

Project Piaba 2018 Annual Report

Conservation via Beneficial Aquarium Fisheries

Buy a Fish, Save a Tree

Project Piaba is a nonprofit organization formed to both study and foster beneficial home 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 remained at the center of our efforts during 2018 (learn more about [Project Piaba](#)). This annual report will provide an overview of the Project's accomplishments and activity during 2018 and our plans to continue to build on this positive momentum during 2019.

We continued in 2018 as a fully volunteer-staffed organization with our specialists and team members all contributing to projects and capacity building on an unpaid and volunteer basis. The accomplishments and activities detailed below were all achieved with no paid staff and almost zero overhead and we are barely keeping up with the opportunities.

We are very grateful for, and proud of the accomplishments that Project Piaba has made in 2018 and the previous 25 years. Our relationships, visions, and strategic actions are now well underway with key stakeholders in the zoo and public aquarium community, the mainstream conservation & academic communities, and leaders in the pet trade.

During 2019, we hope and expect to create a paid staff position to establish the essential infrastructure needed to help us continue to amplify our efforts and further the Project's mission and objectives.

Accomplishments in 2018:

Best Handling Practices – Community Workshops:

During 2018 we were able to continue the implementation of Best Handling Practices (BHPs) for the Rio Negro fishery and we successfully completed an additional community workshop. In addition, we began implementation of Best Handling Practices (BHP's) with the Manaus Exporters. This expands upon our workshops we began in 2016, while implementing feedback generated by attendees and trainers from the workshops implemented to date. We are grateful for the funding from donations which 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 and the workshops the team has begun with Exporters in Manaus. Project Piaba's in-country trainers (all of whom have extensive ties to these fishing communities) lead these workshops and we gratefully acknowledge these trainers and team members: Arnold Lugo, Joely-Anna Mota, Aline Sousa, Gabriel Russo and Radson Alves for their outstanding work in the field.

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 driver of preservation of forest and habitat for [IUCN Red listed](#) species. With the additional Best Handling Practices workshops, 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.

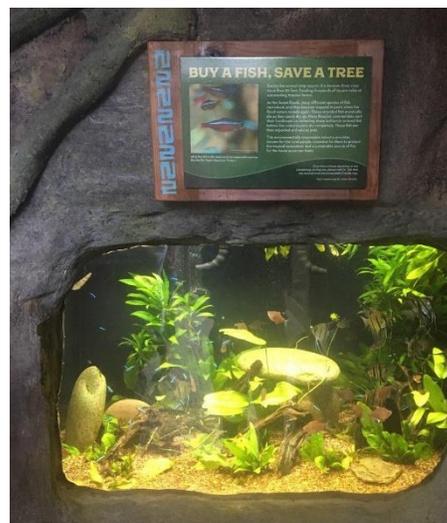
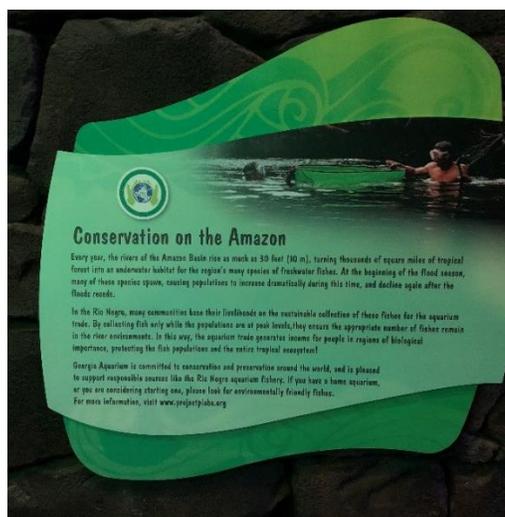


Photos of Best Handling Workshops Trainers and Participants 2018 (Clockwise from top left: Arnold and Dora at the microscope, Aline and Joely planning, a BHP Workshop completes, Water Testing.



Zoo and Aquarium Exhibits:

More institutions opened or updated exhibits showcasing the beneficial wild-caught Rio Negro Fishery with an emphasis on home fishkeeping. During 2018 we added five institutions and our total reached 33 institutions during 2018 with an estimated total reach of 35.1 million annual visitors being exposed to Project Piaba's messaging and receiving inspiration to join the fishkeeping hobby. An additional 8 public aquariums (with 5.3 million visitors/year) are at various stages of developing Rio Negro aquarium fish displays to tell this story at the time of this publication (Summer 2019).



