



progress report

Stories from our partners around the world

DECEMBER 2017
AMPHIBIAN SURVIVAL ALLIANCE
NEWSLETTER



Got a story you want to share?
Drop Candace an email today!
cmhansen@amphibians.org



From Colombia to Cameroon...



Frogs & Friends' **video documentary**, "Toxic midgits of Colombia," about the amphibian project of Zurich Zoo, Cali Zoo, WCS Colombia and PNN Colombia, won the Fast Forward Science video competition 2017. This prize is awarded to the best science web-videos by German associations Science in dialogue and Donor's association for the promotion of humanities and sciences in Germany.

The Cameroonian government recently initiated a series of infrastructure development projects, including a construction of deep-sea

port in the south-western Cameroon. Surrounding area is a potential habitat of the Goliath Frog, however, it is largely unexplored, so nothing was known about the presence and condition of the Goliath Frog populations. In spring 2017, Frogs & Friends asked Cameroonian herpetologist Dr. Nono LeGrand Gonwouo to conduct a rapid assessment, seeking for the Goliath frog in the proximity of the construction site. Since the Goliath Frog was not found there, it seems that (for now) it is not jeopardised by the construction. However, other activities might put it at risk. At the time, Frogs &

Friends, Tiergarten Schönbrunn in Vienna and Museum für Naturkunde Berlin are preparing a captive breeding program of the Goliath Frog. To implement it successfully, some of the gaps in the knowledge about the Goliath Frog ecology need to be filled.

In June 2017, Frogs & Friends was awarded a grant from the Stiftung Artenschutz, supporting a study on feeding ecology of the Goliath Frog tadpoles in Cameroon.

Indeed, a successful year for Frogs & Friends.

Save the date: Salamander Saturday, 5 May 2018



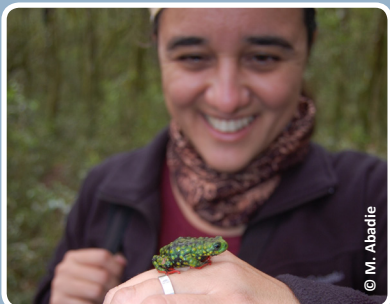
Salamander Saturday is an initiative started by Foundation for the Conservation of Salamanders (FCSal) to raise awareness about salamanders, their habitats and their role in the ecosystem. We are encouraging organizations around the world to hold an event on this day and to share their events with FCSal through social media, thereby promoting global unity in the effort to protect salamanders.

Interested in hosting an event? Your Salamander Saturday event should be catered to your organizations strengths and schedules; it can be as simple as hosting an education table, or as involved as a fundraising event. FCSal will be partnering with American Association of Zoo Keepers, Partners in Amphibian and Reptile Conservation and Amphibian Survival Alliance to reach a broad audience of amphibian lovers and to make Salamander Saturday a success!

You can help by creating a day for international salamander awareness. If you would like to participate, please contact info@fcsal.org and share your plans with us. Make sure to send us the event title/program name, organization hosting, location/time, and website.

All Salamander Saturday events will be promoted via FCSal.org and our Facebook page, so please take pictures and have fun spreading the word about salamander conservation! If you would like to host a fundraiser for FCSal, we would be happy to supply you with necessary materials including our Chopsticks for Salamanders stainless steel chopsticks.

Please see our website for more information and for downloadable education materials. www.FCSal.org



This edition of the Progress Report has a number of exciting developments led by ASA partners, many focusing on salamanders. The rediscovery of Jackson's Climbing Salamander, not seen since its description in 1975, is fantastic news for the amphibian conservation world and gives us reason to hope that other poorly known and/or threatened species that have not been seen in a long time may still survive. The development of a field manual to survey Chinese giant salamanders will help standardize approaches and make results comparable across the species' range. Building partnerships

among national and local government, non-profit organizations and academic institutions to advance captive breeding and experimental release of native species, as well as education and outreach initiatives, ensures that there is multi-stakeholder ownership of and commitment to these initiatives. Seeking to develop optimal conditions in enclosures for successful captive breeding of Tinkers Reed Frog as well as ecological research into the Endangered Goliath Frog are important to advance amphibian conservation in Africa. A science video documentary focusing on South American poison frogs won an important award in Germany, and an outreach campaign to raise awareness about salamanders and their habitats is going global. Two seed grants will help develop *ex situ* conservation of two emblematic South American frogs, and development of Conservation Needs Assessments for North American

salamanders could help prepare for the arrival of the salamander chytrid fungus should it happen.

