

AQUATICNews

Brooklyn Aquarium Society Online Newsletter & MagazineVOL. 6Winter – Spring 2025No. 18



Photo by Victor Bevilacqua



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President's Message

Hopefully the frigid months are behind us. The older I get, the more I hate the cold. February was COLD, but our members are hearty and came out to hear Bob Likins of Pet Advocacy Network speak on important issues facing the hobby both here and abroad. Since there was a storm in the forecast, we featured him virtually. He answered a lot of questions at the end of his presentation.

Pet Advocacy Network is a great organization who fights for the fish trade and keeping us up to date. We thank Bob for taking time to enlighten us on the work his of organization.

Our photo contest continues to run, so enter your pictures. You can submit as often and as many as you like. As you know, taking good pictures of your fish is challenging, but showing off your tank can be rewarding. So get your cameras out and start shooting your tanks! The last contest winner, Victor Bevilacqua's fish are on the cover of this issue of AquaticNews!

This month, March, brings Noah Chesnin of the New York Aquarium to Education Hall to speak to us. Noah will tell us all about the Hudson Canyon which rivals the depth and scale of the Grand Canyon! It's located only 100 miles off the coast of New York City. Noah is the Director of Policy and Outreach for the Wildlife Conservation Society's (WCS) New York Seascape program and will describe what the New York Aquarium's conservation and sustainable use is in the Hudson Canyon.

The 50/50 will continue each month, as it has been successful for both the club and our members. Whatever livestock and plants members bring in, we split the proceeds 50/50 for their highest ten bags. This is for livestock only. We have had encouraging feedback from doing this, because it's a great way to make some money and enjoy breeding your favorite species.

Let us know if you want speakers on a particular

aquatic topic. We need our members to be more involved as we are always trying to improve our club. Do you want to tell us about YOUR specialty? Members are encouraged to work up a presentation on their tanks too! So let us know your ideas!



Also consider lending a hand at the meetings. It takes a lot of hard work from our board members to put on an organized, informative and entertaining show every month. Anyone wishing to help out, we will gladly give you something to do.

Remember to visit our Facebook page where we feature items for sale, manufacturers listing, and member's feedback. We always have tanks and equipment for sale. If you are looking for something aquatic, reach out to us. We probably have it in storage. We can't bring everything to every meeting!

After the auction ends, please exit the building promptly so clean up can occur. Only board members should be in the building after the auction is over. The aquarium security needs to leave at a reasonable time. We must stay on good terms with the Aquarium!

Our sole publication, **AquaticNews**, will now be published twice a year: Winter/Spring and Summer/Fall. Any hobby or aquatic information you hear or read about, please share with our editor, Ginny Cahill. Please send all emails to Ginny at basny.editor@gmail.com. We are always looking for your contribution on our events and publications!

For more info, please call out hotline 718-837-4455, or visit our site at www. brooklynaquarium society.org

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The On-Line Journal of the Brooklyn Aquarium Society

VOL. 6 Winter-Spring 2025 No. 18

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AquaticNews will exchange publications with all interested societies. If we do not receive your publications for three consecutive months, we will assume you no longer wish to exchange and your club may be removed from our mailing list.

ALL CORRESPONDENCE CONCERNING THIS PUBLICATION SHOULD BE SENT TO:

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You can submit articles to the Editor by mail, or E-mail to: basny.editor@gmail.com.

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The Brooklyn Aquarium Society Inc. is a non-profit organization 501(c) (3) for people interested in the aquarium hobby and the study of aquatic life. The Society meets the 2nd Friday of each month except July and August at the Education Hall of the New York Aquarium at Coney Island, Surf Avenue at West 8th St., at 7:30 PM. Meetings are open to visitors. Refreshments are served.

Upcoming Events

March 14 Noah Chesnin — Hudson Canyon
April 11 TBA
May 9 Giant Auction
June 13 TBA

July & August No meetings

March 14, 2025

Noah Chesnin — Hudson Canyon: A National Marine Sanctuary

Noah Chesnin is the Director of Policy and Outreach for the Wildlife Conservation Society's (WCS) New York Seascape program where he works on conservation engagement and policy advocacy efforts at the local, state and federal level. He leads the New York Aquarium's engagement to promote the designation of Hudson Canyon as a National Marine Sanctuary and serves as Vice Chair of the proposed Hudson Canyon Sanctuary Advisory Council. Noah received his BA in Humanities from Yale University and his Master of Environmental Management from the Nicholas School of the Environment at Duke University.

Just 100 miles off the coast of bustling New York City lies the largest submarine canyon along the U.S. Atlantic coast – the Hudson Canyon. Rivaling the depth and scale of the Grand Canyon, this special place supports a remarkable abundance and diversity of marine wildlife, from leviathan whales, endangered sea turtles, majestic sharks and tunas, to colorful coldwater-corals and many species that support local commercial and recreational fisheries.

Please join us for a presentation and discussion about balancing conservation and sustainable use in the Hudson Canyon. Noah Chesnin, Director of Policy & Outreach at the Wildlife Conservation Society's New York Aquarium, will share stories about the Canyon and describe how the aquarium has led the effort to nominate and now secure the designation of Hudson Canyon as a National Marine Sanctuary.

