

CBSG Annual Meeting

4-7 October 2012 ♦ Melbourne, Australia

We are proud to share with you the proceedings of the 2012 CBSG Annual Meeting. With a focus on the One Plan Approach to integrated species conservation planning, 102 people from 19 countries worked tirelessly for three days on key issues facing our community. Their intellectual contributions, along with the creativity of our interactive World Café session, the inspiration captured in the TED Talks, and the critical nature of the working group topics, resulted in a highly energetic atmosphere and production of a set of substantive recommendations. These actions will guide the CBSG community as we work to contribute to climate change solutions, develop new tools for species conservation planning, assist zoos in making the powerful contribution to conservation that only they can make, and more. The reports from these groups and all other working groups convened in Melbourne are presented in this publication.

In addition to the reports, participants will receive a table displaying the specific actions generated by the working groups in which they participated. These documents will serve to update other participants on progress since the meeting and will be circulated regularly so that we can maintain the momentum gained in Melbourne. It is our hope that each of you will play a part in the implementation of these actions so that together we can realize the positive change we envision.



The results of the post-Annual Meeting survey support the many positive comments we heard in Melbourne. We are thrilled that 95% of respondents felt that the Annual Meeting was productive and informative, and 94% left the meeting energized about CBSG and how it relates to their own work. The survey indicated a couple of areas for improvement, including better integration between the zoo/aquarium community and the field conservation community. This is a priority for CBSG and we are working to create a more diverse membership that will hopefully be reflected in future Annual Meetings. The survey responses also recommend more time for working group presentations at the end of the meeting. We appreciate this observation and changes will be made to next year's agenda to improve on this.

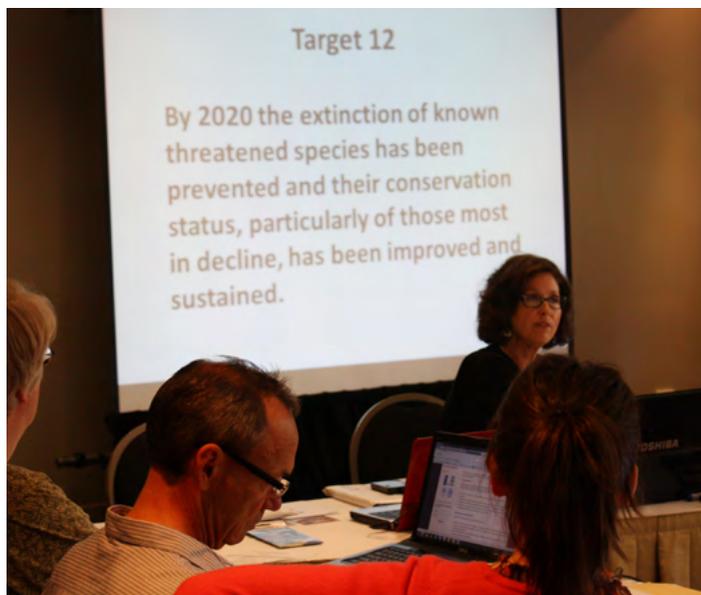


A highlight of every CBSG Annual Meeting is the awarding of the Ulysses S. Seal Award for Innovation in Conservation. This award is very appropriately viewed, not just by CBSG and our partners but also by the Species Survival Commission and others, as one of the foremost awards given in conservation. This year we had the pleasure to present this award to the exceptionally worthy Robert Lacy. Excerpts from my presentation can be found on page 17.

The 2012 CBSG Annual Meeting was a tremendous success, with many of the recommendations made by working groups being implemented today. Many thanks to Jenny Gray, Kevin Tanner, and their staff for hosting this year's meeting and to Caroline Lees, Richard Jakob-Hoff, and the CBSG Australasia team for helping to make it a great success. We hope that you will join us for powerful presentations, meaningful and productive discussions, and the magic of Disney at next year's meeting from 10-13 October 2013 in Orlando, Florida, USA!



Dr. Onnie Byers
CBSG Chair





The World Café Session

World Café is a method of group discussion that requires movement, interaction, and creativity. CBSG wanted to use this method to expand on ideas of how to better execute the One Plan Approach—specifically, how can SSC specialist groups and zoos work together to do better conservation?

Essential to World Café are the table settings: paper tablecloths and markers. Drawing is encouraged to help spur creativity and depictions of thoughts-in-process are left at the table for the next participants to expand on when they take that spot in the next round.

Participants discussed one of three questions at any given table. There were three 20-minute “rounds,” meaning that participants moved twice in order to have the opportunity to discuss all three questions. One person (the “Anchor”) remained stationed at each table throughout the course of the activity, facilitating the discussion for a new set of participants every round.

This session allowed each person to express their thoughts and listen to the ideas of others. After the session, anchors used the tablecloths, which now displayed stick-figures, speech bubbles, and scribbled text, to create a report that was presented in a plenary session on the final day of the meeting.

