In October, the CBSG headquarters staff and regional network teams traveled to New Delhi, India for the 2014 CBSG Annual Meeting. One hundred and twenty people from 24 countries gathered to discuss the application of the One Plan approach in India and beyond. Our hosts, the Central Zoo Authority, India (CZA) outdid themselves with detailed planning and smooth implementation of the entire event, from the lovely opening reception to the closing dinner under the stars. We are grateful to B.S. Bonal, Brij Gupta, Sally Walker, Sanjay Molur, and the CBSG South Asia staff for making this a meeting to remember.

The three days contained many fine examples of conservation in action around the world, including conservation of gyps vultures in India, linking *in situ– ex situ* efforts in greater one-horned rhino conservation, and the focus on integrated conservation in Indian zoos. Click here to read plenary presentation abstracts.

The participants met in working groups to discuss some of the key issues facing our community and the wildlife we are dedicated to protecting. Examples include:

• **IUCN Asian Species Action Partnership (ASAP)**
  The group identified potential flagship/ambassador species that could be used to promote ASAP and discussed processes for developing and marketing ASAP more effectively for greater zoo and aquarium engagement.

• **Species Conservation Toolkit Initiative (SCTI)**
  Working group members were introduced to, and invited to provide input on, this initiative. The purpose of the SCTI is to: develop and support the next generation of population modeling tool developers; continue the evolution of VORTEX; and drive ongoing innovation of metamodeling tools for comprehensive, integrated assessments of the many threats affecting wildlife.

• **IUCN Guidelines**
  Three working groups received overviews on the application of some new or recently revised IUCN guidelines for reintroduction, *ex situ* management, and wildlife health. A fourth group provided input on the guidelines on management of confiscated animals (currently under revision).

• **India’s National Conservation Breeding Program**
  This group discussed the main features of the Central Zoo Authority’s collaborative conservation breeding program, a joint venture of *in situ* and *ex situ* wildlife managers. The discussion revolved around the policy framework, CZA’s strategy towards conservation breeding of endangered species, the prioritization of
the species, and the status and barriers to success of the program.

- **Dysfunctional Zoos**
  Critical components of a “good zoo”—such as an environment that is safe for animals, staff and visitors, basic record keeping, an animal collection plan, and a sound financial plan—were identified, as were the steps required to achieve this standard.

In addition to the long, productive days, we had colorful adventures in Delhi in the evenings. We were treated to shopping at the outdoor market in Dilli Haat, watching (and participating in!) traditional Gujarat dancing, and viewing a spectacular light and sound show at the Red Fort.

One of the highlights of the meeting for me was presenting the first CBSG Chair’s Citation of Excellence to Latha Ravikumar in recognition of her energetic, efficient, and enthusiastic management of the CBSG South Asia office. Since 1991, Latha has been providing tireless support to her colleagues, enabling them to make important and long-lasting improvements to the conservation of South Asian species.

Thanks to all who joined us in New Delhi. We look forward to next year’s CBSG Annual Meeting, hosted by Al Ain Zoo in the United Arab Emirates!

Sincerely,

Dr. Onnie Byers
CBSG Chair
From CBSG South Asia Members

Many CBSG South Asia staff have been involved with CBSG for over 20 years, but obstacles such as finances and scheduling challenges have made it difficult for them to attend past annual meetings. With this year’s meeting held in their region, and with the support of members of the CBSG Strategic Committee, several CBSG South Asia colleagues were able to attend and contribute their perspectives and expertise. Below are some of their responses to the meeting.

“I spend most of my year at my field site in the Himalaya and hardly get to attend such events. It was exciting to see so many conservationists all at the same place, learn of their experiences, and share in some very exciting and interesting discussions. As a field worker, I have little practical experience of zoos and therefore the opportunity to sit with the zoo keepers and directors from across the world gave me much needed insight on zoos and captive management.” — B.A. Daniel

“The greatest part of the CBSG meeting was the opportunity to meet up with the experts, scientists, and managers from about 26 countries at one place. It was indeed great to meet all of them: it not only helped me to renew my contacts after many years with some of them, but also provided ways to create new contacts and project initiatives.” — Martina Anandam

“I take care of my boss Sally Walker’s travel bookings. During September I had asked her about her plans for the CBSG and WAZA Annual Conference that is held in Delhi. At that time she told me that I should also be prepared to go. At first I thought she was joking, as I mostly like to work behind the scenes and don’t like to go out. But soon I realized she was serious. I got an award from CBSG for providing support to our technical people for enabling them to make important and long-lasting improvements to the conservation of South Asian species. Sally Madam and Onnie kept the news themselves to give me a surprise, and I don’t have words to describe my feelings when Onnie called me to the stage. It was a most valuable gift I got on my birthday.” — Latha G. Ravikumar

