

Buy a Fish Save a Tree



Annual Report 2017  
**PROJECT PIABA**



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## **Conservation via Beneficial Aquarium Fisheries**

Project Piaba is a nonprofit organization formed both to study and to foster beneficial aquarium fisheries in the Amazon Basin and in areas of biological importance worldwide.

The home aquarium fishery based along Brazil's Rio Negro has been the focus of this work since the Project's inception and has remained at the center of our efforts in 2017.

This annual report will provide an overview of the Project's accomplishments and activity in 2017 and our plans to build on this positive momentum for 2018.

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## An All-Volunteer Effort

We continued in 2017 as a fully volunteer-staffed organization with our specialists and team members all contributing to Project advancement and capacity building on an unpaid, volunteer basis.

The accomplishments and activities detailed in the following pages were all achieved with no paid staff and almost zero overhead – imagine what could be achieved with full-time focus.

In 2018, we hope and expect to create a paid staff position to help us continue to amplify our efforts and further the Project's mission and objectives.

Learn more about our latest activities in these current reports: [Project Piaba](#).





## Accomplishments in 2017

### Best Handling Practices – Community Workshops

In August 2017, we were able to continue the implementation of Best Handling Practices (BHPs) for the Rio Negro fishery with the successful completion of three community workshops and training sessions. This expands upon our pilot BHP workshop held in 2016, while implementing feedback generated by attendees and trainers from the pilot program. We are grateful for the funding from [World Pet Association](#) and [Oceanario de Lisboa](#) to help us hold and continue to offer these Best Handling Practices workshops for rural fishers in the communities of Barcelos, Daracua and Santa Isabel in Amazonas State, Brazil.

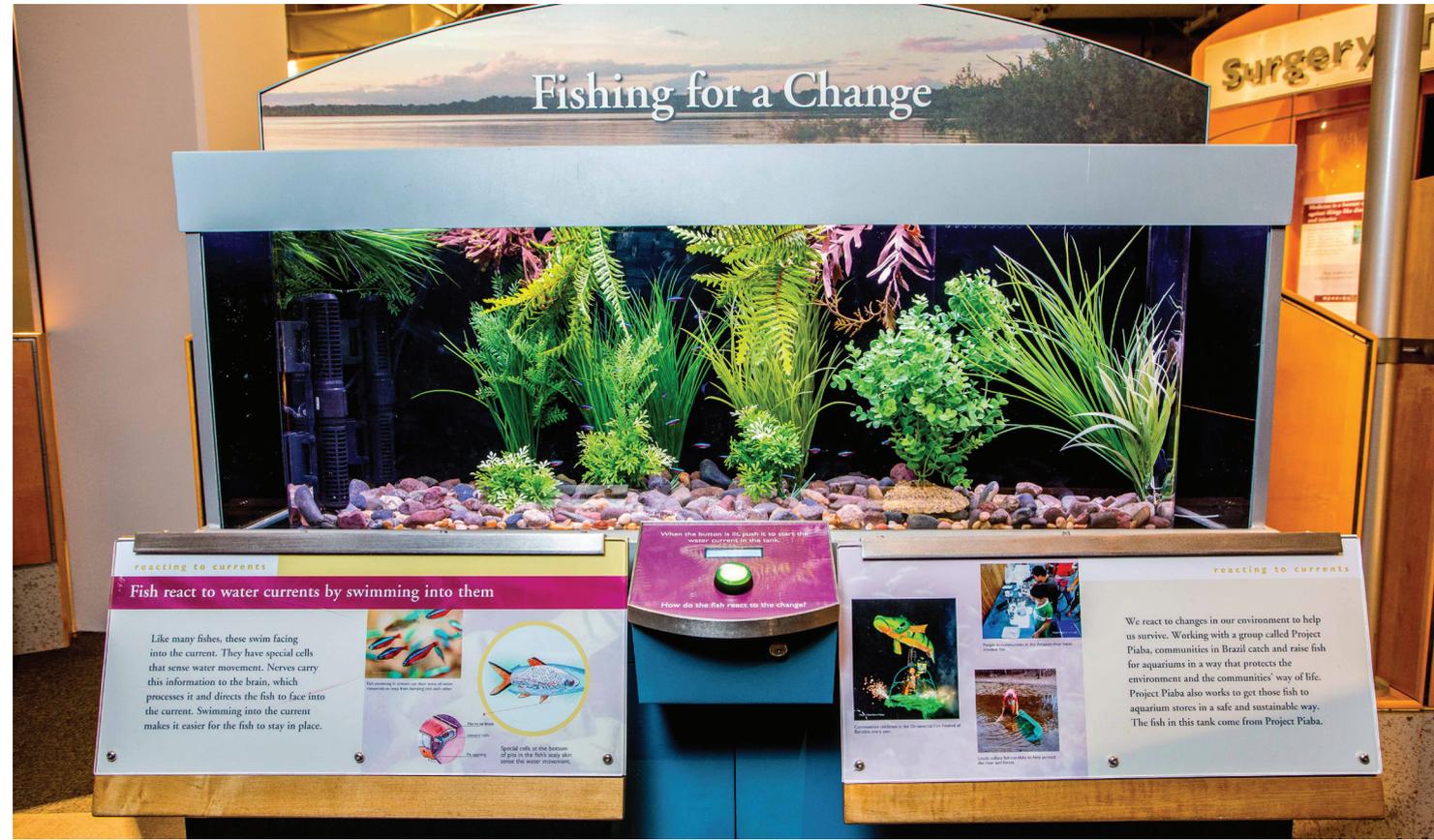
Project Piaba’s in-country trainers (all of whom have extensive ties to these fishing communities) host and undertake these workshops and we gratefully acknowledge trainers and team members Radson Alves and Arnold Lugo for their outstanding work in the field.