Auction Rules

All fish lots must be properly bagged: bag must have ample space and be filled with 1/3 water and 2/3 air.

No sandwich bags or Zip-Lock bags for fish!

Seller MUST put their name on each bag.

Seller must label all bags with species and sex if known.

Tags with lot numbers will be given to sellers at the time of registration, who will then tie the tag SECURELY to the bag.

Donations - Thank You!

Individuals for January & February

Bill Amely

Tomasz Lis

Denis Vadaro

Katherine Hernandez

James Longo

Don Lang

Scott Peters

Justin King

Alexandr Vinnitsky

Al Turco

Ken Ip

Gene Kogan

Dan Puleo

Joshua Allen-Palenske

Samuel Valez

Peter Hvde

Steve Matassa

Jeral Matos

Brando Bringas

Dan Smith

Liz Puello

Nick DeCillis

Victoria Silverstein

Eduard Kogan

John Liy

Bismarck Vanegas

Stores/Mfg

All in 1 Petshop, Brooklyn, NY
Monster Aquarium, Queens, NY
Pacific Aquarium, New York, NY
Brooklyn Zoo & Aquarium, Brooklyn
Absolutely Fish, Clifton, NJ
Pop Coral, Brooklyn

Open Board Positions

The board members meet once a month to discuss club business, and we can use your help! There are four board positions currently available: corresponding secretary, treasurer, webmaster and recording secretary. If you'd like to attend a meeting which are held the **1st Friday of the month**, September through June, please notify Steve Matassa at (347) 277-4793 by the Tuesday before the meeting.

BASNY Breeders Unite!

Do you know what the Breeders Award Program is all about? The Brooklyn Aquarium Society welcomes members to bring in fish, plants or invertebrates, bred at home, to offer at auction.

The club receives half of the auction sale and the breeder receives the other half. It is through this program that we measure our advancement and gain the necessary knowledge and skill as aquarists. The purpose of the **Breeders Award Program** is to encourage participation, recognize outstanding achievements and share knowledge of breeding techniques. This hopefully encourages members to breed species that are not readily available.

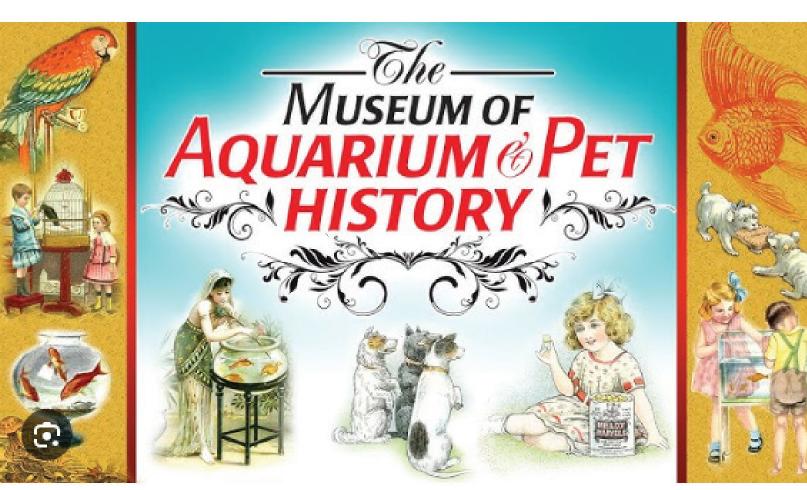
A non-competitive program recognizing members equally., the program should inspire breeders to experiment without the concern of competing against breeders with larger setups or more time. All points earned are cumulative based on type of fish, plant or invertebrate bred/cultivated and whether the breeder has written articles discussing their experience.

Special recognition is given to members that breed multiple species or C.A.R.E.S. (Conservation Awareness Recognition and Responsibility Encouragement and Education and Sharing) species. https://caresforfish.org/

The BASNY Breeders Award Program is for freshwater fish, marine fish, corals, invertebrates and plants (both fresh and marine).

We welcome you to take the challenge. Download the breeders award form from our website now!

— David Manuel, Vice President



If you like history and you like pets, then this is the place for you! https://MOAPH.org

Python Hose Tip

If your python hose becomes dirty or even black, don't throw it out. There is an easy fix. A mixture of 50/50 bleach and water will clean it like new. Hook up the python like normal, and stick the hose in a container with the bleach mixture. When the hose is full shut the faucet and valve and let it sit for an hour or two. Then rinse with fresh water until the bleach smell is gone. The hose should be nice and clear. If not repeat with all bleach.



Current NEC affiliate clubs

If someone wants to travel, they can visit another club. Here's a list of the clubs.

Aquarium Society of Lancaster Boston Aquarium Society Brooklyn Aquarium Society Bucks County Aquarium Society Capital Cichlid Association Cichlid Club of NY **Central New York Aquarium Society Danbury Area Aquarium Society Diamond State Aquarium Society Erie Aquarium Society Greater City Aquarium Society Jersey Shore Aquarium Society Koi Organization International** Long Island Killi Assoc **Long Island Aquarium Society** Metropolitan Area killifish Assoc.

