



progress report



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December 2019

AMPHIBIAN SURVIVAL ALLIANCE

NEWSLETTER



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FOUND: Lost Starry Night Harlequin Toad makes radiant return to science



For the first time since 1994, biologists have documented the stunning black-and-white-spotted Starry Night Harlequin Toad (*Atelopus aryescue*). The photo documentation is the result of a unique and poignant partnership between Global Wildlife Conservation partner Fundación Atelopus—a Colombian NGO—and the indigenous Arhuaco people of the Sogrome community in Colombia's Sierra Nevada de Santa Marta, the tallest coastal mountain on Earth.

"While Harlequin Toads across Latin

America at these higher altitudes have largely vanished over the past three decades as the result of a deadly fungal pathogen, it turns out that the Starry Night Harlequin Toad has bucked the trend," said Lina Valencia, Colombia conservation officer at Global Wildlife Conservation. "This is a powerful story about how working with indigenous and local communities can help us not just find species lost to science, but better understand how some species are surviving and how we can conserve the natural world in a way that connects spiritual and cultural

knowledge. We are tremendously grateful to the Arhuaco people for giving us this opportunity to work with them."

The Starry Night Harlequin Toad, known as 'gouna' to the Arhuaco people, is classified as Critically Endangered by the IUCN Red List of Threatened Species. Although it had been lost to science for nearly 30 years, it has never been lost to members of the Sogrome community, who have always lived in harmony with the toad in their shared home in the Sierra Nevada

de Santa Marta and have historically protected the amphibian, its habitat and the other wildlife living there.

“The Sierra Nevada de Santa Marta is a place that we consider sacred, and harlequin toads are guardians of water and symbols of fertility,” said Kaneymaku Suarez Chaparro, a member of the Sogrome community and a biology student at the Francisco José de Cladas District University. “We manage our resources and conserve our home as the law of origin dictates, which means that we live in balance with Mother Earth and all of the life here. Now we have a great opportunity to bring together two worldviews for the protection and preservation of the Sierra species: the Western scientific knowledge and the indigenous scientific, cultural and spiritual knowledge.”

The Starry Night Harlequin Toad has not been scientifically documented in nearly 30 years in part because biologists have not had access to its habitat. However, for the community of Sogrome and their representative Ruperto Chaparro Villafañá, the toad is a legitimate authority of the natural world—an indicator that signals when to take actions like

planting crops or performing spiritual ceremonies—that has inspired their ancestral culture for thousands of years.

For this reason, the Sogrome community has chosen the Starry Night Harlequin Toad as a flagship for their community-based project, Amas la Sierra. The project is aimed at demonstrating that it is possible for humans to accomplish their goals while maintaining the equilibrium of Earth, even achieving economic growth through the preservation of nature. Given their shared interests to protect nature, a partnership with Fundación Atelopus seemed like a natural fit. But for the biologists to obtain permission to make the eight-hour hike to co-document the starry night harlequin toad for the rest of the world required first building a relationship with the indigenous community.

After four years of dialogue among Fundación Atelopus, Villafañá and Sogrome spiritual leaders, called mamos, the Fundación Atelopus team was allowed in April of this year to see the toad without taking photos (a test of trust the Arhuaco call “resisting temptation”). Then

after a series of gatherings with the community, the biologists awaited word from the mamos, who consulted with nature about the team’s intentions and whether they genuinely shared the community’s interest in protecting the Sierra Nevada before granting them permission to visit the toad again on a GWC-funded expedition to get photographs.

“It is an incredible honor to be entrusted with the story of the Starry Night Harlequin Toad and the story of the Sogrome community’s relationship with it,” said Fundación Atelopus vice president and biologist José Luis Pérez-González. “We were hoping to find one individual of the Starry Night Harlequin Toad, and to our great surprise we found a population of 30 individuals. We were full of joy and hope as we had the chance to observe a healthy population from a genus for which very few species remain.”

The next steps will involve Fundación Atelopus, Suarez Chaparro and Villafañá Chaparro sitting down with the mamos and authorities of the community to continue discussing the role of the Sierra and its wildlife, to establish a monitoring



program for the Starry Night Harlequin Toad, and to bring together both the scientific and spiritual perspectives to best continue protecting the amphibian.

Eighty of the known 96 Harlequin Toad species are Endangered, Critically Endangered or Extinct in the wild, according to the IUCN Red List of Threatened Species, as the result of infectious disease, habitat destruction and degradation, invasive species and climate change. As of 2018, 37 Harlequin Toad species had disappeared from their known homes and have not been seen since the early 2000s, despite efforts to find them. The Starry Night Harlequin Toad is one of four Harlequin Toads with seemingly steady populations living in mid-to-high-level

elevations in the Sierra Nevada de Santa Marta, surprising biologists who associate high-elevation habitats with dramatic amphibian declines.