This activity, to which 95% of survey respondents responded positively, provided the chance for participants to make connections, network, and enjoy a more casual setting for meaningful discussion.



Working Group Summaries

The Frozen Ark: The Creation of a One Plan Approach Genome Resource Banking System

Participants

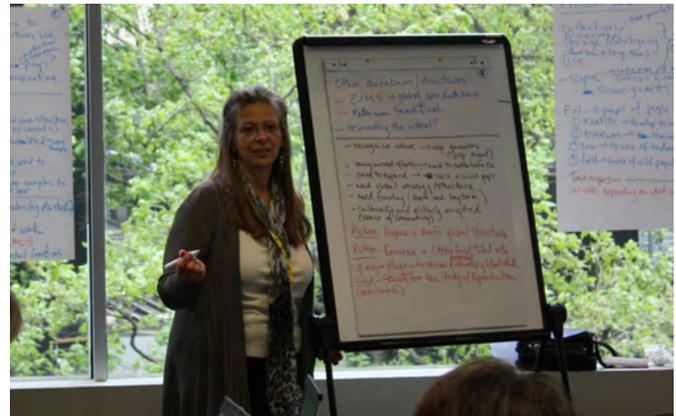
Suzanne Boardman, Ann Clarke (convenor), Danny de Man, Ian Gunn (convenor), Rebecca Hobbs, Dennis Kelly, Melanie Lancaster, Dominik Lermen (convenor), Kristin Leus (recorder), Marissa Parrott, Rebecca Spindler, Kathy Traylor-Holzer (facilitator)

Background and summary

The Frozen Ark Project is a global consortium developed with the aim to conserve the genetic resources of the world's endangered animal species before they go extinct. The project is analogous to the preservation of the world's plants, such as the "Millennium Seed Bank" created by Kew Gardens. While the Frozen Ark consortium consists of 22 zoos, aquaria, natural history museums, and research laboratories around the world, the current scale of the initiative is relatively small in relation to the scale of faunal biodiversity loss, or in comparison to similar initiatives for seed plants or for domesticated plants and animals. There are likely many other institutions that with the right assurances might be willing to join the Frozen Ark initiative, but currently there is little collaboration and coordination. There is also insufficient recognition in the zoo world and the wider conservation community of the value of tissues for animal conservation and population management. In order to build a comprehensive and state-of-the-art "next generation" Frozen Ark consortium, global needs, global resources, and global strategies need to be considered, and a comprehensive structural, technical, legal, and business plan needs to be developed. This working group discussed how best to bring the world's animal conservationists together to achieve state-of-the-art and coordinated collection and preservation of genetic material by a global consortium, how to engage the global zoo community in this endeavor, and what CBSG can do to help this process.

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Actions

- Identify existing biosample collections, particularly those held by CBSG members and partners.
- Prepare an updated CBSG/WAZA position statement to highlight the need for and usefulness of Genome Resource Banking, referring to previous CBSG statements as well as those for the banks for plant seeds and domestic plant and animal species as successful examples.
- Organize a CBSG-facilitated workshop, potentially during the yearly conference of one of a number of scientific societies in this field, to get buy-in from the major players, develop a structure and MOU for working together and for sharing data, identify how to increase sampling, identify mechanisms for sharing and incorporating new technologies, and demonstrate opportunities for cooperation and data sharing.

[Click for full working group report.](#)



Working Group Summaries

Keeping Tools Alive: Ensuring a Future for CBSG Innovation

Participants

Stefano Canessa, Karina Cartwright, Claire Ford, Ian Fraser, Jo Gipps, Dan Harley, Rebecca Hobbs, Heribert Hofer, Mark Holdsworth, Kevin Johnson, Michael Johnson, Bob Lacy (convenor), Melanie Lancaster, Caroline Lees (facilitator), Kristin Leus, Sarah Long, Phil Miller, Frank Oberwemmer, Larry Perry, Karin Schwartz (recorder), Brandie Smith, Kathy Traylor-Holzer, Eric Tsao, Doug Verduzco, Erna Walraven, Emily Weiser, Ros Wilkins

Background

Population viability analysis and management tools such as *Vortex*, *PMx*, and *MetaModelManager* are pivotal to the development of CBSG's One Plan Approach. These tools were developed by a small number of individuals who continue to play an essential role. To date, this system has ensured that the tools remain reliable, freely available, user-friendly, and responsive to the needs of the conservation community. It is important that these qualities are sustained into the future.

In recent years, several new systems for collaboration have emerged, some of which are highly relevant to the area of software development. These may provide opportunities for greater collaboration among those working on PVA-related tools and for greater system resilience in the face of change ... or they may not. This workshop aimed to explore the potential value these new ways of working could add to CBSG tools.