In November, thanks to support from [Segrest Farms](#) and Oregon State University’s [Aquatic Animal Health Program](#), Arnold Lugo was able to visit the United States, where he assisted Project Piaba team member Dr. Tim Miller-Morgan with aquatic animal health workshops in Washington and Illinois.

In addition, Arnold was able to visit a number of local aquatic specialty retail stores and helped staff Project Piaba’s booth at [Aquatic Experience](#) Chicago, the largest aquarium hobby and trade event in the U.S. Arnold traveled on to spend a couple days observing Segrest Farms’ operations in Florida before returning to Manaus with a deeper understanding of the U.S. market for home aquarium fish.

The goal of these workshops is to help the fishery better compete in the global marketplace and to offset recent economic declines so that it can continue to provide sustainable livelihoods and the resultant

preservation of forest and habitat for [IUCN Red listed](#) species. Given the completion of our second round of BHP workshops in the field, we expect that the industry will begin to see improvements in the health and quality of the fish coming out of the Rio Negro fishery. Historical benchmark data on fish health collected during past expeditions will allow us to validate these claims in the future. [Learn more](#)



## Accomplishments in 2017

### Zoo and Aquarium Exhibits

More institutions opened and updated exhibits showcasing the beneficial wild-caught Rio Negro Fishery with an emphasis on home fishkeeping. We had a presence in 28 institutions in 2017 with an estimated total reach of 30 million annual visitors being exposed to Project Piaba's messaging and receiving inspiration to join the hobby. An additional six public aquariums (with 4.2 million visitors) are at various stages of developing Rio Negro aquarium fish displays to tell this story starting in 2018.

Funding from the [World Pet Association](#) partially

funded equipment, construction and signage at some of these new exhibits, all of which are open or opening soon. [Learn more here](#)

### Indianapolis Prize Recognizes Conservation Efforts

In September, the Indianapolis Prize announced 32 nominees for their prestigious conservation prize for 2018. We are pleased that the Indianapolis Prize recognized the important role the Rio Negro Fishery plays in conservation of the Amazon rainforest. We are especially honored to have the co-founder of the Project, Scott Dowd, a New England Aquarium biologist, recognized for his tremendous volunteer

work with Project Piaba. [Read more](#)

### Expedition

In January 2017, a group of 23 participants joined an Expedition to the Rio Negro aquarium fishery to observe aspects of the fishery—with participants having backgrounds in conservation, biology, fish health and the aquatics industry.

The team continued the assessments of fish health and the impact of the Best Handling Practices community workshops. In addition, work plans for modeling fish populations began. [Read more](#)



**One Key Indicator:  
Fish Going Out and  
Cash Coming In for this  
area of special biological  
importance**

The largest factor for the Fishery to continue to provide the benefits of protecting habitat and forests from development and providing livelihoods is cash coming in and fish going out into the global marketplace to protect this area of biological importance. As the Rio Negro Aquarium Fishery recovers, people will be able to continue their jobs in the fishery and not have to take destructive employment in mining, logging or to move into urban areas causing overpopulation and unemployment in municipalities. This is one of the key indicators we have of our work with the Fishery and it continues to be a primary focus of our efforts both in the region and globally.