Norwalk Aquarium Society
Nassau County Aquarium Society
New England Cichlid Assoc
New England Fancy Guppy Assoc
North East Live bearers Assoc
North Jersey Aquarium Society
Otter Valley Aquarium Society
Pioneer Valley Aquarium Society
Pioneer Valley Water Garden & koi
South Jersey Guppy Group
Southern New England killifish Assoc
Tropical Fish Club of Burlington
Tropical Fish Society of Rhode Island
Upstate NY killifish Assoc
Worcester Aquarium Society

PAST MEETINGS PHOTOS



Harry Faustmann spoke in January on live food cultures.









Bob Likins from Pet Advocacy Network addressed members in February.





JAN & FEB MEETINGS





David made auction paddles to make bidding easier (and more FUN).





Marie cuts BAS's birthday cake celebrating 114 years of the club!





Club Exchange



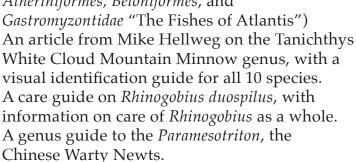
Justin King - BAS

TROPICAL FISH CLUB OF ERIE COUNTY, SOME THINGS FISHY, DECEMBER 2024

Features the article *Betta Antuta* by Chuck Mule, on one of the largest type of betta fish.

THE MISSOURI AQUARIUM SOCIETY, DARTER MAGAZINE, JANUARY / FEBRUARY 2025

The January / February 2025 issue contains content "Exploring the Waters of China". Two articles on Oryzias ricefish, including a general article on the East Asian species and a care guide for O. pectoralis (PLUS a link to a massive visual guide to Atheriniformes, Beloniformes, and



A guide to easy indoor marginal plants from China. A visual guide to Chinese botanicals. An article on *Cryptocoryne crispulata*, including info on its subspecies.

Two full biotope guides, "The Chinese Rice Paddy" and "The Chinese Hill Stream", including brief guides to plants and animals in each biotope.

THE GREATER PITTSBURGH AQUARIUM SOCIETY, FINFORMATION, SEPTEMBER 2024

This issue's lead article *Hoplisoma Micracanthum*, AKA *Corydoras micracanthus* is by Regina Spotti. The author describes husbandry



and care for this Argentinian freshwater catfish. **OCTOBER 2024 ISSUE**

The lead article *Neoheterandria elegans*: A Micro-Predator Called "Teddy" by Ed Moats.
The article *My flowering Aponogeton ulvaceous* by Susan Everett, highlights plant growth.

AQUARIUM CLUB OF LANCASTER COUNTY. TANK TALES, MARCH 2025 AQUARIUM CLUB

Interesting article on Blue Leg Poso Sulawesi Shrimp Caridina caerulea



by Laura Walters. Blue Poso are found native in only one place in the world, Sulawesi Indonesia in Lake Poso.

BUCKS COUNTY AQUARIUM SOCIETY, THE BUCKETTE, MARCH 2025

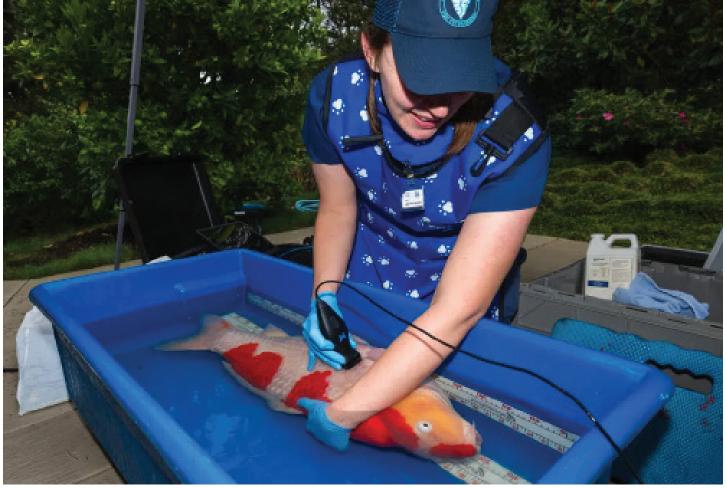
An article showcasing *Ptychognathus barbatus*, also known as Pom Pom Crabs, by Glenn Roberts.

An aquarists experience spawning Otopharynx lithobates "Zimbabwe Rock" Yellow Blaze cichlids.

The article *Approches to Fighting and Fostering Green Water* by Steve Brunn describes how to add or remove microscopic algae from freshwater systems.

The article *Breeding a Little Mistake* by Jules Birnbaum describes an accidental encounter in breeding *Scleromystax kronei* catfish.

An article highlighting the Freshwater Cobalt Blue Goby Stiphodon semoni by Karen Murray. The article *Under the Covers* by Timothy J Brady provides a spotlight and care guide on the *Neoheterndria elegans*, also known as the Tiger Teddy killiefish.



'It can be diet related, too. This is very common in goldfish ponds, where you have fish that float after eating.'

By Emily Anthes Photographs by Nic Coury The New York Times Published June 28, 2024

It's Never 'Just a Fish'

Many students begin veterinary school with career aspirations that date back to childhood, when they fell in love with the idea of ministering to cats and dogs, or horses, or the exotic animals at the zoo. Jessie Sanders arrived at veterinary school with a more particular passion. "I was the one weird fish kid," she said.

