

# CBSG UPDATE



## Announcements

March 2012

### Annual Meeting

Mark your calendars: CBSG's 2012 Annual Meeting will be held in Melbourne, Australia, 4-7 October 2012. More information will be available soon at our website. We hope you plan to join us!

### SSC Specialist Group Chairs' Meeting

Thanks to the extraordinary effort of Simon Stuart, SSC Chair, and his staff, and the generous sponsorship of the Environment Agency - Abu Dhabi (EAD), and the support of the Mohamed bin Zayed Species Conservation Fund, the second IUCN SSC Specialist Group Chairs' Meeting took place on 23–27 February 2012 in Abu Dhabi. The meeting



brought together the leadership of the IUCN SSC and Global Species Program in order to advance global species conservation efforts and develop a work plan for the SSC for the next IUCN quadrennium (2013 – 2016).

Onnie Byers and Caroline Lees, CBSG Program Officer and co-convenor of CBSG Australasia, represented CBSG at the meeting but many CBSG Strategic Committee and Regional Network members were also in attendance. The ambitious meeting agenda

provided a wonderful opportunity to make contacts and establish future collaboration, and to showcase the work of CBSG, including our work on the use of virtual tools for conservation, the One Plan Approach to integrated conservation planning, and the drafting of the new *IUCN Technical Guidelines on the Management of Ex Situ Populations for Conservation*.

**What is IUCN? Check out this video explanation from the International Union for Conservation of Nature.**

<http://www.youtube.com/watch?v=0uf5e9vsXWo&feature=youtu.be>

### Revision of *IUCN Technical Guidelines*

CBSG is coordinating an effort by the SSC to revise the current *IUCN Technical Guidelines on the Management of Ex Situ Populations for Conservation*. The revised guidelines will outline suggested steps in a more formal, informed, and transparent decision-making process to provide guidance on if and when *ex situ* activities are a beneficial component of an overall species conservation strategy. Draft guidelines were discussed at the 2011 CBSG annual meeting in Prague, and revisions have been subsequently reviewed by a small drafting group comprised of several Specialist Group (SG) and Subcommittee Chairs, and assessed during a session of SG Chairs at the recent meeting in Abu Dhabi. Upon further revision the guidelines will be submitted to the SSC for formal endorsement.

## **PMx User Manual Now Available**

The first version of the complete *PMx User Manual* (version 1.0) is now available. The manual PDF (as well as the PMx software program itself) can be downloaded at [www.vortex9.org/PMx/PMx.html](http://www.vortex9.org/PMx/PMx.html). The PMx population management and planning software program was developed by Jonathan Ballou (Smithsonian Conservation Biology Institute) and Robert Lacy (Chicago Zoological Society) in concert with J.P. Pollak (Cornell University) and support from IMLS. The *PMx User Manual* is a product of the joint efforts of many population managers around the world and is edited, produced and maintained by CBSG. The full manual is currently being translated into Japanese, Chinese and Spanish (as is the PMx software itself), and will soon be available in these languages. This will be a dynamic document that will evolve as PMx continues to improve and expand, and will be periodically updated. Please send any manual corrections, additions, updates or suggestions to Kathy Traylor-Holzer at the CBSG Office, or contact us if you are interested in providing translation into other languages.



## **Recent Workshops**

### **Gamete Banking Workshop**

A small group of population biologists (including CBSG) and species managers met at the Saint Louis Zoo on 10-11 January to address how best to use gamete banks to improve population management in species conservation programs. A major focus of the meeting was to categorize specific tools and methods within the PMx software program that can be used: 1) to identify priority individuals from which to collect samples to establish a Genome Resource Bank; and/or 2) to develop a strategy for optimal use of stored gametes (and embryos) via assisted reproduction. Four species (red wolf, Mexican wolf, black-footed ferret, whooping crane) were examined as case studies to test PMx tools and to develop a list of current and proposed software features. An anticipated result is the future development of a module within the PMx program related to gamete banking and assisted reproduction.



