

Announcements

Parque das Aves to host CPSG Brasil

We are delighted to announce that Parque das Aves will be providing support to the CPSG Brasil team. Parque das Aves is an internationally recognized rescue and conservation center for birds, located in the middle of the rich and exuberant Atlantic rainforest, and neighbor of the Iguaçu National Park in Brasil. With more than 1320 birds from about 143 different species Parque das Aves is also focused on conservation of Birds from the Atlantic Forest.

“This support will allow our network to grow and increase its effectiveness, we could not be more grateful” says Arnaud Desbiez CPSG Brasil Convenor.

Thanks to the support from PdA, Fabiana Lopes Rocha will be able to dedicate part of her time to CPSG activities. The PdA is also sponsoring an annual meeting for the team to meet face to face to plan their activities. With its six members scattered around the country this meeting will be key to CPSG Brasil’s growth.



eUpdate November 2017

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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 the three official languages of IUCN.



WWW.CPSG.ORG

Carmel Croukamp, CEO of PdA adds “With the news of CPSG’s expanded remit, we are thrilled to have the opportunity to support this work beginning at such an exciting time. CPSG Brasil, led by Arnaud Desbiez, is a highly capable, motivated team who has done so much already and deserves all the support they can get. It makes absolute sense to us that face-to-face meetings and dedicated time are important and will have important consequences. Their work will be key to many more conservation success stories here in Brasil. We can’t wait to see what the future holds, and we’ll be there cheering them on and supporting their valuable work in any way we can.”

PAAZA App Launched at CPSG Conference 2017

DataWild (www.datawild.info) was launched at the 2017 PAAZA Conference. Shortly after, the PAAZA™ mobile app was created and announced at the 2017 CPSG Annual Meeting. The PAAZA mobile app has offered the opportunity to bring information and tools required for those in African regions where internet connectivity, desktop and laptop computers are not widely available or accessible.

Both *DataWild* and the Mobile app were created for information sharing, but it quickly became apparent that this ease of access at one's fingertips, could be used to assist permitting and enforcement authorities to address the call from CITES for Zoos and Aquaria to 'address the ever growing illegal trade in wildlife'. Through the Studbook or Transponder information, a receiving facility can ascertain that the animal they are being offered is legal and DNA typed i.e. legal parentage and part of a registered species management plan. This all culminates in the PAAZA™ Passport which has been developed in conjunction with the National Research Foundation and the South African CITES and TOPS permitting authorities, DEA:

Cheetah (<i>Acinonyx jubatus</i>) Passport		
The information below incorporates the DNA unique to the animal		
INSTITUTION: National of South Africa		
ANIMAL INFORMATION:		
FIELD ID: NZG254	CATALOGUE #: 36283	SAMPLING DATE: 21/08/2014
HOUSENAME: Charlie	CHEETAH ID: 917065	STUDBOOK #: 1253
MICROCHIP #: 985140000350200	QUOTA#:	SEX: male
SAMPLE ORIGIN: Captive born	PARENT ORIGIN:	
PHOTOGRAPHIC ID:		
		
FLANK ID	TAIL ID	FACIAL ID

- A valid Animal Passport is required before/with any Permit application
- When an application is received by DEA CITES Permitting, they will verify the Animal Passport on the secure database
- Enforcement can further verify the animal by either Transponder/Microchip or Photo ID

Collaboration between Association Species Management coordinators is essential – together we CAN make a difference. For more information, please contact John Werth : johnw@zoosafrika.com. The app is available as a free download through Android and IOS app-stores.



Recent Activities

Artificial Insemination of the Endangered Javan Banteng

A joint project between CPSG Indonesia, Taman Safari Indonesia Group (TSIG), and Bogor Agricultural Institute (Institut Pertanian Bogor) was carried out to explore assisted reproductive techniques in the endangered Javan banteng (*Bos javanicus javanicus*). The aims of this project are to investigate the viability of transferring frozen semen to improve the genetics of banteng in managed populations and as a future exercise to improve the genetics and associated physical characteristics and development of the domesticated Bali cattle.



