

# CBSG update

January 2017



## Publications

# **2016 CBSG Annual Meeting Proceedings**

The proceedings from the 2016 CBSG Annual Meeting are now available at <http://www.cbsg.org/latest-news/cbsg-annual-meeting-proceedings>.

**CBSG Annual Meeting**  
6-9 October 2016 + Puerto, Mexico

In early October, the CBSG annual meeting gathered in Puerto Morelos for the 2016 CBSG Annual Meeting, where we were hosted by Cecilia Salas. Participants from 25 countries focused their energy on considering the many ways human beings can contribute to the environment and affect species conservation (and more), and how CBSG can respond.

Our invited speaker, Iain Banks (from EngenderHealth) discussed projections for global human population growth. He described how providing access to family planning resources and empowering and educating women and girls around the world can help mitigate the effects of the booming global population and the problems that come along with it. The CBSG Annual Meeting Development group is in an activity that asked participants to consider why conservationsists avoid talking about human population growth. Participants were asked to write a short paper or a report on the results of their activity coming soon.

Working groups explored topics related to the theme as well as other relevant issues to our community, such as prioritizing the collection of samples for genetic research, improving the use of molecular tools for species identification, and integrating species distribution models into CBSG processes. The results of the actions formed as a result of working groups include:

1. Reviewing the CBSG project library to retrospectively analyze the value of adding human dimension into planning processes and how it contributed to success.
2. Preparing a list of useful science resources and contact information for the CBSG community.
3. Organizing a training program for species distribution models to be integrated into the CBSG workshop process.

Summary reports of the working groups are available on the following page, along with links to full reports hosted on the CBSG website.

While not all planes of work accomplished during the day, participants filled with curiosity explored the Puerto Morelos and Isla Holbox tours that allowed participants to see the Continues on next page



The document includes an overview of the meeting, working group reports, and a sample of the many photos taken during the meeting. Many thanks to Africam Safari for being incredible hosts.

We look forward to  
seeing you at the 2017  
CBSG Annual Meeting  
in Berlin, Germany from  
12-15 October 2017.

## **CBSG eUpdate: January 2017**

*Contributors: Onnie Byers, Caroline Lees, Phil Miller,  
Kathy Taylor-Holzer*

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

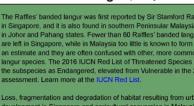


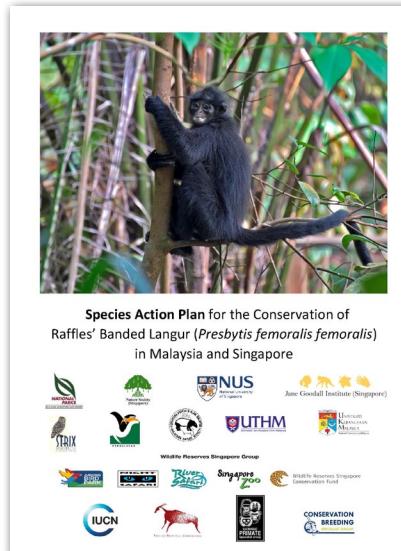
Visit us at <http://www.cbsg.org>

## In this issue:

Publications .....	1
Bellinger River Snapping Turtle Planning.....	2
Whooping Crane Conservation Planning .....	2
Southeast Asian Zoo Population Management.....	3
Sumatran Tiger GSMP Meeting.....	3
Chinese White River Dolphin PHVA.....	4