The ASA Secretariat has been working closely with the ASA Global Council to develop new governance and partnership documents that will help implement the ASA 2017–2021 Strategic Plan, so stay tuned for updates in this regard.

Finally, we would like to take this opportunity to thank all ASA partners for all they do for amphibian conservation each and every day.

On behalf of ASA, Season's Greetings! We look forward to continuing to work with all of you to help advance global amphibian conservation in 2018.

Ariadne Angulo, PhD
Interim Executive Director
Amphibian Survival Alliance

Building relationships to meet goals



The Amphibian Foundation is dedicated to protecting imperiled amphibians and their habitats. But we can't do it alone. We combine our experience, dedication, and skill with many talented and passionate partner agencies to meet mutual goals. Partnerships are the backbone of all of our initiatives, and the Amphibian Foundation wouldn't be able to achieve our goals without these relationships.



For example, our captive breeding program addresses the decline of three species native to the state of Georgia - the Frosted Flatwoods Salamander (*Ambystoma cingulatum*), Gopher Frog (*Lithobates capito*), and Striped Newt (*Notophthalmus perstriatus*). We collaborate with national and state governmental agencies and other nonprofits to sample the animals in the field, collect them, and maintain them, from captive breeding and assisted metamorphosis to experimental release into protected habitat.

We also collaborate to meet educational initiatives. Partnering with universities, we mentor student interns and teach courses on biology, conservation and scientific illustra-

tion. The Foundation trains citizen scientists and hosts workshops alongside state agencies, nonprofits, and for-profit organizations. We also encourage and teach amphibian conservation through our partnerships with local festivals, and even host free, accessible events at small coffee shop venues.

The Foundation, which is a little more than a year old, wouldn't be flourishing without these collaborations. Whether locally here in Atlanta, throughout the southeastern Coastal Plain, or globally, any success we achieve is made through our strong partner relationships.

Want to work together?

Wild-like care for *Hyperolius*



We maintain a study collection of Amphibians at the Arcadia Reptile Science and Innovation Centre UK. The premise of our working theory is that 'any given species will have seen a long-term level of change and adaptation within the wild ecosystem in order to be able to take everything that it needs from that wild habitat in order to 'thrive.' By 'thrive,' we refer to an animal that is

able to live a long, enriched life, with a low risk of avoidable disease and is able to project its genes into many future generations.

In 2017 we have been implementing our theory of 'Wild Re-creation™' into a group of *Hyperolius tuberilinguis*, the Tinkers Reed Frog. Using a suitable enclosure that maintains formal 'Bio-Activity.' We

have created a sustainable 'ecosystem in micro' that mimics that of the wild range in terms of temperature, humidity, light spectrum/quantity and ultra violet.

We are monitoring this group for social interaction, type and size of prey, movement and visible well-being. Within this we are paying particular attention to the daily 'Self-regulation' of temperature zones and the self-selected level of exposure to UVB.

Initial findings are that this species will self-regulate daily for long periods within a UVI provision of between UVI 1.30-2.20. This is a higher level than currently suggested of the group, but would match that of the wild habitat at the level in which they are found.

We hope to use this data to disseminate information that leads to more frequent captive breedings.



© Carlos Vásquez Almazán

Salamander rediscovered 42 years after last sighting

Global Wildlife Conservation's Search for Lost Species initiative has announced the incredible and unexpected rediscovery of the first of its top 25 "most wanted" lost species, the Jackson's Climbing Salamander (*Bolitoglossa jacksoni*), lost to science since its discovery in 1975. The rediscovery comes months before an organized expedition to Guatemala's Cuchumatanes Mountain range to look for the animal, and was made possible in part because a group of organizations, including GWC and the ASA, established the Yal Unin Yul Witz Reserve (also known as Finca San Isidro Amphibian Reserve) in 2015 to help protect the species' habitat.

A guard at the Reserve, Ramos León, discovered a juvenile Jackson's Climbing Salamander—only the third individual ever seen—on the

edge of the reserve while out on patrol this month. He sent a photo to Carlos Vásquez-Almazán, curator of herpetology at USAC University in Guatemala and coordinator of the amphibian conservation program at local NGO, GWC partner and reserve manager FUNDAECO, who confirmed that the species in the photo was, indeed, the Jackson's Climbing Salamander.

