

Recent Amphibian Conservation Needs Assessment workshops

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Vietnam, Laos and Cambodia

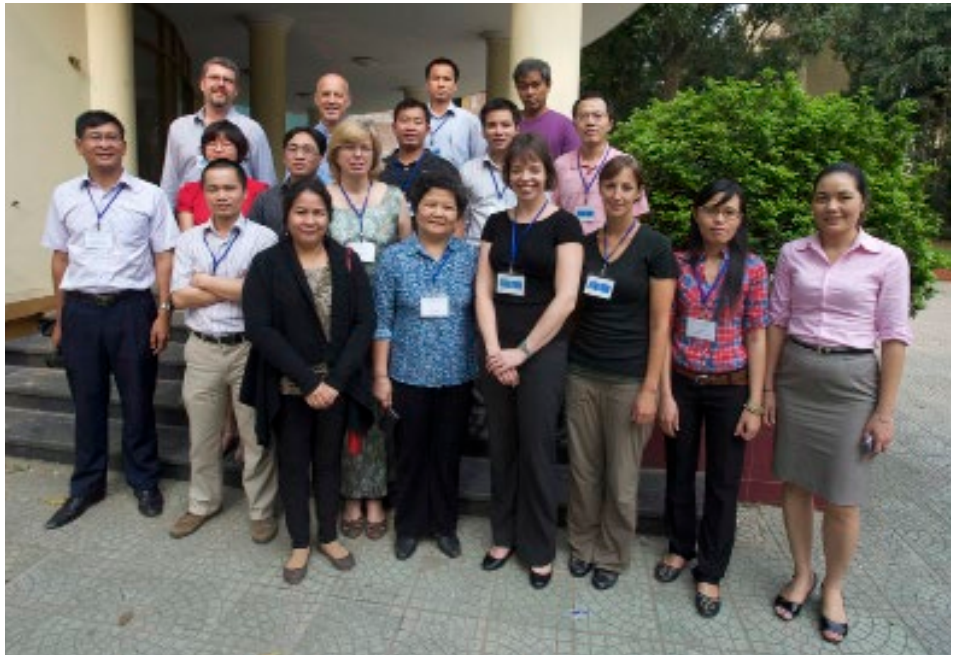
The Institute of Ecology and Biological Resources, at the Vietnamese Academy of Science and Technology in Hanoi, Vietnam, hosted a five-day amphibian conservation needs assessment workshop from March 26-30, 2012. During the workshop, the conservation needs of 203 species of amphibians occurring in Vietnam, Laos and Cambodia were assessed.

Twenty participants met during the five-day period, with representatives from Vietnam, Laos, Cambodia, Germany, France, China, Australia, the Philippines, and the USA. The workshop was jointly funded by grants from the Conservation Food and Health Foundation, the Conservation and Collection Management Committee of the Columbus Zoo and Aquarium, and the Prince Bernhard Fund For Nature.

Two main issues were re-iterated during the workshop. Firstly, there is very little known about many amphibian species in the wild in Vietnam, Laos and Cambodia, and a great deal more field research is required to obtain a thorough understanding of the status of the region's amphibians. Secondly, although a number of species occur in protected areas within the region, most of these protected areas are not providing effective protection, and there is still collection of animals, habitat destruction for agriculture and mining taking place in these areas. This is especially evident in Cambodia where there is almost not real protection for natural habitat.

During the workshop, 90 species were recommended for *in situ* conservation work to ensure their survival in the wild, 123 species (mostly classified as Data Deficient) require additional *in situ* research to determine their distribution or the threats they face, 5 species were identified as husbandry analogs for more threatened species or for *ex situ* research, 81 species were identified as being suitable for conservation education purposes and there were 25 species that do not require conservation action at this time. There are also a number of species that require further taxonomic work to determine correct species limits.

The complete results from the workshop are available on Amphibian Ark's data portal at www.amphibianark.org/assessmentresults.htm.



Twenty participants met in March 2012 to assess the conservation needs of the amphibians. Photo: Jeremy Holden.



Participants at the Amphibian Conservation Needs Assessment for Ecuador. Photo: Pontificia Universidad Catolica del Ecuador.

Ecuador

In May 2012 the Pontificia Universidad Catolica del Ecuador (PUCE) in Quito, Ecuador, hosted a workshop to assess the conservation needs of Ecuadorian amphibians. During the workshop, 265 of Ecuador's 531 species of amphibians were assessed, including all 241 threatened species (Critically Endangered, Endangered, Vulnerable and Near Threatened), and 24 species categorized in the IUCN Red List as Least Concern or Data Deficient.

