

Announcements

Sign and Share EAZA's Climate Change Petition

Join us in signing the EAZA Pole to Pole petition demanding that world leaders support all measures that help keep global warming under the 2°C limit and work towards a binding global agreement at the intergovernmental meeting on climate change in Paris in December 2015.

Sign the petition at <http://www.poletopolecampaign.org/it-is-time-to-act-2-degrees-is-the-limit/> and help by forwarding the petition on to your networks.

Recent Publications

Saving critically endangered vertebrates is possible, but requires urgency and investment

A recent paper published in *Current Biology*, to which CBSG members and staff contributed, found that an investment of an estimated US\$1.3 million per species could significantly increase the chances of survival for Alliance for Zero Extinction (AZE) species on the brink of extinction. Researchers developed a "conservation opportunity index" to quantify the possibility of achieving successful conservation of a species, both in its natural habitat and in zoo insurance populations.

To read the press release, visit <http://www.cbsg.org/blog/201503/saving-critically-endangered-vertebrates-possible-requires-urgency-and-investment>.

Find the paper at <http://www.sciencedirect.com/science/article/pii/S0960982215000809>.

Regent Honeyeater Disease Risk Analysis Report

The report from the Regent Honeyeater Disease Risk Analysis workshop is now available to read and download at <http://www.cbsg.org/content/regent-honeyeater-disease-risk-analysis-2014>.

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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.



Regent Honeyeater © Dean Ingwersen



Recent Activities

Indonesian Rhino Conservation Planning Workshops



© Phil Miller

The Javan (*Rhinoceros sondaicus*) and Sumatran (*Dicerorhinus sumatrensis*) rhinos are two of the world's most Critically Endangered mammals. The current Javan rhino population is estimated to be just 60 animals in West Java's Ujung Kulon National Park, while around 100 Sumatran rhinos occupy fragmented habitats in Sumatra and perhaps Borneo. Urgent conservation action is required to save these species from extinction.

CBSG traveled to Bogor, West Java to conduct separate conservation planning workshops for these two species. The Javan Rhino Workshop was hosted by CBSG Indonesia at Taman Safari Indonesia, sponsored by the US Fish and Wildlife Service, and held in collaboration with the IUCN SSC Asian Rhino Specialist Group, the International Rhino Foundation, World Wildlife Fund, and key Indonesian agencies. The workshop followed a broad Population and Habitat Viability Assessment (PHVA) format, identifying key threats and evaluating extinction risk using quantitative risk assessment. Topic-based working groups determined important actions related to species management, habitat management, and stakeholder engagement.

After a weekend break and a trip to Sumatra's Way Kambas National Park to visit the Sumatran Rhino Sanctuary, CBSG returned to Taman Safari Indonesia to conduct a population viability analysis (PVA) for the Sumatran rhino. This workshop was sponsored by the Disney Worldwide Conservation Fund and focused intensively on demographic analysis of fragmented populations. It included an evaluation of the many factors that may be limiting the species' reproductive capacity in the wild, including low population density leading to few encounters between adults, inbreeding depression, and reproductive pathology among adult females. One of the key outputs was a detailed qualitative threats map that can be used to prioritize research and management to mitigate threatening human activities.



Greater Bilby Conservation Summit

The greater bilby (*Macrotis lagotis*) is a widely known and beloved Australian icon that has suffered an ongoing decline in range and abundance since the introduction of exotic mammals to Australia. The species is now listed as Vulnerable at a national level and as Endangered in Queensland, where as few as 300 individuals remain.

Thirty-nine participants from 29 organizations met in Queensland from 10-13 March to forge a plan for recovery of the greater bilby across its former range. The workshop was facilitated by CBSG, organized by the Save the Bilby Fund, and sponsored by Taronga Conservation Society Australia, Dreamworld, the Australian Federal Government Threatened Species Unit, and the Queensland Government Threatened Species Unit.

The outcomes of the workshop will inform a review of the Federal Government National Bilby Recovery Plan as well as state conservation plans for the species. A number of important steps were taken during the workshop, including: the appointment of a Bilby Recovery Coordinator; agreement on a submission to the Federal Threatened Species Commissioner in preparation for a forthcoming national summit on threatened species; and the formal acknowledgement and prioritization of the critical role of Australia's Traditional Owner communities as stewards of this species in the landscape.





