Amazon Research Center For Ornamental Fishes

ARCOF

Fall 2025 NEWSLETTER

The Aquarium of the Amazon

As we approach the end of 2025 and near the Aquarium of the Amazon's second year of operation, we find ourselves reflecting on how much we've learned along the way. Building and sustaining a public aquarium in a place accessible only by air or river has been a formidable challenge, but it remains one of our proudest accomplishments—a testament to our commitment to bringing conservation education to communities often overlooked by the rest of the world.

Over the past year, this commitment has guided much of our work, particularly as we focused on building maintenance and improvements to several exhibits. We learned that some of the aquarium construction techniques commonly used in the United States and Europe did not hold up as well in the humid climate of the Peruvian Amazon. As a result, we replaced several of the smaller exhibits with new all-glass tanks, ensuring that our displays remain both durable and engaging for our visitors.

Behind the scenes view of the new glass tanks

Rebuild of the Nocturnal Fish Room

To complete this work, we temporarily relocated the fish from the Nocturnal Fish Room to a designated area in the large fish lab while we rebuilt the exhibit's infrastructure using materials better suited to the environment. This effort not only strengthened the exhibit but also gave us the opportunity to consider new ways to present the stories of these remarkable species.

During this time, we discovered a crack forming in one of the large double-window exhibits. These panels are made

through a process called lamination, where multiple layers of glass are bonded together under heat and pressure to create a single, strong panel. Thankfully, we identified the issue early, before the crack extended through all of the layers. Although the exhibit needed to be closed for three months while new glass was manufactured in Lima and shipped by boat to Iquitos, the closure allowed Anthony to redesign the back wall of the exhibit, creating a more natural and immersive environment for visitors.


Double panel predator exhibit

Our efforts to maintain and improve the facility have been especially important as visitor numbers continue to grow. As of September 30, 2025, more than 15,000 people have visited the Aquarium. This is a tremendous achievement—as every visitor receives conservation education during their visit, helping us fulfill our mission. However, this volume of foot traffic has also left its mark on our floors and walls, reminding us that regular maintenance is essential to keeping the Aquarium welcoming and educational for everyone.


Waxing the newly painted river mural in the aquarium floor

In addition to upkeep, we made several changes to keep our exhibits fresh and engaging. The new seahorse exhibit, placed beside the marine tank, was created to highlight the ongoing exploitation of seahorses in the wild. Although the animals initially adapted well, we were unable to maintain them long-term and are still working to understand why. We are now evaluating which marine species would thrive best in this space. On a brighter note, our new glow-fish exhibit has been a great success, offering visitors an accessible way to learn about the benefits and ethical considerations of genetic modification. We also enhanced the large stingray tank by adding plants commonly found in local rivers, giving visitors an even more authentic view of Amazonian habitats.


Glow Fish Exhibit

Stingray Tank

Seahorse Exhibit

This past year, our work at ARCOF has extended far beyond the research center and the Aquarium of the Amazon, reaching into the heart of the village of 31 de Mayo. Located along a dirt road that had long been challenging for visitors to navigate, ARCOF received feedback from tour companies hesitant to travel the route due to its potholes and rough terrain. To improve access, we invested in grading the road and packing it with clay, making it safer and easier for visitors to reach the facility—and for villagers to move around their own community. Building on this improvement, we are now collaborating with the village's new mayor to establish a cooperative, bringing community members together to maintain the road and ensure long-term access.

ARCOF's commitment to the village also extends to supporting local initiatives. When approached to assist the village soccer team, we gladly contributed to purchasing uniforms, helping to foster team spirit and community pride. Additionally, we provided flashlights to the community watch team, supporting safety and security in the village. Through these efforts, ARCOF is not only promoting conservation and education but also strengthening the bonds that connect us to the community we serve.

By working alongside the community to improve access and support local initiatives, we are able to continue sharing the wonders of the Amazon and fostering a culture of conservation education for all.

Conservation Education

As we shared previously, the opening of the Aquarium of the Amazon has allowed us to reach more children than ever before. By September 30, 2025, we had provided structured conservation education to over 4,500 primary and secondary school students. Over time, our program has grown more focused and engaging, offering three age-appropriate activities for the students. Winners of each activity receive a certificate to take home, while all members of the winning team are rewarded with small prizes, such as pop-pit fish keychains or colored pencils. Following the activities, students take a hands-on tour of the Aquarium, exploring the exhibits up close and learning about the vital roles aquatic species play in the ecosystem.

There were two significant additions to our educational programming in 2025. The first was the introduction of *The Adventures of Nalda and Eduardo: Book Two – The Great Paiche*. As a reminder, all students receive a copy of *The Adventures of Nalda and Eduardo*; Book One was introduced last year. Each book is designed to offer multiple ways for children to

interact: an adventurous story built around a conservation theme, opportunities to color characters or scenes, and engaging activities to complete. The response from students and teachers has been overwhelmingly positive. In fact, we are exploring working with a publisher so that teachers can include the books in their assigned reading lists.

The second addition was a diorama depicting the Iquitos neighborhood of Belén. Originally built by Anthony to be part of the Aquarium's Environmental Wall, the team in Peru found that it has a much greater impact when incorporated into educational activities in the outdoor auditorium. The diorama has proven to be a powerful tool for helping students connect emotionally with real-world environments—so much so that one young girl began to cry when she recognized Belén in the display.

Through these innovations, our conservation education program continues to inspire children, giving them both knowledge and emotional connection to the Amazon and its ecosystems.