“With the Starry Night Harlequin Toad records, we confirm that Sierra Nevada de Santa Marta is one of the most important sites for the conservation of harlequin toads in Latin America,” said Luis Alberto Rueda, professor at Universidad del Magdalena and Fundación Atelopus cofounder. “And thanks to the indigenous communities like Sogrome, this special place continues to be a sanctuary for these special animals.”



**GLOBAL
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**AMAS LA
SIERRA**



EDITORIAL

In a bumper Holiday edition of the Froggress Report, we bring you exciting updates from new and established ASA partners all over the world. In a long and inspiring list, we share contributions from the Smithsonian Conservation Biology Institute, Zoological Society of London, Froglife, Zoos Victoria, Save The Frogs! Ghana, Global Wildlife Conservation, Synchronicity Earth and the Conservation Planning Specialist Group. We welcome new partners to ASA, including the Wildlife Trust of India, Taita Taveta Wildlife Forum in Kenya, Elgon Wildlife Conservation Organization in Uganda, COANA in Argentina, Grupo RANA in Peru, and the Monitor Conservation Research Society, which is based in Canada and works internationally on amphibian trade

issues. There is a fascinating summary of the recent Atelopus Survival Initiative workshop in Colombia, which was convened to develop an essential network and conservation strategy for threatened Harlequin Toads across the Neotropics. As a recent boost to this initiative, we share a story from Fundación Atelopus announcing the rediscovery of the Starry Night Harlequin Toad (*Atelopus arsyecue*) in Colombia. We also celebrate some richly deserved commendations given to members of our community, including the IUCN SSC Amphibian Specialist Group (awarded the IUCN SSC Chair's Citation of Excellence), Ariadne Angulo (awarded The Harry Messel Award for Conservation Leadership) and Gina Della Togna (awarded the L'Oréal-UNESCO For Women in Science Award).

It has been an eventful and rewarding year for ASA. Our partnership has grown and we have relished celebrating novel initiatives for amphibians in diverse global locations. As 2019 draws to a close, we are publishing the ASA Annual Report for the 2019 fiscal year. We strongly encourage you to add this

to your holiday reading and enjoy yet more fantastic stories from the ASA partnership. We look forward to an exciting 2020 as we make every effort to support global biodiversity conservation targets, including promoting Key Biodiversity Areas and amphibian disease mitigation. Getting the New Year off to a strong start, in early 2020 we will reveal the recipients of our newly launched ASA Conservation Grants and share news from the 9th World Congress of Herpetology (5th-10th January 2020), where ASA is running the Amphibian Conservation Research Symposium as a double session.

We sincerely thank all of our partners and supporters for their tireless efforts in amphibian conservation, and for helping develop ASA into a strong and collaborative partnership. May the New Year bring you much peace and happiness, and the promise of better things to come for your beloved amphibians!

Helen Meredith, PhD
Executive Director
Amphibian Survival Alliance

Saving the Intermediate Puddle Frog



© Daniel Portik

SAVE THE FROGS! Ghana (STF! Ghana) is dedicating hundreds of working hours in search of one of West Africa's rarest frogs, the critically endangered Intermediate Puddle Frog (*Phrynobatrachus intermedius*) at south-western Ghana's Ankasa Conservation Area, it's only known home. Since its discovery of three individuals in 2001, there have not been any further sightings despite several focused surveys in other localities, including Tanoé-Ehy Swamp Forest, Banco National Park, and Taï National Park in neighbouring Côte d'Ivoire. Not surprisingly, nothing is known yet about its population status, distribution, natural history, and tolerance to threats. Scientists from STF! Ghana, therefore, is committing an entire year of continuous searches in an attempt to rediscover and bridge this knowledge gap. Alongside this, the team will train local park rangers to incorporate surveys in their routine wildlife monitoring activities to increase the chances of rediscovery.

The Ankasa Conservation Area is one of Ghana's best-protected forests. Regardless, there still is heavy dependence on Non-Timber Forest Products, including raffia palm tapped for a local 'wine.' This activity within the species' habitat puts it in imminent danger of disappearing; thus, offering little opportunity to know more about its biology and ecology. STF! Ghana, in collaboration with Ghana's Forestry Commission, is, therefore, conducting proactive conservation actions alongside the searches by planting 10,000 raffia palm trees to secure the species' type locality before it is lost. Additionally, we will assist 100 local palm wine tappers in planting 2,000 seedlings of raffia palm trees in suitable areas on their farms to reduce pressures on wild palms within the species' habitat; and educate an estimated 20,000 local people including school children from surrounding communities on the need to protect *P. intermedius*.