## Supply Chain Challenges

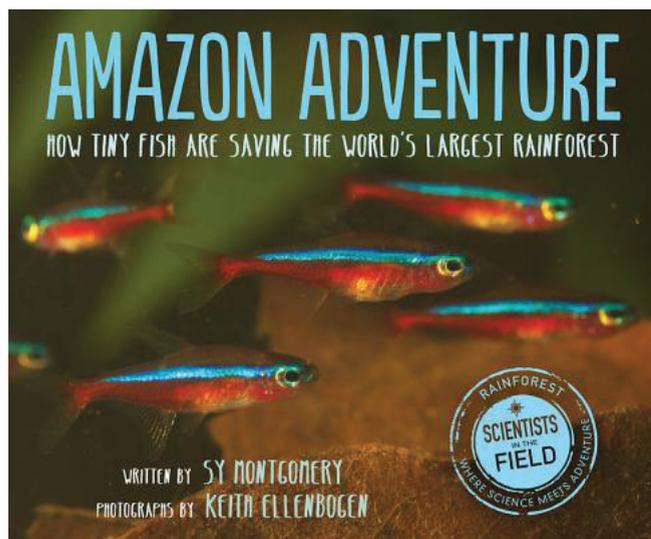
The Rio Negro home aquarium fishery is a highly seasonal fishery based on the annual flooding pattern of the Amazon Basin; fish collectors are only able to collect these fish when water levels and conditions allow. After a very difficult year of drought in 2016 (caused by that year's El Niño), early 2017 brought very heavy rain so the collecting ended early in Winter 2017. At the start of the new season in August 2017, river levels returned to their "normal" seasonal levels which has made collecting conditions favorable.

Unfortunately, in September, the few remaining airlines offering air cargo space for live tropical fish changed their flight schedules from Manaus. Options for connections through other cities have been found, but these options cause longer flight times for the fish.

Marshall Meyers, our volunteer expert in transportation, began working with American Airlines at that time on exploring alternative options to help alleviate this situation, but the impact of two category 5 hurricanes on several Caribbean islands have dominated American's air cargo department in recent months.

We will continue to interface with air carriers, Manaus-based exporters, and aquarium fish importers in the US to develop solutions for these supply chain impediments to the fishery.





## Building Awareness – Publications 2017

### Books

A new book is now circulating in more than 4,200 school libraries and distributed widely. [AMAZON ADVENTURE: How Tiny Fish are Saving the World's Largest Rainforest](#) was published in July. [Sy Montgomery](#), a celebrated wildlife and science author, wrote the book, which features the fishery, its benefits and Scott Dowd's in Brazil.

Project Piaba and the Rio Negro Fishery are also featured as a case study in a textbook for college students studying the carbon offset market and conservation. The book, [Conservation of Tropical Rainforests: A Review of Financial and Strategic Solutions](#), was written by Brian McFarland of CarbonFund.org.



### In the News:

Dominic Whitmee, OATA Chief Executive, joined the Expedition last January and shared this excellent report on his observations. [From River to Retail](#)

An inspiring [Amazonas Magazine](#) article for hobbyists entitled "Building a Biotope: A Step-by-Step Rio Negro Aquarium" covers hands-on tips and stocking advice featuring wild-caught Rio Negro fish. [Read more](#)

The OFI newsletter kindly featured the nomination of the Indianapolis Prize. [Read more](#)

Pet Product News highlighted the Indianapolis Prize with the story about the closure of the Hawaii fishery. Explaining the good the industry does with beneficial aquarium fisheries such as the Rio Negro fishery is important to share with conservation groups, zoos, aquariums and the public. [Read more](#)



[Tropical Fish Hobbyist](#) magazine generously donated an ad page to Project Piaba and the Rio Negro Fishery throughout 2017. We are grateful for their support.

Another [Amazonas Magazine](#) article authored by Mike Tuccinardi highlighted accomplishments of Best Handling Practices Community Training and the Indianapolis Prize Nomination: [Read more](#)

### Conferences and Conventions Participation:

The [Northeast Council of Aquarium Societies](#) (NEC) meets every March. They hold a fundraiser for conservation efforts and last year the focus was on research on the aquarium fishery in the Congo.

Aquarium and zoo professionals gather for seminars and learning each May at the [Regional Aquatics Workshop](#) (RAW). Scott Dowd is on the Freshwater Fishes Taxon Advisory Group of the Association of Zoos and Aquariums that met before RAW. Project Piaba was also invited to give a talk, and we hosted a table during the mixer at New England Aquarium, which hosted RAW in 2017.

[Aqua Aquaria India 2017](#) invited Scott Dowd to attend and speak at their conference on aquarium fisheries. India is looking to develop beneficial fisheries which provide livelihoods and protect habitat.

