

# CBSG UPDATE



## Member Announcements

### New Chair for CBSG

After eight years of dedicated service to CBSG, Robert Lacy stepped down as CBSG Chair in October 2011. We welcome Dr. Onnie Byers as our new Chair. Onnie has served as the CBSG Executive Director for many years, and is excited about the new opportunities ahead for CBSG. Meanwhile, Bob Lacy remains an integral part of CBSG and will continue to contribute greatly to our work in his new role as CBSG Science Advisor.



### CBSG Book Club

Whether stationed for long periods at a remote field site, confined for hours on an airplane, or curled up front of a fire, most of us find ourselves looking for our next good read. To help fill this need, and to encourage communication among CBSG members, CBSG introduces a new, members-only feature on our portal site. On the CBSG “Book Club” site members can share recommendations for books that appealed to them. The book needs to have a conservation theme, but that is the only requirement. It can be fiction or non-fiction, a novel or a text book, dense and analytical or simply enjoyable and enlightening. We will provide links to published reviews – all you have to do is submit the title, author, a brief description of the book and why you recommend it. Happy reading! [View the Book Club Site](#)

### 2011 CBSG Annual Meeting

The beautiful Czech city of Prague was the site of our 2011 CBSG Annual Meeting on 30 September - 2 October. This year’s participants included 74 people from 21 countries, who enjoyed the wonderful hospitality of our hosts Ivan Rehak and Martin Munzar from Prague Zoo. Plenary sessions focused on the intensive management of populations and the One Plan approach for integrated species conservation planning. Working groups addressed aspects of these and related topics, including conservation success stories, revised IUCN technical guidelines for *ex situ* management, paradigm shifts needed in the conservation community, needed tools and processes for intensive population management, and WAZA initiatives on climate change and the Decade on Biodiversity. This meeting also marked the changeover of our Chair from Robert Lacy to Onnie Byers, and celebrated the announcement of the 2011 Ulysses S. Seal Award for Innovation in Conservation to William Conway, a renowned conservationist and very deserving recipient as well as long-time CBSG colleague and supporter. We hope to see many of you at the 2012 CBSG Annual Meeting next October in Melbourne!

### Release of PMx 1.0

The population management and planning software program PMx has been officially released and is available for download at: [www.vortex9.org/PMx/PMx.html](http://www.vortex9.org/PMx/PMx.html). PMx was developed by Jonathan Ballou (Smithsonian Conservation



Biology Institute, SCBI) and Robert Lacy (Chicago Zoological Society, CZS) in concert with J.P. Pollak and with support from the Institute for Museum and Library Services (IMLS). PMx expands upon the demographic and genetic analytical tools provided by the PM2000 program, and includes new features such as stochastic projections, increased breeding and group management options, tools for evaluating supplementation and release plans, and options for evaluating inter-population transfers. Training courses in using the new software have begun and will continue in 2012. PMx has been translated into Japanese and Chinese; please contact the CBSG office if you are interested in assisting with translation into other languages.



## Recent Workshops

### Western Chimpanzee PHVA for Sierra Leone

Sierra Leone is home to the second largest wild population of the Endangered western chimpanzee, *Pan troglodytes verus*. More than one half of the country's estimated 5,580 chimpanzees live outside protected areas, often sharing habitat and resources with local communities, which sometimes leads to conflict. Chimpanzee numbers are declining due to a variety of threats, including hunting for bushmeat and habitat loss/conversion due to agriculture, logging and mining.



At the invitation of the Sierra Leone Ministry of Agriculture, Forestry and Food Security, CBSG and CBSG Europe conducted a Western Chimpanzee PHVA workshop in Freetown, Sierra Leone in May 2011. The workshop was developed in collaboration with the Tacugama Chimpanzee Sanctuary and IUCN/SSC Primate Specialist Group (PSG), and involved about 50 stakeholders, including government representatives, researchers, and community leaders (chiefs and paramount chiefs) as well as several PSG members. Workshop participants developed a vision, goals, action steps and implementation plan toward conserving chimpanzees in Sierra Leone, leading ultimately to the development of a National Chimpanzee

Conservation Action Plan for Sierra Leone. Participation by the IUCN/SSC Hippo Specialist Subgroup helped to ensure that recommendations from this workshop integrate well with the recently completed action plan for pygmy hippos in Sierra Leone, strengthening the conservation benefit for both species.

### PVAs for Brazilian Species

In the past few months CBSG Brasil has been involved in several Population Viability Analyses (PVAs). In May they assisted in facilitation and modelling for a Puma PVA in Atibaia, Sao Paulo in partnership with CENAP/ICMBio. The puma (*Puma concolor*) is an overlooked species in Brazil, with most of the attention from researchers, policy makers and the public generally focusing on jaguars. Pumas are widely distributed throughout the country and are persecuted everywhere. Major threats are killing in retaliation for attacks on domestic livestock, sport hunting, road kill, and habitat loss. An Action Plan for pumas will be developed in December 2011.