The project is expected to benefit co-occurring threatened amphibian species such as Ghana River Frog (*P. ghanensis*) and Yapo River Frog (*P. villiersi*), as well as non-amphibian species including Forest Elephant (*Loxodonta africana cyclotis*) and White-breasted Guinea Fowl (*Agelastes meleagrides*).

This project is sponsored by Mohammed bin Zayed Species Conservation Fund and Prince Bernhard Nature Fund.



The ASG at the IUCN SSC Leaders meeting



The fourth IUCN Species Survival Commission (SSC) Leaders meeting, where the leadership of the IUCN and SSC meet to discuss the functioning, growth and integration of species conservation work, was held in Abu Dhabi, United Arab Emirates, October 6-9, 2019, with the support of the Environment Agency Abu Dhabi (EAD). This meeting brought together over 350 conservationists from around the world, including ASG co-chairs Prof. Phil Bishop and Dr. Ariadne Angulo, Programme Officer Sally Wren, and Amphibian Red List Authority Global Coordinator Jennifer Luedtke.

Amphibians had a prominent presence at the SSC Leaders meeting as ASG was requested to participate in several sessions. Prof. Bishop presented on ASG's planning approach in plenary during the first day of the meeting and was congratulated by many fellow specialist group chairs. In addition, an ASG poster that same day received much interest from meeting participants. Ariadne Angulo was invited to represent ASG during a panel discussion on diversity in leadership and membership during a parallel session on the second day, and ASG was also tasked with facilitating an amphibian and reptile breakout session on the third

day to discuss priorities and challenges and whether to establish an Amphibian and Reptile Conservation Committee.

The last day of the meeting was especially significant for ASG. Dr. Simon Stuart gave a very heartfelt and moving tribute to Dr. George Rabb, arguably the father of the global amphibian conservation movement and staunch supporter of the ASA, Amphibian Ark, ASG, and all things amphibian. The ASG also received a Chair's Citation of Excellence at the meeting. ASG received this important commendation in recognition of its outstanding contributions in delivering the Species Strategic Plan during the 2017-2018 period. ASG is a fantastic example of how an IUCN SSC specialist group can build a welcoming global community that serves and delivers science and conservation action. It comprises a wonderfully committed team of experts who are striving to make this world a better place for amphibians.



This commendation recognises a truly fantastic group of people and is richly deserved.

Ariadne Angulo also received a very important recognition of her achievements in amphibian conservation during this last day of the meeting. She was one of the recipients of The Harry Messel Award for Conservation Leadership. This award recognizes exemplary service to the IUCN SSC, especially from individuals who have made a specific contribution to species conservation on the ground or through their leadership, as part of the work of an SSC Specialist Group or Task Force. Ariadne combines her commitment to the coordination of global efforts with a passion for developing amphibian conservation in Latin America. Since 1984, when the award was initiated, this is the first time that SSC has bestowed this award in recognition of specific work with amphibian conservation. Moreover, out of 72 IUCN SSC awardees until 2019, only four worked in Latin America and only 16 were women, which makes this recognition timely. Nevertheless, it was not the first time that Dr. Ariadne Angulo, who was born in Peru and raised in Brazil, has been recognized for her work. In 2015, she received an IUCN SSC Chair's Citation of Excellence in recognition of her tireless, conscientious, and dedicated leadership of amphibian conservation, including through the Amphibian Specialist Group and Amphibian Red List Authority. Among Ariadne's many contributions to amphibian conservation, she served as Interim Executive Director of ASA from 2017-2018 during Dr. Helen Meredith's maternity leave – a role she embraced with great tenacity whilst bringing ASG and ASA ever closer together.

Congratulations, ASG and Ariadne! The Amphibian Survival Alliance is grateful for all that you do, and is very proud of you!

Atelopus Survival Initiative workshop



Harlequin Toads (*Atelopus* spp.), a species-rich genus with a wide distribution in the Neotropics, are among the most threatened group of amphibians in the world. The Atelopus Survival Initiative (ASI) is a collaborative effort that unites and mobilizes national and international conservation groups, governments, academic institutions, zoos, and other interested organizations to implement substantial, long-term, range-wide conservation measures for this unique group of amphibians.

As a first step to accomplish this, a 4-day workshop was held in Medellín, Colombia with key experts and Harlequin Toad conservationists working across the *Atelopus* range countries. The objectives of the workshop were to create an *Atelopus* network and to formulate a roadmap of actions to be implemented collectively by the ASI.