Exhibits: Georgia Aquarium (Updated) and Roger Williams Zoo (New)

Supply Chain Challenges:

The Rio Negro home aquarium fishery is a highly seasonal fishery due to the annual flooding pattern of the Amazon Basin; fish collectors are only able to collect these fish when water levels and conditions allow. This normally occurs September through June but varies depending on rainfall amounts and timing. Fortunately, 2018 Fall was a normal season thankfully after a couple years of unusual river levels of highs and lows which impacted when the piabeiros and piabeiras could collect aquarium fish.

Air cargo routes and space for live tropical fish remain challenging. Routes through San Paulo and Panama, although longer than a direct Manaus to Miami route, have been working for importers in the United States. Efforts continue to convince American Airlines to reinstate a regular live fish cargo route from Manaus to Miami in 2019. 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.

One Key factor for success: Fish Going Out and Cash Going Into this Area of Biological Importance

Cash inputs to the fishers and the fish exports into the global marketplace are essential for the fishery to continue to provide the benefits of protecting habitat and forests from development and providing livelihoods for the fishers. This movement of cash and fish is key to protecting 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 move to destructive employment like mining and logging and moving into urban areas with resulting, overpopulation, unemployment and associated health issues in these municipalities. This is one of the key factors that we try to address during our continuing work with the fishery. This continues to be a primary focus of our efforts both in the region and globally.

Expedition:

In January 2018, a group of 23 participants and three Project Piaba volunteers joined the Expedition to the Rio Negro to observe aspects of the aquarium fishery. Participants came from varied backgrounds in conservation, biology, fish health and the aquatics industry.

Brian McFarland of Carbon co, completed rapid carbon assessment and submitted a report and plan assessing the Rio Negro Fishery's potential as a forest carbon offset project. We are working on those steps in a longer-term process of fostering the fishery.

Clockwise:
Participants visit
with a community
on the river, photo
of another boat on
the river, Captain
Mo takes to the
trees!



The team continued the assessments of fish health and the impact of the Best Handling Practices community workshops. In addition, work plans for fish populations modeling continued during this Expedition.

We also continued to build on the Geographic Indication infrastructure and planning to find ways to best leverage differentiating wild fish collected in their home waters which provide employment and protect the forest from being developed.

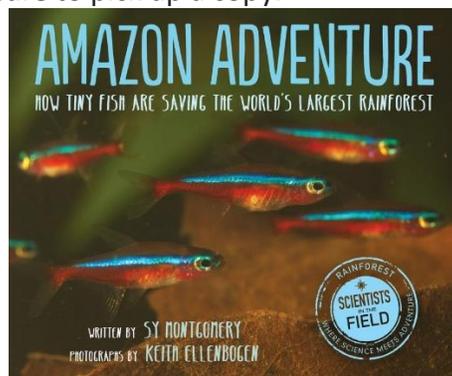


Building Awareness – Publications 2018

Books

Sy Montgomery's book continues to circulate in more than 4,200 school libraries. Sales continue in book stores, zoo and aquarium gift shops and on-line. [AMAZON ADVENTURE: How Tiny Fish are Saving the World's Largest Rainforest](#) has been inspiring young students to become fish keepers and to learn more about our work with the Rio Negro fishery. [Sy Montgomery](#), a celebrated wildlife and science author, wrote the book featuring the fishery, its benefits and Scott Dowd's work with the Rio Negro Fishery.

If you haven't read it yet, be sure to pick up a copy.



As a result of this book and Sy's many appearances, several young new fishkeepers have shared pictures of their new aquariums and are asking retailers to carry Rio Negro fish! Here's a photo of James Engel's tank, a young person from the Pacific Northwest.



In the News:

The February 2018 Ornamental Fish International Journal [OFI Journal Feb 2018](#). Includes letters of support for the aquarium trade from the World Bank, UN Food and Agriculture as well and IUCN Sustainable Livelihoods Chair.

Another Amazonas Magazine article, thanks to Mike Tuccinardi, highlighted accomplishments of Best Handling Practices Community Training: [Read more](#)

Conferences and Conventions:

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.

