Orangutan Regional Species Management Program Meeting, Taiwan
Taipei Zoo

Red Siskin Recovery Planning Workshop, USA
CBSG; Smithsonian Conservation Biology Institute

Regent Honeyeater Disease Risk Analysis, Australia
Auckland Zoo; Birdlife Australia; Department of Environment and Primary Industries (Victoria); Taronga Conservation Society Australia; Zoological Society of London

Reproductive Planning Modeling Discussion, USA
Saint Louis Zoo

Rhino Conservation Education Program, India
Ocean Park Conservation Foundation

Southern Ground Hornbill APP Meeting, South Africa
Montecasino Bird Gardens; PAAZA

Takahē Meta-population Planning Workshop, New Zealand
Auckland Zoo; Takahē Recovery Group

Wattled Crane APP Meeting, South Africa
Entabeni Communications
PHVA and Species Conservation Planning
Using CBSG’s structured tools for issue formulation and problem solving, stakeholders collaborate to develop effective recommendations for species conservation action, including the identification of personal responsibilities and timelines to ensure that the recommendations 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. CBSG also assists with planning for intensively managed populations, including ex situ masterplans.

In 2014, CBSG led, co-led, or provided analysis for 28 PHVA and Species Conservation Planning Workshops on 464 species in 10 countries, involving a total of 809 people from 237 organizations.

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

In 2014, CBSG was involved in 14 Planning Workshops for Conservation Organizations in 7 countries, involving a total of 307 people from 146 organizations.

Action Plan for the Brazilian Zoo and Aquarium Society, Brazil
International Species Information System; Parque das Aves; Royal Zoological Society of Scotland; Zoo Copenhagen; Zoologico de São Paulo; WildWelfare

Amphibian Ark Advance, USA
CBSG

CapeNature Species Prioritization and Planning Workshop, South Africa
CapeNature

Chinese Disease Center Capacity Building Planning, USA
Ocean Park Hong Kong; San Diego Zoo Global; Smithsonian National Zoological Park (through David M. Rubenstein and the Ford Motor Company Fund)

Colombian Zoos Association Strategic Planning, Colombia
Colombian Zoos and Aquariums Association

Joint Taxon Advisory Group Chairs Meeting, Netherlands
CBSG; EAZA; PAAZA; WAZA

Kansas City Zoo Strategic Planning (3 meetings), USA
Kansas City Zoo

Saint Louis Zoo’s WildCare Institute Strategic Planning, USA
Saint Louis Zoo

Santa Cruz Zoo Strategic Planning, Colombia
Santa Cruz Foundation

Taronga Conservation Society Australia (TCSA) Conservation Leadership Course Planning Workshop, Australia
Taronga Conservation Society Australia

TCSA Science Department Strategic Planning, Australia
Taronga Conservation Society Australia

WAZA Conservation Strategy Workshop, Germany
EAZA
2014 TRAINING WORKSHOPS AND SPONSORS

Chinese Association of Zoological Gardens (CAZG) Species Masterplanning Training Course, China  
CAZG; WAZA Committee for Population Management

CBSG North America Facilitation Training, USA  
CBSG; Saint Louis Zoo

Emerging Wildlife Conservation Leaders Training, USA  
Defenders of Wildlife; Houston Zoo; International Fund for Animal Welfare; United States Fish and Wildlife Service; White Oak; Wildlife Conservation Network

Facilitation Skills for Conservation Managers, UK  
Durrell Wildlife Conservation Trust; International Rhino Foundation

Invertebrate Survey and Techniques Training (3 meetings), South Africa  
Mpumalanga Tourism and Parks Agency (1 meeting); North-west Parks and Tourism Board (2 meetings)

Rhino Conservation Educator Skill Training Program, India  
Ocean Park Conservation Foundation

Training Workshop on Building National Capacity in Research and Monitoring of Small Mammals, India  
Chester Zoo; WWF/Hariyo Ban Program; Zoo Outreach Organisation

Training Workshop on Ex Situ Roles for Conservation, South Africa  
National Zoological Gardens of South Africa; PAAZA

VORTEX 10 Advanced Training Course, USA  
Chicago Zoological Society

VORTEX Training—Universidad Nacional, Costa Rica  
Universidad Nacional de Costa Rica

2014 TOOL DEVELOPMENT WORKSHOPS AND SPONSORS

Abruzzi Web-enabling, Virtual  
CBSG

Adaptive Management in Ex Situ Programs, Australia  
Australian National Environmental Research Program; Australian Research Council; University of Melbourne School of Botany

Invasive Species Consortium Meeting, USA  
United States Department of Agriculture, APHIS

Molecular Genetics for Species Management in Zoos and Aquaria Workshop, Belgium  
CBSG; EAZA; Royal Zoological Society of Antwerp; Royal Zoological Society of Scotland

Parks Australia Workshop on Use of Captive Breeding in Support of Threatened Species, Australia  
Parks Australia

Research Collaboration Network Metamodelling Steering Committee Meeting, USA  
National Science Foundation; Stony Brook University

Social Modeling Development Workshop, USA  
National Science Foundation; Virginia Polytechnic Institute and State University

Wellington One Plan Workshop Scoping Meeting, New Zealand  
New Zealand Department of Conservation
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 2014, CBSG led or co-led 12 Training Workshops in 6 countries, involving a total of 207 people from 88 organizations.