### **Revision of the Paraíba River Action Plan**

In May 2010, the Chico Mendes Institute (ICMBio) and CBSG Brasil organized a workshop to prepare the first Brazilian action plan on watersheds and aquatic vertebrates (fish, turtles and crustacean taxa). The 42 participants representing 20 institutions defined the main objective of the action plan as restoration and maintenance of the endangered aquatic species in the basin of the Paraíba do Sul River over the next 10 years. The plan contains 12 goals and 56 actions, which are monitored yearly by an advisory group, responsible for implementing the planning and fundraising projects aimed at completing actions set out in the plan.

On 5-7 March 2012, the entire advisory committee was present for the second annual revision of the action plan. They reviewed progress of already applied actions, added new actions and eliminated or merged others. The revision results determined that 4% of the actions were completed, 25% were in the process of completion with no foreseeable problems, 32% were in the process of completion with some foreseeable problems, 23% have recently started but were experiencing delays and 16% still need to be initiated. The advisory committee concluded that overall, the Paraíba do Sul action plan is proceeding as programmed. In other exciting news, this action plan has been chosen to be partially supported by the Paraíba do Sul Watershed Committee through funding of R\$ 1 million (US \$600,000.00). A third annual meeting will take place in March of 2013.

## Sumatran Tiger GSMP Meeting

Critically Endangered in the wild, the Sumatran tiger (*Panthera tigris sumatrae*) is managed by five *ex situ* regional programs – EAZA, ZAA, AZA, JAZA and PKBSI – with a total of 375 tigers held globally. A WAZA Global Species Management Plan (GSMP) was established for the Sumatran tiger in 2008, one of the first four GSMPs. The second meeting of the GSMP committee was held on 2-3 March and hosted by Dreamworld in Coomera, Australia, and was attended by species coordinators and advisors from all five regional programs. CBSG staff serves as the population management advisor to the GSMP and also assisted in facilitation of the meeting.

The global *ex situ* population represents about 95% gene diversity. The four populations outside of Indonesia each retain < 90% gene diversity and are mostly descended from the same founders, emphasizing the importance of the range country population. The GSMP committee discussed regional and global population goals, strategies, and needs, and identified actions to address these needs. These include a few selected breedings and inter-regional transfers of tigers to demographically and genetically strengthen regional populations. Other opportunities for inter-regional cooperation include collaborative research efforts and *in situ* conservation support. As one of the first GSMPs, the structure, administration and reporting of this GSMP is serving as a test case for the further development of the GSMP framework by WAZA's Committee for Population Management (CPM).



## Ongoing Projects

### PHVA for the Yellow-Shouldered Blackbird in Puerto Rico

Invasive species are often cited as the second most significant driving force of species extinction, after the effects of human activity (habitat loss, overexploitation and pollution). CBSG, in collaboration with the US Fish & Wildlife Service, has entered into a contract with the US Department of Agriculture's Invasive Species Coordination Program to systematically evaluate the impact of invasive species on native species persistence.

The first case study takes place in Puerto Rico, focusing on the native Yellow-Shouldered Blackbird (*Agelaius xanthomus*) and its interaction with the invasive Shiny Cowbird (*Molothrus bonariensis*). A preliminary population viability analysis (PVA) meeting was held this past January at the US Fish & Wildlife offices in Boquerón, with experts on the biology and management of both species in attendance, as well as a representative from the SSC Invasive Species Specialist Group. The participants began the process of analyzing more than 25 years of data in order to construct separate demographic simulation models for the two species. Using the new metamodeling software developed by staff of the Chicago Zoological Society and CBSG, they are now physically linking the models to examine the consequences of interaction between the two species, in the context of the existing species management program.