Road to Recovery for the Vancouver Island Marmot

The Vancouver Island marmot (*Marmota vancouverensis*) is a conservation success story in action. This genetically-distinct species inhabits sub-alpine meadows on the island of Vancouver and is one of only five endemic Canadian mammals. Wild populations declined dramatically starting in the late 1980s, possibly due to changing habitat and predator-prey conditions. Only about 30 marmots remained in the wild by 2000.



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In 1996, the Vancouver Island Marmot Recovery Team (MRT) recognized the essential conservation role of an *ex situ* breeding population as a source for reintroduction and population reinforcement. Fifty-five marmots were captured over several years and from several locations to establish a breeding program at Toronto Zoo, Calgary Zoo, and the Mountain View Conservation Society. The Marmot Recovery Foundation (MRF), a non-profit charity, was established in 1998 to develop necessary partnerships and raise funds for recovery efforts. The Tony Barrett Mount Washington Marmot Recovery Centre, a dedicated marmot breeding facility, was built in 2000 within marmot habitat to facilitate release success.

Since 2003, over 450 marmots have been released into the wild, leading to the re-establishment of a population in the southern core of the species' range. This is the first step toward the recovery goal of 400-600 marmots distributed among three populations. Additional releases have supported fledgling populations in northern parts of the range. Recent research has focused on data collection on the successful southern population at Nanaimo Lakes, leading MRF and MRT to request for CBSG to lead a PHVA workshop to help guide future recovery planning for this species.

MRT, MRF, and other diverse stakeholders convened at the Calgary Zoo from 3-6 March to discuss and evaluate the status of and challenges to the various *in situ* and *ex situ* marmot populations; identify important data gaps hindering effective management; and recommend actions to promote marmot recovery. Given the uncertain status of the existing wild populations and the degree of risk they face to future declines and threats, and since only one potentially viable population of 100-200 marmots has been established so far, participants concluded that the *ex situ* population continues to serve a critical conservation role for this species.

Strategies were developed to address needed data collection, compilation, and analysis to improve PVA efforts. Field monitoring and management objectives were recommended to improve viability and response capabilities to changing population status. Resource needs for these efforts were prioritized and MRF funding strategies discussed. The resulting One Plan approach conservation effort, which combines fully integrated *in situ* and *ex situ* populations along with collaboration among government, industry, academia, zoos, and an NGO, has averted species extinction and is progressing toward species recovery.

Planning for Taronga Conservation Society's Science Department

At the Taronga Conservation Society, responsibility for applying and communicating conservation science stretches across departments and involves many staff. Enabling and supporting this wider effort is the Conservation Science Department, a group of ten staff members who undertake independent scientific investigations in the areas of ecology, health, behavior, nutrition, and population viability to inform wildlife management decisions, whether in the zoo or in the wild.



In December 2014, CBSG Australasia facilitated a two-day future planning workshop for the department. The workshop was organized by Rebecca Spindler and included both science department staff and representatives from a range of current and potential research-oriented partner institutions. Participants developed a vision for their ideal department and a plan for achieving that vision. Fourteen priority goals were identified with associated actions, a number of which have been completed in recent months.



Upcoming Activities

Bush Dog PVA and Disease Risk Analysis (DRA)

The bush dog (*Speothos venaticus*) is a small (10-18 lb) social canid found in Central and South America. Despite its extensive range, the species is very rare in most areas. In late March, CBSG and CBSG Brasil will conduct a Bush Dog PVA and DRA workshop to assess the threats and viability of bush dog populations throughout their range. *OUTBREAK* will be used with *VORTEX* to analyze the impact and threats of disease on bush dogs. Insights gained from this workshop will be shared with the IUCN SSC Canid Specialist Group.



Rio Torres Basin Prioritization

In 2008, CBSG Mesoamerica and FUNDAZOO organized a workshop to prioritize a list of tree and shrub species for reforestation and rehabilitation of western Central Valley, Costa Rica. This list (<http://www.cbsg.org/content/ex-situ-plant-conservation-costa-rica-2008>) is referenced in several environmental management departments of different municipalities in the region and used to guide collection, nursery, and planting in areas to be reforested.

CBSG Mesoamerica and FUNDAZOO, along with Universidad de Costa Rica and Universidad Estatal a Distancia, are organizing a similar workshop in April for the Rio Torres basin region. This area has undergone various environmental rehabilitation efforts, and the workshop organizers expect that the outcome will help in the ongoing implementation of these and other new conservation actions led by regional municipalities and other organizations.