Alexandra Muchen | Pixabay

Semen was collected from animals at Taman Safari Indonesia 1 Bogor, before and after nutritional supplementation to examine dietary effects on sperm quality. Semen was then frozen until required for artificial insemination. Female banteng were observed for physical signs of oestrus and this together with physical and ultrasonographic examinations determined the appropriate timing for artificial insemination.



Banteng AI Team 2017



Banteng AI Team 2017

Two females were artificially inseminated in January and April 2017, and subsequent ultrasound examinations confirmed pregnancies in both animals. Parturition is expected to occur between late October to early November 2017 for one female and between late January to early February 2018 for the other.

Several significant reproduction-related information and techniques were collected and achieved during this exercise and these will hopefully pave the way for better population and breeding management and conservation of the endangered Javan banteng.

Mentawai Primate Conservation Program

Siberut, the largest and northernmost island of the Mentawai group of islands, is renowned for its endemic fauna, including 4 threatened primate species – bilou (*Hylobates klossii*), simakobu (*Simias concolor siberu*), joja (*Presbytis potenziani siberu*) and bokoi (*Macaca siberu*).

Due to hunting, logging, and forest conversion to farms and plantations, a concerted effort is required for conserving these primates. Current updated field data and information are key to coordinating a forest management plan that also focuses on primate conservation.



Mentawai Survey Team 2017

CPSG Indonesia with Taman Safari Indonesia Group (TSIG), Balai Taman Nasional Siberut (Siberut National Parks Board), Primate Research Center of Bogor Agricultural Institute (Pusat Studi Satwa Primata – Institut Pertanian Bogor), Universitas Muhammadiyah Sumatera Barat, and Universitas Andalas partnered for a preliminary primate survey within the Siberut National Park.



Mentawai Survey Team 2017

The survey aimed to obtain estimate population sizes, group composition and distribution of the four primates, including plant species consumed or favored by them.

Four areas within Siberut National Park were surveyed over eight days in July 2017, covering North, Central and South Siberut. Results showed that between three and four primate species were found in study areas of North and Central Siberut, while no sighting was recorded for the South Siberut site. A workshop for local participants will be organized, to formulate a primate conservation action plan taking into consideration forest management, cultural practices, and social needs of the different stakeholders on the island.

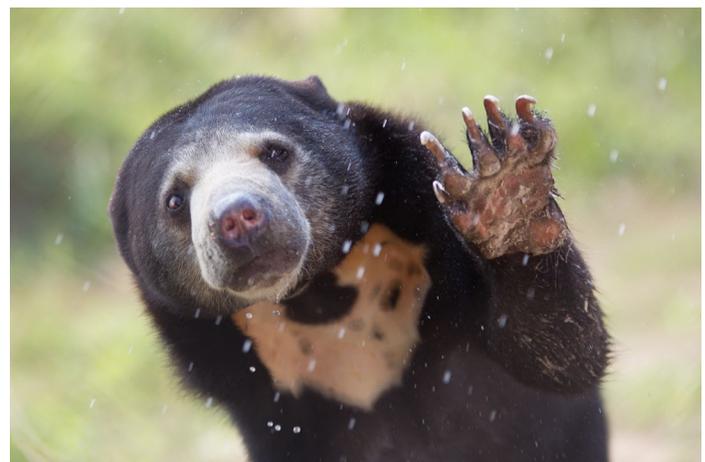
Sun Bear Symposium and Range-wide Conservation Planning

A sun bear (*Helarctos malayanus*) symposium was held in Kuala Lumpur from September 4-6th, followed immediately by a two-day conservation planning workshop for the species.

The symposium brought together 100 people from 57 organizations, including government representatives, field researchers, conservation managers, environmental educators and conservation breeding specialists, to discuss opportunities for the conservation of sun bears and their habitat throughout their range. The program included presentations and workshop sessions focusing on the themes of: integrating *in situ* and *ex situ* management of sun bear populations for the conservation of the species; health and welfare; status and distribution; public attitudes and behaviors; illegal trade; education and behavior change; and conservation planning.