Although most of our education takes place at the Aquarium facility, we also actively participate in local and regional science fairs, where we reach students who might not otherwise have access to our programs. At these fairs, our team leads interactive demonstrations, shares resources on sustainable aquaculture, and helps students understand the importance of protecting Amazonian waterways. This outreach broadens our impact and strengthens our role as a regional leader in conservation education.

Conservation Projects

- **The Red Pencil Fish** (*Nannostomus mortenthaleri*) – We continue to make steady progress toward establishing an insurance stock of this beautiful and highly valued species. As the saying goes, “so far, so good.” Because we were unable to introduce the broodstock into the earthen aquaculture pond until July 2025, we will not be able to conduct a full population assessment until January 2026. Working with earthen ponds requires patience and careful monitoring, as the natural conditions—vegetation, substrate, and water chemistry—provide an ideal environment for reproduction but also make it more challenging to track early results. Despite these factors, we remain optimistic that the pond will support successful spawning and contribute meaningfully to long-term conservation of the species.

- ***Apistogramma “Alto Tapiche”*** - We are pleased to share that Anthony has been awarded a grant to support travel to several remote villages near the origin of the Apistogramma “Alto Tapiche.” This region is one of the most isolated areas of Peru, and reaching the species’ natural habitat requires several days of river travel by boat. The Rio Tapiche—primarily a whitewater river—receives blackwater from tributaries such as the Rio Blanco, creating a uniquely balanced and delicate ecosystem.


Apistogramma “Alto Tapiche”

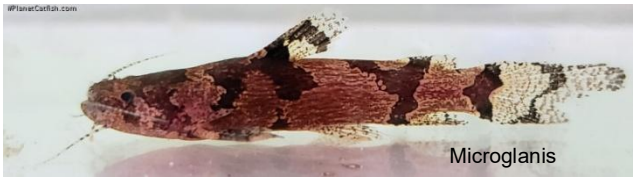
  Meanwhile, our work with the species at ARCOF continues to show promising results. Our two pairs of Apistogramma “Alto Tapiche” have successfully produced hundreds of fry, all of which are developing well. As part of this project, we will bring these results back to the villages we visit, working with local fishers to help them establish their own aquaculture ponds and create sustainable, conservation-focused income opportunities.

- ***Anablepsoides speciosus*** **-** The population survey of the creeks flowing into the northern end of Lago Quistococha has been completed, and unfortunately, no evidence of *Anablepsoides speciosus* was detected. The next step will be to survey the creeks feeding the southern end of the lake in the summer of 2026, using a combination of visual counts and environmental DNA (eDNA) analysis. This approach will help us gain a more comprehensive understanding of the species’ distribution and inform future conservation efforts.

- **Neon Tetra Project** – (*Paracheirodon innesi)* – In July 2025, we introduced the parent stock of neon tetras into one of our earthen aquaculture ponds. As we shared earlier, working with earthen ponds requires patience as these ponds can take time to show measurable results. Because of these factors, we will not conduct a population count until January 2026. During this time, our team continues to monitor the ponds. This project represents an important step in our ongoing efforts to establish sustainable, conservation-focused aquaculture for one of the Amazon’s most iconic ornamental species.

- ***Corydoras*** **and Microglanis catfish –** Dr. Eric Thomas from the University of the Pacific returned to the research center in the summer of 2025 to continue his fascinating study on stress-induced self-poisoning in *Corydoras* catfish. While at ARCOF, he conducted several targeted field collections of specific Corydoras species, gathering the specimens needed to deepen our understanding of how these fish respond to environmental stress. This research not only advances scientific knowledge of Corydoras biology but also provides valuable insights that can inform conservation strategies and improve the care of ornamental catfish both in the wild and in aquaculture


Corydoras



Volunteers and Interns

After careful consideration and a thorough review of the financial impact, we are sad to announce that, for the foreseeable future, we will not be able to accept volunteers from outside of Iquitos. The costs of housing and supporting volunteers have become prohibitive, making it challenging to continue the program in its current form.

We are deeply grateful to all the volunteers who have contributed their time, energy, and passion to ARCOF's work over the years. While this change is necessary, we remain open to unique circumstances and encourage anyone with questions or proposals to reach out to us at **rmaze@amazonresearchcenter.org**. Please rest assured that this update will not affect volunteers to whom we have already made commitments. We look forward to continuing our mission of conservation education and sustainable aquaculture with the incredible support of our community and volunteers.

Special Thank You

This past summer, ARCOF was honored to receive a $20,000 bequest from the estate of Michael Digua. Michael was a dedicated supporter of ARCOF over the past five years, and his generosity has had a lasting impact on our work. This bequest was instrumental in allowing us to complete several important projects, including repairing the road leading to ARCOF, replacing the Aquarium's front door that was blown off during a severe storm in the Iquitos area, and addressing many of the ongoing maintenance activities highlighted in this newsletter.

We are deeply grateful to the estate of Mr. Digua and sincerely appreciate his commitment to supporting our mission of conservation education and sustainable aquaculture. His legacy will continue to make a difference for the community and the species we work to protect.

Ways You Can Help

The Amazon Research Center for Ornamental Fishes is a nonprofit 501(c)3 organization. As such we rely on the goodwill of our followers to help with the expenses of running the center. Please consider any of the following ways to support ARCOF.

- **Donate** directly to ARCOF by clicking here
- **Sponsor** an exhibit through the **Adopt a Tank** program by clicking here.
- **Check out** our online store at https://www.amazonresearchcenter.org/shop