It was an interest that had surprised even her. In college, Dr. Sanders had started volunteering at an aquarium, hoping to work with the whales. Instead, she found herself assigned to the fish team — and falling hard for her finned charges.

"I just love fish," she said. "I love the way they're built. I love the way they interact with the environment. And there's still so much that we just don't know about all the little internal workings."

Today, Dr. Sanders runs Aquatic Veterinary Services, with patients that include carnival goldfish, pet store bettas and prizewinning koi worth tens of thousands of dollars. Last year, she became one of the first 10 veterinarians to receive a board certification in fish practice, a wholly new accreditation.



Dr. Jessie Sanders analyzing the movement of a Fisher's wood catfish at a home in Martinez, Calif., in January.

Dr. Sanders spoke with The New York Times about life as a fish veterinarian. Her story was based on two conversations, and her responses were edited and condensed.

I've done nothing but pet fish for 10 years, and it's been awesome and challenging. I like the challenge of setting everything in an underwater environment. And the amount of personalities that you get in fish — they have so many little quirks. Some of them are super chill and nice, and some of them are complete terrors.

We had a hospital for about three years. Unfortunately, a 24-hour gym moved in and shared the adjacent wall, and they liked to play their music all night long. Fish have an organ known as a lateral line that picks up on vibrations; it's how they're able to sense predators, swim in a school together. Obviously, having rock music played at you all hours in the night is very stressful. Anything connected to that wall we lost

within the first month they opened.

A person in a baseball cap moves a loaded carton into an orange hatchback car that has on its side rear door a cartoon logo of a mermaid doctor employing a stethoscope on a smiling fish.

"We just have a mobile practice now," Dr. Sanders said. "We serve the greater San Francisco Bay Area. I'll drive from three to eight hours in a day."

We just have a mobile practice now. We serve the greater San Francisco Bay Area. I'll drive from three to eight hours in a day. When I get there, it's the same as you taking your cat or your dog to the vet. We'll have a discussion: What's been going on? Have they been eating? Is there anything in particular that you want me to take a really close look at?

A woman in a yard, wearing a baseball cap and a blue smock, holds a medical device in her hands while looking down on a medium-sized fish.

"We'll have a discussion: What's been going

on? Have they been eating? Is there anything in particular that you want me to take a really close look at?"

The most common "disease" that we see in fish is actually poor water chemistry. Like the air that we breathe, the water that a fish swims in is critical to their overall health. If you're breathing in nothing but pollution, you're going to be prone to more illnesses. So we check the water chemistry; if it's terrible, the fish are already stressed out. I don't want to put hands on them because that could make things worse.

A large orange and white Koi fish in a net within a pool as a person wearing surgical gloves looks down at it.

"When I get there, it's the same as you taking your cat or your dog to the vet."

Then you've got to catch the fish. I have a bunch of different nets. The cute little square aquarium nets for tank fish — I usually use one on each side of the fish and kind of squish 'em together. In bigger ponds, I use seine nets. They have floats on the top and weights on the bottom. I have ponds that are so big that I have to use two nets and get in there with my waders. It's one of those things you've got to practice. No one's good when they start out, but I'm really good at it now.

A person wearing surgical gloves places a Koi fish in a tub.

"After I catch them, they'll be transferred to the exam tub."

After I catch them, they'll be transferred to the exam tub. I usually have a tub of their tank or their pond water that is ready to go with some sedatives. For most of my physical exams, I prefer that the fish be lightly anesthetized. It's less stress for them; trying to restrain a wet, slippery torpedo is not really going to be in either of our favors. We just need them to be handleable. So they might be wiggling a fin at me, but once they're anesthetized, I can get a really good look all around their body.

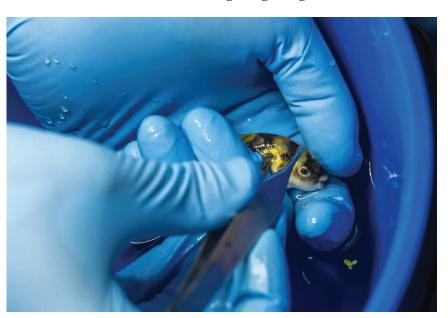
A small fish is held in tweezers in the hands of a person wearing surgical gloves.

"Usually we're going to do skin mucus and gill

biopsies. The skin mucus biopsy is mostly just looking for parasites, which can irritate fish and make them lethargic."

Usually we're going to do skin mucus and gill biopsies. The skin mucus biopsy is mostly just looking for parasites, which can irritate fish and make them lethargic. The gill biopsies are more important because that can show us what their respiratory system is doing. It provides us a great diagnostic tool without having to stick a tube down their throat.

A woman wearing surgical gloves looks at a



'Usually we're going to do skin mucus and gill biopsies. The skin mucus biopsy is mostly just looking for parasites, which can irritate fish and make them lethargic.'

slide through a microscope.

"The gill biopsies are more important because that can show us what their respiratory system is doing. It provides us a great diagnostic tool without having to stick a tube down their throat."

