

Announcements



Registration for the 2016 CBSG Annual Meeting

Registration for the 2016 CBSG Annual Meeting in Puebla, Mexico is open! Register at <https://waza2016.mx/cbsg#/> before 15 July to receive the discounted early bird price. The meeting will be hosted by Africam Safari in Puebla, Mexico from 6-9 October.

As we plan the agenda, we look forward to productive and meaningful discussions related to the influence of human population and behavior on species conservation planning. We ask for your input on the evolving agenda for the meeting. Your ideas for meeting content are very valuable to us—please contact us with your suggestions for working group topics or plenary speakers at members@cbsg.org.

CBSG eUpdate: July 2016

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Thanks to our translators, Jean-Luc Berthier and Elizabeth Townsend (French), and Celia Sánchez (Spanish), for helping make this publication available in three languages.



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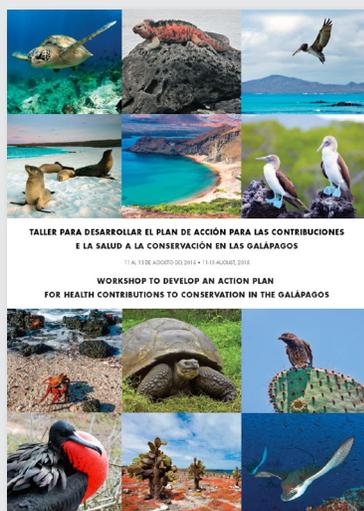
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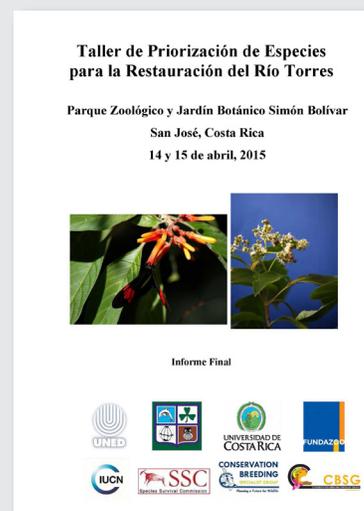
This symbol indicates that a project follows the One Plan approach to species conservation planning. Click [here](#) to learn more about the One Plan approach.

New Workshop Reports

Health Contributions to Conservation in the Galápagos
<http://www.cbsg.org/health-contributions-to-galapagos-conservation>



Rio Torres Basin Plant Prioritization
<http://www.cbsg.org/content/rio-torres-basin-plant-prioritization-2015>





Recent Activities

Facilitation and Communication Skills Training in Toronto

CBSG's mission is to "transform passionate commitment to wildlife into effective conservation." In April, 19 people from 13 organizations in six countries spent four days learning and practicing skills designed to help them do just that. The CBSG/Durrell Facilitation and Communication Skills Training Course, hosted by Toronto Zoo, provided participants with essential facilitation tools including decision making, team formation and management, conflict resolution, listening, consensus building, and cross-cultural sensitivity. CBSG North America, Toronto Zoo, and CBSG co-organized the training.



CBSG and Durrell Wildlife Conservation Trust have collaborated for years on conducting a Facilitation and Communication Skills Course each spring in Jersey, UK. Course instructors include former CBSG program officer Susie Ellis (International Rhino Foundation), CBSG Europe Program Officer Kristin Leus (Copenhagen Zoo/EAZA), and Jamie Copsey, Head of Learning and Development at Durrell.

We were honored to have Jamie play a major role in the Toronto training course. He has great depth in the subjects covered by the course and a wonderful teaching style. Everyone, including the other instructors, learned a great deal from him.

This course was targeted toward those wanting to develop the skills necessary to facilitate successful conservation planning. Participants have reported back on how they have already applied these newly-developed skills and have established an online meeting site to continue sharing with and learning from each other. On a post-workshop survey, 100% said they would recommend this course to a colleague. The greatest benefit of this course is that we have increased the pool of experienced facilitators who may contribute to saving species through effective planning. We look forward to offering this course annually.