“It was really a wonderful experience to participate in a CBSG meeting. I learned their working group processes, was part of more than one working groups and special lectures, and met people with different experiences. I saw old friends after a long time—one of them I met after 21 years.” — R. Marimuthu

“Being someone who is currently working on understanding the presence and distribution of the amphibian chytrid fungus in the Western Ghats of India, I have always wanted to reach out to on-ground people involved in ex situ breeding programs, especially in amphibians. This conference offered me one of the best networking opportunities I have ever had and more so to be able to meet kind and humble people despite their phenomenal achievements.” — Keerthi Krutha

“We met some of the “revolutionaries/rock stars of conservation” (as I like to call them), such as Bob Lacy and Jon Ballou, who have been instrumental in developing the Vortex model. In addition to this, this experience is especially valuable to me as I was given the opportunity to present the freshwater fish work/projects undertaken by our team in India. This was a golden opportunity as the presentation was met with a lot of encouragement and offers of support. Also, the zoo community came forward to suggest contacts and exchanged information on the problems faced in their region. All in all the experience was extremely enriching and will be put to good use in conservation work/projects that I undertake in India.” — Priyanka Iyer
Working Group Summary

CBSG and Conservation Genetics Specialist Group Collaboration

Participants
Jonathan Ballou (Convenor), B.A. Daniel, Danny de Man, Dennis Kelly, Keerthi Krutha, Bob Lacy (Convenor), Sonja Luz, Mir M. Mansoor, R. Marimuthu, Paul Pearce-Kelly, Craig Pugh, S.C. Sharma, Sarhid Sood, Kazu Takami, Kumiko Yoneda

Summary
The Conservation Genetics Specialist Group (CGSG) was formed in 2014. Undoubtedly, CBSG and CGSG will provide assistance to each other and collaborate on joint initiatives, and it will be valuable for the CBSG community to provide input at this early stage of development of this specialist group. This working group was an opportunity to discuss what this input might consist of, and to consider areas of potential synergy between the two specialist groups.

This working group discussed these questions:

• Are there any concerns about the establishment of CGSG?
• What issues would the CBSG community want to see CGSG tackle? What can they do for us (within reasonable limits)?
• How can CGSG and CBSG work together on issues of mutual interest and concern?

The working group produced a list of non-prioritized points related to all three of these questions.

Next Steps
There were several concerns, including the importance of having good geographic representation in CGSG to cover global needs, and the desire to make sure CBSG tools remain within CBSG and its partners, and not be presumed to be transferred to CGSG.

The group identified many topics upon which CGSG can provide support to CBSG, including: the need for forensic genetics (captive and wild), building capacity, and understanding of the power and limitations of the new genomics tools; guidance on hindrances to implementing conservation genetics actions (regulatory, property rights, etc.); guidance on managing metapopulations; and help with sorting out taxonomic uncertainty.

CBSG and CGSG can work together by:

• Identifying a liaison “team” that would be members of both CBSG and CGSG
• Planning occasional back-to-back meetings
• Identifying a few specific projects for a CBSG-CGSG collaborative effort
• Reciprocal exchanging of newsletters and other forms of communication
• Having CGSG review and input on conservation plans facilitated by CBSG

Bob Lacy will pass these issues on to the chairs of the CGSG.
Working Group Summary

Asian Species Action Partnership (ASAP)

Participants
Renuka Bandaranayake, Mark Craig, Danny de Man, Susie Ellis, David Field, Myfanwy Griffith, Markus Gusset, Bengt Holst, Enayet Hossain, Kira Husher, Deborah Jensen, Joerg Junhold, Caroline Lees, Sonja Luz, Jansen Manansang, Phil Miller, A.K. Paltra, B.P.S. Parehar, Mark Pilgrim, Pichirikkat Rajeev Raghavan, Madhu Rao (Convenor), Ivan Rehak, William Robichaud (Convenor), Christoph Schwitzer, Elizabeth Townsend, Kathy Traylor-Holzer, A.B.M. Shahid Ullah

Summary
Vertebrates in Southeast Asia are among the most critically endangered in the world. The Asian Species Action Partnership, an IUCN SSC initiative, is a consortium of institutions committed to saving the (ASEAN + E. Timor) region’s threatened vertebrates on the brink of extinction. The goal of the working group was to raise awareness of the ASAP initiative and eligible ASAP species, with the objective of identifying a role for zoos and aquaria in further engagement with the initiative. During the first session, working group participants emphasized the need to generate a manageable list of species in order to find a good fit for resources and expertise of the CBSG community. Within this context, several filters were considered necessary to apply to the ASAP species list. These filters included the list of AZE species, Red List recommendations for captive breeding, ISIS data, and species in captivity with studbooks. Following this, the group identified the need to develop a clear action plan for ASAP and identify ambassador species that would help zoos and aquaria identify potential areas for engagement.