Shiny Cowbird

This meeting will be followed in early April by a second PVA meeting, designed to verify input dataset accuracy and to refine our baseline demographic models. This effort will culminate in a PHVA-style species planning meeting in late summer, where the results of the PVA and information gathered during focused discussions and deliberations among a variety of stakeholder representatives will provide specific species management recommendations to federal and local authorities.



## Upcoming Workshops

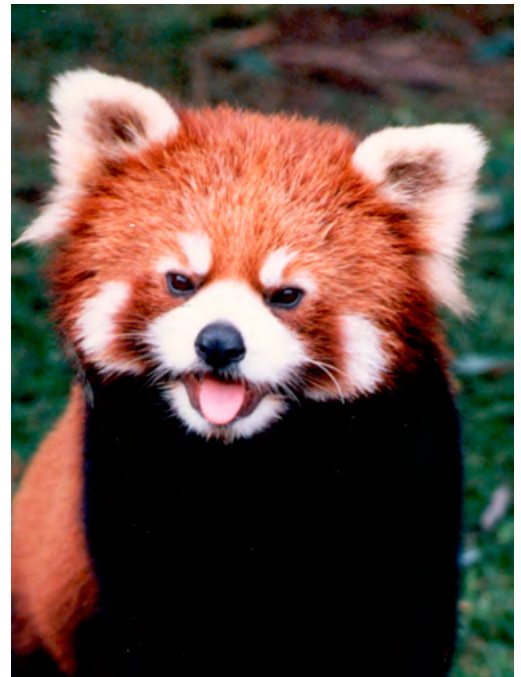
### Conserving Djibouti's Priority Land Animals

From 26-29 March 2012, the workshop "Conserving Djibouti's priority land animals" will be held in Djibouti, hosted by the Djibouti Ministry of Housing, Urbanism and Environment and jointly organized by CBSG (Europe and Brasil networks), the IUCN/SSC Equid, Antelope, Cat and Galliform Specialist Groups, Association DECAN (DECouvrir et Aider la Nature), The World Pheasant Association, Association Beauval Conservation et Recherche, and ZooParc de Beauval. The workshop aims to develop conservation strategies for selected priority land animals (or appropriate groupings of them): Somali wild ass, Grevy's zebra, gerenuk, beira, beisa oryx, leopard, cheetah, Soemmering's and Pelzeln's gazelles, Salt's dik-dik and Djibouti francolin. The workshop will follow a process in compliance with the IUCN/SSC *Strategic Planning for Species Conservation Handbook*, will build upon former conservation action plans from the area, and will be preceded by a one-day seminar focusing on conservation issues for Djibouti in general and the conservation status of Djiboutian land animal species in particular.

### Red Panda Global Masterplan and Red Panda PHVA

During 24-27 April 2012, a masterplanning workshop for the global *ex situ* population of red pandas (*Ailurus fulgens*) will be hosted by Rotterdam Zoo, home of the international studbook for this species. The workshop will be facilitated by CBSG Europe/EAZA Population Management Advisor and will be attended by the international studbook keeper, managers of the regional programs, representatives of the regional associations, and several members of WAZA's Committee on Population Management (CPM). The red panda *ex situ* population has been managed at the global level for decades, and several global masterplanning sessions have already been held in the past. Recently, the red panda was selected by CPM as one of six trial GSMPs (Global Species Management Plans). Like the Sumatran Tiger GSMP, this meeting will serve as a testing ground for the proposed GSMP application and management procedures as well as formalize the working procedures for the Red Panda GSMP.

This meeting is nicely complemented by a series of Red Panda PHVA workshops in the range countries, beginning with a PHVA held in Nepal in 2010. A Red Panda PHVA will be conducted for China in June 2012, followed by a PHVA in India in 2013. This concurrent species planning for the regional and global *in situ* and *ex situ* red panda populations facilitated by CBSG will work toward an integrated approach to conservation planning for this species.



