



# GET TO KNOW US: CONSERVATION PLANNING SPECIALIST GROUP

*HOW SPECIES CONSERVATION  
PLANNING CAN HELP YOU ACHIEVE  
YOUR SPECIES CONSERVATION GOALS*



*Leontopithecus rosalia*



CPSG helps save threatened species by increasing the effectiveness of conservation efforts worldwide. We bring together the right people and information to engage in collaborative conservation planning that produces practical management recommendations for conservation action.

In the 40 years since our founding, we have helped develop conservation plans for over 500 species through more than 800 workshops in over 75 countries. We are a Specialist Group of the Species Survival Commission of the International Union for Conservation of Nature supported by a non-profit organization, the Global Conservation Network.

We support an integrated approach to species conservation planning through the joint development of management strategies and conservation actions by all responsible parties, known as the One Plan Approach. We strive to ensure that a broad range of stakeholders is represented at each workshop. As a result, one comprehensive conservation plan for the species helps bridge the gap between wild and captive population management.



The International Union for Conservation of Nature is the global authority on the status of the natural world and the measures needed to safeguard it. The largest of its Commissions, the Species Survival Commission, works to reduce the loss of diversity of life on Earth.



*Grus carunculata*

# CPSG at a Glance

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40  
Years



500+  
Species



800+  
Workshops



400+  
Publications



8  
Headquarters  
staff



300+  
Members



11  
Regional  
Resource  
Centers



75+  
Countries





*Vipera ursinii*

The post 2020 Global Biodiversity Framework calls for the decline of threatened species to be reversed. Experience shows that we can do this. Conservation, when it is effectively planned for, works.

CPSG's time-tested, evidence-based approach:

- Brings together the right people with the right information, and
- Connects the conservation needs of species to boots on the ground, boosting the effectiveness of conservation action.

The result is species conservation plans in which stakeholders are invested, empowering them to take action for species. Around the world, CPSG workshops are a turning point for threatened species.

Now, in response to the IUCN SSC global call for urgent, effective action to save species, we have created this document to introduce to IUCN Regional and National Offices CPSG's species conservation planning processes and how they can help governments plan for, and ultimately take action to achieve, the recovery of threatened species for which they are responsible. Training and capacity development in each of these species conservation planning processes is also available from CPSG.

The following page lists species conservation planning needs that are commonly encountered. Each of these needs can be addressed through a CPSG species conservation planning process.



**Contact our Chair, Onnie Byers at [onnies@cpsg.org](mailto:onnies@cpsg.org) for more information or to engage our services.**



## IF YOU NEED

- To plan for the conservation of species while:
  - balancing competing interests
  - addressing uncertainty
  - managing complexity
  - using wildlife simulation models to support decisions
  
- To create pathways to effective action planning for large groups of species while:
  - using IUCN Red List data to group species with similar conservation needs
  - building multi-species action plans
  
- To plan effective management of wildlife disease while:
  - understanding potential disease hazards and their likely impact
  - identifying potential risk pathways and planning effective mitigation
  - using wildlife disease simulation models to support decisions
  
- To take a One Plan Approach to conservation by:
  - evaluating the potential value of *ex situ* management
  - practicing integrated conservation planning
  
- To develop your capacity to lead species conservation planning processes through:
  - training courses (in-person and online)
  - extended mentorships
  - access to relevant guidelines and resources

## TURN TO

### SPECIES CONSERVATION PLANNING

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*Dendrolagus ursinus*


## SPECIES CONSERVATION PLANNING

Species conservation plans are built on the best information available for the species, on the threats facing their conservation and recovery, and on the relative merits of potential approaches to overcoming those threats. CPSG's approach—used around the world since the early 1990s—is particularly useful for species whose conservation involves multiple competing interests, high levels of uncertainty and complexity.

Complex issues in threatened species conservation planning require creative solutions and our Species Conservation Planning process has been designed with this creativity in mind. CPSG workshops typically feature the scientific rigor of a population viability analysis (PVA) that helps wildlife biologists and managers more clearly understand the threats that influence populations. The PVA effort is combined with innovative methods for helping people organize and evaluate information across a broad range of disciplines and perspectives.

Through this integration, planning workshop participants create more effective conservation actions for species that also take into account the social, cultural, and economic needs of local people. When local stakeholders participate actively and as equals in building the plan, they are much more likely to support its implementation.





*Rhinoceros unicornis*

## Population Viability Analysis

Population viability analysis (PVA) evaluates the risk of wildlife population decline or extinction, typically using computer simulation models. These models attempt to replicate the processes of reproduction, survival, dispersal, etc. that define the demography of a particular species. These underlying conditions can then be examined to determine the primary drivers of population growth or decline, as well as the best options for population management to minimize risk of extinction.

For example, a PVA for the greater one-horned rhino in northeast India highlighted the dire consequences of poaching just one to two animals each year from the small population inhabiting Manas National Park. These analyses mobilized government resources for more effective management of these animals, which has contributed to a substantial increase in the Park's rhino population.