Recommendations
The recommendations from the working group can be categorized broadly into two groups of activities. In the first, a recommended action plan for ASAP would help define the “product” by a grouping of species under relevant themes, thus generating a manageable list of species and a series of manageable projects and products. The second set of actions relate to the “marketing” of the product by the identification of species champions and establishing a communication strategy for engaging across audiences including CBSG, the zoo/aquaria community, the broader conservation community, and the general public.

Recommendations from the group included the following:

- Development of an action plan for ASAP
- Completion and revision of the ambassador species selection
- Recommendations from ASAP to SEAZA and other regional zoo associations
- Review of marketing through additional lenses (e.g., degree of community engagement)
- Distribution of the working group results

Click for full working group report.
Working Group Summary

Climate Reality Community Conservation Package

Participants
Yara Barros, Martin Bauert, Onnie Byers, Frands Carlsen, Bryan Carroll, Mark Craig, B.A. Daniel, Jo Gipps, Brawin Kumar, Lena Lindén, Rachel Lowry, R. Marimuthu, S. Martina, Paul Pearce-Kelly, Stephanie Sanderson, Madelon Willemsen (Convenor)

Background
Madelon Willemsen led the pro-bono development of a creative idea by GPY&R / WPP (marketing firm) to assist the zoo and aquarium (Z&A) community in collectively communicating climate action to their visitors and wider audiences. This is a potential new initiative and component of the Zoos and Aquariums for 350 climate change movement launched in 2013. This creative idea links animals and species directly to man-made climate change. It highlights how humans are the cause, but that they can also make a change for the better: “It's our story. Help us to write a better ending.” The idea and the accompanying materials were shared with working group members for their input and consideration. Click to see the communications materials produced by GPY&R / WPP.

Summary
The creative idea was supported in theory by the working group participants. Furthermore it was agreed that this opportunity should not be missed as the community normally does not have access to such ‘costly’ opportunities. The group agreed that the idea should be shared and presented to determine if zoos and aquariums around the world would be interested and willing to adopt this concept.

The general Z&A community should be engaged and involved in the development of a visitor-based climate action initiative to realize the full benefits and potential of the creative idea. The materials are gorgeous and compelling. While a great deal of work has already gone into creating these materials, they are in draft form and adaptable to the needs of the Z&A community, so that we can ensure they work perfectly with the refined purpose of the project and so that others can have input into and ownership of the final product.

The group arrived at a possible overall objective of this project:

The worldwide conservation community amplifying their global voice calling for action on climate change, resulting in policy changes to reduce emissions.

“The community will use their voices to write a better ending.”

This creative work creates a strong link between man-made climate change and the survival of animal species in the collections of Z&A, so that their visitors are compelled to change their own behaviors, and influence the decisions that politicians make in addressing the situation.

Click for full working group report.
Working Group Summary

Collaborative Conservation Breeding Efforts in India

Participants

Summary
The working group deliberated on the salient features of the collaborative conservation breeding program in India. The discussion revolved around the information presented to participants about the program in India and the issues flagged in the presentation. The group discussed policy framework, the Central Zoo Authority of India’s strategy towards conservation breeding of endangered species, the prioritization of these species, the status of the conservation breeding program launched in India, and barriers to success.

The Central Zoo Authority was established by the Government of India as a Statutory Authority in 1992 to oversee the functioning of the zoos in the country and to enforce the minimum standards and norms for the upkeep and health care of animals in Indian zoos. One of the important functions of the authority is to identify endangered species of wild animals for the purpose of conservation breeding and assign responsibility in this regard to a zoological park, and also to coordinate research in captive breeding. The Central Zoo Authority has identified 26 priority endangered species based on scientific criteria for the conservation breeding program. This is a flagship program of the government, and it has been launched in collaboration with different zoos/states located in the geographic distribution of the species. The Authority has also identified the coordinating and participating zoos for the targeted species and provides funds for appropriate off-exhibit breeding enclosures, furnishing/enrichment, and facilities for research and veterinary health care management in the conservation breeding centers in the identified coordinating zoos. The centers maintain records and mark the animals. The Authority has also assisted the centers in preparing the species recovery and conservation breeding plans. The program is a joint venture of in situ and ex situ wildlife managers.