The workshop was held in Parque Explora from 4-7 November 2019,

and was attended by 40 *Atelopus* experts and conservationists from 11 different countries, including seven where Harlequin Toads occur. These experts represented at least 30 institutions, including ASA partners Global Wildlife Conservation (GWC), Amphibian Ark (AArk), the IUCN SSC Amphibian Specialist Group (ASG), the Smithsonian Conservation Biology Institute, and a variety of Latin American universities, museums, environmental agencies, and NGOs.

The workshop was co-organized by GWC and Parque Explora, with the support of the Amphibian Survival Alliance (ASA), AArk, and ASG, and thanks to the kind donations of the Zoological Society for the Conservation of Species and Populations (ZGAP), Philadelphia Zoo, and ASA partners German Herpetological Society (DGHT) and the Smithsonian Conservation Biology Institute. The workshop structure followed the guidelines developed the IUCN Conservation Planning Specialist Group

(CPSG), also a partner of ASA.

ASA was represented by our Communications and Partnership Officer Luis F. Marin da Fonte, who not only helped co-facilitate the workshop, but also got to know about the incredible work these organizations are doing around amphibian conservation and prospect new partners for ASA across Latin America.

ASA partners can support the ASI in a number of ways. We are looking for funding to implement the goals of the initiative and for expertise and initiative partners. Together we can restore Harlequin Toads and protect their habitat. If you are interested in joining this critical initiative, please contact Lina Valencia at lvalencia@globalwildlife.org

Papua New Guinea's first public display for native frogs



The first phase of on-ground work to strengthen a secure future for Papua New Guinea frogs was recently completed at the Port Moresby Nature Park. Part of a larger, long-term strategy to mitigate the likely impacts of the Amphibian Chytrid Fungus on PNG frogs, the project has seen the country's first public display for PNG frogs installed at the Nature Park. Melbourne Zoo's frog husbandry specialist, Damian Goodall, spent a week sharing his expertise with the Park's frog and reptile keepers, Ryan Reuma and Dagie Solomon. A 1 x 0.6 x 0.6m glass aquarium was fitted-out with filtration and irrigation systems, lighting to support live plants and meet the frogs' UV requirements, and natural landscaping to highlight the frogs to Park visitors. A major focus was ease of maintenance and recording climatic parameters like temperature and humidity. The exhibit's first inhabitants, White-lipped Tree Frogs (*Litoria infrafenata*) and Green Tree Frogs (*Litoria caerulea*) have settled in well.

It is planned to add further displays for Cane Toad (*Rhinella marina*) and

Water Frog (*Rana daemeli*). All four species occur on the Park grounds.

Establishing the display was underpinned by two workshops on frog husbandry for the Park's Life Science staff and complemented by installation of off-exhibit tanks for tadpoles and metamorphs. Critical for successful frog husbandry, the Park has an expanding live food unit that receives regular input from staff at Melbourne Zoo's Invertebrate Department.

All available evidence points to New Guinea being the only large land-mass yet to be affected by chytrid (see Bower *et al.*, 2019; "Island of opportunity: can New Guinea protect amphibians from a globally emerging pathogen?"). Accordingly, we are being proactive and developing capacity for frog husbandry

and breeding, in PNG for PNG frogs, in advance of the likely arrival of chytrid in PNG.

Much of the country's frog fauna comprises small species with poorly known captive needs, *ie.* the large number of microhylids. As such, and recognising that the Park's keepers are just starting out on the journey of caring for frogs, husbandry skills will develop with common hardy species before moving on to the more challenging less well-known species.

The work is part of a long-term sister zoo partnership between the Nature Park and Zoos Victoria, which has facilitated visits by more than 30 staff sharing expertise across the gamut of zoo operations.

Damian Goodall, Melbourne Zoo (dgoodall@zoo.org.au); and Chris Banks, Zoos Victoria (cbanks@zoo.org.au).

ZOOS
VICTORIA
Fighting Extinction

Save the Frogs!, ASA and Froglife meet in Cambridge, UK



In September 2019, UK charity Froglife organised a conference at the David Attenborough Building, Cambridge with speakers from Save the Frogs!, the Amphibian Survival Alliance (ASA) and Cambridgeshire Amphibian and Reptile Group (CPARG). The aim was to bring together conservation organisations working in the UK and globally to form partnerships and share ideas and successes.

The afternoon started with an introduction by Froglife's Chief Executive Officer, Kathy Wormald, followed by a talk by Steven Allain from the Cambridge and Peterborough Amphibian and Reptile Group (CPARG). Steve shared the activities of the

group which included local events, training courses and amphibian and reptile surveys. It was encouraging to hear of the number and variety of events being hosted in the county and of the range of amphibian and reptile conservation initiatives being carried out by CPARG.

