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# 2024

# ANNUAL REPORT



**Amphibian Ark**  
Rescuing amphibians in crisis



**Amphibian Ark**  
Rescuing amphibians in crisis

© **Amphibian Ark**

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## Our mission

# Rescuing amphibians in crisis

We secure a future for species that cannot be currently safeguarded in nature.

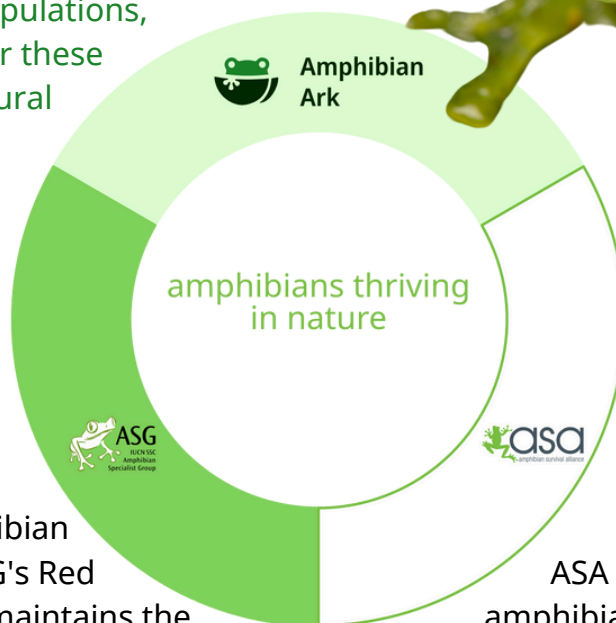
## Our vision

With the shared vision of building a future where **amphibians thrive in nature**, Amphibian Ark works in synergy with the IUCN SSC Amphibian Specialist Group (ASG) and the Amphibian Survival Alliance (ASA). Together we strive towards this unified vision by promoting global conservation efforts that are scientifically informed, strategically directed, and inclusive of diverse stakeholders.

Amphibian Ark leads in the rescue of amphibian species in dire circumstances via temporary *ex situ* solutions. By establishing *ex situ* populations, we buy critical time for these species until their natural environments can support them once again.

The IUCN SSC ASG provides the scientific foundation to inform effective global amphibian conservation. The ASG's Red List Authority ([ARLA](#)) maintains the amphibian assessments on the IUCN Red List through the Global Amphibian Assessment Initiative.

ASA works to conserve amphibians in the wild and coordinate global partnerships, funding, communication, and education.





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# From the Executive Director

I'm proud to present Amphibian Ark's 2024 Annual Report—my first full year as Executive Director. This year marked continued strong delivery as well as a strategic reset for our organization.

Our revamped AArk strategy was developed just months after the IUCN's alarming second Global Amphibian Assessment was completed. The picture painted is one of a significantly worsening situation for amphibians, now by far the most threatened group of vertebrates. In response, we launched a renewed AArk strategy that refocuses our efforts on building national momentum for species rescue in countries within global biodiversity hotspots. Through this approach, we aim to target our resources more effectively and scale up our impact.

Our signature Conservation Needs Assessment (CNA) work continued, particularly focusing this year on threatened species throughout Guatemala and South Africa. For the first time, CNA outcomes were published in reports designed specifically for decision-makers and potential conservation partners. These are now available on our website.

A key feature of our new strategy is the development of AArk National Programs in biodiversity hotspots. While we remain globally responsive, our near-term focus will center on Brazil, Guatemala, Colombia, Sri Lanka, and Madagascar—collectively home to nearly one-third of the world's threatened amphibians. In Brazil, our pilot program has already doubled the number of species rescue initiatives, setting the stage for similar efforts in Guatemala and Colombia to begin in 2025.

Our capacity-building program delivered a series of specialist amphibian care training courses for participants across Latin America. Our grant program supported the establishment of conservation breeding programs for priority species in Venezuela, Brazil, and Mexico. We also committed funding for an amphibian veterinary care training course organized through our Brazil National Program, which will be delivered in 2025.