Recommendations
The participants determined recommendations for the following topics:

- Housing and infrastructure
- Technical support and capacity building
- Policy / funding commitments
- Genetic founders

Click for full working group report.
Working Group Summary

Wildlife Disease Risk Analysis (DRA)

Participants

Summary
This session provided an introduction to the DRA process as described in the new IUCN guidelines and the *Manual of Procedures for Wildlife Disease Risk Analysis*, published this year and endorsed by the IUCN Species Survival Commission and the World Organisation for Animal Health (OIE). The DRA process is a structured, evidence-based, and transparent process to assist decision making for the complex situations involving wildlife and disease. The group discussed diseases faced by the wildlife of the countries represented at the meeting, including the many new emerging diseases such as chytridiomycosis of amphibians and continuing changes in land use, climate, and other environmental factors. In Japan, avian influenza is of major concern, and foot-and-mouth disease (FMD) is an emerging threat to deer and wild boar as well as livestock. In Hong Kong, chytrid fungus has recently been found. This disease is also a concern to five threatened species of amphibians in the Western Ghats of India. In Myanmar, there is a concern about tuberculosis spread due to free movement between domestic and wild elephants and contact with livestock.

The group then discussed how the DRA process could be best implemented in both *ex situ* and *in situ* situations and brainstormed the following action steps.

Recommendations

- Develop a simplified template for day-to-day use in zoos.
- Train trainers in each region to facilitate global uptake of the DRA process.
- Develop e-learning modules for distance education.
- Establish a database of case studies for use by others.
- Explore options for translation of the guidelines and manual.

Click for full working group report.
Working Group Summary

IUCN Guidelines for Ex Situ Management and Translocation Guidelines

Participants

Summary
This working group provided an overview of two newly revised IUCN guidelines—specifically, those outlining ex situ management for conservation and those guiding conservation translocations—and how these guidelines might be applied as part of an integrated species conservation planning process. These complementary guidelines each outline a decision-making process that recommends factors to be considered before deciding whether to implement these forms of population management for conservation purposes. Steps include a status review and threat analysis, identification of potential conservation roles and strategies, determination of required program structure, and assessment of feasibility, costs, and risks before an informed decision is made to undertake ex situ or translocation conservation activities.

Contributing authors described the content and scope of these guidelines along with examples of how they have already been applied in several CBSG species conservation planning workshops by both the in situ and ex situ conservation communities. Important clarifying points included that the ex situ guidelines apply to existing as well as new ex situ programs of all types (including genome resource and seed banks) and for all taxa (including invertebrates and plants). Participants provided input on important information to be included in accompanying annexes.

Recommendations
1. Include important references and relevant case studies in the supporting materials, including “failures” and lessons learned as well as successes. Participants were asked to submit examples of projects in which they have been involved.
2. Provide risk assessment advice in the supporting materials and identify knowledgeable point people.
3. Provide relevant IUCN guidelines to the local community at the beginning of a project and in the local language.
4. Develop a PowerPoint that can be used in training and educating people regarding the guidelines and the decision-making process for ex situ activities and conservation translocations.

Click for full working group report.
Working Group Summary
IUCN Guidelines for the Placement of Confiscated Animals

Participants

Summary
IUCN is re-drafting the current “Guidelines on the Placement of Confiscated Animals.” The aim of the group was to comment on the latest draft (with a proposed amended title of “Guidelines for the Management of Confiscated Species”) and make suggestions for changes, such that the guidelines can be used as a practical tool for managing authorities (MAs).

Rationale:
• Situations change
• New knowledge (shared knowledge)
• New initiatives
• Cultural perspectives
• Develop as a practical operational tool – supporting the confiscating authorities

In order to produce a “product” that is as useful as possible to those making decisions on the management of confiscated species, we need to ...

• Take into account current practices
• Produce guidelines based on implications, risks, benefits, and feasibility
• Make them as locally relevant as possible, e.g., language, culture, laws
• Produce a “user-friendly toolkit” for decision making
• Incorporate training suggestions

Next Steps
• Development of the revised guidelines is a work in progress
• Take the (excellent and very much appreciated!) feedback from the group into consideration
• Some highly valuable information has been suggested, and leads to some further questions, for example:
  - How can the guidelines be made locally relevant, e.g., language, legalities, culture?
  - How can the conservation world support the decision making, i.e., resources, “tool-kit”?
  - What format would be most useful, e.g., wall chart, decision tree, matrix?
  - How can training take place, e.g., use of regional offices, partners?

Click for full working group report.
Working Group Summary

Dysfunctional Zoos

Participants
Martina Anandam, Anne Baker, Yara Barros, Martin Bauert, Jacob V. Cheeran, Anna Croukamp, Latha Ravikumar, Maria Clara Dominguez, Anil Garg, Sarita Jnawali, Manoj Misra, Siddhartha Mohanty, Kirsten Pullen, Disha Sharma, Surinder Suneja, Sally Walker (Convenor), John Werth

Summary
The working group meeting spanned two working sessions. The first session focused on identifying criteria that should be used to define a “good” zoo, dividing the criteria into three categories of components: must do, should do within a reasonable time frame, and aspirational. The second working session was spent in discussion of how a country or region might go about implementing a process for raising the standards within that country. There was unanimous agreement that some sort of zoo legislation and the correct implementation of that legislation was essential. The group then went on to explore various situations that might exist within a country. The relationship between the zoos (or zoo association) and the government was seen as critical to developing and implementing zoo legislation. Finally, the group emphasized the importance of insuring that zoos had appropriate resources and identified a number of ways which zoos might acquire these resources.