The conservation planning workshop that followed involved a subset of 25 delegates tasked with drafting a conservation plan. A plenary session during the symposium had generated a draft Vision Statement and Goals for the future of the species, and the themed sessions had surfaced a number of key issues for further consideration. This provided the basis for the planning discussions. Working groups were formed around habitat, illegal trade, *ex situ* management, and communications. By the end of the workshop participants had further developed the vision and goals, discussed in detail the issues, and had drafted a set of objectives and actions for the next 5-10 years. It is intended that implementation of the plan, once finalized, will be coordinated through the Sun Bear Expert Team of the IUCN SSC Bear Specialist Group. A small group of editors is currently preparing a draft plan for input by the wider symposium group.

The event was organized by Free the Bears, the IUCN SSC Bear Specialist Group and TRAFFIC Southeast Asia, and was sponsored Wildlife Reserves Singapore; Perth Zoo Wildlife Conservation Action; Taronga Conservation Society Australia; Bornean Sun Bear Conservation Centre; Hauser Bears; and the International Association for Bear Research & Management. The IUCN SSC Conservation Planning Specialist Group worked closely with the organizers in the lead up to the event and provided support through process design and planning facilitation.



Peter Yuen | Free the Bears

Global Ex Situ Planning for Amur Tigers

The Amur Tiger Global Species Management Plan (GSMP) is one of nine GSMPs organized under the World Association of Zoos and Aquariums (WAZA). This GSMP brings together four regional zoo associations (AZA, EAZA, EAZA and JAZA) actively managing Amur tigers to promote international collaboration and activities that ensure healthy, viable global and regional ex situ tiger populations and that support wild tiger conservation. An important function is to serve as an effective interface between ex situ and in situ tiger management and conservation. This includes discussing ways in which ex situ tiger populations or their institutions can support conservation needs in the field, as well as advising on conservation-based population management strategies for orphaned cubs, conflict tigers, and possible tiger reintroduction efforts.



Copenhagen Zoo

The Amur Tiger GSMP committee held its second meeting in November 2017, hosted by the Moscow Zoo. Tiger managers and advisors for both *ex situ* and *in situ* tiger populations came together to evaluate the demographic and genetic status of the regional and global populations and make strategic recommendations for inter-regional transfers and other management actions, facilitated by CPSG. Russian zoos within EAZA serve as the nucleus of the global ex situ program, periodically receiving new founders (unreleasable orphaned or conflict tigers), while European (EAZA), North American (AZA) and Japanese (JAZA) zoos hold viable populations augmented by strategic inter-regional transfers. All regional populations are genetically diverse (94-97% gene diversity) and collectively represent about 500 tigers, matching about the same number of tigers and amount of genetic variation as the wild Amur tiger population.

Other discussion topics included recent taxonomic changes, assisted reproduction research, genome resource banks, application of DNA profiling, veterinary issues and online training developments, status and threats of wild Amur tiger populations, and *ex situ* campaigns supporting *in situ* tiger conservation projects. The GSMP meeting was followed by an international conference on the interface between *ex situ* and *in situ* tiger populations, including presentations outlining recent successes in headstarting orphaned cubs and releasing them into former tiger habitat to establish new reintroduced tiger populations that expand the subspecies' range. Meta-population management across regions and across the *in situ* – *ex situ* interface are integral components to conservation of this subspecies.

Genetic Management of Iberian Lynx

Back in 2002 when the Iberian lynx (*Lynx pardinus*) was listed as Critically Endangered by the IUCN, wild populations had declined to fewer than 150 lynx in two remaining subpopulations, and the situation was critical. Thanks to a well-planned and well-executed conservation strategy, an ambitious *ex situ* breeding and release program was developed in 2003. Today about 140 lynx reside at five *ex situ* breeding centers in Spain and Portugal and serve as a viable assurance population for the species as well as a source for animals to reinforce the wild population. About 40 captive-born young lynx are released each year after having been trained in predation, human avoidance and other skills essential to life in the wild. These efforts have stabilized and expanded the wild population to ~470 lynx, achieving positive results ahead of projected timelines and enabling the Iberian lynx to be downlisted to Endangered in 2015.