© Takashi Miyake

### Mesoamerican Reptiles Red List Review Workshop

From 6 -10 May 2012, a workshop to review the status of the populations of Mesoamerican Reptiles will be held at Palo Verde Biological Station, Guanacaste, Costa Rica. It is being organized by the Biology School, the Clodomiro Picado Institute of the Universidad de Costa Rica, the Organization for Tropical Studies, Nature Serve, Fundación pro Zoológicos, and CBSG Mesoamerica. Financed by the National Science Foundation, USA, this workshop has the support and collaboration of the Species Survival Commission and IUCN Regional Office (ORMA). More than 40 experts on Mesoamerican Reptiles will participate in this workshop, resulting in an invaluable exchange of information about the conservation of reptiles in the region.

## Recent Training Activities

### PMx Population Planning Workshop in Tokyo

In 2008, CBSG and ISIS conducted a series of studbook training courses for the Japanese Association of Zoos and Aquariums (JAZA). Since that time, JAZA has developed and conducted its own *ex situ* population management training program for studbook keeping and basic population management (using PM2000). The most recent CBSG training effort took the next step – providing advanced population management training to 16 JAZA species coordinators (both regional and international studbook keepers). With support from JAZA and a WAZA training grant, CBSG (including Jonathan Ballou from SCBI) led a four-day training course on 7-10 February on the use of PMx for population planning for *ex situ* populations in Japan, including species such as the Japanese serow, Oriental white stork, red panda and Sumatran tiger. Additional training and materials were provided to JAZA instructors to enable the development of continued advanced training opportunities within Japan.



### Wildlife Disease Risk Analysis

CBSG Australasia is leading a global collaborative team in the development of a new *Guide to Wildlife Disease Risk Analysis* (DRA). This project involves the first formal collaboration between four SSC Specialist Groups: Conservation Breeding, Reintroduction, Wildlife Health and Invasive Species. Thanks to financial support from a University of Minnesota Global One Health Project Grant, an electronic training module is being developed in correspondence with the *Guide* to maximize the value of this new resource. Part of module development includes testing a training program and associated teaching resources through two face-to-face workshops. In February, Richard Jakob-Hoff facilitated the first of these full-day workshops for a group of 27 wildlife veterinarians as part of a Short Pathology Course, which was hosted by the Taronga Conservation Society's Australian Registry of Wildlife Health in Sydney, Australia.

After an introduction to the DRA process and key concepts, the participants split into small groups to apply the process to five self-selected, locally relevant wildlife disease scenarios. A reflection exercise at the end of the day enabled the group to articulate the insights, challenges and issues that arose, which will be used to further develop and refine the training module. In April, Richard will present a similar workshop at an International Zoological Medicine Course hosted by the Buin Zoo, Santiago, Chile. We expect the training module will be completed by July 2012, at which time a train-the-trainer program will be rolled out, targeting individuals in all major geographic areas of the globe who, once trained, will organize a training workshop in their area focused on locally relevant topics for wildlife DRA. Anyone who would like to be considered should contact Richard at [richard@cbsgaustralasia.org](mailto:richard@cbsgaustralasia.org).

### Course on Veterinary Medicine and Management of Captive Wild Animals

On 23-25 February, the Thomas Belt Zoo of Juigalpa, Chontales, Nicaragua, with the collaboration of Fundación pro Zoológicos (FUNDAZOO) and with the support of the Mesoamerican and Caribbean Zoos and Aquariums Association (AMACZOOA) and CBSG Mesoamerica, organized a course for veterinary doctors called Veterinary Medicine and Management of Captive Wild Animals. DVM Randall Arguedas from FUNDAZOO and CBSG Mesoamerica taught the course to 36 Nicaraguan DVMs that represented several organizations and institutions, such as the Animal Protection Society, Fundación A-Marte, PROVESA (Epidemiological Surveillance), MAGFOR (State institution), Commercial Science University, Thomas Belt Zoo, and individual doctors. Arguedas also trained 23 zoo staff members about animal management, design and maintenance of enclosures, food handling and feeding procedures.

