these experts can offer advice in English, French, Spanish or Chinese. The list of experts, and the subjects they have expertise in can be found on the AArk web site, (www.amphibianark.org/amphibian-husbandry-experts/).

As always, AArk staff and our dedicated associates are available at any time to provide additional support and guidance when needed. If you would like us to help with any aspect of your captive amphibian programs please feel free to email us at info@amphibianark.org and we will ensure that your questions are answered.

Conservation Needs Assessments in Colombia

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With more than 800 amphibian species, Colombia is considered the second most biodiverse country for amphibian species.

In order to help plan a comprehensive strategy for the conservation of amphibians in Colombia, and taking into account the National Plan for the Conservation of Amphibians (which brought together a significant number of researchers and professionals from NGOs, governmental and academic institutions), a strategic alliance between the Wildlife Conservation Society (USA), Zurich Zoo (Germany), Cali Zoo (Colombia) and several others interested in amphibian conservation was formed to implement the priority actions identified by the plan. In particular this alliance is focusing on complementary conservation actions, both *in situ* and *ex situ*, in priority areas which have a high concentration of threatened amphibians in Colombia.

This alliance is leading the initiative to ensure the conservation of threatened species of amphibians in five national parks (Parque Natural Nacional Selva de Florencia, Parque Natural Nacional Tatamá, Parque Natural Nacional Farallones de Cali, Parque Natural Nacional Munchique and Parque Natural Nacional Sierra Nevada de Santa Marta), which include more than thirty percent of the threatened amphibian species of the country.

Through the coordination of Amphibian Ark, the use of the Conservation Needs Assessment process was proposed to identify the necessary conservation actions for more than 200 species that are distributed in the National Natural Parks system. Using the Conservation Needs Assessment tool (www.ConservationNeeds.org) a group of experts recommended conservation actions which will now inform conservation strategies for those species.

A small group of field biologists and researchers gathered together at Cali Zoo from March 22nd – 24th to complete assessments for almost 120 species. As result of the assessments, seven species were recommended for *Ex Situ* Rescue, fifty-one species were recommended for *In Situ* Conservation, eighty-six species were recommended for further *In Situ* Research, forty-two species were recommended for *Ex Situ* Research, two species were recommended for Mass Production in Captivity, twenty-nine species were recommended for Conservation Education, seven species were recommended for Supplementation, and seven species were recommended for Biobanking. Definitions for all of these types of conservation actions can be found at www.conservationneeds.org/Help/EN/ConservationActions.htm.

The participants of the workshop also selected two species to develop a holistic conservation program (including both *in situ* and *ex situ* management). One of these, Lehmann's Poison Frog (*Oophaga lehmanni*), is a species that is currently under pressure from over-collection due to illegal trading for the pet trade, and has been recommended for mass production, supplementation, conservation education and *in situ* conservation strategies. The Universidad del Valle, in Cali, Colombia, along with the Corporación del Valle del Cauca (the regional government branch in charge of conservation and management of biodiversity in the Department of Cauca) are currently studying the population dynamics for this species, and the Universidad de Los Andes in Bogotá, Colombia, is currently studying the genetic variability of different sub-populations of the species, trying to understand the effect of population decrease on the genetics of the species in the wild due to over-collection. Cali Zoo will be the institution in charge of breeding the species in captivity in a biosecure area so individuals from this assurance population could be translocated to the wild when needed.

The group also identified *Atelopus laetissimus* as a husbandry analog species for mid-altitude (1,900–2,800m above sea level) species from the *Atelopus* genus, such as the Critically Endangered Bogota Stubfoot Toad (*Atelopus subornatus*). For this species the Parque Explora, located in Medellín, Colombia, will develop management and breeding protocols in a biosecure area. Parque Explora already has some experience keeping mid-altitude *Atelopus* species in their facilities.

Finally the group also identified *Colomascitus* (*Hyloscirtus*) *antioquia* as an *ex situ* Rescue species, and Parque Explora will develop a holistic conservation plan for this species. This species was only recently described (in 2013) and is found north of the Cordillera Central of the Departmento de Antioquia, Colombia, where it has been identified in eight localities ranging from 2,500–3,200m above sea level (Rivera-Correa and Faivovich 2013). The population is considered to be severely fragmented, given that most of the population occurs in small creeks, isolated from one another and with no exchange of individuals (NatureServe Workshop August 2016); however the population trend is currently considered to be stable.

Amphibian Ark will follow the development of these actions plans and will provide help whenever required.