The APPA provided Project Piaba with show floor passes to Global Pet usually held each March. This show enables us to foster the Rio Negro Fishery by advocating about the beneficial fishery and the work that Project Piaba does to help the fishery.

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 which meets before RAW.

Dr. Tim Miller-Morgan, the lead aquatic veterinarian of our efforts, attended AquaRealm and other international aquatic conferences and leads talks on aquatic animal health and provides updates on Project Piaba's work with the Rio Negro Fishery.

Scott Dowd was invited to the [Wilson Center](#) in September for a symposium on the Amazon's development and preservation.



Volunteers of Project Piaba were hosted by the World Pet Association at [Aquatic Experience](#) 2018 where the project received free booth space. Volunteers Jackie Anderson, educator and biologist, Tori Babson, aquatics specialist and Scott Dowd had hundreds of adults and children stop by to learn more about the Rio Negro Aquarium Fishery and Project Piaba's work. We had more than 500 children visit our booth and color 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.



Aquatic Experience 2018:
 Hundreds of kids and parents visited our booth to learn about the project and color or draw their favorite fish and Amazon animal to decorate our wall.



Financial Summary: 2018

Because we continue to work as a fully volunteer-staffed organization, our budget, and the resulting impact is modest. During 2019, we plan to fund a full-time staff member position to amplify our impact with this work.

See our tax filings for more details and please note, because the Expedition takes place each January, year to year variability is a result of timing of Expedition Participant Fees coming in and expenses for the Expedition being paid.

2018:

Beginning Balance: \$28,150

Revenues: \$61,382

From sources such as: grants, donations, expedition participant fees

Spending: \$75,893

On activities such as: Best Handling workshops, expedition costs, Carbon Assessment report, outreach programs

Ending Balance: \$14,269

We'd like to thank all the Expedition Participants, World Pet Association, Conservation International, Moody Gardens, Boston Aquarium Society, Green Bay Aquarium Society, Alex Tropicals, APET, and many others for donations and grants to support our continued work with the Rio Negro fishery.

We welcome donations and grants for 2019 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 and impact in 2019 with the addition of our first paid staff member.

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



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.

Several young volunteers helped us in 2018 on various special projects and deserve recognition for their efforts: Izzy Hazard, Clara Rotger, Sam Magill-Dohan and Shane Puthuparambil.

Advisers Team

Les Kaufman
Sandy Moore
Lonnie Ready
Mike Tuccinardi

Dr. Tim Miller-Morgan
Eric Rasmussen
Michael Tlusty
Dominic Whitmee

Volunteer Core Team:

Scott Dowd, M.Sc.
Arnold Lugo, M.Sc.
Mari Balsan, M.Sc
Aline Sousa
Dr. Nelson Ferreira Fontoura, Ph.D.
Radson Alves

Dr. Tim Miller-Morgan, DVM, CertAqV
Joely-Anna Mota
Jackie Anderson
Dr. Roberto Reis, Ph.D.
Tori Babson
Deb Joyce

Plans for 2019: A Look Ahead

Addressing Supply Chain Challenges:

We started 2019 with a day of meetings in Manaus to identify key challenges for the Fishery this year.

Before the Expedition began, the core Project Piaba team comprised of Brazilian and US experts met with Manaus based institutions such as: IBAMA (re: export lists) Veterinarian inspectors (re: schedules), INPA (re: fish

populations), INDES (re: forest preservation) and the Manaus based exporters (re: cargo issues, best handling practices, communication improvements).

Best Handling Practices:

We plan to continue Best Handling Practices community workshops in the Rio Negro Fishery by the community-based trainers in the Fall of 2019. In June 2019, the trainers conducted Best Handling workshops for Manaus exporters to help with assessments and best handling practices throughout 2019.

We will continue to gather feedback, analyze, and publish the impact our work (including Best Handling Practices trainings) has 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 importers, retailers and zoos and aquariums feedback and partnership.

We also plan to continue to expand Best Handling Practices in supply chain growing the number of partners: Continuing with Manaus based exporters (to 4), continuing with US and UK importers (to 5), US and UK retail pet stores (to 30), zoos and aquariums exhibiting (to 38).