Antonio Rivas

With rapid achievement of success comes the need to re-evaluate objectives and strategies. In October 2017, CPSG was invited to Doñana National Park to meet with technical experts from the Doñana Biological Station and the Iberian lynx conservation project to discuss objectives, strategies and methods for the integrated genetic management of wild, *ex situ* and reintroduced lynx populations as a One Plan approach to its conservation. Molecular genetic data, disease issues, reproductive physiology, and logistical constraints were considered along with genetic modeling results to develop strategies for the annual selection of *ex situ* breeding pairs and for placement of the resulting offspring, most of which are released into the wild to augment one of the original or reintroduced populations. These strategies will form the first draft of the Iberian lynx demographic and genetic management manual. While challenges remain, including dwindling prey (rabbit) populations, careful scientific assessment combined with strong collaboration among dedicated biologists has put this beautiful cat species on the road to recovery despite significant challenges of low genetic variation and small population size.

Scaling up Sunda Pangolin Conservation

Pangolins are estimated to be the most trafficked wild mammals in the world and all eight species are now threatened with extinction. In July 2014 the IUCN SSC Pangolin Specialist Group launched, “Scaling Up Pangolin Conservation”, a plan of action to conserve all pangolin species. To support the broad directions outlined in this plan, the Pangolin Specialist Group is working with partners to develop species-specific regional and national action plans.

From June 28-30th, 45 participants from 37 organizations and nine range states, met in Singapore to develop a detailed regional action plan for the Sunda pangolin *Manis javanica* and to complete a revision of the IUCN Red List assessment for this species. Immediately following this, on July 1st and 2nd, representatives from this workshop joined delegates from Singaporean government agencies, academic institutions and wildlife management agencies to discuss the regional findings in a national context and to plan a future for the Sunda Pangolin in Singapore.



Dan Challender | Save Vietnam's Wildlife

The Sunda pangolin currently occurs in 9 countries. The species' apparently adaptability to modified and even urban environments bodes well for its future in places where illegal trade can be adequately mitigated. However, the trafficking is complex and necessitates action along trade chains from source sites to consumer markets. Regional workshop themes included site-based protection from poaching, policy and enforcement, demand reduction, and providing sufficient capacity and expertise for effective rescue, rehabilitation and release of illegally captured pangolins. The situation in Singapore is different. There, the primary issues for pangolins are urban development and road accidents. Sympathetic urban design was considered key to supporting the ongoing presence of Sunda pangolins, with roads and habitat corridors a particular focus. Understanding more about population distribution, abundance and fragmentation was also prioritized for urgent attention.

The workshops were sponsored and hosted by Wildlife Reserves Singapore and organized in partnership with the IUCN SSC Pangolin Specialist Group and Asian Species Action Partnership (ASAP). The IUCN SSC Conservation Planning Specialist Group (CPSG) facilitated both workshops and worked closely with organizers in the development phase. The action plans detailing the outputs from each workshop are in preparation. For more information, visit the Pangolin Specialist Group's website: www.pangolinsg.org

Lima Leaf-toed Gecko



Roberto Elias

The Lima Leaf-toed Gecko (*Phyllodactylus sentosus*) inhabits coastal desert areas with substrate dry soil or sand with some rocks, and without vegetation. Currently, this kind of habitat is restricted to a few localities in the city of Lima. The species shows great fidelity to its small home range, has a low reproductive rate, and a poor dispersal-the known subpopulations are confined to small archaeological monuments that preserve natural desert habitat. Its small distribution is located within a heavily urbanized area of Lima, which expose the sub-populations to threats such as habitat encroachment, high levels of predation by introduced predators, including rats and cats, and competition from other gecko species more adaptable to inhabit the city.

In the IUCN Red List, the species is listed as Critically Endangered (CR) because of its restricted small area and continuing decline in the quality of its habitat, the number of individuals, as a result from pressures on the species and its remaining microhabitat. Recent surveys have failed to record the species at several known localities, and it is possible that one or more subpopulations may already have been lost. Because of how endangered this species is, it is recommended more research into its population trends and establish *ex situ* populations to evaluate possible management action for the species.

2017 Annual Meeting Update

In mid-October, 108 conservation professionals from 29 countries gathered in Berlin, Germany to attend the 2017 CPSG Annual Meeting graciously hosted by Zoo Berlin. This was the first meeting held under our new name. The meeting focused on increasing species conservation planning within the SSC and beyond.