If we need to do any more diagnostics, ultrasound or radiographs, we can do that while the fish is asleep. One client has a pond of goldfish, and there's one goldfish that just hasn't been able to get up and swim with everybody; she's kind of stuck on the bottom. We're going to take X-rays.

A person in surgical gloves looks as an X-ray image of a fish on a device.

"If we need to do any more diagnostics, ultrasound or radiographs, we can do that while the fish is asleep. We have a pond of goldfish, and there's one goldfish that just hasn't been able to get up and swim with everybody. She's kind of stuck on the bottom. We're going to take X-rays."

A buoyancy disorder is when a fish that should be able to swim in the middle of the water column is either sinking to the bottom or floating to the surface. It's very important for fish with buoyancy disorders that we can evaluate their internal anatomy — specifically their swim bladder, a little air sac that helps them float.

A vet holds a device to the side of a large koi that is immobile, on its side in a tub filled with water.

"It can be diet related, too. This is very common in goldfish ponds, where you have fish that float after eating."

It can be diet related, too. This is very common in goldfish ponds, where you have fish that float after eating. If there's a lot of competition and limited food during feeding time, it's madness. They're all just eating, eating, eating; they suck down a little bit too much air.

A woman with cases of medical equipment leans over a pond where seven koi are swimming nearby.

"A lot of fish diets float because it gives owners the opportunity to evaluate them at the surface and obviously, it's a lot more interactive. Koi and goldfish are naturally bottom-feeding fish. But we have taught them — because they're golden retrievers, they'll do anything for food — to come to the surface during feeding time."

That can be corrected by spreading out the feeding a little bit more or feeding a sinking diet. A lot of fish diets float because it gives owners the opportunity to evaluate them at the surface, and obviously it's a lot more interactive. Koi and goldfish are naturally bottom-feeding fish. But we have taught them — because they're golden retrievers, they'll do anything for food — to come to the surface during feeding time.

For fish surgeries, there's many different levels. I do a lot of enucleations, which is eyeball removals. In fish, these are so easy; they don't have eyelids or need to have any sort of globe in there to look normal. I did one for a little goldfish that actually had an abscess in her eye.

The fish was just utterly miserable. We were able to get that out, and the next day the owner is, like, "She's a completely different fish. She's eating, she's zipping around." They heal up just beautifully every single time.

We see ovarian cancer very commonly in koi. If we catch it early enough, we can do surgery to remove it. We use a higher dose of the sedative. We have a specialized trough that the fish sits upright in. They sit over a little reservoir that has the anesthetized water. There is an aquarium pump that pumps it through a tube up into the fish's mouth, it goes over their gills, runs down the side of their body and then back to the reservoir.

The back of an orange car with a California license plate that says "Doctor 4 Fish" and the words "Mobile Fish Veterinarian" on the bumper.

"The biggest challenge is the public not even knowing that fish veterinarians exist. Even within our own profession, we're ridiculed. Fish aren't respected as pets in general."

The biggest challenge is the public not even knowing that fish veterinarians exist. Even within our own profession, we're ridiculed. Fish aren't respected as pets in general. Like, "Why are you wasting your time? It's just a fish." For a lot of people, it's not just a fish. It's an actual living and breathing animal that needs to have care and respect. A lot of fish are taken into homes as practice pets and get the really short end of the stick.

Emily Anthes is a science reporter, writing primarily about animal health and science. She also covered the coronavirus pandemic. A version of this article appeared in print on June 30, 2024, Section F, Page 7 of the New York edition with the headline: It's Never 'Just a Fish'.

https://www.nytimes.com/2024/06/28/science/fish-veterinarian-health.html?searchResultPosition=1

Meet My Tank!

Marie Licciardello — BAS



Marie's built-in, 19-gallon wall tank with her 20 year old Parrot Fish.

Aquarium Society started in 1992 when my husband and attended our first meeting. Everyone was very welcoming and we learned a lot about fish and fish keeping, their habits and living environments.

Our tank at the time was a built-in wall tank that is 19 gallons. It has gravel on the bottom and small rocks. We had two Kissing gouramis renting the tanks. My kids were young and amused with them. In 2005 we purchased two parrotfish for the tank. Whenever we had company over, they'd always run to the built-in tank to greet the parrotfish. In a short period of time, they laid

eggs! But they didn't come to fruition. The fish kept busy moving the gravel around the tank. It saddens me to admit that I lost one of the parrotfish. His best friend grieved his buddy's absence. You could see the sadness he felt. He no longer swam excitedly around the tank, his color changed and he didn't eat much. After a week or so, things improved and he felt more confident in the tank alone. I am now looking for a new friend for him. He's 20 years old!

The other tanks we enjoy are great too. Since I always wanted a larger tank, I treated myself to a 35 gallon tank. It is a delight to watch since the fish are African Cichlids. They're different sizes and colors. They're

compatible with each other except at dinner time! The bloodworms, black worms, freeze dried plankton, pellets, and spiraling flakes certainly go fast!

Another unusual tank is my hexagon shaped tank. It houses our lovely koi angels. We carefully watch the temperature and look for signs of ich.

Our fourth tank is a show case for guppies:

we have fancy tails to forked tails. They often produce broods of 20+ fry.