Actions

A task force was set up to consider and expand upon this analysis and to report back to CBSG for further consideration and action.

[Click for full working group report.](#)

Integrating Structured Decision Making into PHVA

Participants

Anne Baker (recorder), Peter Black, James Brazill, Kevin Buley, Stefano Canessa, Karina Cartwright, Candice Dorsey, Annika Everaardt, Claire Ford, Ian Fraser, Georgia Garrard, Jo Gipps, Lewis Greene, Dan Harley, Natalie Hill, Heribert Hofer, Mark Holdsworth, Caroline Lees (convenor), Sarah Long, Vicky Melfi, Phil Miller (convenor), Frank Oberwemmer, Paul Pearce-Kelly, Mark Pilgrim, Chelle Plasse, Monique Van Sluys, Brandie Smith, Sally Walker, Terry Walshe, Erna Walraven, Emily Weiser

Background and summary

PHVA, CBSG's signature workshop process, involves an intensive analysis of a species/population (or several species/populations) to evaluate extinction risk under various scenarios. It is a stakeholder-driven process and results in management plans that address key issues identified through the risk analysis.

Structured Decision Making (SDM) provides an alternative framework for "unpacking" a problem. Its advantages include the incorporation of both personal values and attitude to risk into decision-making, and the ability to quantitatively assess the impact of management alternatives on objectives other than population/species viability. Its incorporation into PHVA could enhance outcomes for conservation and was explored through a series of presentations and associated discussion.

Recommendations

- 1) Identify one or two promising elements of SDM for trial incorporation into PHVA.
- 2) Apply these at a forthcoming PHVA and assess the impact.
- 3) Continue discussions on this topic through a working group (interested parties were identified at the workshop).

[Click for full working group report.](#)

Working Group Summaries

Climate Change Action Planning

Participants

Amitabh Agnihotri, Brad Andrews, Anne Baker, Peter Black, Paul Boyle, Kevin Buley, Frands Carlsen (facilitator), Ann Clarke, Dalia Conde, Mark Craig, Gerald Dick, Bengt Holst (convenor), Hidemasa Hori, Dominik Lermen, Al Mucci, Jackie Ogden, Paul Pearce-Kelly (convenor), Rebecca Spindler (recorder), Harutaka Taira, Yasumasa Tomita, Monique Van Sluys

Background, aims and summary

Our joint WAZA/CBSG climate change engagement initiative has made some progress advancing our understanding of the threat and response issues, keeping up with the science, generating formal statements, developing information tools, and increasing incorporation of these threat factors into our evaluation and planning work. However, the worsening threat and greatly reduced response time for avoiding unmanageable mass extinction impacts mean we need a new approach to generate **effective action** while there is still time to make a difference.

Therefore the aim of this working group was to identify how CBSG's strengths can best be used to address this challenge and to design a detailed engagement action plan.

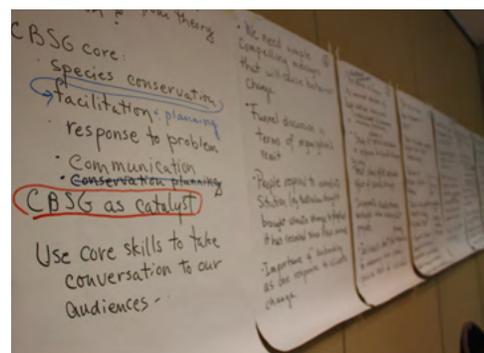
Conclusions

The group agreed that a major hindrance to progress is the widely perceived complexity and abstract nature of the climate change/ocean acidification issues. Within the conservation community and in general, people struggle to comprehend the true impact significance and feel lost in the jungle of potential consequences and response actions. There is therefore an urgent need to clarify the most significant major system level impacts, their consequences for both humanity and the rest of biodiversity, and the response actions that will have the greatest predicted impact on species survival.

We need to focus the technical skill sets, resources, and proven abilities of CBSG to help clarify these threats, build consensus, and engage people in innovative responses. The PHVA process is identified as a key evaluation tool for clarifying likely impacts based on realistic emissions trajectories and, as importantly, the essential mitigation and adaptation actions necessary for addressing these threats. Specifically, the suggestion is to perform robust PHVA-like workshops at a system level on major natural regions (e.g., Amazon and Himalayas) and urban centers (e.g., New York City and other major cities). Such a focus could better demonstrate to governments and society the true significance of the threat facing us and the essential actions we must take. It is therefore equally important that the results of such impact assessments are communicated as effectively as possible to all concerned so that the essential policy actions can be realized in time.

Therefore, in parallel with the technical impact evaluation focus, we need an ambitious public engagement initiative using the full potential of social media and communication specialists to alert, inspire, and actively engage humanity in effective activism. This task will require the most creative and effective specialist collaborations and concerted efforts to ensure the necessary results are realized.