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. In addition, collaborating with other conservation organizations gives us access and exposure to new tools that can help us broaden our capabilities and increase our effectiveness.

In 2014, CBSG led or co-led 8 Tool Development meetings in 4 countries involving 95 people from 62 organizations.

2014 Conference Participation Sponsored Solely by CBSG:
ASA Global Council Meeting (UK), International Species Information System Board Meeting (USA), WAZA Annual Conference (India), WAZA Committee for Population Management Executive Meeting (India)
ABOUT CBSG

The Conservation Breeding Specialist Group (CBSG) is a global volunteer network of 370 conservation professionals, coordinated by a headquarters staff of six and assisted by 10 Regional and National Networks on six continents. CBSG is dedicated to saving threatened species through effective conservation planning. 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 Specialist Group of the Species Survival Commission of the International Union for Conservation of Nature, and is supported by a nonprofit organization incorporated under the name Global Conservation Network.

History
Since its inception in 1979, CBSG has assisted in the development of conservation plans involving over 255 species through more than 600 workshops held in 71 countries. CBSG has collaborated with more than 190 zoos and aquariums, 180 conservation non-governmental organizations (NGOs), 65 universities, 50 government agencies, 49 SSC Specialist Groups, 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 conservation planning 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.

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

http://iucn.org/about/work/programmes/species/who_we_are/about_the_species_survival_commission/

The Species Survival Commission is the largest of IUCN’s six volunteer Commissions, with a global membership of 8,000 experts. The 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.
2014 CBSG CHAIR’S CITATION OF EXCELLENCE

The CBSG Chair’s Citation of Excellence honors individuals who make unique contributions to CBSG and species conservation. These individuals often do their work behind the scenes, but their contribution is integral to the success of conservation progress. This recognition will be awarded every other year to a member of the CBSG community to honor their remarkable dedication to the mission of CBSG through hard work and support.

In 2014, Onnie Byers awarded the first ever CBSG Chair’s Citation of Excellence to Latha Ravikumar, who has managed the CBSG South Asia office for over 20 years.

The award was given to recognize Latha’s energetic, efficient, and enthusiastic management of the CBSG India/South Asia office since 1991. She has provided necessary support to her colleagues, enabling them to make important and long-lasting improvements to the conservation of South Asian species. She was presented with the award at the closing dinner of CBSG’s 2014 Annual Meeting in New Delhi, India.

IUCN SSC
CONSERVATION BREEDING SPECIALIST GROUP
CHAIR’S
CITATION OF EXCELLENCE
Presented by the IUCN SSC Conservation Breeding Specialist Group on this 2nd day of November 2014 to
Latha Ravikumar
In recognition of her energetic, efficient and enthusiastic management of the CBSG India/South Asia office since 1991 providing support to colleagues enabling them to make important and long-lasting improvements to the conservation of South Asian species.
## 2014 CBSG DONORS

### $25,000 and above
- George Rabb*
- Saint Louis Zoo

### $20,000 and above
- ZSL
- Toronto Zoo

### $15,000 and above
- Chester Zoo
- Chicago Zoological Society

### $10,000 and above
- Alice Andrews
- Auckland Zoological Park
- Dallas World Aquarium*
- Houston Zoo*
- San Diego Zoo Global
- Taronga Conservation Society Australia
- Zoo Leipzig*
- Zoo Zürich*

### $5,000 and above
- Al Ain Wildlife Park & Resort
- Association of Zoos & Aquariums (AZA)
- Anne Baker & Robert Lacy
- British & Irish Association of Zoos and Aquariums (BIAZA)
- Detroit Zoological Society
- Lincoln Park Zoo
- Nordens Ark*
- Ocean Park Conservation Foundation, Hong Kong*
- Point Defiance Zoo & Aquarium
- Schönbrunner Tiergarten – Zoo Vienna*
- Sedgwick County Zoo
- Smithsonian National Zoological Park

### $2,000 and above
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- Fundación Parques Reunidos
- Fundación Temaiken
- Kansas City Zoo
- Los Angeles Zoo
- Odense Zoo
- Palm Beach Zoo at Dreher Park
- Prudence P. Perry
- Philadelphia Zoo
- Rotterdam Zoo