I was second Vice President of the club for 18 years (2003–2021). During those years I was honored with the William DeFoe award by BAS in appreciation of my service throughout the years.









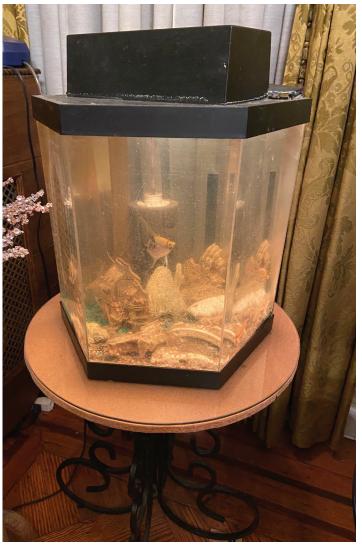


Photo Contest Winners!

1st place: Victor Bevilacquaf (his fish featured on cover)

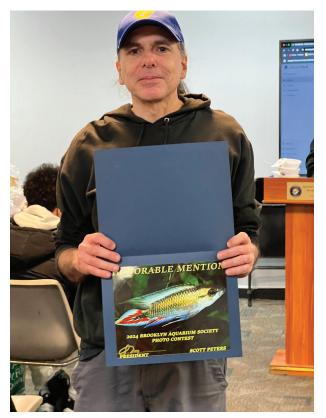
2nd place: Dee Manuel

3rd place: Jeral Matos and Adam Escato

Honorable mention: Scott Peters



Dee Manuel



Scott Peters



Jeral Matos



Adam Escato

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THE BIOTOPE AQUARIUM

Vinny Anderson, USA
Photos by the Author

A biotope is described in microscale and is defined as a uniform environment formed by the unique biotic and abiotic features in which a biological community inhabit. The term is closely related to habitat, which represents the macroscale of physical conditions surrounding a species, assemblage of species, or community, whereas a biotope is specific to its subject and the microscale it may reside in. Favorably, the microscale environment of a biotope allows aquarists, aquascapers, and nature enthusiasts to replicate a biotope scene accurately and elegantly within the confines of an aquarium.

Biotope aquariums have become increasingly popular for home aquarists and aquascaping competitions. This style of aquascaping captures the beauty of the natural environment and unique aspects of its inhabitants. A biotope aquarium should represent all aspects of the biotope, including rocks, wood, substrate, leaf-litter, debris, water flow, water qualities, clarity, lighting, temperature, plants, algae, fish, and more.

BIOTOPE AQUARIUM AND AQUASCAPING

A biotope aquarium is a living ecosystem representing the living world around us and a form of art,

or aquascape. Many likenesses exist across biotope and nature aquarium aquascaping styles, all be it with varied balance and weight. Both styles encompass a shared motivation to create a harmonious balance of nature and life within the confines of the aquarium. Aquarists know the importance of understanding the natural environment and the habits of plants and fish, which is leveraged to recreate a natural ecosystem, grow aquatic plants, and create a favorable environment for underwater inhabitants.

Other motivational ideologies are of greater weight and influence on the biotope aquarium style. For example, the biotope aquarium creates an inherent natural balance between the aquascape and the inhabitant selection. It should provide an accurate representation of plants, wood, rocks, substrate, and other hardscape in a manner that matches the flow of nature and influences of water's presence, mimicking natural growth patterns of plants, erosion of wood or stone, or deposition of leaf-litter, sand, or silt.

Additionally, the biotope aquarium may look to invoke a stronger interest in the unmanicured natural world of our everyday adventures, building awareness for the unseen underwater inhabitants, and potentially driving environmental conservation. The biotope aquarium may better allow for rediscovery of

the importance of nature around us and a course to train our eye to notice the minute details and beauty of the natural environment.

AQUASCAPING AND BIOTOPE PROGRESSION

Identifying the goal, motivation, and inspiration are critical for developing an aquascape.

Motivation and goals often go hand-in-hand. Motivation is the driving force behind the work, of which there are numerous.

One may wish to have a pleasing biotope aquarium for their personal enjoyment, to rank highly in an international aquascaping competition, or to represent a geographical area or species to a larger audience.

Goals define concrete criteria to judge the success of the aquascape and pushes the level of execution. The goal of the Big Walnut Creek biotope aquarium was to enter and rank in international aquascaping competitions. This was further motivated by the desire to improve upon previous years' rankings, as well as showcase central Ohio local waterways on an international stage.

Inspiration then guides the aquascaping and the creative process. With the aim of recreation of the aquatic environment in-kind, inspiration may be identified and drawn from nature. I encourage you to find and follow the aquatic environment you enjoy. Take a

walk down the local river trail, or along the stream in the metro park. Nature seemingly provides an endless supply of inspiration. Once a direction is known, unclear motivation and goals may become apparent. Often the scope of our inspiration must be scaled to satisfy the microscale of a biotope and be replicable in the aquarium. In the case of the Big Walnut Creek biotope tank the original inspiration was the multiple large sycamore trees lining the banks of the creek. The tall tree branches overhang the water, and their roots intertwine at the water surface, submerging and anchoring the tree into the substrate. The scale of this inspiration was concentrated to focus on the roots and rock bank where small panfish and bass hide and hunt. With goals, motivation, and inspiration, the focus is now on the construction of the aquascape.