## New Workshop Reports and Summaries

Species Conservation Planning Workshop Summary	
<b>Raffles' Banded Langur</b> ( <i>Presbytis femoralis femoralis</i> )	 
The Raffles' Banded Langur was first recorded by Sir Stamford Raffles in Singapore, and it is now restricted to the island of Sumatra, Indonesia, in Sabah and Phuket states. Fewer than 500 Raffles' banded langurs are left in Singapore, while in Malaysia less than 100 is known to form an isolated population. The Raffles' banded langur is one of the most endangered primate species. The 2016 IUCN Red List of Threatened Species lists the subspecies as Endangered, elevated from Vulnerable in the 2008 assessment. Learn more at the <a href="http://iucnredlist.org">IUCN Red List</a> .	 
Loss, fragmentation and degradation of habitat resulting from urban development in Singapore and agricultural conversion in Malaysia have reduced the distribution of the Raffles' banded langur to a large number of small, isolated populations across its range. These populations are vulnerable to a heightened risk of loss from the effects of genetic deterioration, disease, predation, weather events, disease outbreaks and other catastrophic events.	
<b>Priority Goals</b>	Contact: Andre Arg (IUCN SSC Conservation Breeding Specialist Group) andre.arg@zooed.org.es
In August 2016, 31 stakeholders from 15 organizations met at the Singapore Zoo to plan a future for the Raffles' banded langur in Malaysia and Singapore. Participants began by constructing a long-term vision and associated conservation goals. They explored in detail the challenges to achieving those goals and used the products of those discussions to set objectives and recommended actions. Click on the text in the table below to learn more about each goal and related actions.	
<b>Recover and protect Raffles' banded langur in the wild, ensuring that:</b>	
<ul style="list-style-type: none"> <li>• the greatest extent of the taxon is intact, where necessary restored, and safeguarded</li> <li>• wild populations are monitored</li> <li>• genetic and demographic viability are ensured</li> </ul>	
<b>Gather key data through ongoing studies, ensuring that:</b>	
<ul style="list-style-type: none"> <li>• its taxonomy and systematics are clarified, and the biology and ecology of the taxon are well understood</li> <li>• long-term monitoring and conservation research are in place</li> </ul>	
<b>Secure the necessary resources and commitments for long-term conservation of Raffles' banded langur, ensuring that:</b>	
<ul style="list-style-type: none"> <li>• there is strong public awareness and government support</li> <li>• cross-country collaboration is strengthened and long-term financial support has been secured</li> </ul>	
Full workshop report available at: <a href="http://www.cbsg.org/content/species-action-plan-conservation-raffles-banded-langur-2016">http://www.cbsg.org/content/species-action-plan-conservation-raffles-banded-langur-2016</a>	
Workshop organized and sponsored by: Wildlife Reserves Singapore	
Workshop design and facilitation: IUCN SSC Conservation Breeding Specialist Group (CBSG)	