Dr. Tim Miller-Morgan, the lead aquatic veterinarian of our efforts, attended [AquaRealm 2017](#) in Singapore and led talks on aquatic animal health. He also provided an overview and update on Project Piaba's work with the Rio Negro Fishery.

Scott Dowd was invited to give an IUCN FFSG talk on Conservation via Aquarium Fisheries at the [European Union of Aquarium Curators](#) Conference in November. Several zoos and aquariums in Europe already have Rio Negro Fishery exhibits and several more expressed interested in adding exhibits showcasing the Fishery and its benefits to inspire visitors to join the hobby and help the Fishery recover.

Jackie Anderson, educator and biologist, and Deb Joyce, business manager, were generously hosted by the World Pet Association at [Aquatic Experience 2017](#) where the project received free booth space. More than 500 children visited our booth and colored Rio Negro Fish which, were added to our "jungle," while visitors learned about the positive impact of this fishery and how their hobby can help drive conservation. Thanks to product donations by [Aqueon](#), [Ruinemans](#), [Tannin Aquatics](#), [Tetra](#) and [Universal Rocks](#), we were able to to stage our first-ever booth raffle.



# Financial Summary 2017

Because we continue to work as a fully volunteer-staffed organization, our budget is still modest. In 2018, we plan to fund a full-time staff member position to amplify our impact with this work.

This preliminary financial summary shows an operating deficit for 2017 of \$12,343. These numbers are not final as of this writing and may be adjusted for our year-end tax filings. An actual Financial Report for 2017 will be published this Spring with details.

We welcome donations and grants for 2018 and beyond. Feel free to contact us directly or visit our [website](#) to make a donation towards our work. We hope to greatly expand our work in 2018 with the addition of our first paid staff member.

Project Piaba is a Gold Star-level nonprofit on [Guidestar](#) and is a registered 501c(3) in the state of [Massachusetts](#) in good standing with compliance filings.

Beginning Year Balance	\$41,877
<b>REVENUES</b>	
Grants	\$30,000
Donations	\$19,294
Expedition Participant Fees (2017/2018)	\$26,879
<b>Total</b>	<b>\$76,173</b>
<b>EXPENDITURES</b>	
Expedition Costs	\$(49,811)
Zoo and Aquarium Exhibits (construction, educational materials)	\$(10,000)
Best Handling Practices Training (materials/curriculum development, outreach and travel)	\$(7,524)
Global Outreach (materials/travel expenses)	\$(6,526)
Research (Carbon Storage Rapid Assessment)	\$(5,840)
Video Documentary Production	\$(2,500)
Administrative expenses/overhead (website hosting, bank fees, non-profit filing fees)	\$(4,648)
<b>Total</b>	<b>\$(86,849)</b>
Net Gain or Loss on Investments	\$(3,051)
Ending Year Balance	\$28,150



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## Plans for 2018: A Look Ahead

### Addressing Supply Chain Challenges

We are kicking off the year with meetings in Manaus to identify key challenges for the Fishery this year.

Before the Expedition begins, the core Project Piaba team comprised of Brazilian and US experts will meet with Manaus-based institutions such as: IBAMA (re: export lists); veterinary inspectors (re: schedules); INPA (re: fish populations); INDES (re: forest preservation); and the Brazilian exporters (re: cargo issues, best handling practices, communication).

One key area to improve is the freight schedule. We have heard from the Manaus exporters to better understand what the freight agents think about the aquarium fish trade. With the help of Marshall Meyers we have an important ongoing plan to step up our dialogue with the airline carriers to better share the benefits of the Rio Negro Fishery with the goal of gaining improved freight schedules and costs, especially now that Best Handling Practices workshops are taking place in the Fishery.

### Best Handling Practices

We plan to continue Best Handling Practices community workshops in the Rio Negro Fishery by the community-based trainers. The trainers are also working with some Manaus-based exporters to help with assessments and handling practices throughout 2018.

We will continue to gather feedback, analyze, and publish the impact our work (including Best Handling Practices trainings) on fishery export quantities. Our annual growth goal is a modest 5% based on reports we receive from MAPA export reports and fish health studies with our OSU partnership as well as feedback from PIABA Partners, including importers, retailers and zoos and aquariums. We also plan to expand Best Handling Practices in the supply chain by growing the number of partners: Manaus-based exporters (to 4); U.S. and UK importers (to 500; and U.S./UK retail pet stores (to 30).

### Grow number of exhibits and enhance current Zoo and Aquarium Exhibits

We also plan to increase the number of zoo and aquarium exhibits by five institutions (to 33) resulting in exposure to approximately 5 million more visitors who may be inspired to become tropical-fish keepers with home aquariums.