## Success with Species Conservation Planning

The tenkile tree kangaroo population rebounded from fewer than 100 individuals to an estimated 300 after CPSG helped to connect local landowners, conservation scientists and government authorities, supporting them to equitably share their knowledge and take collective responsibility for conserving this species.



*Ceratophora aspera*

Photo credit: Panduka de Silva

## ASSESS TO PLAN (A2P)

Threatened species that inhabit the same areas or that share specific biological characteristics often have overlapping conservation needs. A2P is designed to move multiple threatened species rapidly to effective action, by identifying groups of species whose overlapping needs can be planned for and acted on together. A2P uses analyses of IUCN Red List data and the input of local specialists, to identify next steps towards action for these groups, and the individuals or agencies best placed to take it. It is designed to work either as an integral part of the IUCN's Red Listing framework—combining Red List workshops with the A2P process, where possible—or as a stand-alone process for groups of species with published Red List assessments. A2P may also integrate with Key Biodiversity Area assessments.

A2P helps ensure stakeholders, collaborators, and resources are targeted efficiently, and that otherwise poorly known or lower-profile species receive the attention they need.

### Success with Assess to Plan

In 2019, CPSG used the A2P process at four Red List workshops in three countries, covering over 1,000 species. The results are now informing planning and action for species identified as threatened or data deficient.





*Ammodramus savannarum floridanus*

Photo credit: USFWS

## DISEASE RISK ANALYSIS

Disease Risk Analysis (DRA) provides a transparent, science-based framework to systematically identify wildlife-associated disease hazards and, by drawing on both qualitative and quantitative tools, to assess relative risks to populations of concern and the potential impacts of available mitigating actions.

The DRA process, conducted within a multi-stakeholder workshop environment, combines elicitation of expert opinion with published and unpublished data to reduce uncertainty and provide direction for both immediate action and targeted research.

Where disease is the primary threat or issue of concern, the DRA can be applied with this as its sole focus. Alternatively, where warranted, it can be equally well integrated with one of our broader conservation planning workshops to ensure a robust analysis of disease within the context of a wider array of threats.

### Success with Disease Risk Analysis

State and local experts recently released captive-bred Florida grasshopper sparrows to their native habitat after a DRA workshop facilitated by CPSG. Surviving birds are now interacting with wild-born birds, boosting confidence in bringing the species back from the edge of extinction.



*Alouatta guariba*

## Wildlife Disease Simulation Models

*Outbreak* is a software program that simulates disease dynamics, using familiar, basic conceptual algorithms of infectious disease transmission. All disease parameters are input by the user, allowing for customization of epidemiology across a range of pathogens. In addition, demographic information, such as breeding rates and non-disease mortality for general sex-specific stages (juveniles, sub-adults, and adults), is user-specified and used to project total population size. Along with basic disease analysis, the user may include vaccination and removal as a means of managing disease dynamics in the population.

## Success with Wildlife Disease Simulation Models

In 2008-2009, severe yellow fever outbreaks decimated brown howler populations in Brazil and Argentina, driving the already small population in Misiones Province to the verge of extinction. CPSG was invited to create models linking disease epidemiology with howler population dynamics in a workshop held in Andresito and Puerto Iguazú, Argentina. Workshop participants created a set of 12 priority actions, aimed at reaching specific objectives. With support from the Instituto Nacional de Medicina Tropical, mosquito trapping and isolation of yellow fever virus are ongoing.