# **Species Action Plan for the Raffles' Banded Langur in Malaysia and Singapore**

Species Conservation Planning Workshop Summary															
<b>Chacoan Peccary (<i>Calonanus wagneri</i>)</b>															
<p>The Chacoan Peccary is one of the most endangered species that includes the area between the Gran Chaco of Bolivia, Paraguay and Argentina. The Gran Chaco is the second largest ecoregion in South America after the Amazonia. In 1993, the entire Chacoan peccary population was estimated to be less than 5,000 individuals and has been declining ever since. The main threat to the Chacoan Peccary is hunting, primarily because of habitat destruction and over-hunting. Recent economic changes have greatly boosted the export of natural resources and agriculture production. Large areas of the Gran Chaco are now under cultivation, mainly for soybean production. These trends, in addition to the already unsustainable subsistence hunting that occurs in the region, represent a major threat to the survival of the Chacoan peccary. Despite the threats, the Chacoan Peccary is still considered as Least Concern by IUCN. Its protection, the last, and only conservation plan for the species was written more than 20 years ago. Learn more at the <a href="#">IUCN Red List</a></p>															
<b>Priority Goals</b>															
<p>Representatives from Argentina, Paraguay, and Bolivia, representing government agencies, indigenous communities, Mennonite communities, NGOs, and research institutions reviewed the species status and distribution and its population viability and habitat requirements. The following priority goals were developed to address the main threats: hunting, habitat loss and lack of knowledge. Potential roles for captive breeding programs were also assessed.</p>															
<table border="1"> <tr> <td>All responsible institutions for hunting control operate efficiently and in a coordinated way.</td> </tr> <tr> <td>The species is considered emblematic of Chaco conservation and under the maximum level of protection.</td> </tr> <tr> <td>There is no illegal hunting, pet trade, or commercialization of Tagua bides and community-based monitoring programs of subsistence hunting and biological data are implemented.</td> </tr> <tr> <td>Education and awareness programs of dogs and dogs' impact on wildlife are implemented to reduce the number of dogs to the minimum necessary.</td> </tr> <tr> <td>The value of the Chacoan Peccary's resources and services, is recognized.</td> </tr> <tr> <td>There is interaction among relevant actors (government, research institution, NGOs, etc.) to promote sustainable alternative land uses and to develop and implement programs to reduce the impact of agriculture and pastoral activities on the species.</td> </tr> <tr> <td>Regulations for sustainable practices are improved and designed to be locally appropriate and coordinated among the three range countries.</td> </tr> <tr> <td>New protected areas are created and the existing ones are consolidated.</td> </tr> <tr> <td>Alternative methods to facilitate the tilling of land for local people within the species range are identified and promoted to secure social lands.</td> </tr> <tr> <td>There is a standardized system for monitoring the species and its habitat use as well as standardized protocols for radio telemetry studies.</td> </tr> <tr> <td>There is information about the biology and ecology of the species as well as its socio-economic value and the different perspectives of the society and research are available at the higher education institutions to encourage research on the topic (CONICET, CONICYT, universities).</td> </tr> <tr> <td>Locally adapted environmental education programs are established, in local language, assessing the importance of environmental conservation and sustainable practices.</td> </tr> <tr> <td>Captive breeding centers are established to collect genetic information on the species and develop a standardized protocol for captive management.</td> </tr> <tr> <td>There is a collaborative system among captive breeding centers, the IUCN Specialist Group, and CCC, and CCC works as liaison to coordinate activities about the species.</td> </tr> </table>		All responsible institutions for hunting control operate efficiently and in a coordinated way.	The species is considered emblematic of Chaco conservation and under the maximum level of protection.	There is no illegal hunting, pet trade, or commercialization of Tagua bides and community-based monitoring programs of subsistence hunting and biological data are implemented.	Education and awareness programs of dogs and dogs' impact on wildlife are implemented to reduce the number of dogs to the minimum necessary.	The value of the Chacoan Peccary's resources and services, is recognized.	There is interaction among relevant actors (government, research institution, NGOs, etc.) to promote sustainable alternative land uses and to develop and implement programs to reduce the impact of agriculture and pastoral activities on the species.	Regulations for sustainable practices are improved and designed to be locally appropriate and coordinated among the three range countries.	New protected areas are created and the existing ones are consolidated.	Alternative methods to facilitate the tilling of land for local people within the species range are identified and promoted to secure social lands.	There is a standardized system for monitoring the species and its habitat use as well as standardized protocols for radio telemetry studies.	There is information about the biology and ecology of the species as well as its socio-economic value and the different perspectives of the society and research are available at the higher education institutions to encourage research on the topic (CONICET, CONICYT, universities).	Locally adapted environmental education programs are established, in local language, assessing the importance of environmental conservation and sustainable practices.	Captive breeding centers are established to collect genetic information on the species and develop a standardized protocol for captive management.	There is a collaborative system among captive breeding centers, the IUCN Specialist Group, and CCC, and CCC works as liaison to coordinate activities about the species.
All responsible institutions for hunting control operate efficiently and in a coordinated way.															
The species is considered emblematic of Chaco conservation and under the maximum level of protection.															
There is no illegal hunting, pet trade, or commercialization of Tagua bides and community-based monitoring programs of subsistence hunting and biological data are implemented.															
Education and awareness programs of dogs and dogs' impact on wildlife are implemented to reduce the number of dogs to the minimum necessary.															
The value of the Chacoan Peccary's resources and services, is recognized.															
There is interaction among relevant actors (government, research institution, NGOs, etc.) to promote sustainable alternative land uses and to develop and implement programs to reduce the impact of agriculture and pastoral activities on the species.															
Regulations for sustainable practices are improved and designed to be locally appropriate and coordinated among the three range countries.															
New protected areas are created and the existing ones are consolidated.															
Alternative methods to facilitate the tilling of land for local people within the species range are identified and promoted to secure social lands.															
There is a standardized system for monitoring the species and its habitat use as well as standardized protocols for radio telemetry studies.															
There is information about the biology and ecology of the species as well as its socio-economic value and the different perspectives of the society and research are available at the higher education institutions to encourage research on the topic (CONICET, CONICYT, universities).															
Locally adapted environmental education programs are established, in local language, assessing the importance of environmental conservation and sustainable practices.															
Captive breeding centers are established to collect genetic information on the species and develop a standardized protocol for captive management.															
There is a collaborative system among captive breeding centers, the IUCN Specialist Group, and CCC, and CCC works as liaison to coordinate activities about the species.															
<p><b>Full workshop report available at: <a href="http://www.cgi.org/intcetos/chacoan-peccary-conservation-strategy-2016">http://www.cgi.org/intcetos/chacoan-peccary-conservation-strategy-2016</a></b></p>															
<p><b>Workshop organized by:</b> IUCN SSC Peccary Specialist Group, BCI, Guyra, Cucci, CCC.</p>															
<p><b>Keynote speakers:</b> Mauricio Zapata (Species Conservation Program, IUCN SSC Specialist Information Platform Sub-committee), the IUCN SSC Conservation Breeding Specialist Group (CBG) (Conservation Breeding Specialist Group (EAFN) (Captive breeding and facility), IUCN SSC Conservation Breeding Specialist Group (CBG) (Brazil) Network.</p>															
 <b>CONSERVATION BREEDING</b>   <p><b>Z. Jane Pfeiffer, Zoologische Gesellschaft für Arten- und Populationsschutz (ZGAP)</b></p> <p><b>Contact:</b> Mauricio Alzola <a href="mailto:m.alzola@cgi.org">m.alzola@cgi.org</a></p>															