Participants representing eight different organizations systematically assessed the species using the AArk's conservation needs assessment process, with each species being recommended for one or more of the following conservation actions:

- **Rescue:** 55 species that are in imminent danger of extinction (nationally) and require *ex situ* management, as part of an integrated program, to ensure their survival.

- **In Situ Conservation:** 202 species for which mitigation of threats in the wild may still bring about their successful conservation.
- **In Situ Research:** 290 species that for one or more reasons require further *in situ* research to be carried out as part of the conservation action for the species. One or more critical pieces of information is not known at this time.
- **Ex Situ Research:** 28 species currently undergoing, or proposed for specific applied research that directly contributes to the conservation of the species, or a related species, in the wild (this includes clearly defined 'model' or 'surrogate' species).
- **Conservation Education:** 64 species that are specifically selected for management – primarily in zoos and aquariums - to inspire and increase knowledge in visitors, in order to promote positive behavioral change.
- **Biobanking:** 55 species for which the long-term storage of sperm or cells to perpetuate their genetic variation is urgently recommended, due the serious threat of extinction of the species.
- **No Conservation Action Required:** 22 species that do not require any conservation action at this point in time.

Due to time constraints 266 species classified as Least Concern or Data Deficient were not assessed during the workshop.

The complete results from the workshop are available on Amphibian Ark's data portal, www.amphibianark.org/assessmentresults.htm.

Funding for the workshop was generously provided by Saint Louis Zoo and Chicago Zoological Society's Chicago Board of Trade Endangered Species Fund, with Pontificia Universidad Catolica del Ecuador providing the workshop venue and equipment.

2012 AArk Seed Grant Winners

Amphibian Ark is pleased to announce the winners of the 2013 Seed Grant program. These \$5,000 competitive grants are designed to fund small start-up projects that are in need of seed money in order to build successful long-term programs that attract larger funding. We would like to acknowledge the generous support of the Andrew Sabin Family Foundation, Ronna Erickson, Josie Lowman, Woodland Park Zoo and the European Association of Zoos and Aquariums in establishing these grants. Applications for seed grants in 2013 will be called for early in 2013.

Conservation Plan for *Eleutherodactylus juanariveroi* (Anura: Eleutherodactylidae): captive breeding and environmental assessment for future introduction efforts

Project Leader: Neftalí Ríos-López, e-mail: neftalirios@yahoo.com / neftali.rios@upr.edu

Team Members: Ariel Díaz-Pérez and Lelanee Ortíz Rivas, University of Puerto Rico at Humacao, Call Box 860, Humacao, Puerto Rico 00792

Total funding amount provided by Amphibian Ark to support this project: \$5,000.

Executive Summary

Eleutherodactylus juanariveroi is an herbaceous palustrine wetland specialist from Puerto Rico, and it is designated Critically Endangered by Puerto Rico's Department of Natural and Environmental Resources (DNER 2007a, b) and by the International Union for Conservation of Nature (IUCN, 2011). The species has the smallest geographic distribution (~180 ha), lowest reproductive output (3 eggs/clutch), utilizes one a single plant species for egg laying (bulltongue arrowhead, *Sagittaria lancifolia*), and it has not been found beyond its type locality (Ríos-López and Thomas 2007). Biotic conditions of its wetland habitat, which presumably had a much wider geographic cover, are rarely found in Puerto Rico and this wetland site is highly threatened by a wide range of anthropogenic disturbances at the public, private, municipal, state, and federal governmental levels. Consequently, the conservation of the species and of the wetland ecosystem it depends on for reproduction and survival are of prime importance and require coordinated *ex situ* and *in situ* conservation efforts.



A male *Eleutherodactylus juanariveroi* calling. A captive breeding program for this Critically Endangered species will be established at the University of Puerto Rico at Humacao. Photo: Neftalí Ríos-López.

The proposed project is oriented at establishing a captive breeding program for the species and funds requested from Amphibian Ark will be devoted exclusively to the establishment of the captive breeding program and for related materials and equipment. Results from this project will include breeding, raising hatchlings to adulthood, and captive care and maintenance protocols for the species, which can also serve as guidelines for similar small-sized *Eleutherodactylus* species in need for *ex situ* conservation. Two related activities will be conducted simultaneously and consist of (1) the identification of wetlands suitable for rehabilitation and (2) determining optimal growing conditions for *S. lancifolia* for future largescale planting in wetlands selected for rehabilitation. We expect that these activities combined will set the basis for successful conservation of *E. juanariveroi* and the establishment of adequate regulatory mechanisms for better conservation policies for Puerto Rican *Eleutherodactylus* species.

The complete proposal can be viewed here: www.amphibianark.org/pdf/seed%20grants/Neftali%20Rios%20Lopez%202012%20AArk%20Proposal.pdf.