PVAs for other Brazilian species have also been underway. Since July CBSG Brasil has been working on a population viability model for bush dogs (*Speothos venaticus*) with the help of CENAP/ICMBio and 12 field researchers. This work is being conducted through questionnaires and e-mails. A two-day meeting was held in September to use population viability models to evaluate and make recommendations for a reintroduction program for populations of the endemic endangered red-billed curassow (*Crax blumenbachii*) in the Atlantic forest.

### Human-Elephant Coexistence in India and Thailand

Six workshops in two series of three workshops each were conducted on human-elephant coexistence in elephant areas. The first series was for three villages of Coimbatore, South India in June-July 2011 sponsored by International Elephant Foundation, USA. The second series took place in August 2011 in Kanchanaburi, Thailand in collaboration with ECN Elephant Conservation. The workshop was sponsored by the US Fish and Wildlife Service, Columbus Zoo, and Cologne Zoo. Zoo Outreach Organization (ZOO)/CBSG South Asia were primary resource persons and organizers for all six workshops.



## Analysis of Free-Roaming Cat Population Dynamics and Control

CBSG was recently invited to participate in a Think Tank on feral cat population dynamics and management, coordinated by the Alliance for Contraception of Cats and Dogs, in June 2011. The goal of the Think Tank is to investigate how population modeling, field studies, and other approaches adapted from wildlife biology could be applied to the problem of providing improved spay/neuter guidance for free-ranging cat and dog populations. The group concluded that applying the Vortex software package to free-roaming cat populations would be a feasible and cost-effective way to generate informative, scenario-specific guidance, especially when supplemented with opportunistic collection of field data. A proposal for this project has been approved for funding through the end of 2012.



As a follow-up, CBSG staff was invited to participate in a workshop, hosted by NIMBioS (National Institute for Mathematical and Biological Synthesis, University of Tennessee) in November 2011, on the use of models to study free-roaming cat population dynamics. A NIMBioS-funded working group, composed largely of people who attended both workshops, is a likely outcome.

## 2011 Annual Conference for Giant Pandas

The 2011 Annual Conference of Chinese Committee of Breeding Techniques for Giant Pandas was held in Changsha, China in November 2011. Over 100 participants from China as well as from other parts of Asia, Australasia, Europe and North America attended the conference, which included over 30 presentations on giant panda husbandry, research, education, conservation and population management. CBSG presented information on new conservation planning and modeling tools that may be useful in giant panda conservation planning, both *ex situ* and *in situ*.

Since establishment of this Committee in 2002, CBSG has attended each conference and facilitated the master planning technical session. This year CBSG (including Jonathan Ballou, SCBI) again led representatives from the major panda breeding centers through specific breeding recommendations for female giant pandas in and outside of China. Population management is increasingly being refocused from demographic growth to more intensive genetic management, resulting in slower population



growth in favor of increased efforts to breed genetic valuable females and allowing other females to serve as surrogate mothers for juvenile pandas. This strategy to focus on the 'quality vs quantity' of giant panda cubs produced is strongly supported by both the Chinese Association of Zoological Gardens (CAZG) and the State Forestry Administration. At the meeting CAZG declared its intention to expand its *ex situ* cooperative management programs to other species, building upon the expertise gained at the recent PMx training course conducted by CBSG just prior to the giant panda meeting.

## History of Zoos Symposium

In May CBSG participated in a two-day symposium at Chester Zoo titled "From Royal Gifts to Biodiversity Conservation: The History and Development of Menageries, Zoos and Aquariums". The purpose of the symposium was to provide a comprehensive overview of the history and development of living wild animal collections across the world. This international meeting was held in celebration of the 75th anniversary of the Society for the History of Natural History, "a friendly international society for everyone who is interested in natural history in the broadest sense". Many CBSG colleagues presented at the symposium, which was a joint collaboration between the Society for the History of Natural History, Chester Zoo and the Linnean Society of London, supported by the Bartlett Society and WAZA. CBSG's paper, "From Captive to Conservation: The IUCN Conservation Breeding Specialist Group and the evolving role of zoos" will be published in the Symposium proceedings.

## Recent Training Activities

Over the past few months CBSG has conducted several training activities, including several training workshops on population management and population modeling software. Upcoming training courses include PMx training for JAZA (Tokyo, Japan) in February, Vortex training in Mexico in August, and potential PMx and Vortex training courses in the US in 2012.

### Studbook and Population Management Workshop, Cisarua, Indonesia



Over 40 forestry and zoo staff participated in a two-day workshop focusing on threats to small populations, integrated species conservation planning, and *ex situ* management conducted by CBSG and CBSG Europe in cooperation with the IUCN/SSC Asian Wild Cattle Specialist Group. This was followed by studbook training (SPARKS 1.6) for 17 Indonesian PKBSI studbook keepers, assisted by two experienced Indonesian studbook keepers. Mentors are being identified to continue working with their newly trained individuals to encourage their studbook progress for species such as banteng, anoa, babirusa, komodo, Javan gibbon, Bali mynah and orangutan.