Recommendations
The output from this working group is in the form of recommendations, providing a template that zoos and/or zoo associations might follow in improving the quality of zoos and aquariums within their countries.

1. A zoo and/or aquarium is defined as any facility that has wild (non-domestic) animals and is open to the public on a regular basis.

2. Critical (must-have) components of a good zoo: good animal welfare (healthy animals exhibiting a range of special-typical behaviors); environments that are safe for animals, staff, and visitors; basic record keeping; a masterplan for the facility with clear, achievable goals; an animal collection plan; and a sound financial plan.

3. There must be an inspection process that utilizes the criteria identified above.

4. Steps to improving zoos/aquariums within a country or region:
   • Zoos/aquariums that are interested should develop an agreed-upon plan for improving zoos/aquariums in their country.
   • All zoos/aquariums in the country must be identified.
   • There must be a dialogue between the zoo/aquarium community and the government in order to enact zoo legislation. There are a number of routes by which this can be established.

5. Zoos/aquariums must either receive sufficient funding from the government or some other source, and/or must be allowed to develop revenue-generation activities that will allow them to make necessary improvements.

Click for full working group report.
Working Group Summary

Species Conservation Toolkit Initiative

Participants
Jonathan Ballou (Convenor), Danny de Man, Markus Gusset, Keerthi Krutha, Bob Lacy (Convenor), Caroline Lees, Khyne U. Mar, Phil Miller, Mark Pilgrim, Kazu Takami, Kathy Traylor-Holzer

Summary
The purpose of the Species Conservation Tools Initiative (SCTI) includes:

1. To develop and support the next generation of tool developers with skills in population biology, computer programming, and conservation science, while ensuring that the core software tools continue to be validated, well-tested, and thoroughly documented.
2. To continue the evolution of Vortex as a highly flexible population modeling tool that can be used to integrate conservation assessment and planning across the spectrum of levels and kinds of intensive wildlife management.
3. To continue the ongoing development of the innovative metamodeling framework for linking analyses into comprehensive, integrated assessments of the many threats affecting wildlife populations.

The working group discussed these topics:

1. Questions about the initiative
2. How to manage the process of future development?
   a. Incorporating new ideas
   b. Setting priorities
3. Suggestions of updates or new needs

Next Steps
These were some of the requests for new functionality:

For PMx:
1. Better regional analyses.
   Simultaneously evaluate and compare what is going on in different regions. Value of individuals in different regions.
2. How can non-ISIS members (no access to SPARKS, ZIMS) use PMx? Design an Excel file template for basic import of most important data into PMx.

For Vortex:
1. Need PVA models that can deal with different levels of data, e.g., just census data, stage-based data, age/sex specific.
2. Develop a Vortex reference library to import default population variables for a taxon type, e.g., import typical small antelope values.
3. Evaluate impact of uncertainty in entered parameters on results.
4. Need to better link into Vortex: GIS data, projection of landscape changes over time, models for changes in human habitat use.

Questions about the Initiative:
1. This is still just a stop-gap initiative. Short-term solution.
   Need a much larger initiative for an international population management software center.
2. Concern about competing requests for support and updates (e.g., Vortex requests vs. PMx).
   How to prioritize? Maybe an advisory team of subject matter experts?
3. How feasible is it for one programmer to do this all?

These concerns will be passed on the SCTI partnership leadership (Bob Lacy and Jon Ballou were in the working group), and the suggestions will be added to the “To Do” lists of PMx and Vortex.
CBSG Regional Network News

CBSG Australasia
Convenors: Richard Jakob-Hoff and Caroline Lees

CBSG Australasia has completed its sixth year of operation and has developed a positive profile within the region’s *in situ* and *ex situ* wildlife conservation communities. This is reflected in the increasing requests for our training, planning, and facilitation services as detailed in this report. During 2013-2014, we have been actively involved in planning work for the following local species: bilbies, kokako, mala, Norfolk Island green parrots, regent honeyeaters, southern corroboree frogs, and takahē.

The Network continues to pursue the following priorities:

- Development and promotion of wildlife disease risk assessment and management tools
- Deployment of virtual tools for remote collaboration and training
- Continuing development of small population management tools
- Project evaluation

Click for more details on CBSG Australasia activities.