Amphibian Ark Advance

Amphibian Ark staff and partners met in May for the second Amphibian Ark Advance. The Amphibian Ark recently completed its 2016-2019 Strategic Plan. In addition to continuing to support Conservation Needs Assessments (CNAs) and expanding amphibian husbandry training, AArk identified a commitment to encouraging and facilitating the use of the results of CNAs to develop National Amphibian Conservation Action Plans. The need to link *ex situ* programs with *in situ* conservation efforts through integrated, holistic conservation planning at the species level was also identified as a high priority. Increased collaboration with the Amphibian Specialist Group and the Amphibian Survival Alliance will promote better integration of all aspects of Amphibian Conservation.

Praise for Facilitation Course in Toronto

This is an amazing intensive course that is eye opening to the dynamics and process of facilitation and decision making!

This course provides you with the tools to deal with one of the most difficult aspects of conservation: to keep an effective and open dialogue. Aspects of this course can be applied to all aspects of life.

This course was a fantastic experience for me. The problem solving, critical thinking, and facilitation experience makes for great professional development and is extremely relevant to any team environment.

This course was extremely useful, directly applicable to my role, and very enjoyable. I am not only better able to do my best work, but can share what I learned so that many others can do the same!

PHVA Workshop for Sumatran and Bornean Orangutans

From 23-27 May, delegates gathered in Bogor, West Java, Indonesia to participate in a Population and Habitat Viability Assessment workshop (PHVA) for orangutans. This is the latest in a series of CBSG workshops focusing on orangutans, beginning with the first orangutan PHVA in 1993. The second PHVA for these two species (in 2004) laid the groundwork for a 2007-2017 Indonesia-wide action plan for orangutans. CBSG was requested to facilitate this third PHVA, which is expected to provide a basis for the next 10-year Indonesian orangutan action plan.



Photo: Galen Sjoström

The Indonesian orangutan conservation agency FORINA organized the workshop with support from ARCUS Foundation and the Orangutan Foundation, and in collaboration with the Indonesian Ministry of Environment and Forestry (KLHK), IUCN SSC Primate Specialist Group, and CBSG. Almost 100 attendees from government agencies, universities, and NGOs met to review and discuss population estimates, habitat status, and current and anticipated threats to orangutan viability and habitat. Previous *VORTEX* orangutan models were revised based on new data to provide new viability projections and insight into effective conservation strategies. Priorities for conservation action were identified.

Much work remains to be done before the results are finalized; however, land conversion to palm oil production and habitat fragmentation due to road building were considered to be key threats. The final workshop report will be available this fall and is expected to include: 1) updated information on the distribution and abundance of orangutans in Sumatra and Borneo; 2) information on the estimated abundance and projected viability of each identified population unit; 3) information on specific threats to each population unit, and on the key threats to each subspecies; 4) recommended priority mitigation strategies for each taxon; and 5) information on the likely viability of population fragments of varying sizes, for potential use in determining appropriate action.

VORTEX Training Course in Indonesia



CBSG conducted a three-day *VORTEX* training course in Bogor, Indonesia directly following the Orangutan PHVA. The course filled quickly with 20 eager students representing many Indonesian forestry offices and conservation NGOs, including FORINA and other orangutan forums, Forum Gajah (elephants), WCS-Indonesia Program, WWF Indonesia, and ZSL. Participants gained a good understanding of the features of *VORTEX 10* population modeling software through lectures and activities as well as working on their

own data. Topics included the development of baseline models, sensitivity testing, management scenario development, and other aspects of conducting population viability analysis (PVAs) as part of a conservation risk assessment. Trainees are already applying their newly acquired skills to models for orangutans, tigers, elephants, and other Indonesian species of conservation concern. Requests for additional advanced training in Indonesia are being discussed.

PVA Assistance: Sumatran Tigers and Red Wolves

CBSG has been asked recently to advise on the development of complex *VORTEX* models for two high profile conservation-oriented PVAs. For several months CBSG has been reviewing *VORTEX* models for wild Sumatran tiger populations undertaken by the Sumatran Tiger PVA team in Indonesia. CBSG met with the PVA team in the WCS-Indonesia Program office in Bogor, Indonesia on 1-2 June to refine this model and develop scenarios to explore projected habitat loss, poaching rates, and potential meta-population management strategies for mitigating these effects. CBSG also consulted with the Red Wolf PVA team (Lincoln Park Zoo, Dapper Stats, Point Defiance Zoo and Aquarium, US Fish and Wildlife Service) over the past nine months on the development of complex PVA models for captive and wild red wolf populations and potential meta-population management strategies. CBSG is proud to provide assistance in using SCTI tools such as *VORTEX* appropriately and effectively to support conservation planning for these Critically Endangered carnivore species.