Zoo Berlin

Plenary sessions included:

- keynote address by IUCN SSC Chair Jon Paul Rodríguez, focusing on how to increase planning to catalyze more conservation action;
- presentations by Specialist Group Chairs and Co-Chairs (Amphibians, Vultures, Invertebrates, Galliforms, Otters, African Rhinos, Small Mammals, Cranes, Primates, and Chameleons);
- an overview of systematic conservation planning approaches by Tara Martin (University of British Columbia);
- a gripping presentation on the sixth extinction by Brad Andrews (Global Conservation Associates);
- introduction to the Green List of Species and the Species Monitoring Specialist Group by Richard Young (Durrell Wildlife Conservation Trust);
- and the conservation efforts to save the critically endangered Edward's Pheasant by Pham Tuan Anh (Viet Nature Conservation Centre).



Jeremy Mallinson | WAZA

For three days, participants explored topics focused on the theme and included working group sessions such as prioritizing species for conservation planning, the human-wildlife conflict, using data science for the One Plan Approach, and new training for the Species Conservation Toolkit Initiative. Reports of the working groups and a full report of the meeting proceedings are in progress and will be available soon.

On the final evening, Onnie presented Jeremy Mallinson with the Ulysses S Seal Innovation in Conservation Award. The award recognizes his 42 years of association with Jersey Zoo and Durrell Wildlife Trust, and his dedication to innovative and collaborative science-based conservation.

CPSG thanks Zoo Berlin, Dr. Andreas Knieriem, and Sandra Bekel for the amazing hospitality we were treated to throughout the duration of the 2017 CPSG Annual Meeting, not to mention the delicious food provided each day and the beautiful evening tour of Berlin. We also want to thank all of the participants whose energy and dedication for species conservation planning made this meeting truly special.



Species Conservation Toolkit Initiative (SCTI) update

SCTI

The Species Conservation Toolkit Initiative

SCTI has formed an Advisory Group comprised of both representatives of major organizational partners of SCTI (a number of zoos, zoo associations, conservation NGOs) and experts in the application of our tools for species conservation. The SCTI Advisory Group will be providing strategic advice on our mission and scope, organizational structure, broad priorities for tool development and support, and new innovations that are needed to address increasingly complex conservation challenges. The group had its first meeting in during the recent annual conference of the CPSG.

In a working group of the CPSG meeting, Sara Sullivan from SCTI presented an overview of the new training program being developed to ensure that the SCTI tools are used effectively. She gave the working group an initial look at the kind of on-line materials that we are developing, and received many good suggestions regarding how best to serve geographically and professionally diverse audiences. The first training modules being developed by SCTI will focus on the PMx and Outbreak software.

SCTI software is distributed freely, so as to maximize our impact on improved species conservation. However, this makes it difficult for us to know who uses the tools and for what purposes. In order to help us to understand better the users and their needs, the SCTI website (www.vortex10.org) now has a registration link where users can enter some very basic information about their country, preferred working languages, the species on which they are focused, which software tools they use, and their primary uses of SCTI software (wild population management, *ex situ* population management, research, teaching, or conservation planning). Although registration is optional, we encourage users to register so that we can serve you better.

Planning for Coexistence

In the 2017 CPSG Annual Meeting, CPSG Brasil's Katia Ferraz and Silvio Marchini, in collaboration with Alexandra Zimmermann, chair IUCN-SSC Task Force on Human-Wildlife Conflict (HWCTF), convened a working group entitled 'Incorporating human-wildlife conflict (HWC) issues into conservation planning'. The goal of the working group was to evaluate a novel workshop process intended to extract and organize HWC information useful for planning when data availability and specific knowledge among workshop participants is scarce (which is usually the case). The process included tackling the complexity of human-wildlife conflict by deconstructing it and then re-assembling it again. The exercise of getting the working group participants just to think very precisely about specific sub-questions gave them (and the facilitators!) valuable insight.