Next, followed Dr. Laurence Jarvis, Science & Research Manager from Froglife who spoke on the research themes of Froglife. These included tunnel mitigation research, including a successful case study of tunnel monitoring at a site in northern England; the latest figures from Froglife's long-standing Toads on Roads project; an update on their juvenile toads research study; Garden Wildlife Health; and some of the interesting conservation and research projects being conducted at the Hampton Nature Reserve in Peterborough.

Dr. Helen Meredith, Executive Director of the ASA, then gave a motivating talk on global amphibian partnerships. She highlighted the incredible diversity in amphibian spe-

cies across the globe and provided seven themes for amphibian conservation initiatives. Her work involves forming international partnerships and developing funding opportunities for crucial amphibian conservation programmes worldwide.

The last talk of the day was from keynote speaker Dr. Kerry Kriger, Founder, Executive Director & Ecologist from the international charity Save the Frogs! Kerry gave an inspirational and dynamic talk on amphibian conservation and environmental education from across the world. He detailed some of the many and varied successful events held for Save the Frogs! Day from the USA, Africa, India, Bangladesh and South America. Kerry's talk provided insight into the incredible variety of environmental education initiatives which have been inspired by Save the Frogs! and of the range in amphibian conservation success stories from across the globe.





© Left photo by Claudio Soto Azat. Right photo by the Ministry of Housing and Urbanism of Chile

World's Last Loa Water Frogs Get a Helping Hand

In late June a team of conservationists and government officials in Chile evacuated what may be the world's last-known 14 Loa Water Frogs (*Telmatobius dankoi*)—a species considered Critically Endangered by the IUCN Red List of Threatened Species and found only in a single stream outside of Calama, Chile—just before their habitat dries up almost completely from the illegal extraction of water, leaving the frogs malnourished and barely holding on.

As part of the rescue mission, the animals were relocated to the National Zoo of Chile, where the zoo's specialists have been successfully nursing them back to health.

Now the international conservation community—including Global Wildlife Conservation, the Amphibian Survival Alliance and the IUCN SSC Amphibian Specialist Group—are calling on the Chilean government not to stop at the rescue, but to restore the Loa Water Frog's habitat and formally protect it as a sanctuary or reserve.

"Global Wildlife Conservation is proud to be committed to the conservation of water frogs, a unique and charismatic group of frogs that have gained notoriety over the last few years thanks to Romeo the Sehuencas Water Frog," said Don Church, Global Wildlife Conserva-

tion president. "This is important because water frogs across the Andean highlands in South America need our help. The story of the Loa Water Frogs is a cautionary tale, one that should spur us to action for all other water frog species before they also potentially decline to only a few individuals left."

[Read more about the rescue efforts](#)



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L'Oréal – UNESCO For Women in Science Award

Dr. Gina Della Togna has been recently awarded with the L'Oréal – UNESCO For Women in Science Award for her work on the development of Artificial Reproductive Technologies for the conservation of endangered amphibian species in Panama. The philosophy behind the L'Oréal – UNESCO For Women in Science Award is to support and to empower women who have dedicated their lives and careers to science. Dr. Della Togna is a Research Professor at the Universidad Interamericana de Panamá and Research Associate

of the Smithsonian Tropical Research Institute. She has been working for more than 10 years in the development of Artificial Reproductive Technologies (ART's) including hormonal stimulation for gametes collection, sperm cryopreservation, stimulation and synchronization of reproductive behaviors and artificial fertilization for endangered species such as *Atelopus zeteki*, *Atelopus limosus*, *A. certus*, *A. glyphus*, *A. varius*, *Anotheca spinosa*, *Craugastor evanescens*, *Strabomantis bufoniformis*, among others.

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Gina Della Togna
Instituto Smithsonian de Investigaciones Tropicales (SITR)
Universidad Interamericana de Panamá



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An update from the Panama Amphibian Rescue and Conservation Project

The Panama Amphibian Rescue and Conservation Project was created in 2009 as a partnership between Zoo New England, Cheyenne Mountain Zoo, Houston Zoo, Smithsonian National Zoo, and the Smithsonian Tropical Research Institute to build captive populations of species at risk of extinction from the deadly amphibian chytrid fungus. Together we have built significant capacity for amphibian conservation in Panama and now have 8 full-time employees and a 5,000 sq ft facility that houses an *ex situ* collection of 2,000 adult frogs of 12 at-risk amphibian species.

Our current facility improvement goal is to constructing a dedicated 1,600 square foot insect production facility on site to ensure capacity to feed our growing collection of amphibians that are housed in 7 modified shipping containers. We manage our captive populations using the Zoological Information Management System (ZIMS) and are researching the causes of spindly leg syndrome, to improve our captive rearing survival rates. We also have an active research program

using assisted reproduction methods to induce spawning in different species, with a goal to ensure that we breed unrepresented founder animals. We are also cryopreserving live amphibian sperm as a safeguard against unintended genetic bottlenecks from captivity.