Let's prepare to 'scape! Firstly, consider how the aquarium

The stream in Ohio that inspired the biotope.



shape may best represent the biotope. Does the tank need height to accommodate a water column for fish to swim, or does a shallow tank allowing emergent plant growth suit the biotope better? Next, consider what hardscape materials are required. If allowed by state regulations, and applicable to the biotope, collection of local materials is an effective method to acquire representative materials. Otherwise, source materials from shops with similar geology or structure to the biotope. Local rock and stone quarries are another good option for finding unique stone. Substrate works in tandem with hardscape and has a great impact on the aquascape and biotope. Often a bag of aquarium sand does not result in a representative substrate. Mixing sands, dirt or clays, and small bits of crushed stones can create the desired substrate material. Attention should also be paid to botanicals, organics, leaf-litter, or other accent hardscape materials, such as shells. Lastly, evaluate the water flow and quality, including hardness, temperature, and pH.

Biotope aquascapes incur more research and time investment learning the inhabitants and behaviors. Utilizing online and literature resources can greatly aid in understanding the material needs of the biotope. This upfront work is offset by the minimal maintenance and demand of an

established biotope aquarium.

Moreover, recreation of a local biotope has many benefits, including similar water parameters to the municipal water supply, the ability to physically explore the biotope in person, and ease of finding and collecting materials.

Following aquarium selection and acquisition of materials, construction of the aquascape begins. This process may be made easy with the replicatory nature of a biotope aquarium. Focus on the water flow and movement through the tank, as well as the aspect of the biotope which is to be featured. This is a good time to seek and incorporate feedback as the scape is developed.

Personally, construction and evolution of a biotope aquarium is an enjoyable and entertaining experience. Maturation of the scape is dynamic, taking months to develop into its full potential. Plants and algae may grow and biofilms and mulm are given time to develop. Wood, leaf-litter, and organics that are decomposed beyond a practical life in a nature aquarium may be allowed to continue in the biotope aquarium. Decomposition adds depth to the aquascape, improving the substrate or affording new opportunities for plantings or inhabitants. The natural feel of the biotope aquarium is greatly enhanced through maturation of the tank. From here the journey is your own.

COMPETITION AQUASCAPING

Many tanks are constructed simply for enjoyment, where the guidelines of aquascaping styles may readily blend for the desired visual appeal. However, for competitions the tank should



- Large sycamore trees line the streambanks on either side.
- The tall tree branches overhang the water, and their roots intertwine at the water surface. Small panfish and bass hide and hunt in the roots and rock bank.



strictly follow the biotope style. Continuing to seek feedback and refine the aquascape can greatly improve the level of execution. This approach is often used in a repetitive way for those wishing to achieve high rankings in biotope aquascaping competitions. Knowing and following the requirements of the contest organizer is vital. One should review not only the judging criteria for the aquascape, but also additional information and context that accompanies the submission. Information on the surrounding habitat and a detailed description

of the biotope in the natural environment may be required. It is beneficial to save any online and literature resources in developing the aquascape for this section of a submittal of the scape. For some competitions this task is best not left to the last minute.

Other prep work that can be done prior is videography. Not required by all competitions, a video of the aquarium can be done with the equipment in place. Video captures the movement of water and behavior of aquatic inhabitants and is often filmed in a manner that does not show equipment.



- The initial hardscape with driftwood and river rocks.
- The aquascape details are becoming more refined: the hardscape now includes larger rocks within the tree's root system, and leaf litter has been added.



Lastly, the photograph. All equipment should be removed from the tank, the glass should be cleaned inside and out, and room light should be minimized to prevent reflections. Lighting the tank is critical to capturing the feeling of being in the biotope. Spot lighting and slightly turbid water can create unique rays of light through the biotope, or front lighting can completely remove the background making the tank feel endlessly deep. Multiple photo sessions may be needed to determine lighting and surface agitation that suit the tank best.

Whichever your motivation, the biotope aquarium is a rewarding way to bring unique aspects of the natural world into your home.

AQUASCAPE DETAILS

Dimensions 90 × 30 × 30 cm Title Alum Creek Volume 71.3L Background poster-dark, brown gray

Lighting Fluval 2.0 planted LED

Filtration Oase Biomaster 350
Plants None / roots replicating the American sycamore.

Animals Sunfish, Bass

Materials River rock and wood/roots

Additional Information This aquarium replicates the pools found in the creek beds of Ohio, specifically Alum creek in Columbus, Ohio. Lined with tree roots from American sycamores, a range of stone sizes are found in along and within the pool areas. Here a bass and sunfish are waiting for their next meal.

• More detail refinement: the emersed part of the display is maturing.



The author's 2nd Place winning Biotope Aquascape "Alum Creek" as submitted to the AGAIAC in 2021. Alum Creek parallels, and eventually joins, Big Walnut Creek in Ohio.