**Raffles' Banded Langur**  
**Workshop Summary**  
[http://www.cbsg.org/content/  
workshop-summary-raffles-  
banded langur](http://www.cbsg.org/content/workshop-summary-raffles-banded-langur)

# **Species Action Plan for the Raffles' Banded Langur in Malaysia and Singapore**

## **Chacoan Peccary Workshop Summary**



## Recent Workshops

### Planning Recovery for the Bellinger River Snapping Turtle

The Bellinger River snapping turtle (*Myuchelys georgesi*) is a medium-sized freshwater turtle known only from the Bellinger catchment on the central east coast of Australia. Within the catchment the species is restricted to the Bellinger and possibly Kalang Rivers and is currently listed as Critically Endangered under the Threatened Species Conservation Act New South Wales (1995). In February 2015, a number of *M. georgesi* were found dead and dying in the Bellinger River. An investigation confirmed a disease outbreak extending across the known range of the species, with no other species apparently affected. Population size estimates before the crash ranged from 1500-4500. Recent surveys indicate as few as 200-300 turtles, predominantly juveniles, remain in the river.



© Shane Ruming

Though disease outbreak is widely understood to have precipitated the current extinction crisis in Bellinger River snapping turtles, experts recognize that a range of other factors may have predisposed the species to disease risk, and may prejudice its recovery or pose a future risk to the species should it be successfully recovered.

To discuss these issues and to agree a plan of priority actions for the recovery and conservation of the species, 15 experts from eight organizations gathered in Sydney, Australia from 1-2 November, 2016. The workshop was hosted by Taronga Zoo, organized and funded through the Office of Environment and Heritage, NSW, and facilitated by CBSG Australasia.

The workshop successfully integrated a disease risk analysis (DRA) into a One Plan approach conservation planning framework. The program alternated between working group sessions—in which one group worked specifically on disease and the other on the broader risks to long-term recovery and conservation of the species—and plenary sessions where the results were reported and synthesized. The resulting action plan, which includes disease investigation and mitigation measures, protection and threat mitigation on the river, and captive breeding for release, is currently in review.

### Whooping Crane Conservation Planning Update



© Klaus Nigge/Parks Canada-Wood Buffalo National Park

Our work continues with US and Canadian federal wildlife management authorities on whooping crane recovery planning. The second workshop took us back to Calgary where 25 experts on species biology and conservation met for three days at the Calgary Zoo to continue the population viability analysis (PVA) effort initiated one year earlier. Specifically, participants used this workshop to identify a set of nearly 30 scenarios for evaluation using the PVA modeling tool *VORTEX*, with each scenario including one or more of the existing wild whooping crane populations and with explicit linkage to the current captive population. The simulations would help species managers to determine the characteristics of the whooping crane metapopulation—number of subpopulations, abundance of cranes in each subpopulation, extent of demographic and genetic connectivity among subpopulations, etc.—that would be most effective at achieving long-term recovery across the species' current range.

Through the first six months of 2017, CBSG staff will collaborate with workshop participants to develop detailed input data specifications for each management scenario and to generate the appropriate output from model results. Our plan is to hold a third workshop, this time utilizing a modified PHVA workshop approach, to use the final results of the PVA to guide the development of a scientifically sound species management plan.

## Promoting Population Management in Southeast Asian Zoos

Zoos in Southeast Asia reside within a biodiversity hotspot under enormous threat. These zoos care for a myriad of threatened species, yet *ex situ* population management expertise and implementation is not yet well developed in this region. In recognition of this need, the Southeast Asian Zoo Association (SEAZA) has formed a SEAZA Species Management Committee (SSMC) with representatives from each member country to promote effective *ex situ* population management.