[Click for full working group report.](#)



Working Group Summaries

Conservation Welfare

Participants

Paul Andrew, Brad Andrews, Chris Banks, Yara Barros, Suzanne Boardman, Bryan Carroll, Peter Clarke, Danny de Man, Anura De Silva, Gerald Dick, Lesley Dickie, Candice Dorsey, Karen Fifield, Suzanne Gendron, Jenny Gray, Lewis Greene, Markus Gusset, Natalie Hill, Heribert Hofer, Bengt Holst, Susan Hunt (convenor), Jörg Junhold, Androo Kelly, Bjarne Klausen, Rachel Lowry, Vicky Melfi, Dave Morgan (convenor), Frank Oberwemmer, Jackie Ogden, Marissa Parrott, Mark Pilgrim, Kanako Tomisawa, Stephen van der Spuy, Sally Walker (convenor)

Workshop 1: Defining Conservation Welfare

Conservation welfare is a relatively new concept described and outlined publicly by the Universities Federation for Animal Welfare. Sally Walker began using the concept for zoo and wildlife welfare and published a number of booklets and other educational materials on this new topic, including a 600-page manual. Sally outlined that “bad welfare means bad conservation” and expressed the need to continually build animal welfare standards to ensure the conservation of species within zoos. The group worked on a definition of conservation welfare from the zoo perspective. A great many related issues were discussed in a very large group of participants who had not before had the opportunity to discuss welfare in a meeting.

Outcome

The group did not reach consensus on a definition of conservation welfare. Sally will research and present a range of elements for creating a definition of conservation welfare that is specifically relevant to all aspects of zoo animals' management. This will be presented and discussed in a working group at the CBSG Mid-year meeting held in Gland.

Workshop 2: Animal Welfare vs. Animal Ethics

One key issue of agreement was the need of WAZA to separate “animal welfare” from “animal ethics.” For example, the decision to euthanize an animal may be an ethical issue, but the method of euthanasia and whether an animal suffers in that process is a welfare issue. Discussion was far-reaching and broad, with general agreement that zoos and aquaria at the global level should have a clear Animal Welfare Statement and/or position. The bad name of substandard or poor zoos can greatly affect the effectiveness of zoos in forming partnerships and achieving conservation outcomes: “We all share our name with bad zoos.”

Outcome

The workshop will be reviewed at the 2013 Mid-year meeting of WAZA and the accepted concepts will be woven into a comprehensive Animal Welfare Strategy.

[Click for full working group report.](#)



Working Group Summaries

Wildlife Disease Risk Analysis

Participants

Bishan Singh Bonal, Judy Clarke (recorder), Richard Jakob-Hoff (convenor), Sonja Luz, Eric Miller, Hans van Weerd, Matt West (recorder)

Background and summary

This workshop took place over three sessions and provided participants with an introduction to wildlife disease risk analysis (DRA), applying the systematic DRA structure recently developed by a CBSG-led global group on behalf of the IUCN and the World Organisation for Animal Health (OIE). The workshop began with an overview of wildlife DRA and its application to a wide range of scenarios, including wildlife movements, *in situ* wildlife declines, and wildlife disease threats to human and domestic animal health. The members of the group then proposed the following scenarios (with which they had personal involvement) as options for application of the DRA process:

- Release of captive-bred Bali mynahs to Bali
- Introduction of Tasmanian devils to Maria Island
- Introduction of pygmy hogs to a new site in India
- Wild-to-wild translocation of Indian rhino
- Assessment of risk of chytrid fungus to *in situ* spotted tree frogs in Victoria
- Disease threat analysis to Gyps vultures in India
- Disease threats associated with the turtle trade in Southeast Asia

The scenario selected by the group was the **introduction of Tasmanian devils to Maria Island**, planned for November 2012.

Concern by the Tasmanian government is prompted by the fact that devils have never been on this island before. It is unknown if they can introduce disease that may impact the resident native animals, which include wallabies, wombats, Cape Barren geese, shorebirds and the endangered forty-spotted pardalote. The available information was reviewed in the following sequence: problem description (including the context, goals, scope, and focus), risk communication (including identification of stakeholders and experts), hazard identification, risk assessment, risk management, and implementation action planning. **Leptospirosis** was selected for more intensive analysis and this revealed: a) a need for collection of data on the current status of this disease on the island; and b) that, should it be transferred onto the island, the threat to the resident species would most likely be indirect via rodents (of which there is an existing population) and water contamination. A graphic depiction of the possible disease transmission route was a useful means of identifying critical control points at which preventative actions could be taken. The workshop ended with a reflections exercise, which provided insights on the value of the structured DRA process and the associated challenges and issues arising.