Furthermore, we hope the existing zoos and aquariums with PIABA-related exhibits will enhance their displays, allowing us to utilize the message of [“Buy a Fish, Save a Tree”](#) as we begin to overcome some of the supply chain challenges together.

We plan to expand the reach of our twice-a-month newsletter to zoo and aquariums with highlights of the fish available from current importers of Rio Negro Fish as well as to communicate other key information and support important feedback loops for these partners.

### Retailer & Consumer Education and Demand Generation

We are stepping up our consumer communications with the addition of our Instagram and Facebook messaging, including the addition of [“Wild-Caught Wednesdays.”](#) In this weekly feature we are sharing the counter-intuitive aspects of this fishery and helping consumers become aware of the more than 250 abundant and beautiful species available for the trade—emphasizing the “Buy a Fish, Save a Tree” message.

We have also begun retailer partnerships with a newsletter planned to engage, inspire, improve communications and build partnership solutions. Materials to build consumer demand with signs for wild-caught Rio Negro Fish, retail strategies, and “Buy a Fish, Save a Tree” program testing are underway.

### Important Step in Documenting Rio Negro Fishery Benefits

We have engaged Brian McFarland of CarbonFund.org to complete a “Rapid Assessment” of the Rio Negro area’s potential as a Certified Forest Carbon Offset.

### Staffing – Amplifying Impact and Expanding Capacity

One of the building blocks we are working on to help us accomplish these goals and build capacity to do more in the future is bringing Scott Dowd onto the project as a full-time staff member and growing the BHP trainers’ role in the fishery. This is a very big and exciting step for the project and the Rio Negro Aquarium Fishery.

As you can see from our 2017 accomplishments, momentum is building and in 2018 and beyond, the potential to do more to increase Conservation via Aquarium Fisheries is going to take effort and time.

We hope that you’ll read this report and appreciate the opportunities that partnership brings and the extent to which it will play a role in the environmental and

social benefit brought by the recovery of the Rio Negro Aquarium Fishery. We invite you to join us and help play a role in growing the efforts of Project PIABA.

### Expedition

Project Piaba will lead the annual expedition 22 to 24 people growing the group of international stakeholders from conservation, zoos, aquariums, fishkeepers, ecotourists and industry professionals.

Next year, join the Expedition from January 18 to February 1, 2019. [Learn more](#)

### Publications Already in the Works for 2018

We have numerous publications in progress for 2018. Please continue to watch the Project Piaba website and Facebook for additions.

In 2017, Project Piaba received several donations that we were able to pass along to video producer Don McConnell, whose new documentary about the Rio Negro Fishery and Project Piaba’s work could be released in 2018. Stay tuned!



# Special Thanks

We'd like to thank all the Expedition participants, World Pet Association, Moody Gardens, Oceanario de Lisboa, the Magill-Dohan family in honor of Anna, New England Aquarium, Boston Aquarium Society, Milwaukee County Zoo, Green Bay Aquarium Society, Living Art Aquariums, The Fish Crew, Tannin Aquatics, The Anderson Group and many others for donations and support for our continued work with the Rio Negro fishery.

## People

Our team is comprised of people with specialties who have been providing expertise to the Rio Negro Fishery and aiding Project Piaba's work. None of the individuals work full-time on the project and most are contributing both their spare time and own funds to this conservation via beneficial aquariums work.

## Advisers Team

Les Kaufman  
Dr. Tim Miller-Morgan  
Sandy Moore  
Eric Rasmussen  
Lonnie Ready  
Dr. Michael Tlusty  
Michael J. Tuccinardi  
Dominic Whitmee

## Core Team

Scott Dowd, M.Sc.  
Tim Miller-Morgan, DVM  
Arnold Lugo, M.Sc.  
Radson Alves  
Mari Balsan, M.Sc.  
Jackie Anderson  
Brian McFarland, M.Sc.  
Roberto Reis, Ph.D.  
Dr. Nelson Ferreira Fontoura  
Deb Joyce

Four young volunteers also helped us in 2017 on various special projects and deserve recognition for their efforts. Thanks to: Izzy Hazard, Sam Magill-Dohan, Shane Puthuparambil and Clara Rotger.

This Annual Report was done with the generous assistance of Anne Linton Elston/MacWorks and Bayley R. Freeman. Images provided by Michael J. Tuccinardi and Charles Doughty.

## Our Thanks Again to Our Major Supporters:

[World Pet Association](#), [Moody Gardens](#), [Oceanario de Lisboa](#), [New England Aquarium](#) and the Magill-Dohan family.



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[www.projectpiaba.org](http://www.projectpiaba.org)