Members of the new SSMC became the focus of a population management training workshop conducted by CBSG and hosted by the Taipei Zoo on 23-26 October. Additional participants included studbook keepers and species coordinators in the region. Representatives from Singapore, Vietnam, Thailand, Indonesia, Malaysia, Taiwan, South Korea, and Japan spent four days in instruction, practice, and discussion of all aspects of population management, from studbook data collection and analysis to developing program goals and breeding plans. Attendees identified the conservation roles for their focal species as described in the IUCN *ex situ* guidelines. Group discussions outlined the challenges to population management in this region, which were grouped into three categories: data acquisition and quality issues; poor population status and management; and issues related to people and resources. Potential solutions and action steps were identified to begin addressing these challenges.

This training workshop was followed almost immediately by the SEAZA Annual Conference hosted by Taman Safari Indonesia, which allowed SSMC members to move forward quickly with these ideas. The intense discussions in Taipei continued at the conference and provided a valuable catalyst for this new group of professionals to bond as a group, learn together and bounce ideas off of each other, and develop collaborative working relationships that will help advance *ex situ* population management in Southeast Asia.



## Sumatran Tiger GSMP Meeting

Critically Endangered in the wild, the Sumatran tiger (*Panthera tigris sumatrae*) is the most genetically unique of the extant tiger subspecies. About 400 Sumatran tigers are managed by five regional zoo programs—PKBSI, EAZA, AZA, ZAA and JAZA—with about one third of these held in zoos in the range country of Indonesia. The WAZA Sumatran Tiger Global Species Management Plan (GSMP) was established in 2008 and has held periodic meetings to discuss population status, needs and recommended actions. CBSG facilitated the most recent GSMP meeting, which was held on 28-29 October at Taman Safari Indonesia near Bogor, Indonesia. Participants included species coordinators and studbook keepers from all five regional programs as well as Indonesian government, NGO, and zoo representatives. CBSG also provides population management support to the GSMP.



Workshop participants identified four conservation roles for the *ex situ* tiger population, outlined progress and issues for each role, and developed goals and actions for the next few years. A primary role is to serve as an assurance population, which was a primary focus of workshop discussions. While the global Sumatran tiger population is genetically diverse, the regional populations will not be genetically viable in the long term without genetic reinforcement and effective population management. Regional populations outside of Indonesia are based on the same founder lines and are inbred. The PKBSI Indonesia population holds genetically important tigers, including

10 wild-caught potential founders that have not yet bred. Breeding genetically valuable tigers in Indonesian zoos will be key to improving the demographic and genetic health of this *ex situ* range country population and will provide options for genetic reinforcement of other regional populations in the future. Workshop recommendations are currently being reviewed by PKBSI and government agencies in Indonesia. These discussions complement similar ongoing activities for three newly established GSMPs for Indonesian species (anoa, babirusa, and banteng).

## Chinese White Dolphin Workshop

The number of Chinese white dolphins (*Sousa chinensis*) in the Pearl River Estuary (PRE) is estimated to have declined by 60% over the last ten years due to loss and fragmentation of habitat; pollution; boat, ship and ferry traffic; and the fishing industry. In addition, climate change is likely to influence the ability of the Chinese white dolphins to thrive in the PRE.



© WWF Hong Kong

In view of the extensive and growing anthropogenic challenges that threaten the species long-term viability, a comprehensive conservation management framework was deemed vital and urgently needed. With funding from the Hong Kong Airport Authority, Ocean

Park Conservation Foundation (OPCF) convened a workshop in January to take the first steps towards developing this framework. The 55 participants from 5 countries included academics, scientists, IUCN SSC Cetacean Specialist Group, the fisheries community, NGOs, ecotourism operators, and representatives of government departments and regulatory authorities. Together they identified obstacles that are keeping them from effectively addressing the threats to Chinese white dolphin conservation, and goals and actions for overcoming those obstacles.

The workshop illustrated the effectiveness of one of CBSG's core principles: stakeholder inclusivity. After the workshop, Dr. Alexander Huang of Shantou University wrote: "I cannot help presenting my deepest thanks and appreciation for you all to host such a successful workshop that really touched and motivated me. To me, the most touched part is the involvement of fishermen representatives and they are willing to talk freely. Above all, their comments really help to revise our minds and impose a novel direction that moves toward an effective direction. In recent years, I've frequently read lots of papers on Conservation Biology describing the fact a practical and effective conservation campaign stands on active participation of policy makers and practitioners, researchers, NGOs and NPOs, local communities and people, interest stakeholders. This workshop presents actually how the above task can be achieved."

Suzanne Gendron, Director of OPCF, committed her team to champion the implementation of the actions from the meeting and to convene follow up meetings annually to ensure that stakeholders that progress is made.