Key recommendations

1. Secretarial assistance to record notes would enable all participants to fully engage in the content of the DRA.
2. Role-playing as stakeholders and experts in a pre-prepared DRA scenario could be another effective teaching method.
3. The group supported the planned strategy of rolling out train-the-trainer virtual workshops following release of the new DRA publications at the end of this year.

[Click for full working group report.](#)



Working Group Summaries

Zoos Working Together to Save AZE Species

Participants

Paul Andrew, Chris Banks, Yara Barros, Onnie Byers (convenor), Bryan Carroll, Peter Clarke, Mark Craig, Gerald Dick, Lesley Dickie, Annika Everaardt, John Fa (convenor), Karen Fifield, Jenny Gray, Markus Gusset, Bengt Holst, Kevin Johnson, Michael Johnson, Androo Kelly, Bjarne Klausen, Eric Miller, Al Mucci, Jackie Ogden, Laurence Perry, Hugh Possingham, Karin Schwartz (recorder), Eric Tsao

Background and discussion

How do we enable zoos to lead a “surge” against biodiversity loss? Like any other organization involved in conservation, zoos should aim for the most favorable cost-to-benefit ratio, i.e., “the greatest conservation bang for your buck.” The Alliance for Zero Extinction (AZE), a consortium of biodiversity conservation organizations, focuses on species that face extinction either because their last remaining habitat is being degraded at a local level, or because their tiny global ranges make them especially vulnerable to external threats and imminent extinction if no appropriate conservation action is taken.

Pros and cons were discussed for collaboration between AZE and the zoological community to initiate conservation action for those AZE sites whose species are in imminent danger. Discussion included the feasibility for zoological institutions to incorporate the use of the AZE list into their prioritization process for collection planning, and opportunities to identify and support conservation action at AZE sites. There was agreement that there is a need to go forward with action for species in imminent danger of extinction and that collaboration with AZE would offer a favorable cost-to-benefit ratio for conservation action. CBSG could play a role in facilitating the connection between the zoological community and AZE.

Initial actions would be to assess the current status of overlap in programs, including WAZA-branded projects at AZE sites, zoos working on conservation of trigger species at AZE sites, zoos already contributing at AZE sites but on different species with similar threats, and current captive breeding programs for AZE trigger species. CBSG could then move forward to facilitate links between regional zoo associations’ population management programs and conservation programs with AZE.

Key action steps

Initially, background information will be gathered to determine where there are current programs within the zoo and aquarium world (*ex situ* population management or *in situ* field conservation programs) for AZE species. Information on preliminary numbers of *ex situ* population management programs were compiled and presented to the AZE Board meeting in Washington, DC on 25 October 2012 as part of a proposal for a connection with the zoological community.

1. Determine the number of AZE trigger species that are currently under human care and managed under regional zoo association population management programs.
2. Determine the number of field conservation programs in which zoos are involved for AZE trigger species or for other flagship species within an AZE site.
3. Develop bullet points to justify use of this prioritization process by the zoo community and participation in conservation efforts for AZE sites and trigger species.
4. Establish a working group to work on further action.

[Click for full working group report.](#)



Working Group Summaries

Australian Mammals Extinction: Needs and Costs of Ensuring Captive Populations and Other IMPs

Participants

Paul Andrew, Paul Boyle, Stefano Canessa, Karina Cartwright, Peter Clarke, John Clulow, Dalia Conde (convenor), Danny de Man, Lesley Dickie, Candice Dorsey, Annika Everaardt, John Fa, Claire Ford, Jenny Gray (convenor), Lewis Greene, Dan Harley, Natalie Hill, Mark Holdsworth, Hidemasa Hori, Kevin Johnson (recorder), Michael Johnson, Androo Kelly, Bob Lacy, Melanie Lancaster, Kristin Leus, Sarah Long, Eric Miller, Al Mucci, Marissa Parrott, Paul Pearce-Kelly, Larry Perry, Chelle Plasse, Hugh Possingham (convenor), Karin Schwartz, Brandie Smith, Rebecca Spindler, Harutaka Taira, Yasumasa Tomita, Kathy Traylor-Holzer (facilitator), Eric Tsao, Monique Van Sluys, Erna Walraven, Emily Weiser, Ros Wilkins

Background

This working group aims to analyze parameters and approaches for assessing which Australian mammal species are most likely to need the support of *ex situ* management programs. Selected species should be viable for captive programs (populations of sufficient size and diversity to contribute to eventual release back into the wild).

The goal is to support a prioritization process that can contribute to the intensively managed population component of CBSG's One Plan Approach.

Summary

Hugh Possingham presented a prioritization process that was developed in 2006 (and published in *Conservation Biology* in 2009 – Joseph et al.) in collaboration with the New Zealand Department of Conservation (DOC) for *ex situ* conservation of native species in New Zealand. The group discussed this algorithm for optimizing the number of species saved, and suggested possible considerations and modifications that might need to be made for the prioritization to be most effective, especially if applied in a broader context.