The guard rediscovered the salamander 300 meters higher than where the species was discovered in 1975 by Jeremy Jackson (after whom the salamander is named) and Paul Elias, two American friends who spent time exploring the jungles of Guatemala in the 1970s. On their adventures they also discovered the Finca Chiblac Salamander and the Long-limbed Salamander. All three species went unseen for more



**GLOBAL
WILDLIFE
CONSERVATION**

than three decades, until Vásquez-Almazán rediscovered the Finca Chiblac Salamander in 2009 and the Long-limbed Salamander in 2010. The Jackson's Climbing Salamander was the last of the missing triad.

GWC, FUNDAECO and Rainforest Trust are now joining forces to expand the reserve to protect the Jackson's Climbing Salamander and a treasure trove of additional endemic and endangered Guatemalan species threatened by climate change, habitat loss and infectious disease.

Chinese Giant Salamander field survey manual published

ZSL | LET'S WORK FOR WILDLIFE

A number of methods are utilized to survey Cryptobranchid salamanders and these methods vary greatly in their efficacy and invasiveness. The Chinese Giant Salamander (*Andrias davidianus*) is the world's largest amphibian. It is endemic to China and is currently listed as Critically Endangered by the IUCN and ranked as the number two global priority for amphibian conservation on the basis of threat and evolutionary history by the Zoological Society of London's Evolutionarily Distinct and Globally Endangered (EDGE) program.

Wild populations are threatened and some have already become

extinct. Population declines have been attributed to habitat loss and fragmentation, and especially hunting for luxury food markets and potentially to stock salamander farms. *Andrias davidianus* is particularly vulnerable to overexploitation due to its slow growth and age at which it attains sexual maturity; generation length has been estimated to be 15 years. Historically, this species was found over much of southern and central China in the Pearl, Yellow and Yangtze River drainage basins. Despite its large size and wide distribution relatively little is known about this species and range wide surveys have not been undertaken.

In order to understand the distribution and population status of Chinese Giant Salamanders it is pivotal that the data collected during field surveys is comparable between sites, the use of standardized methods is therefore of the upmost importance. We have developed a field manual to facilitate the adoption of standardized Chinese Giant Salamander surveys in China that are minimally invasive, logistically feasible and robust. It is our hope that these methods will be used by all researchers working to collect data on the species.





Updates from Amphibian Ark



In August we called for applications for a second round of Amphibian Ark (AArk) Seed grants. These competitive \$5,000 grants fund start-up rescue projects for species that cannot currently be saved in the wild. We're very pleased to announce that two grants were recently awarded to new amphibian conservation programs in Latin America:

- An *ex situ* conservation program for the Zippel's Frog, *Aromobates zippeli*, Enrique La Marca, Laboratory of Biogeography of the University of Los Andes at Merida, Venezuela. The project proposal can be viewed at www.amphibianark.org/seed_grants/Enrique-La-Marca-AArk-Seed-Grant-Proposal.pdf.
- Saving the giant frogs of Peru, *Telmatobius macrostomus*, Lizette Bermúdez Larrazábal, Parque Zoológico Huachipa, Peru. The project proposal can be viewed at www.amphibianark.org/seed_grants/Lizette-Bermudez-Saving-the-giant-frogs-of-Peru.pdf.

The addition of these two seed grants brings the total number of AArk seed grants awarded since 2009 to

26, in 16 countries, with a total of US\$127,109 being awarded. The complete list of seed grant recipients can be seen at www.amphibianark.org/seed-grant-winners/.

AArk staff are continuing to work with field experts to review and update the draft Conservation Needs Assessments for North American salamanders. Several volunteers assisted AArk staff to draft assessments based on data from *Amphibian Declines: The Conservation Status of United States Species* (edited by M. Lannoo, 2005), and we are now working with a number of salamander experts who have more recent knowledge of the status of wild populations, to update the assessments. Recommendations for potential conservation actions are then generated for the completed assessments, and these can be viewed on the Conservation Needs Assessment web site, www.ConservationNeeds.org. We hope that an accurate assessment of the conservation status and needs for North American salamanders could lessen the impact of the arrival of the salamander chytrid fungus, *Bsal*, should this occur. The findings that a number of frog species can carry *Bsal* make understanding current population status even more important.