CBSG Brasil
Convenor: Arnaud Desbiez

CBSG Brasil was founded in 2004. CBSG Brasil is not based at any institution and is run voluntarily by four members with the support of the Royal Zoological Society of Scotland. Members are a wildlife biologist, a veterinarian, a GIS expert, and a zoo professional, each working for a different institution. The convenor, Arnaud Desbiez, is the Conservation Manager for Latin America at the Royal Zoological Society of Scotland (RZSS) based in Campo Grande, Mato Grosso do Sul State, Brazil. Fabiana Lopes Rocha has a post-doctoral position at FioCruz, Rio de Janeiro City, Rio de Janeiro State. Katia Ferraz is a professor at ESALQ, Piracicaba, São Paulo. Our newest member Yara Barros is the technical director of the Parque das Aves in Foz do Iguaçu, Paraná.

During the Regional Network meeting of February 2013, it was decided that CBSG Brasil would work hard to get involved with the Brazilian *ex situ* community. Yara Barros has now joined our small team as representative of the *ex situ* community. Yara is well positioned for this endeavor, as she is also the president of the Brazilian Zoo and Aquarium Association. Thanks to Yara we hope to be able share CBSG tools, contacts, and ideas with the Brazilian zoo and aquarium community. Welcome Yara!

Since the last CBSG Annual Meeting we have successfully run several workshops and attended various meetings, as well as engaged with numerous partners regarding potential workshops.

Recent activities include:

- Action plan for the Brazilian Society of Zoos and Aquaria (SZB)
- CBSG Brasil partnership with the Brazilian Center for the Study of Road Ecology
- Participation in Zoos & Aquariums for 350

Click for more details on CBSG Brasil activities.
CBSG Regional Network News

CBSG Europe
Convenor: Bengt Holst

CBSG Europe’s activities in the past year include:

- Revision of the IUCN SSC Guidelines on the Use of Ex Situ Management for Species Conservation
- Facilitation Skills Training for Conservation Managers
- Adjusting the regional collection planning process for the EAZA Callitrichidae Taxon Advisory Group
- Red panda conservation planning in India and Bhutan
- Population management of ex situ ungulate populations at the King Khalid Wildlife Research Centre

Click for more details on CBSG Europe activities.

CBSG Mesoamerica
Convenor: Yolanda Matamoros

CBSG Mesoamerica acts as a linking organization among different stakeholders, including regional zoos, academia, field research, ex situ management, government, and the community. CBSG Mesoamerica helps set species conservation priorities and actions through workshops, facilitation experience, and computer tools, fulfilling a need for science-based conservation planning. Our aim is to maintain and create new contacts in our region to continue supporting conservation efforts for Mesoamerican wildlife using CBSG’s conservation planning tools and methodologies. CBSG Mesoamerica has contributed to over 60 conservation workshops, collaborating with more than 100 organizations working on in situ and ex situ conservation in the region.

CBSG Mesoamerica’s recent activities include:

- Update of Costa Rican National Red Lists for amphibians and reptiles
- VORTEX 10 Course
- International Symposium on Conservation of Felids in America

Click for more details on these CBSG Mesoamerica activities.

CBSG Indonesia
Convenor: Jansen Manansang

CBSG Indonesia organizes many conservation activities in Indonesia through seminars, workshops, and campaigns. This year, some of the activities carried out were:

- CBSG Indonesia supported CBSG’s initiative of Zoos & Aquariums for 350.
- Earth Day 2014 was organized by Taman Safari Indonesia to invite the leaders of Islam and Catholic communities to participate. Approximately 10,000 trees were planted.
- The first National Conference for Javan Leopards took place.

Click for more details on CBSG Indonesia activities.
CBSG Regional Network News

CBSG South Asia
Convenors: Sally Walker and Sanjay Molur

CBSG South Asia is active in Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka. We work closely with IUCN SSC CBSG, other IUCN specialist groups, our own taxon and thematic networks, and host organizations (ZOO, WILD, and SAZARC). CBSG India, started by Sally Walker in 1990, was the first CBSG regional network. It was expanded into CBSG South Asia in 2000.

CBSG South Asia’s recent initiatives include:

- Chiroptera Research Techniques and Conservation workshop in Bangladesh
- CEPF/IUCN workshop on freshwater key biodiversity areas in Kerala and Tamil Nadu
- Sensitizing local communities in India for conservation of the declining greater one-horned rhino
- PHVA workshop for the red panda

Click for more details on CBSG South Asia activities.

CBSG North America
Convenors: Anne Baker and Philip Nyhus

CBSG North America came into being in early March 2013. It is hosted by the Saint Louis Zoo and co-convened by Anne Baker, Ph.D., executive director of Amphibian Ark; and Philip Nyhus, Ph.D., Assistant Professor of Environmental Studies, Colby College. Geographically, CBSG North America includes Canada and the United States of America.