We have begun releasing surplus-bred animals into the wild in order to compare the effectiveness of different post-release monitoring methods, including using radiotracer-tagged animals, mesocosms, and mark-recapture survey-based methods. Our current research into mitigating the effects of the amphibian chytrid fungus includes trials studying the mucusome of animals in the captive collection, with a goal to breed more resilient individuals. We are also conducting research into the idea of environmental refugia from the chytrid fungus with a goal of selecting reintroduction sites where frogs have a higher chance of persisting.

Our primary education and outreach is conducted by a team at the Punta Culebra Nature Center

in Panama City, who have a world-class amphibian exhibit and informal educational curriculum to share with casual visitors and visiting school groups. A team of educators on the Qrius bus visits schools in rural areas and conduct amphibian-based education and outreach activities there. Annually around August 14th we participate alongside many different groups and stakeholders in a week-long 'Golden Frog Day Festival' with frog-themed activities, talks, exhibitions, sporting events and parades.





18th meeting of the African Amphibian Working Group

At the beginning of October, the Amphibian Survival Alliance attended the meeting of the African Amphibian Working Group in George,



South Africa. It was an incredible and vibrant event, gathering almost 40 researchers from several African and European countries. ASA was represented by its Communications and Partnership Officer, Luis Fernando Marin da Fonte. He gave a talk about our work and took the opportunity to make contacts with potential new partners working with amphibian conservation in the African continent.

Among the 32 talks presented in the meeting, it was great to see several ASA partners presenting the amazing work they conduct in Africa. Joshua Weeber, from Endangered Wildlife Trust, gave an incredible talk about his work with the Critically Endangered Table Mountain Ghost Frog in South Africa. Francis Osei-Gyan and Michael Akraasi represented herp Conserva-

tion Ghana. They presented two talks about the fantastic work the group is conducting in Ghana. Mark-Oliver Rödel, from Frogs & Friends, gave a very important talk about the Critically Endangered Nimba Toad, a microendemic and very peculiar amphibian species from West Africa.

During the event, three of our ACRS Future Leaders of Amphibian Conservation had the chance to meet again and to have a nice time together. Besides Luis, Kirsty Jane Kyle and Fortunate Mafeta Phaka (both from South Africa) also attended the meeting and presented talks about their work.

Congratulations to the organizers of this amazing event! We are looking forward to meeting all of you again in Namibia at the next meeting!



Bringing Conservation to Life: Beautiful short film released by Synchronicity Earth

Conservation is about people... and planet. This is the message of our strategic partner **Synchronicity Earth's** new film 'Bringing Conservation to Life', which we are delighted to share with you. Synchronicity Earth specialise in overlooked and underfunded species and ecosystems, and the plight of amphibians is high on their agenda!

They seek out partners who are 'small but mighty' and try to build their capacity to undertake work that would otherwise struggle to get funding and support. In addition to their **Amphibian Programme** and

Amphibian Fund, which provide core support for the Amphibian Survival Alliance, they also focus on freshwater ecosystems, high and deep seas protection, the Congo Basin, and overlooked and endangered species in Southeast Asia.

The following film, released on their tenth anniversary, tells inspiring stories from the Philippines, Vietnam and the Democratic Republic of the Congo, where the conservation of each species (Philippine Crocodile, Sunda Pangolin and Bonobo) is dependent on the communities who are proud to protect them.

'Bringing Conservation to Life' was produced by filmmaker **Chris Scarffe** and features stories from **Mabuwaya Foundation** (Philippines), **Save Vietnam's Wildlife** (Vietnam), **Mbou Mon Tour** and **Dynamique des Groupes des Peuples Autochtones** (Democratic Republic of the Congo).

Find out how Synchronicity Earth support amphibian conservation [on our website](#).



CPSG Participates in Global Amphibian Assessment



Amphibians are disappearing more quickly than birds and mammals. This was the shocking finding of the **first Global Amphibian Assessment** completed in 2004. Now, experts are **gearing up for a second global assessment** to determine the conservation status of amphibians all over the world. As part of that effort, **CPSG Mesoamerica** collaborated with Costa Rican amphibian experts, IUCN Red List

of Threatened Species assessors and **Amphibian Ark** in Costa Rica in September to assess the status of amphibians there.

Costa Rica is home to a reported 215 amphibian species. Of these, experts found about 30 percent to be threatened. Species of “Least Concern” increased to 134—from 100 in 2004—while “Extinct” species increased from two to three.