Everyone agreed that we should act to save the most threatened species while it is still practical to do so (i.e., when viable population numbers still exist). The example of the Christmas Island Pipistrelle was cited as one that we never want to repeat.

Actions

- Small task force created to follow up on next steps.
- Determine any modifications required to the prioritization process to meet all stakeholders' needs (e.g., cultural values, species' role in the ecosystem, conservation role of the *ex situ* population, impact on the wild population).
- Consideration to be given to replacing cost (\$) in the equation with space, or some combination of these resources.
- Run the 20 priority native species selected by Zoos Victoria for *ex situ* conservation and the Jersey examples through the process as a case study, assuming all species are equal, for a 20-year time frame.

[Click for full working group report.](#)



CBSG Network News

CBSG Australasia

Convenors: Caroline Lees and Richard Jakob-Hoff

CBSG Australasia was launched at the Adelaide CBSG Annual Meeting in 2008. In addition to localizing delivery of CBSG workshops, the network has the following priorities:

- the development of disease risk assessment and management tools;
- the uptake of virtual tools for mass collaboration; and
- the new generation of population management tools evaluation.

CBSG Australasia's recent initiatives include:

- IUCN Guidelines for Wildlife Disease Risk Analysis and a Manual of Procedures for Wildlife Disease Risk Analysis
- Mass collaboration tools
- Training in small population management
- Contributions to species conservation planning

[Click for more details on CBSG Australasia activities.](#)



CBSG Brasil

Convenor: Arnaud Desbiez

CBSG Brasil was founded in 2004. CBSG Brasil is not based in any institution and it is run voluntarily by three core members with the support of the Royal Zoological Society of Scotland. Members are a wildlife biologist, a veterinarian and a GIS expert, each working for a different institution. The convenor, Arnaud Desbiez, is the Regional Coordinator for Latin America at the Royal Zoological Society of Scotland (RZSS) based in Campo Grande, Mato Grosso do Sul State, Brazil. Fabiana Lopes Rocha is finishing her Ph.D. at FioCruz, Rio de Janeiro City, Rio de Janeiro State. Katia Ferraz is a professor at ESALQ, Piracicaba, São Paulo. Fabiana and Katia have joined CBSG Brasil this year while Patrícia Medici, who founded CBSG Brasil, and Leandro Jerusalinsky have both stepped down.



CBSG Brasil has strong ties with the Species Survival Commission of the IUCN. Between them, Arnaud, Fabiana, and Katia belong to four different specialist groups (Deer, Iguana, Peccary, and Wildlife Health). Arnaud Desbiez is also a member of the Species Conservation Planning Sub-Committee.

Since the last CBSG Annual Meeting, we have successfully run several species conservation workshops and attended various meetings. We continue to try to be innovative in our approaches to integrating new tools and methods into the work we do. We are working alongside the IUCN SSC Species Conservation Planning Sub-Committee to further benefit from new experiences and approaches. In addition, thanks to Katia, we are adding habitat suitability modeling as a planning tool in some of our workshops.

This year was a bit different from previous years as we did more international work (2 workshops in Africa) and are planning new initiatives in other South American countries (Argentina and Paraguay). However, we continue to remain active in Brazil.

[Click for more details on CBSG Brasil activities.](#)

CBSG Network News

CBSG Europe

Convenor: Bengt Holst



During the past year CBSG Europe has worked closely together with the CBSG Main Office and EAZA on several activities within and outside Europe, including:

- Studbook and Population Management Training Workshop in Indonesia
- *Vortex* Population Modeling Training Course, Copenhagen, Denmark
- IUCN SSC Guidelines on the Use of *Ex Situ* Management for Species Conservation
- Conserving Djibouti's Priority Land Animals
- Training: Facilitation Skills for Conservation Managers
- Zoo Involvement in Avian Conservation
- Red Panda Global Masterplan and Red Panda PHVA (China)

In addition to the above, CBSG Europe hosted a brainstorming session with CBSG population biologists on population management related activities to help improve the sustainability of zoo populations as well as strategies for maintaining and expanding expertise, followed by a metamodeling and *Vortex10* training session. CBSG Europe also contributed to the testing of, and writing the manual for, *PMx*.

[Click for more details on CBSG Europe activities.](#)

CBSG Mesoamerica

Convenor: Yolanda Matamoros



CBSG Mesoamerica acts as a linking organization between different stakeholders—from 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 2011-2012 activities include:

- Caribbean Manatee PHVA
- Central American River Turtle PHVA
- Mesoamerican and Caribbean Zoo Association Workshop
- IUCN Red Listing for Mesoamerican reptiles
- *Vortex* Training Course at Tabasco, Mexico

[Click for more details on these CBSG Mesoamerica activities.](#)

CBSG 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, & SAZARC). CBSG India, started by Sally Walker in 1990, was the first CBSG regional network. It was absorbed into CBSG South Asia in 2000. We now have 167 members in 7 countries.