However, global amphibian recovery will require coordinated, international action. In 2025, AArk will be working closely with the Amphibian Survival Alliance, IUCN SSC's Amphibian Specialist Group and Conservation Planning Specialist Group, Synchronicity Earth, Re:Wild, and others to co-develop a global conservation initiative. Our goal is to create an operational framework that enables us, collectively, to support countries in meeting their Convention on Biological Diversity (CBD) commitments with respect to amphibians. Such a programme would see a coalition of organisations poised to roll out comprehensive amphibian conservation programs in amphibian hotspot countries, preventing further amphibian extinctions, and putting threatened amphibians on a road to recovery.

Jonathan Wilcken



# How Amphibian Ark delivers on the Convention on Biological Diversity

In 2022, 196 countries adopted the Kunming-Montreal Global Biodiversity Framework under the Convention on Biological Diversity, setting **23 global targets** to be achieved by 2030. Target 4 calls for action to halt species extinction.

## Amphibian Ark and Target 4

Amphibian Ark is essentially a Target 4 organization. Our core focus is on preventing amphibian extinctions through *ex situ* conservation breeding programs. By helping to safeguard species at greatest risk, we directly contribute to Target 4's goals and support national efforts to meet CBD commitments. We measure our impact using the IUCN's Global Species Action Plan, which provides guidance on delivering each target of the Global Biodiversity Framework.

### Global Biodiversity Framework: Target 4

Target 4 of the Global Biodiversity Framework calls for actions to halt species extinction by 2030.

Given that 41% of amphibian species are currently threatened with extinction (IUCN), achieving this goal presents major challenges for amphibian conservation.

### Target 4.3

Enact measures to prevent extinctions and recover threatened species

### Target 4.4

Maintain or establish coordinated *ex situ* breeding or propagation programs for all species that require them

**75**

species in rescue programs

**22**

countries with amphibian rescue programs

**24%**

of these programs are already reintroducing animals to the wild!

### Target 4.1

Assess the conservation status of all species and identify those needing targeted recovery actions

### Target 4.2

Develop and implement a recovery plan for all species that require one

**3565** Species assessed with AArk Conservation Needs Assessments

8680 amphibian species described

**384** Species identified as in need of *ex situ* rescue

### Target 20.1

Build adequate capacity for species conservation in all countries

**2840**

Conservationists trained in amphibian husbandry and veterinary

Read more on how AArk's response delivers on the CBD [here](#).





# Amphibian Ark strategic planning

In January 2024, Amphibian Ark staff met at Brevard Zoo, Florida, for the first time in several years to review and refresh the organization's strategy. The timing was critical: the meeting brought together new team members, including the new Executive Director, and followed closely on the release of the IUCN's second Global Amphibian Assessment—a sobering report highlighting the worsening status of amphibians worldwide and reinforcing the urgency of AArk's mission.

Building on the foundation of previous work, the refreshed strategy focuses AArk's efforts around three core strategic priorities, each linked to a defined program of action.

## Prioritizing species in need of rescue



## Building conservation capacity



## Supporting species rescue programs



A major strategic shift is the emphasis on establishing National Amphibian Rescue Programs in high-priority countries, each led by a dedicated National Program Coordinator. These locally-driven programs aim to catalyze action and build momentum in regions hardest hit by the amphibian extinction crisis. Pilots have been launched in Argentina and Brazil, with Brazil remaining a key focus for AArk in the coming years.

Another key focus is strengthening Amphibian Ark's communications. This has included hiring a science communications specialist, enhancing our outreach channels, and starting a full website redesign to improve accessibility and engagement.

We are also evolving the AArk Conservation Needs Assessment (CNA) process to ensure it reflects the latest conservation science and can better inform IUCN species planning work. These improvements aim to increase the influence and utility of CNA outcomes in guiding coordinated amphibian conservation action.





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# PRIORITIZING SPECIES IN NEED OF RESCUE





## Guatemala

There are 162 amphibian species described in Guatemala. It is one of the countries with the highest proportion of threatened amphibian species due mainly to habitat loss due to human activities. It is also one of the countries with the largest number of species recommended for *ex situ* rescue.

In July 2024, we led an AArk Conservation Needs Assessment workshop with a group of Guatemalan amphibian researchers for 98 threatened amphibian species. At least 11 species were identified for the development of *ex situ* conservation programs with reintroduction potential, and 12 species that require *ex situ* measures but currently do not have a safe habitat for their reintroduction.