*Diplazium laffanianum*  
Photo credit: Marge From

## EX SITU CONSERVATION ASSESSMENT

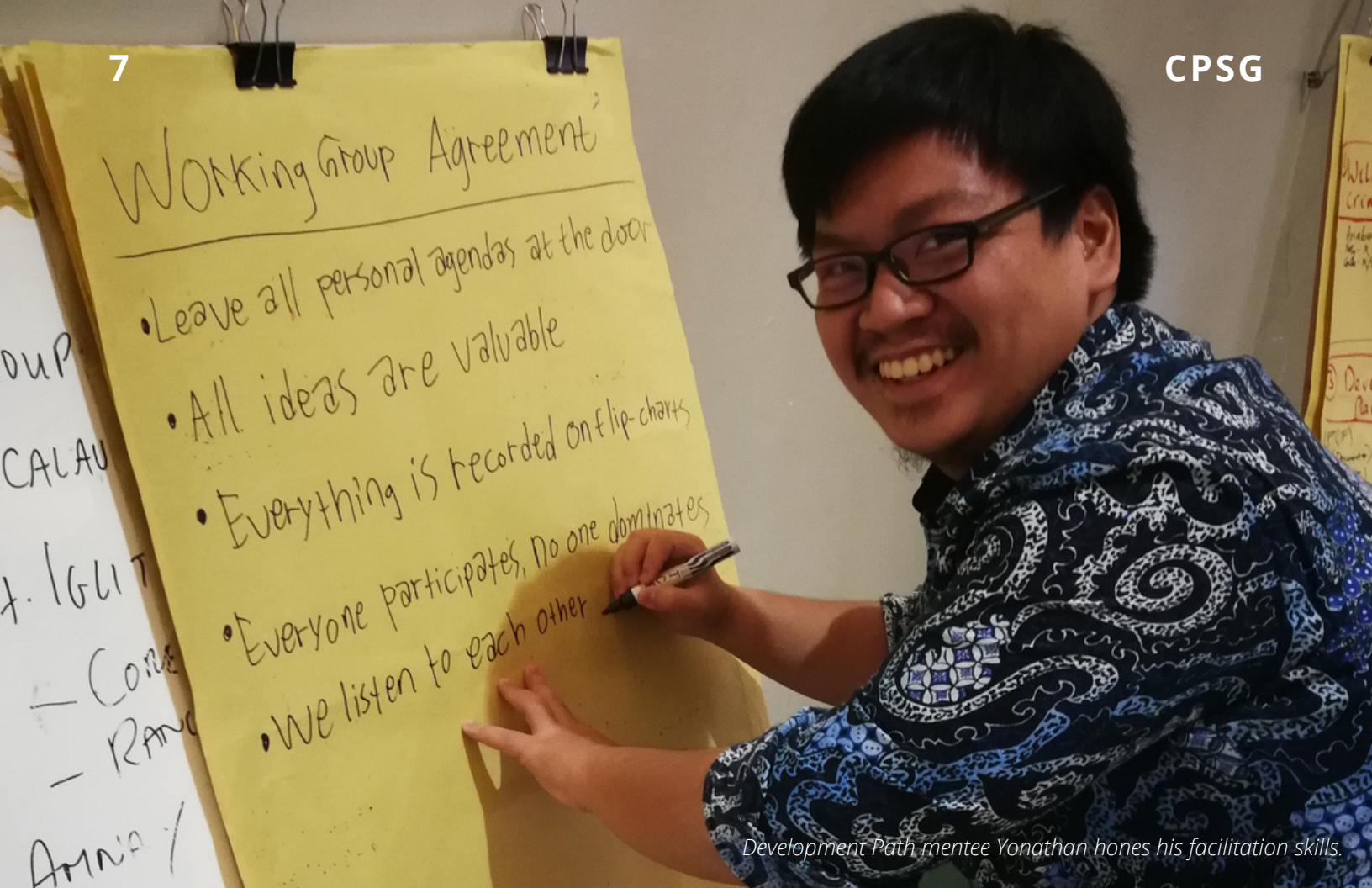
Species with small, fragmented wild populations may need a multi-faceted conservation approach to ensure survival. *Ex situ* management can provide valuable options in your conservation toolbox. *Ex situ* conservation assessment applies the five-step decision process outlined in the *IUCN SSC Guidelines for the Use of Ex Situ Management for Species Conservation* as part of the One Plan approach. This involves understanding the threats to, and conservation needs of, a species; identifying potential *ex situ* conservation options; evaluating the relative value, costs, risks, and feasibility of these options; and making a recommendation for which *ex situ* activities, if any, should be included in conservation planning for the species.

By evaluating *ex situ* conservation options, and including both *in situ* and *ex situ* experts in the process, the resulting conservation plans can be more efficient and effective in saving species.

### Success with *Ex Situ* Conservation Assessment

The plant lab at Omaha's Henry Doorly Zoo successfully reproduced Governor Laffan's ferns from two fertile fronds using protocols that existed because an earlier CPSG workshop had inspired their development. In 2020, 16 reintroduced sub-populations of fern thrive in Bermuda with hundreds more soon to be returned to their native habitat.





*Development Path mentee Yongthan hones his facilitation skills.*

## TRAINING, MENTORING & GUIDELINES

To respond to ongoing planning needs, you may wish to develop your own capacity or that of your staff or partner organizations in species conservation planning tools and processes. Training in all the planning approaches described in this document is available through a combination of in-person and online courses. Training results in a certificate of completion. Extended mentoring opportunities also exist. Mentoring continues until participants achieve a level of competence at which they can lead the design and facilitation of planning processes themselves.

Additional resources are also available at [www.cpsg.org](http://www.cpsg.org) to help you develop your understanding, competence and confidence in a variety of planning tools and processes designed to support you in your species conservation planning efforts.

### Success with Training, Mentoring & Guidelines

In 2018, Dr. Lucy Kemp, Co-Chair of the IUCN SSC Hornbill Specialist Group, joined CPSG's mentorship program, known as the Planning Development Path. After completing one of CPSG's online courses, Lucy applied her skills to a succession of planning events, taking on increasing levels of responsibility. In 2019, she led the design and facilitation of a number of planning workshops resulting in new conservation plans, including that for the Southern ground hornbill in Zimbabwe.





*Neophron percnopterus*

## CONTACT US

**Please contact CPSG Chair, Dr. Onnie Byers, at [onnie@cpsg.org](mailto:onnie@cpsg.org)** for more information or to engage our services. Costs vary by service. CPSG strives to make services accessible to all.