Mexican Wolf Recovery Planning Update

The latest installment in the continuing recovery planning effort for the Mexican wolf took CBSG to Mexico City in mid-April. More than 30 experts on wolf population and habitat management gathered to discuss a new habitat suitability analysis and to receive an update on the demographic modeling effort now being led by CBSG staff. CBSG updated the workshop participants on the status of the *VORTEX*-based population viability model, which will be the focus of intensive revision and evaluation later this summer.

The new habitat analysis work, led by researchers at the National Autonomous University of Mexico and the University of Arizona, will focus on the Mexico landscape. The effort will likely draw heavily from the analysis originally discussed at a workshop led by CBSG Mexico in 2007. This updated analysis will consider multiple biological and sociopolitical factors in a GIS-based assessment of suitable sites for reintroduction of Mexican wolves into northern Mexico and the far southwestern United States (southern Arizona and New Mexico). Workshop participants created a comprehensive list of the factors of interest, types of data available, and the ways in which those data can be organized and manipulated in the habitat analysis. The results of the habitat analysis will be incorporated into the evolving demographic risk assessment modeling process, primarily in the form of metapopulation parameter values (number and distribution of sites, site-specific ecological carrying capacity, connectivity between habitat patches, etc.).



Photo: Oscar Moctezuma O.

Collaborative Opportunities with the Conservation Centers for Species Survival



The Conservation Centers for Species Survival (C2S2) is a consortium of zoological institutions and other private wildlife breeding centers working together to manage large, viable *ex situ* populations of endangered wildlife. One of their main programs, called the Source Population Alliance, is targeting four priority ungulate species—addax, addra gazelle, scimitar-horned oryx, and sable antelope—for conservation activities through meta-population management. Participants include North American accredited zoos and private sector landowners who share a passion for wildlife conservation and can demonstrate success in breeding these species. This scientifically rigorous management approach is designed to achieve the population abundance necessary to provide insurance, avoid extinction, and ensure healthy and socially-resilient herds.

C2S2 leadership approached CBSG to provide scientific expertise and advice to the consortium on the complexities of demographic and genetic aspects of meta-population management. Our experience in analyzing these types of management challenges, rooted in the use of population modeling tools, is ideal for helping the C2S2 community achieve their long-term population management goals. Based on the positive results of the May 2016 C2S2 Annual Meeting, where CBSG discussed opportunities for productive collaboration, we will continue to work with the C2S2 leadership to develop analyses that will help guide the conservation management of endangered ungulates.

Species Conservation Toolkit Initiative Update: June 2016

In May, SCTI hosted a workshop on methods for integrating DNA data into pedigree analysis and management. Colleagues from San Diego Zoo, University of Wisconsin, and University of Sydney worked with SCTI to delineate new methods, identify needs for further research and testing, and begin the design of software that will provide new analytical tools as companion programs or components of the *PMx* software. The work on new methods is being funded by a USA government grant received by San Diego Zoo and University of Wisconsin, with integration into *PMx* funded by SCTI partners.



In June, a new version of *PMx* was released on the SCTI website (www.vortex10.org). This version includes updates to allow the demography section to work with limited data sets (no reproduction, only one sex, etc.). While some functionality, like population projections, cannot be obtained with only limited data, basic descriptive statistics such as the age distribution and partial life tables will be provided. In the genetics section, additional data views and exports are now available. Further updates to genetics, including revised calculations of kinships for partially known animals and improved functionality for genomic or empirical kinships, will be coming soon.

The International Whaling Commission (IWC) is exploring if the SCTI population modeling software (*VORTEX* and *METAMODEL MANAGER*) might be powerful, flexible, and efficient tools for assessing threats to cetaceans from human activities. Bob Lacy presented examples of the use of the software to an IWC workshop on noise impacts, and began discussions about possible applications in threat analyses for vaquita, Southern right whales, and humpback dolphins.



Vaquita Photo: Paula Olson, NOAA