Read the full 2024 Guatemala CNA results [here](#).

## South Africa

There are 124 frog species described for South Africa. Unfortunately, 30% of these species are threatened with extinction.

The third Global Amphibian Assessment, which kicked off in April 2024 in Cape Town, South Africa, began with a joint assessment of the IUCN Red List Authority and AArk's Conservation Needs Assessments. While this included 10 countries and over 100 species evaluated, in this report we present only the results from South Africa.

We identified six South African species that need *ex situ* conservation actions, including rescue (5) and research (1). Due to their level of threat, the five species recommended for *ex situ* rescue are also recommended for biobanking.



Read the 2024 South Africa CNA results [here](#).





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# BUILDING CONSERVATION CAPACITY





## Building conservation capacity

In 2024, we delivered five on-line training sessions on amphibian husbandry, with a particular focus on veterinary medicine. The courses attracted participation from animal care staff from all over Latin America.

### Topics covered:

- Amphibian anatomy and physiology
- Amphibian veterinary medicine
- Husbandry and animal care
- Amphibian nutrition
- Basic considerations on amphibian husbandry



Amphibian  
Husbandry





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# SUPPORTING SPECIES RESCUE PROGRAMS





## 3-year program grants



*Melanophryniscus setiba*  
© Pedro Peloso

### **Ex situ conservation of the critically endangered restinga toad (*Melanophryniscus setiba*)**

Adriana Mezini and Marcelo Bellini Lucas  
Museu Biológico Instituto Butantan, Brazil

[Read more here.](#)



*Physalaemus soaresi*  
© Pedro Peloso

### **Ex situ conservation of *Physalaemus soaresi* at BioParque do Rio**

Samuel Vieira, BioParque do Rio, Brazil

[Read more here.](#)



Juvenile acclimatization and conditioning of *A. dumerilii*

### **Clarifying the protocol for the successful rearing of *Ambystoma dumerilii* larvae**

Rodolfo Pérez Rodriguez, México

[Read more here.](#)





## Extension grants



*Atelopus cruciger* © Jaime Culebras

***Ex situ* rescue of the Rancho Grande Harlequin Frog (*Atelopus cruciger*) in Venezuela—Year 3: securing the first reintroduction of juveniles**

Margarita Lampo | Venezuela

Read more [here](#).



*Nyctimantis pomba*  
© Leandro Ferreira Amaral

***Ex situ* conservation for the critically endangered tree-frog *Nyctimantis pomba***

Cybele Lisboa | Brazil

Read more [here](#).

## Workshop grant



*Nyctimantis pomba*  
© Sao Paulo Zoo

**An amphibian *ex situ* conservation medicine/vet workshop hosted by Sao Paulo Zoo**

Fabricio Rassy and Iago Junqueira  
Brazil

Read more [here](#).



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# NATIONAL PROGRAMS





## AArk Brazil program

The program entered its second year, engaging institutions in strengthening *ex situ* amphibian conservation efforts. The selected institutions (Museu Biológico do Instituto Butantan, BioParque do Rio, and Gramado Zoo) chose the species they will work with and strengthened their collaboration with *in situ* partners. We supported them in the species selection process, project development, and collection permit applications.

### Successful Grant Applications

With the support from AArk's Brazil National Coordinators in grant writing, budgeting, and management, BioParque do Rio and Museu Biológico do Butantan received AArk grants this year to kickstart the *ex situ* programs for *Melanophryniscus setiba* and *Physalaemus soaresi*.

Funding was also secured for an amphibian veterinary training workshop at São Paulo Zoo, planned for August 2025.

### Species Collection (December 2024)

Museu Biológico do Butantan received individuals of *Melanophryniscus setiba* for its *ex situ* conservation program. The *in situ* team from Boitatá Institute collected two males and two females in December 2024.

BioParque do Rio initiated its *ex situ* program for *Physalaemus soaresi*, starting with the analogue species *Physalaemus signifer*. In December 2024, their team, with support from the Federal University of Rio de Janeiro, collected six males, three females, and an egg clutch of *P. signifer*.