CBSG South Asia's recent initiatives include:

- Getting along with elephants, HECx: Educator training in human-elephant coexistence
- Freshwater Biodiversity in the Western Ghats, India Report: Western Ghats assessments
- Training in field techniques for survey and conservation of volant and non-volant small mammals
- HECx workshops for Tamil Nadu and Kerala
- Red Panda Population and Habitat Viability Assessment Workshop Report published

[Click for more details on CBSG South Asia activities.](#)



CBSG Southern Africa

Convenor: Mike Jordan



CBSG Southern Africa is based in the Pretoria offices of the National Zoological Gardens of South Africa. This network works hard to bring together the incredibly diverse range of conservation stakeholders in a region where the economic utilization of wildlife and natural resources is the cornerstone of wildlife management. A central component of CBSG Southern Africa's work is the successful linking of the skills, efforts, and resources of the zoo and aquarium community and related intensive population management expertise to the priorities of the government and field conservation agencies.

[Click for more details on CBSG Southern Africa activities.](#)

CBSG Japan

We have been working to reset the framework of CBSG Japan:

- Re-examination of CBSG Japan bylaw
- Implementation of the survey that is held every four years for CBSG Japan members. Based on the results, the current membership is 47.
- Preparation for the election of officers
- Investigation of the possibilities of PHVA for Okinawa Rail (*Gallirallus okinawae*) or Amami rabbit (*Pentalagus furnessi*)

CBSG 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 is comprised of Luis Carrillo, current convenor and facilitator who works at Zoofari as General Curator, and Juan Cornejo, a modeler who works at the Bronx Zoo as Curatorial Science Fellow-Ornithology. 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 2011-2012 activities include:

- Northern Jaguar (*Panthera onca*) Recovery Planning, Arizona, US
- ALPZA/AZCARM Congress, Puebla, Mexico
- Central American River Turtle (*Dermatemys mawii*) PHVA

[Click for more details on CBSG Mexico activities.](#)

CBSG Indonesia

Convenor: Jansen Manansang



Highlighted activity

In February 2012, CBSG Indonesia joined Taman Safari Indonesia (TSI) to participate in Amphibian Ark's "Leaping Ahead of Extinction" Leap Day initiative by conducting a series of amphibian-focused events over a nine-day period.

Leap Day activities began on 24 February with observation and mapping of frog populations in the Taman Safari Indonesia area. A team from TSI, together with herpetologists from the Bogor Agricultural University (IPB), conducted the observation and mapping of frog populations in the area. The research was conducted at four sites: Pasiripis, Parkir G, Curug jaksa and Rumah Dua. Throughout two hours of observation, the team identified 13 local frog species, two of which (*Limnonectes macrodon* and *Huia masonii*) are Vulnerable species (IUCN Redlist 2011). This research will be continued for other sites in the area.

On Leap Day (29 February), TSI invited about 150 students of all ages to a Leap Day Exhibition, organized to raise awareness about frog conservation and the important role of frogs in the ecosystem. The activities began with a brief presentation about frogs and their status in Indonesia. Dr. Jansen Manansang, CBSG Indonesia's convenor, spoke at this event. CBSG Indonesia's participation in these events represents our taking an active role in promoting the conservation of amphibians, especially in Indonesia.

[Click for more details on CBSG Indonesia Activities.](#)

2012 CBSG Annual Meeting Participants

Adelaide Zoo

Peter Clarke

Al Ain Zoo, UAE

Mark Craig

Amphibian Ark

Kevin Johnson

Animal Gene Storage and Resource Centre of Australia

Ian Gunn

Aquamarine Fukushima

Harutaka Taira

Association of Zoos and Aquariums

Paul Boyle

Candice Dorsey

Auckland Zoo

Kevin Buley

Ian Fraser

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2012 Ulysses S. Seal Award

Presented to Bob Lacy by CBSG Chair Onnie Byers

The Ulysses S. Seal Award for Innovation in Conservation is given each year by the Conservation Breeding Specialist Group. It is regarded very highly not only by CBSG, but also by the entire zoo and aquarium community and the IUCN Species Survival Commission.

Dr. Ulysses S. Seal was the first Chair of the CBSG, serving from 1979 to 2003. Ulie Seal's great passion and talent was his creative thinking about how new science could be most effectively applied to solving the problems of wildlife conservation. His contributions were amplified many times over by his further ability to recognize, encourage, and put to work others who were making, or had the potential to make, such innovative contributions. CBSG honors Ulie's legacy through the awarding of the Ulysses S. Seal Award for Innovation in Conservation to an individual who embodies similar qualities.