### $500 and above
- Abilene Zoological Gardens
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- Banham Zoo
- Bramble Park Zoo
- Chris Byers & Kathy Vila
- Cameron Park Zoo
- Catswild Wildlife Park
- David Taylor Zoo of Emporia
- Friends of the Rosamond Gifford Zoo
- GaiaPark – Kerkrade Zoo
- Jacksonville Zoo & Gardens
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- Little Rock Zoo
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- Tokyo Zoological Park Society
- Topeka Zoo
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- Mohawk Fine Papers
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- Rolling Hills Wildlife Adventure
- Sacramento Zoo
- Safari de Pauugres
- Steinhart Aquarium
- Tautphaus Park Zoo
- Jacqueline Viestra

### $100 and above
- Alameda Park Zoo
- Aquarium of the Bay
- Elias Sadalla Filho
- Lincoln Children’s Zoo
- Steven J. Olson
- Zoo Heidelberg

### $10 and above
- Heiko Janssen

### CBSG Regional Network Hosts
- AMACZOOA & FUNDAZOO
- Auckland Zoo
- Copenhagen Zoo
- Japan Wildlife Research Center
- Royal Zoological Society of Scotland
- Saint Louis Zoo
- Taman Safari Indonesia
- Zoo Outreach Organisation & WILD Zoofari Mexico

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*Denotes CBSG Chair Sponsor
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Smithsonian Conservation Biology Institute, USA

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Japan Wildlife Research Center, Japan
Notes to 2014 Financial Statements

The finances to support the work of CBSG are held and managed by the Global Conservation Network (GCN), a USA 501(c)3 not-for-profit organization. GCN had an overall surplus from operations of about US $86,049 for the year in 2014. Our unrestricted activity (general operations) accounted for an approximately US $164,221 increase, with a US $(78,172) decrease related to restricted activity. As of December 31, 2014, we had an unrestricted net asset reserve of US $892,967 or 23 months of operating expenses. Two components make up the temporarily restricted net asset reserve at year end: about US $274,060 is for CBSG Chair support and US $18,485 is for 2015 CBSG commitments. The information on this page was taken from the 2014 audit. Copies of the full audit can be obtained by contacting the CBSG office.
**CBSG HEADQUARTERS STAFF**

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Chair

Philip Miller  
Senior Program Officer

Kathy Traylor-Holzer  
Senior Program Officer

Caroline Lees  
Program Officer

Elizabeth Townsend  
Finance Officer/Executive Assistant

Emily Wick  
Communications Officer

**CBSG REGIONAL NETWORKS**

Our Regional Networks take CBSG tools and principles deep into the local institutions of a region or country, allowing stakeholders to adapt our proven conservation techniques to meet their own unique needs. We believe that this freedom to shape a Network according to the needs of the culture, society, and services of the individual country is a requirement for successfully addressing the sheer magnitude of the problem of biodiversity loss. Regional Networks acknowledge and appreciate the diversity in environment, culture and social systems, economic conditions, policy and governance, and philosophy in different countries and regions. CBSG Network team members organize activities local to their network and assist with other CBSG activities around the world.

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Co-Convenor: Caroline Lees  
CBSG

Co-Convenor: Richard Jakob-Hoff  
Auckland Zoo

**CBSG Brasil**  
Convenor: Arnaud Desbiez  
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Co-Convenor: Sally Walker  
Zoo Outreach Organisation

Co-Convenor: Sanjay Molur  
Zoo Outreach Organisation

**CBSG Southern Africa**  
Convenor: Mike Jordan
Special Acknowledgements

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 B & G House of Printing, Inc.

Sustainability

We are proud to partner with B&G House of Printing in California to bring you our 2014 Annual Report. This report was printed on Neenah Environment Digital PC 100 White, which contains 100% PCW (post-consumer waste), is PCF (Processed Chlorine Free), Green Seal Certified, FSC (Forest Stewardship Council) certified, and made with 100% renewable green electricity.

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Success Story and Initiative Photos:
Hainan Gibbon photos, p. 4: Jessica Bryant
Takahē photos, p. 5: Glen Greaves
Kansas City Zoo photos, p. 6: Kansas City Zoo
Indian Rhino photos, p. 7: Susie Ellis; Philip Miller
Costa Rican Herpetofauna photos, p. 8: Phil Bishop
Ex Situ Guidelines photo, p. 9: Wellington Zoo (Wellington Zoo Veterinary Science Manager Lisa Argilla hand-rearing kakapo chicks)
One Plan Approach Initiative, p. 12-13: Al Ain Zoo; Mike Jordan

CBSG Chair’s Citation of Excellence Award Photos:
Zoo Outreach Organisation