2014 was the first full year for the CBSG North America network. Activities included:

- Participation in Jacksonville Zoo conservation planning workshop
- Assisting the Brazilian Zoo Association with strategic planning
- Coordinating a CBSG Facilitation Training Course
- Participation on AZA task force charged with developing criteria for selecting species for AZA SAFE program
- Co-facilitating Kansas City Zoo Strategic Planning workshops
- Development of a white paper reviewing USFWS Recovery Planning process with CBSG HQ
- Planning for Southern Woodland Caribou workshop with CBSG HQ (workshop was subsequently cancelled)

CBSG Japan

CBSG Japan has recently reorganized and Kumiko Yoneda (Japan Wildlife Research Center) is the new convenor. Kumiko participated in the 2014 Regional Network meeting, where expectations and roles for CBSG regional networks were clarified and future directions were discussed. CBSG Japan plans to organize a workshop in 2015 for a priority regional species.
CBSG Regional Network News

**CBSG Mexico**  
**Convenor: Luis Carrillo**

CBSG Mexico was founded in 1995 in response to the needs of endangered species conservation in Mexico. It is based at Zoofari, a safari park located in Morelos, Mexico. CBSG Mexico’s convenor is Luis Carrillo, who works at Zoofari as General Curator. CBSG Mexico’s mission is to catalyze conservation actions in Mexico, assisting in the development of holistic conservation programs for threatened species and ecosystems.

CBSG Mexico’s recent activities include:

- Strategic planning workshop for the Colombian Zoos and Aquarium Association (ACOPAZOA)
- Strategic planning for Santacruz Zoo

[Click for more details on CBSG Mexico activities.]

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

CBSG Southern Africa (CBSG – SA) has had another hectic year. Each year we get involved in more diverse projects with more partners, and this in turn brings requests to become involved with other threatened species and other conservation activities. Since the 2013 Annual Meeting in Orlando, Florida, we have participated in more than 25 conservation planning meetings, workshops, and survey and training sessions. Our single species conservation planning has continued with the work on several focal species escalating. The regional network has become increasingly involved in running training sessions on *ex situ* conservation roles planning, based on the new draft *IUCN Guidelines on the Use of Ex Situ Management for Species Conservation*, as well as survey and techniques training for invertebrates following our work on conservation priorities for South African invertebrates. The close relationship between CBSG – SA and the conservation work of the Pan-African Association of Zoos & Aquaria (PAAZA) continues, and support has been given to all of the nine African Preservation Programmes (APPs). The official host of CBSG – SA is in the process of changing, and the offices will no longer be at the National Zoo in Pretoria. We thank them for their previous support, and discussions are ongoing with a potential new host.

CBSG Southern Africa’s recent activities include:

- Conservation planning for African penguins and wattled cranes
- Species prioritization and conservation roles planning
- Survey and techniques training
- Work with PAAZA on conservation breeding programs and APPs

[Click for more details on CBSG Southern Africa activities.]
2014 CBSG Annual Meeting Participants

<table>
<thead>
<tr>
<th>Organization</th>
<th>Name</th>
</tr>
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<tbody>
<tr>
<td>African Association of Zoos and Aquariums (PAAZA)</td>
<td>John Werth</td>
</tr>
<tr>
<td>Al Ain Zoo</td>
<td>Ghanim Al Hajeri</td>
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<tr>
<td>Al Ain Zoo</td>
<td>Mark Craig</td>
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<tr>
<td>Alipore Zoological Garden</td>
<td>K.L. Ghosh</td>
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<tr>
<td>Assam State Zoo</td>
<td>Chandan Bora</td>
</tr>
<tr>
<td>Association of Zoos and Aquariums (AZA)</td>
<td>Candice Dorsey</td>
</tr>
<tr>
<td>Auckland Zoo/CBSG Australasia</td>
<td>Richard Jakob-Hoff</td>
</tr>
<tr>
<td>Avian Society of India</td>
<td>Anil Garg</td>
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<tr>
<td>Bhagwan Birsa Biological Park</td>
<td>A.K. Patra</td>
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<tr>
<td>Bristol Zoo Gardens</td>
<td>Bryan Carroll</td>
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<tr>
<td>British and Irish Association of Zoos and Aquariums (BIAZA)</td>
<td>Kirsten Pullen</td>
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<tr>
<td>Cali Zoological Foundation</td>
<td>Maria Clara Dominguez</td>
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<tr>
<td>CBSG</td>
<td>Onnie Byers</td>
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<tr>
<td>Centre for Environment Education</td>
<td>Kartikeya Sarabhai</td>
</tr>
<tr>
<td>Central Veterinary Hospital, Dhaka Zoo</td>
<td>A.B.M. Shahidullah</td>
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<tr>
<td>Central Zoo Authority, India</td>
<td>Bishan Singh Bonal</td>
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<tr>
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<td>Mark Pilgrim</td>
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<td>Chittagong Zoo</td>
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<td>Renuka Bandaranayake</td>
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<td>Conservation Research Group</td>
<td>Pichirikkat Rajeev Raghavan</td>
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<td>Frands Carlsen</td>
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<td>Enayet Hossain</td>
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<td>Danny de Man, Myfanwy Griffith</td>
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## CBSG Donors