### Institutional Support & Capacity Building

We conducted visits to BioParque do Rio and Museu Biológico do Butantan to assess facilities, identify infrastructure gaps, and improve protocols. As part of this visit, we provided an amphibian husbandry workshop for the BioParque do Rio team.





## AArk Brazil program | Species updates

### *Nyctimantis pomba* Sinimbú Casque-headed Tree Frog

In 2019, a conservation program for *Nyctimantis pomba* was launched to develop a captive breeding protocol and establish an insurance population while addressing *in situ* threats. Supported by two Amphibian Ark grants, fieldwork led to the collection of 15 founders, and the first *ex situ* breeding occurred in late 2022.

By 2024, approximately 300 individuals were under human care at two institutions (Conservation Center of Fauna from São Paulo State—CECFau—and São Paulo Zoo), with the breeding protocol now well-established and the population being managed through studbooks in ZIMS. The most recent 2024 grant funds the expansion needed to accommodate the growing population at both facilities. Currently, research efforts outlined in the species' Strategic Plan (PECAn) are underway, focusing on monitoring the *in situ* population, assessing thermal tolerance, and developing strategies to identify new populations through automated acoustic recording.

*Nyctimantis pomba* Juvenile  
© Cybele Lisboa



*Nyctimantis pomba* © Cybele Lisboa



## AArk Brazil program | Species updates

### *Atelopus manauensis* Manaus Harlequin Toad

As part of the *Atelopus* Survival Initiative (ASI), the captive breeding program for *Atelopus manauensis* began in 2022 at the São Paulo Zoo, initially using the analogous species *Atelopus hoogmoedi*. In partnership with the Federal University of Amapá, 13 specimens of *A. hoogmoedi* were collected in 2023. However, due to logistical delays in transport, the individuals arrived significantly infected with the fungus *Batrachochytrium dendrobatidis* (Bd). This led to high mortality, with eight individuals dying before itraconazole treatment could effectively control the disease.

The Bd-GPL lineage, the most lethal fungal strain, was identified by the Amphibians Natural History Lab (LaHNAB). In 2024, eight additional specimens were collected, with faster transport and immediate preventive treatment, resulting in no recorded deaths.

These management data will be highly valuable when conservation efforts for the endangered *A. manauensis* begin, particularly in combating chytridiomycosis. Currently, the 13 individuals of *A. hoogmoedi* are healthy and breeding efforts are ongoing. Breeding behaviors such as calling, females with eggs, and several amplexus have been observed, but no egg-laying has been recorded so far.



*Atelopus manauensis* © Rafael Jorge





## AArk Brazil program | Species updates

### *Pithecopus rusticus* Rustic Monkey Tree Frog

The *ex situ* program for *Pithecopus rusticus* has been conducted at Parque das Aves, in partnership with the Federal University of Santa Maria, RAN/ICMBio, and the São Paulo Zoo, since 2022. That year, two pairs of the species were collected and transferred to the institution.

In 2023, to increase the insurance population and establish management protocols for tadpoles and juveniles, a partially damaged clutch of 32 eggs was sent to the institution, from which 31 tadpoles hatched. A single death was recorded during this stage. However, in the first year after metamorphosis, the survival rate was low (approximately 20%), but the survivors developed healthily.

Currently, the *ex situ* population consists of eight individuals (one male, two females, and five juveniles), but no reproduction has been recorded so far. Efforts to achieve *ex situ* reproduction are ongoing, and research is currently focused on monitoring the *in situ* population, studying autoecology, assessing thermal tolerance and diseases, and conducting population genetics analysis, in line with the actions outlined in the species' Strategic Plan (PECAn).