Geographic Indication:

We put a plan in place to begin phase 1 of a traceability program to identify fish through the supply chain. This is an effort to specifically highlight piabeiras and piabeiros, transfer agents and exporters who have participated in our Best Handling Practices workshops and are part of the cooperative called ORNAPESCA.

This Fall, two aquatic veterinarians, Scott Dowd and two of our Brazil volunteers will be “escorting” shipments of fish from their point of collection, all the way through the supply chain. They collect updated data and observations on handling practices, water quality, and fish health, to compare to Project Piaba’s decades of historic data to measure improvements in the supply chain, and to identify areas for future improvements.

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

During 2019, we plan to increase the number of zoo and aquarium exhibits by 5 institutions (to 38) resulting in exposure to approximately 4 million more visitors being inspired to potentially become fish keepers with home aquarium tanks.

Furthermore, we have already been in contact with several of the existing zoos and aquariums with exhibits to enhance those exhibits. In 2019, we hope to begin measuring the impact of these exhibits on visitors who are inspired to join the fish keeping hobby with the addition of home aquarium tanks. This is where we can begin to utilize the messaging “[Buy a Fish, Save a Tree](#)” as we begin to overcome some of the supply chain challenges together.

We plan to continue our twice a year newsletter to zoo and aquariums with Rio Negro exhibits with highlights of the fish available from current importers of Rio Negro Fish to the US as well as other key information for these partners. The list began this year with a modest 73 people on the circulation list, but we plan to expand it and provide more information and a direct feedback loop as the year progresses.

We held a drawing in 2018 with the zoo and aquarium participants on the newsletter and Beth Firchau’s name was drawn and she joined the 2019 Expedition and we plan to hold another drawing this Fall to host another zoo or aquarium participant on the Expedition.

Retailer and Consumer Education and Demand Generation:

We stepped up our consumer communications with the addition of our Instagram and Facebook messaging, including the addition of "[Wild-caught Wednesdays](#)". With this weekly feature we are sharing both the counterintuitive aspects of this fishery which provides livelihoods, protects the natural forest and meets all 17 of the UN Sustainable Development Goals. The feature is also designed to help those consumers become aware of the more than 250 abundant and beautiful species available for the trade and emphasizing the "Buy a Fish, Save a Tree" message.

Materials such as signs for "Buy a Fish, Save a Tree" are in several retail stores and more will be added during 2019.

Phase 1 of a launch of a Rainforest Conservation Kit in partnership with Aqueon and Segrest Farms in the Northeast of the United States began in the Summer of 2019. Proceeds from kit sales will be donated to Project Piaba for our ongoing work. The roll out will start in 20 to 30 stores and expand overtime as we help the Rio Negro Fishery with best handling practices and begin to increase exports of wild-caught Rio Negro Fish.

Staffing – Amplifying Impact and Expanding Capacity:

One thing we didn't do in 2018 but need to in 2019 is increase our capacity to work on the important work of Project Piaba. We are working on funding to bring Scott onto the project as a full-time staff member. This is a very big and exciting step for the project and the Rio Negro Aquarium Fishery. Up to this point, we have been limited on our accomplishments with only the spare-time we have available.

As you can see from our 2018 accomplishments, momentum is building and in 2019 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 understanding 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 and that you may want to play a role in helping the effort.

Expedition 2019:

In January, Project Piaba led the annual expedition with 24 people beginning January 21, growing the group of international stakeholders from conservation, zoos, aquariums and industry.

Next year, join the Expedition from January 18 – 31, 2020. [Learn more](#) We are nearly booked so if you are planning on joining us, be sure to reach out soon!

Publications Already in the Works for 2019:

In February 2019, Scott co-authored a paper in Journal of Fish Biology titled, ***Where are they all from? - sources and sustainability in the ornamental freshwater fish trade.*** You can find this article and others on our website: [Project Piaba website](#)

We have several other publications in progress for 2019. Continue to watch the [Project Piaba website](#) and [Facebook](#) page for additions.

Documentary:

Soon the documentary about the Rio Negro Fishery and Project Piaba's work will be available. In 2018, Project Piaba received some small donations which we were able to pass along to Don McConnell. Don has released some trailers for the documentary and plans to release it soon. Here's a link to Don's trailer: [Video Trailer on Facebook](#)