### $25,000 and above

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- George Rabb

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### $10,000 and above

- Auckland Zoological Park
- Dallas World Aquarium*
- Houston Zoo*
- San Diego Zoo Global
- Taronga Conservation Society Australia
- Zoo Leipzig*
- Zoo Zürich*
- 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 and Irish Association of Zoos and Aquariums (BIAZA)
- Cleveland Metroparks Zoo
- Detroit Zoological Society
- Lincoln Park Zoo
- Nordens Ark*
- Ocean Park Conservation Foundation, Hong Kong*
- Perth Zoo*
- Point Defiance Zoo & Aquarium
- Schönbrunner Tiergarten – Zoo Vienna*
- Sedgwick County Zoo
- Smithsonian National Zoological Park

### $2,000 and above

- Allwetterzoo Münster
- Alice Andrews
- Borås Djurpark*
- Bristol Zoo Gardens
- Cincinnati Zoo & Botanical Garden
- Dickerson Park Zoo
- Dublin Zoo
- European Association of Zoos and Aquaria (EAZA)
- Givskud Zoo
- Gladys Porter Zoo
- Japanese Association of Zoos & Aquariums (JAZA)
- Laurie Bingaman Lackey
- The Living Desert
- Linda Malek
- Milwaukee County Zoo
- North Carolina Zoological Park
- Oregon Zoo
- Paignton Zoo
- Royal Zoological Society of Antwerp
- San Francisco Zoo
- Swedish Association of Zoological Parks & Aquaria (SAZA)
- Twycross Zoo
- Union of German Zoo Directors (VDZ)
- Utah’s Hogle Zoo
- Wassenaar Wildlife Breeding Centre
- Wilhelma Zoo
- Zoo Frankfurt
- Zoologischer Garten Köln
- Zoologischer Garten Rostock

### $1,000 and above

- Aalborg Zoo
- Akron Zoological Park
- Audubon Zoo
- Central Zoo Authority, India
- Colchester Zoo
- Dallas Zoo
- Everland Zoological Gardens
- Fort Wayne Children’s Zoo
- Fota Wildlife Park
- Fundación Parques Reunidos
- Fundación Temaikén
- Kansas City Zoo
- Los Angeles Zoo
- Odense Zoo
- Palm Beach Zoo at Dreher Park
- Prudence P. Perry
- Philadelphia Zoo
- Rotterdam Zoo
- Royal Zoological Society of Scotland – Edinburgh Zoo
- San Antonio Zoo
- Seoul Zoo
- Skansen Akvariet
- Taipei Zoo
- Thrigby Hall Wildlife Gardens
- Woodland Park Zoo
- Zoo and Aquarium Association (ZAA)
- Zoological Society of Wales – Welsh Mountain Zoo
- Zoos South Australia

### $500 and above

- Abilene Zoological Gardens
- Apenheul Primate Park
- Banham Zoo
- Brandywine Zoo
- Cameron Park Zoo
- Cotswold Wildlife Park
- David Traylor Zoo of Emporia
- Friends of the Rosamond Gifford Zoo
- GaiaPark – Kerkrade Zoo
- Jacksonville Zoo & Gardens
- Knuthenborg Safaripark
- Lisbon Zoo
- Little Rock Zoo
- Katey & Mike Pelican
- Edward & Marie Plotka
- Racine Zoological Society
- Riverbanks Zoo & Garden
- Tom Staff
- Tokyo Zoological Park Society
- Topeka Zoo
- Wellington Zoo
- Wildlife World Zoo & Aquarium
- Zoo de la Palmyre

### $250 and above

- African Safari – France

### CBG Regional Network Hosts

- AMACZOOA & FUNDAZOO
- Auckland Zoo
- Copenhagen Zoo
- Saint Louis Zoo
- Taman Safari Indonesia
- Zoo Outreach Organisation & WILD
- Zoofari Mexico
CBSG Annual Meeting 2014

CBSG Annual Meeting is published by the Conservation Breeding Specialist Group of the International Union for Conservation of Nature (IUCN) Species Survival Commission. The opinions and recommendations expressed in this report reflect the issues discussed and ideas expressed by the participants in the workshop and do not necessarily reflect the formal policies of the IUCN, its Commissions, its Secretariat or its members. This publication exists to inform CBSG members and others concerned with the conservation of plants and animals about the proceeds of our Annual Meeting.

Editor: Emily Wick

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