It is with great pleasure that we celebrate tonight, with so many members of the CBSG family and with our friends from WAZA, the legacy of CBSG's founder, Ulysses Seal. I'd like to begin by thanking our selection committee, Jo Gipps, Lena Lindén and Mark Craig, for their work in reviewing nominations and unanimously choosing this year's award recipient.



Each year since this award was established in 2003 until tonight, it has been presented by Bob Lacy. Bob has said many times that presenting this award was one of his favorite things about being Chair of CBSG. So it's especially gratifying that Bob will be able to participate in this award ceremony as well. This time not as presenter, but as the 2012 recipient of the Ulie Seal Award for Innovation in Conservation.



It is difficult to imagine a more worthy recipient of this award. Few individuals show Bob's intellectual drive and his ability to develop new and better scientific tools to promote conservation, but fewer still are the people who share his strength of conviction in terms of free and open access to the products of his work. Bob's sole focus is the conservation of the species with which we share this planet. His sole goal is to see his work used and expanded upon for the benefit those species.

Bob's academic and professional accomplishments are impressive. He has authored or coauthored over 150 publications (11 with Ulie). In his long and highly productive career with the Chicago Zoological Society, Bob has explored many aspects of population biology and developed scientific principles, data analysis techniques, and modeling tools, all with profound implications for the management of populations at risk of extinction.

Much of his success comes from the fact that, when faced with a complex conservation challenge that others might call unsolvable, Bob dedicates himself to solving it. In 1988, Bob was asked by Ulie to participate in a workshop on Puerto Rican toads. The workshop had the dual purposes of assessing and guiding management of both the captive and the wild populations. Bob was asked to participate as an expert in the genetic management of captive populations and, in this role, he provided valuable advice. But his groundbreaking contribution came when, during the meeting, Bob recognized that some aspects of the population simulation model they

intended to use were not going to meet the needs of the situation, and the program was so slow that it couldn't be used in a workshop setting. So Bob offered to rewrite the program into a different computer language, enhance its capabilities, and extend the model in several ways to suit the toad data. And this is just what he did—overnight. By the next morning, Bob had a working program that assisted in the identification of management actions to save the Puerto Rican toad.

That program, now known as *Vortex*, is the most widely used population viability analysis (PVA) software in the world and has served as the backbone of CBSG's PHVA workshops for 20 years. Florida panthers, black-footed ferrets, golden lion tamarins, Iberian lynx, mountain gorillas, Sumatran tigers, Javan rhinos, eastern barred bandicoots, Tasmanian devils, and many more endangered species have benefited from the *Vortex* program born at that workshop in Puerto Rico. Without *Vortex*, conservation planning efforts are less likely to be inspired and less likely to succeed.

But *Vortex* was just the beginning. For many years Bob has pushed to expand population models to incorporate additional factors and increasing complexity. The result is the development of *MetaModelManager*, a revolutionary approach to species risk assessment that transfers data between PVA models, landscape modeling tools, emerging disease models, and climate change models, for an unprecedented approach to biologically complex processes.

In addition to *Vortex* and metamodels, Bob (in collaboration with previous award recipient, Jon Ballou) developed software for pedigree analysis primarily for captive populations. In line with his vision, Bob works with colleagues to create tools for integrating the management of populations for conservation along the entire continuum of population management options.

Not only has he contributed greatly to the creation of our base of conservation knowledge and tools for exploring it, but Bob is also selfless in his commitment to helping people understand and use that knowledge and those tools. Bob has been a patient and enthusiastic mentor to hundreds of conservationists from all over the world throughout his career, including many of us in this room.

As you know, Bob served as Chair of CBSG from Ulie's death until just last year. During this time, Bob redoubled CBSG's commitment to the zoo and aquarium community and continues to urge its strong commitment to conservation. And now, as CBSG's science advisor and conservation scientist for CZS, Bob is uniquely positioned to help bridge the narrowing gaps in knowledge, tools, and collaboration in order to more effectively meet the challenges of conserving the world's biodiversity.



Photo by Jim Shulz, CZS

Bob's contributions to conservation have been significant and far reaching, yet he remains modest and soft spoken. He is a man of integrity with an intellect as generous as it is vast. His steadfast belief in openness, free access, and equality, and his tireless work on behalf of our planet's threatened species make him an extraordinary role model. Bob's heartfelt reward is the conservation of species in the wild, living and functioning in their ecosystems without risk of extinction. Until that has been achieved for all species, Bob will never feel that his work is done. And because of his truly innovative, game-changing contributions, and his role as a mentor to so many, Bob's impact on effective conservation will continue long into the future.

Not only was the choice of Bob as recipient of this year's award unanimous, so is the belief that Ulie would be enormously proud to have Bob receive this award to honor their shared life passion and drive for innovation—in thinking, in tools, and in partnerships—for conservation.

CBSG Annual Meeting 2012

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 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 Meetings.

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