*Pithecopus rusticus* © Elaine Lucas





# SPECIES UPDATES





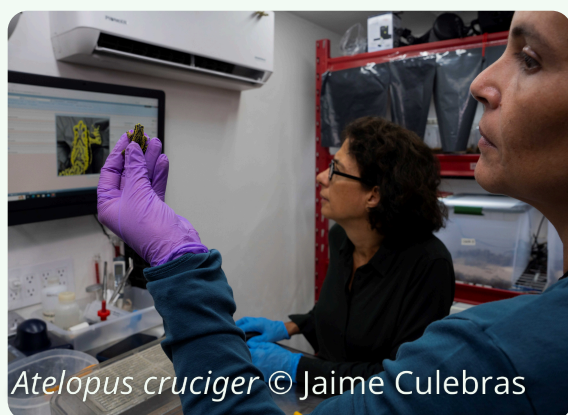


### ***Gastrotheca gracilis***

One of Amphibian Ark's 2018 grants supported the rescue of the southernmost marsupial frog species, *Gastrotheca gracilis*, in Argentina. Six years later—while the species remains threatened in the wild by habitat contamination, domestic animals, disease, and climate change—promising strides have been made.

In 2023, the team installed artificial ponds to improve breeding conditions. By early 2024, tadpoles were successfully recorded in one of them. The project also released 145 captive-reared juveniles back into the wild, with an encouraging survival rate of 82%. These low-cost, scalable interventions show potential for long-term in situ recovery.

Read more in [our March 2024 newsletter](#).



### ***Atelopus cruciger***

Amphibian Ark's support for the Rancho Grande harlequin toad, *Atelopus cruciger*, began in 2022 with one of our program grants. Since then, the team has established two units for the *ex situ* reproduction of *Atelopus cruciger* in Caracas and Turmero, and achieved the first successful *ex situ* breeding of the species. After securing an *ex situ* facility capable of producing up to 150 juveniles per year, in 2024 they're working to secure a genetically diverse backup colony and secure juveniles and adults for the first reintroduction trials in 2025.

Read more [here](#).





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# COLLABORATION





**A new partnership between AArk and Species360 strengthens the efforts of amphibian rescue programs.**

Species360 focuses on using data technology to enhance the care and conservation of animals and plants in *ex situ* programs. Through this partnership, AArk-recommended Species Rescue Programs will receive free access to ZIMS (Zoological Information Management System)—the world’s leading data management system for *ex situ* conservation.



Sound data and scientific management is crucial for the success of these Species Rescue Programs. For these amphibian species, *ex situ* programs may well become the sole safeguard against their extinction. These populations need careful, scientific management to ensure they remain fit for their eventual reintroduction. By using ZIMS, AArk and its partners will ensure the data on these rescue populations is standardized, secured, and made accessible now and in the future.



**Amphibian Ark attended the 10th World Congress of Herpetology in Kuching, Malaysia,** one of the largest global gatherings for amphibian and reptile conservation.

AArk leadership attended key sessions on amphibian diseases, *ex situ* strategies, and climate impacts. The congress also enabled a pivotal in-person meeting with the Amphibian Survival Alliance, the IUCN SSC Amphibian Specialist Group, and IUCN SSC Conservation Planning Specialist Group. This meeting marked the first such gathering in years and laid the groundwork for stronger coordination across global amphibian conservation efforts.



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# FINANCIALS





# 2024 Financial Report

## STATEMENT OF ACTIVITIES AND CHANGES IN NET ASSETS FOR THE YEAR ENDED DECEMBER 31, 2024

### SUPPORT & REVENUE

Grants and contributions of financial assets	\$155,680
Contributions of nonfinancial assets	\$ -
Workshop sponsorships	\$ -
Investment income	\$89,756
<b>TOTAL SUPPORT &amp; REVENUE</b>	<b>\$245,436</b>

### EXPENSE

Program services	\$233,904
Support services:	
Management & general	\$23,616
Fundraising	\$12,614
Total support services	\$36,230
<b>TOTAL EXPENSE</b>	<b>\$270,134</b>

## STATEMENT OF FINANCIAL POSITION AT DECEMBER 31, 2024

### ASSETS

#### Current Assets

Cash & cash equivalents	\$554,984
Accounts receivable	\$ -
Grants receivable	\$ -
Prepaid expenses	\$ -
Total current assets	\$554,984

Investments	\$634,351
Property - net	\$ -

**TOTAL ASSETS** **\$1,189,335**

### LIABILITIES & NET ASSETS

#### Current Liabilities

Accounts payable	\$38
Accrued salaries & vacation	\$4,952
Funds held for others	\$ -
Due to (from) affiliated organization	(\$39,328)
Total current liabilities	(\$34,338)