CPSG Mesoamerica and the **University of Costa Rica** School of Biology have worked together in the last 16 years to use the IUCN Red List guidelines to better understand the status of amphibians in Costa Rica, increasing the robustness of conservation status assessments over time.

The September workshop is part of the Second Global Amphibian Assessment (GAA2), coordinated by the **IUCN/Conservation International Global Species Programme**, and done in collaboration with AArk, **Fundación Pro Zoológicos** (FUNDAZOO), the University of Costa Rica School of Biology and CPSG Mesoamerica. After review by the IUCN Red List and AArk, CPSG will share a more detailed report of the results.



Conserving amphibians in agricultural landscapes

Hello all. We are the COANA initiative, a new partner of ASA.

We devote our work to conserve amphibians in agricultural landscapes and pristine remnants of temperate grasslands from Argentina. The Rio de la Plata Grasslands are the main complex of grassland ecosystems in South America and constitute one of the most productive areas in the world. The entire region has been the scene of the development of a vast livestock industry and a rapid and dramatic increase in intensive agriculture. Neverthe-

less, very few conservation projects have been carried out in this region, none of them involving amphibians in agro-ecosystems. COANA is an amphibian conservation initiative carried out by biologists, educators, and conservationists. It involves research, education, and outreach activities, which take place mainly in

Argentina. Our studies are focused on measuring and describing the effects of agricultural activities on amphibian assemblages. These activities are coordinated with researches and students of the Ecology, Genetic and Evolution

Institute of Buenos Aires (Buenos Aires University and National Council of Scientific Research and Technology) The education and outreach activities are coordinated along with NGOs, governmental agencies and Universities and are performed in rural communities. COANA aims to develop, based on scientific evidence, management recommendations that integrate productive and conservation objectives, reducing the tension of conflicts between farmers and biodiversity.



An introduction to the Elgon Wildlife Conservation Organization



Elgon Wildlife Conservation Organization (EWCO) is the first and only NGO that is dedicated to promoting Amphibian conservation and research in Uganda. EWCO encourages the conservation of the amphibians, their natural ecosystems and implements positive change in human attitudes towards the amphibian and reptilian diversity through integrated programs.

CITIZEN SCIENCE: The amphibian count in Uganda is a Citizen Sci-

ence Program to map and track the amphibian diversity distributions across Uganda's protected areas. Participants will learn how to find and identify amphibians and reptiles to help scientists identify conservation concerns for the amphibian and reptilians.

COMMUNITY CONSERVATION

ACTION: EWCO is promoting community-based conservation by empowering and providing tools to communities adjacent to amphibian habitats and the public to help promote amphibian conservation in their communities. Thus, creating healthier ecosystems and increased awareness of the issues amphibians, and other wildlife faces in our rapidly developing world.

CONSERVATION EDUCATION

OUTREACH: EWCO is dedicated to providing amphibian presentations, radio talks, and other educational

programs to the public and schools in communities where we work. These programs are the hallmark of our initiative to change human perceptions about amphibians.

AMPHIBIAN HABITAT PROTECTION AND PRESERVATION:

Elgon Wildlife Conservation Organization seeks out opportunities to leverage its conservation impact by identifying and protecting landscapes of high ecological integrity with high snake and frog species diversity.

IN SITU AMPHIBIAN CONSERVA-

TION: EWCO is actively conducting in situ conservation projects to increase the diversity and abundance of flora and fauna native to Uganda.

Conservation of endangered Peruvian frogs

The Giant Junin Lake Frog, *Telmatobius macrostomus*, and Junin's Wancha, *Telmatobius brachydactylus* are two endangered frogs from the center of Peru, specifically found around Lake Junin (the second biggest lake in Peru). Before 2000, these frogs were abundant, but overexploitation, alteration, and

degradation of their habitat, and the presence of invasive species have caused an incredible decrease.

Because of this situation, the NGO GRUPO RANA and its allies created a conservation program called "The High Andean Amphibian Conservation Initiative of the Lake Junin

Basin," our efforts are focused on researching new localities with a frog presence, and engaging students about frog conservation.

In 2018, we received our first grant from "NatGeoExplorer" thanks to National Geographic Society, and we identified new localities with frog populations, surprisingly in places near local communities. Then, we won our second grant thanks to The Rufford Foundation, this project's objective was to promote good environmental practices, conduct environmental education programs, and to collect biological information from the frogs. We use methodology from Amphibian Ark's "The Vanishing Frogs" to educate children and to start a pilot protocol to search for frogs. In total, 163 students from seven different schools were engaged in the importance of sav-



ing the Junin frogs. They collected biological information like weight, length, life stage, abundance, and habitat quality in streams near their schools. With these techniques, they are ready to assist in the study of the frogs with specialists and to promote conservation projects with their teachers.