### PMx Population Management Training, Australasia

CBSG Australasia conducted training in PMx software for ZAA in Sydney, Australia and for CMAG in Hamilton, New Zealand. These courses were aimed at helping Australasian coordinators, and the zoo and regional association staff who support them, to transition smoothly from PM2000 to the new PMx software. In particular these courses focused on how the new features in PMx can support problem solving for species recovery programs.

### PMx Population Planning Workshop, Beijing, China

Building upon the 2009 studbook training course held in Beijing, CBSG (including Jonathan Ballou, SCBI) led a training course in the use of PMx for 24 CAZG studbook keepers (both regional and international). Claire Mirande (International Crane Foundation) also participated and assisted the several crane studbook keepers in data analysis and strategies for population planning for crane species in China. Mentors will be working with several of the other studbook keepers to assist them in development of *ex situ* management programs for their species.



### Vortex Population Modelling Training Course, Copenhagen, Denmark

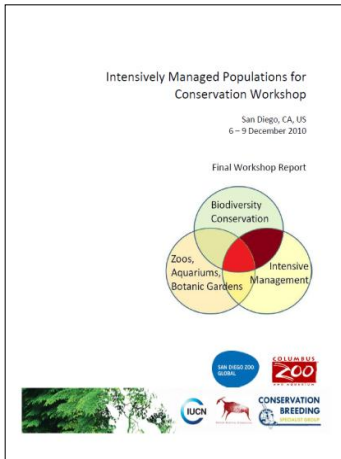
CBSG and CBSG Europe conducted a Vortex training course for participants from several European wildlife agencies, NGOs, and universities. Participants learned how to build complex stochastic population models, and will be applying their newly developed expertise to a variety of species and conservation situations, including river otter populations in the Czech Republic, Hainan gibbons in China, reintroduced orangutan populations in Sumatra, and Antigua racer (snakes) in Antigua.

### Small Mammal Field Techniques Training

ZOO/WILD/CBSG South Asia and its Conservation and Information Networks of South Asia networks for Chiroptera and Rodents, Insectivores and Scandents organized the 15th Annual Field Techniques Training, this year hosted by Kerala Agricultural University. Thirty-five bat and rodent researchers from India, Sri Lanka and Nepal attended. The intensive training focused on field techniques, research ethics, pollination ecology of rodents and bats, and several other topics both in class and field. This training was sponsored by Chester Zoo, Knowsley Safari Park, Columbus Zoo and CBSG.



## Recent Publications

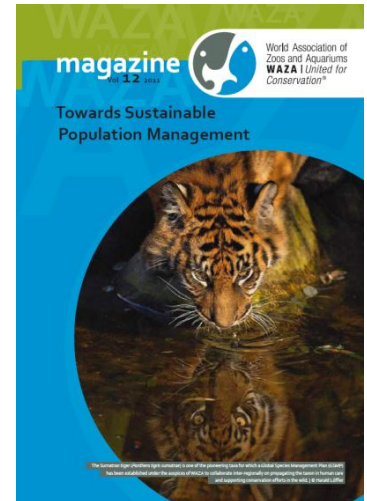


### Intensively Managed Populations for Conservation Workshop Report

Last December CBSG organized a workshop on Intensively Managed Populations (IMPs) for Conservation hosted by the San Diego Zoo. The workshop report includes over 100 recommended actions with respect to IMPs and the *ex situ* community and can guide future IMP-related conservation actions. Several meetings and projects have already developed as a result of these discussions; CBSG also devoted a full day of our 2011 annual meeting to address several key priorities identified in the IMP workshop report. The final report from this workshop is available on the CBSG website.

### WAZA Magazine: *Towards sustainable population management*

Several CBSG members and colleagues contributed papers to the recent issue of the *WAZA Magazine* (Vol. 12) devoted to sustainable population management. Many also gave presentations at the WAZA, AZA, EAZA and CBSG annual conferences outlining various facets of intensive management of populations for conservation. The *WAZA Magazine* includes papers addressing the status of regional *ex situ* populations, global programs for sustainability, genetic and mate choice considerations, and other issues surrounding the intensive management of populations for conservation. This issue is available for download from the [WAZA website](#) (links to PDF).



### Status and Distribution of Freshwater Biodiversity in the Western Ghats, India Report

The IUCN Global Species Programme's Freshwater Biodiversity Unit, in collaboration with ZOO/CBSG South Asia, conducted a Western Ghats Freshwater Biodiversity Assessment in Coimbatore, Tamil Nadu, India to review the global conservation status and distribution of 1,146 freshwater species belonging to four taxonomic groups: fish, molluscs, odonates, and aquatic plants. ZOO/CBSG South Asia and IUCN Species Survival Commission took part in planning, facilitating, training, conducting the workshop, and preparing the report, which is now available on the [IUCN website](#).