#### Net Assets

Without donor restrictions	\$1,223,673
With donor restrictions	\$ -
Total net assets	\$1,223,673

**TOTAL LIABILITIES &  
NET ASSETS** **\$1,189,335**

### Notes to the 2024 Financial Statements

The Amphibian Ark (AArk) is a registered USA 501(c)3 not-for-profit organization (TIN 46-1453272). AArk had an overall deficit from operations of US(\$24,698) for the year in 2024. As of December 31, 2024, AArk had a net asset reserve of US\$1,223,673. The information on this page was taken from the 2024 audit. Copies of the full audit can be obtained by contacting the Amphibian Ark.



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# DONORS





# 2024 Amphibian Ark Donors

The work of AArk is possible due to the generous support of the following individuals and institutions:

## \$10,000 and above

The George & Mary Rabb  
Fund for Conservation

The Bernard & Nancy  
Karwick Foundation

Anne Baker & Robert Lacy



## Up to \$10,000

Ronna Erickson



## Up to \$5,000

Leonard Epstein  
Jessee Gift Fund  
Josh's Frogs Customers  
Alistair Ward



## Up to \$1,000

Buffalo Zoo  
Charles Burnette  
Jacob E.  
Kenneth Faulstich  
Julia Hertl  
Samantha Norton  
Lynn Rust  
Randolph Stadler  
Bryan Wilkinson

## Up to \$500

Association of British & Irish  
Wild Animal Keepers  
Rudolf Cerny  
Da-Shih Hu  
Michelle Rand  
Grant Rutherford  
Stuyvesant Animal Association  
Tracey Allen  
William Aukschun  
Casimir Borowski Jr  
Davis Breen  
Chris Carvalho  
David Corsini  
Tracey Cowenhoven  
Fahim Dhalla

## Up to \$500 (cont.)

Ramona Fenner  
Jonathan Foise  
Cassandra Giannousis  
Marvin Goldberg  
Lee Hall  
Rigan Harker  
Nathanael Johns  
Ron & Joanne Lane  
Richard Melsheimer  
Madeleine Murphy  
Kent Nybakken  
Peoria Park District  
Ben Phalan  
Ada Phoenix  
Christopher Phoenix  
Michael Pierce, in memory  
of Julie Gionfriddo  
PWCCR Rescue, in memory  
of Julie Gionfriddo  
Sara Rex  
George Sommer  
Thodd & Lori Van Allen  
Georgianne Wilcox  
Brett Williams  
Baton Rouge AAZK  
Roman Bodinek

## Up to \$500 (cont.)

Jonathan Brater  
David Butcher  
Nicholas Carter  
Leonard Epstein  
Valrie Fingerman &  
Stephen Hirsch  
Toréy Haas  
Susan Handa  
Traci Hartsell  
Andy Karrmarshall  
Tomas Kraus  
Richard Lierow  
Marian McCain  
Melody McClure  
Kevin Mitchell  
Joseph Moreira  
Claire Rosser  
Torrey Shawe  
Gloria Snowden  
Jordan Thibodeau  
Brian Ugurlu  
Gwendolyn Weeks  
Paul White  
Sawyer White  
Gabrielle Aldrich

## Up to \$500 (cont.)

Kade Ariani  
Wil Aukschun  
Axolotl Arms  
Cynthia L. Bauman, in  
memory of Julie Gionfriddo  
Laura Floyd  
Miranda Floyd  
Craig Harms  
Diana Hassel, in memory of  
Julie Gionfriddo  
Bryce Jamison  
Lisa Johnson  
Christopher Laker  
Taj Mumma  
Jacob Oppenheim  
Roshni Ramani  
John Szymendera  
Stuart Brockbank  
Alexis Campisi  
Kane Hutchinson  
Lyra Meurer  
Marjan Navidpour





# Any questions? Contact us!



## **Donate:**

Amphibian Ark depends on donations and long-term collaborations to continue rescuing amphibians in crisis. Your contribution makes a big difference! [Donate here.](#)

## **Contact:**

[www.amphibianark.org](http://www.amphibianark.org)  
[info@amphibianark.org](mailto:info@amphibianark.org)