The next steps are to implement an environmental education program in all the Junin schools and repeat activities to have students assist in monitoring the frogs' habitat with quality data that can be used by stakeholders, specialists, and teachers. We are grateful to Junin National Reserve, DenverZoo, the local

governments, the local communities, partner NGOs, our participating schools, and especially ASA to allow us to share our work.



Global trade in amphibians

To ensure that the global trade in amphibians is not threatening a species, Monitor studies this trade and highlights potential conservation concerns and legal issues. Previous studies for instance included work on the trade in amphibians endemic to the Nansei Islands (Japan). For amphibians, 45 species of frogs and toads and 33 species of salamanders and newts are known to occur in Japan, with at least 62 being endemic. This high rate of endemism

makes Japanese amphibians popular targets for wildlife traffickers. Monitor found two endemic subspecies of Sword-tailed Newt, *Cynops ensicauda ensicauda* and *Cynops e. popei*, Anderson's Crocodile Newt *Echinotriton andersoni* and Miyako Toad *Bufo gargarizans miyakonis* available in the international pet markets. The Anderson's Crocodile Newt is protected under Japanese legislation. Currently Monitor is preparing a large programme of

work on the trade in amphibians in Southeast Asia. This will include on the ground market surveys, online surveys, legislative reviews, trade data and seizure data analysis and reviews of the biological impact of harvest quota.



Reconnecting poverty-alleviation to biodiversity conservation in Kenya's Eastern Arc Mountains

The Taita/Taveta Wildlife Forum has several activities are ongoing in Sagalla hill aimed at the conservation of the Sagalla Caecilian (*Boulengerula niedeni*), an endemic and critically endangered species occurring in an area about 4 km². The activities are; (i) awareness creation on the existence and extinction risk faced by the Sagalla Caecilian among other species due to human activities that include draining of wetlands, clearing of native vegetation and use of agrochemicals in farming, among others;

(ii) providing support to livelihood generation of the local community through introduction of appropriate alternative livelihoods (fish-farming, bee-keeping, improved bananas) as well as training in appropriate farming techniques (organic/conservation agriculture, terracing, contour lines) so as to maintain soil fertility, soil moisture and minimise soil erosion; (iii) habitat restoration through raising of native tree seedlings and planting (in the forest, school compounds, on-farm and riverine areas), strengthening the management of the forested areas through introduction of integrated natural resource management through preparation of a "Participatory Forest Management Plan" and formation of a "Community Forest Association (CFA)" as well as preparation of a "Sub-catchment Management Plan" and formation of a "Water Resource Users Association (WRUA)" and an

ecological survey on the occurrence of the Caecilian. Also, a Species Conservation Action Plan was developed working in conjunction with Kenya Wildlife Service, Kenya Forest Service, Nature Kenya, and National Museums of Kenya, among others.

Capacity building of the CFA and the WRUA is an ongoing activity as it takes time for the local community to grasp and internalise these concepts through training and provision of appropriate learning materials.





Wildlife Trust of India: Ground actions for species recovery

Wildlife Trust of India (WTI) is an impact-driven nature conservation organization with a focus on addressing the pressing needs of wildlife and their habitats and implementing long-term measures for population recovery of species as well.

WTI has a team of about 150 professionals from diverse backgrounds – conservation biologists, sociologists, wildlife veterinarians, animal rehabilitators, managers, lawyers, and communication specialists, all converging their expertise to conserve wildlife in India. Projects cover forest ecosystems of global biodiversity hotspots such as the Himalaya and the Western Ghats on the one hand and neglected ecosystems such as wetlands and rivers as well on the other. The conservation goals are achieved under nine broad strategic areas by implementing site-specific actions benefitting ecosystems and populations.

Species Recovery is one of the strategic areas which targets the recovery of populations of threatened species. Conducting population surveys of lesser-known species and reinforcing population through conservation translocations to reduce direct and indirect threats to the species and its habitat are the approaches to achieve an increase in population and distribution range of the species, as the case may be to downgrade the Red List conservation status of the target species regionally or globally.

The taxa covered under Species Recovery till now are mammal (markhor *Capra falconeri*; tiger *Panthera tigris*; wild buffalo *Bubalus arnee*, eastern swamp deer *Rucervus duvaucelii ranjitsinhi*; wild buffalo *Bubalus arnee*) bird (sarus crane *Antigone antigone*), and reptile (Gharial *Gavialis gangeticus*). With experiences in a range of taxa, WTI intends to utilize the skills and resources for

the conservation of endemic anuran diversity in India, especially in the Western Ghats and north-east India. These areas are known to harbour many endemic and threatened species of anurans. WTI would work towards conservation of the taxa in these regions under its Species Recovery strategy.