The goal of this collaboration between CPSG and HWCTF is to develop this workshop process further, emphasizing both its 'situation assessment' and 'action decision making' components. We also intend to explore ways to integrate it with analytical tools such as PVA, and eventually apply it in the CPSG's planning projects whose target species are associated with conflicts (e.g. java leopard). The next opportunity to advance this goal will involve a multi-species workshop focusing on maned wolf and puma in agricultural landscapes of Sao Paulo. In collaboration with Rogério de Paula (CENAP-ICMBio) and Alexandra Zimmermann, CPSG Brasil is proposing a workshop that will bring together in mid-2018 key experts on conflict, planning, and public policy - not on maned wolf and puma! - representing the governmental (national and state), non-profit, private and academic sectors. This workshop is expected to be a milestone towards the ultimate goal of establishing collaboration between CPSG and ICMBio that will eventually design a National Strategic Plan for Human-Wildlife Coexistence.



International Symposium of Integrated Conservation in Brazil

From 8 to 10th of November the 1st International Symposium of Integrated Conservation, in Foz do Iguaçu, Brazil took place.

The Symposium was promoted by CPSG Brasil and Parque das Aves. The Copenhagen Zoo was one of the sponsors. Three CPSG networks were present: CPSG Europe, CPSG Mexico and CPSG Brasil.



The idea of the Symposium was to spread the word about the One Plan Approach, CPSG tools and emphasize CPSG culture and the need of cooperative work amongst both *in situ* and *ex-situ* conservationists.

The lectures included some tools used by CPSG, as Vortex, Guidelines for *Ex Situ* Management, Habitat Modeling and Human Dimensions of Conservation. We also selected many examples of *in situ* and *ex situ* conservation projects both inside and outside the country that work applying the One Plan Approach. We invited speakers and participants from the Government to present and discuss National Action plans and to involve them in this process.



Workshop Updates

Brown Howler Monkey Conservation in Argentina



Ilaria Agostini

Almost five years have passed since the Workshop on Brown Howler Monkeys was held in Argentina. At that time, several experts had worked on reviewing brown howlers' status, analyzing its main threats and challenges for conservation. The most important challenge was yellow fever, which periodically re-emerges in this area, decimating brown howler populations. The outbreak that spread in Brazil at the beginning of 2017 has reaffirmed the magnitude of this threat that could potentially lead to local extinction of a small population of brown howlers, such as the one found in Misiones, Argentina. The second biggest identified challenge was the lack of awareness among authorities and communities about the species' situation. The Brown Howler Monkey Conservation (BHMC) group has made the following advancements towards the proposed objectives:

- To estimate current distribution in Misiones, we carried out walking census surveys in 2014, 2016 and 2017. Although still present at some sites, current howler population densities are so low that these traditional survey methods have become mostly inefficient.
- To increase the effectiveness of population surveys, as well as organize a surveillance system for yellow fever, we propose integrating novel and cost-efficient techniques, such as aerial drone thermal imaging, and

automated sound recording devices, with validated methods such as camera trapping and local participatory monitoring networks, to facilitate surveying this endangered primate population at larger spatial and temporal scales. Funding has been secured for this purpose.

- To assess health status of brown howlers, our work is still preliminary and we obtained faecal samples from one group at the only site where the species has been routinely monitored during 2017. These samples will be analyzed to assess presence of gastrointestinal parasites.
- To improve our knowledge on yellow fever dynamics, in 2015-2016, we captured and identified mosquito species that are potential vectors of yellow fever virus, and performed virological analyses. This study helped established a baseline for future projects on epidemic surveillance through monitoring of mosquitoes.
- To raise awareness, we published two articles on the results of PVA and Outbreak modelling that came out of the workshop, one in *Tropical Conservation Science* (<http://journals.sagepub.com/doi/full/10.1177/194008291400700107>) and the other one in *Memórias do Instituto Oswaldo Cruz* (http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0074-02762015000700865).
- We presented our work at five scientific meetings, and participated to several press releases and radio interviews with local as well as international media.
- We changed our name into Proyecto Carayá Rojo, to make it friendlier for Spanish-speaking people.
- We added a logo for the project and kept working on our Facebook page (<https://www.facebook.com/procarayarojo>), which is currently being followed by 2950 people.

The major action in which the team of BHMC is involved right now is testing the methodologies for efficiently monitoring brown howlers in the future. Results of this study will be practically applicable to establish monitoring protocols for all the potential distribution of brown howlers in Argentina.