Bullies Love Piranhas

By Neil Mayerson

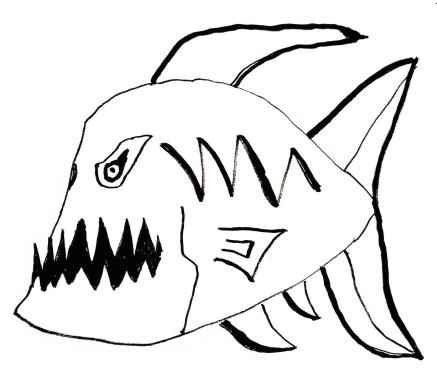
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Red Devils are just so neat
Vampire tetras and black ghosts
Are the most
Kissing gouramis are lovers
Siamese Fighter fish
Are fighters up and down the coast
Iridescent sharks
Knife fish, Trigger fish
Sword fish —stay sharp.

Oscar is an award winning name Jack Dempsey is the same. Purple smilers are nice Black nests are naughty.

Electric Blue Acaras
Are one of the first to go
Green Terrors and Red Terrors
Get their last licks
Striped Convicts
Are criminals
If they jump out of the tank
They're escaped convicts

The minnows and goldfish Are food
When you throw them in



They get chewed The Snakehead's end Pikes Are rude Bullies love piranhas Bullies love their Red Bellied Piranahs

My cousin had to move, so he broke down and stripped his tank. He put all his Red Belly Piranhas in a bucket that once had ammonia in it. All his fish died but one! And that fish refused to eat for weeks on end.

There is an an episode of Star Trek "When Gods Destroy" with Lord Garth and the green girl Martha — at one point Captain Kirk and Mr. Spock are invited to eat dinner. Captain Kirk asks "What about the Governor?" And Garth says "The Governor is fasting." So I named the lonely Red Belly Piranha "The Governor." My friend would ask "How's th Governor. Is he still fasting?"

Then finally, he started eating flakes which is unheard of. Then brine shrimp and sure enough, it was back to devouring schools of goldfish and minnows. Bullies love their Red Belly Piranhas. The Shrimp Farm.com is the place to go for freshwater shrimp. The owner is **Ryan Curtis**, with a new mailing address: 2401 East Washington St, STE 200 A2, Bloomimgton, Il 61704. Visit the Aquarium Shrimp Forum http://theshrimpfarm.com/forum/index.php to ask questions, talk to other shrimp nuts and discuss everything related to Freshwater Aquarium Shrimp.



pH in a Dwarf Shrimp Aquarium

The Blue Dream Shrimp is the selectively bred red color variant of the neocaridina Shrimp. Originally selectively bred in Tawian for its blue coloration, the Blue Dream Shrimp is becoming one of the most popular Dwarf Shrimp across the globe.

When keeping Dwarf Shrimp in the home aquarium it often becomes necessary to modify water parameters to meet the shrimp's requirements. The pH of the water is often one of the most important parameters to maintain in appropriate ranges.

Before modifying pH it is important to note that all changes should be made gradually if there are shrimp already in the aquarium. It is also important to not allow the pH (or any water parameters) to fluctuate.

Lowering pH

Chemicals

There are chemicals sold at almost every pet store that sells fish equipment that are intended to lower pH. These chemicals lower the pH by adding acid to the water. This is only a temporary solution as the buffers in the water counter act the chemicals and the pH will eventually return to its original state. This is a very expensive, ineffective, and dangerous method of altering pH. The inconsistent nature of these chemicals causes pH swings that can cause major problems with Dwarf Shrimp.

Co₂

Carbon Dioxide injection in the aquarium is often used to aide in plant growth. Injecting Co2 causes a Co2 to bond with the water creating carbonic acid. The carbonic acid lowers the pH of the aquarium water but has no effect on hardness. If the water is fairly soft but has a high pH than desired Co2 injection using a fully automated system can be an effective method of controlling pH. Caution should be used when using Co2 as overdoses of Co2 can cause major issues.

Substrates

There are a few substrates on the market that are made to specifically soften the aquarium water and lower the pH. These substrates are often used in conjunction with reverse osmosis filtration, which lowers the water hardness greatly. The best substrate for this purpose is Aqua Soil Amazonia. Using these substrates with or without reverse osmosis is the most recommended method to maintain soft slightly acidic water. Care must be taken when using a new bag of Aqua Soil Amazonia, as it will cause an Ammonia Spike. See Cycling Aqua Soil Amazonia for more information.

Raising pH

Chemicals

There are chemicals sold at almost every pet store that sells fish equipment that are intended to raise pH. These chemicals cause a temporary rise in pH, but just like the chemicals used to lower pH they get expensive and are very ineffective. These chemicals cause fluctuations in water parameters which can be dangerous to aquarium inhabitants.

Substrates



There are many substrates that are made to increase pH in the home aquarium. Many substrates made for marine aquariums are good for raising pH. Crushed coral is one of the better substrates for this. Substrates made for African Cichlids are great at maintaining a high pH. The best substrate for this is Eco-Complete African Cichlid Substrate.

Filtration

When only needing to raise pH slightly, adding buffering substances to the aquarium filter. Adding a handful of crushed coral to a filter will buffer the waters hardness and will also cause the pH to rise. This solution is safe and works long term. The crushed coral in the filter will only need to be replaced every 3-4 months.

It is very important to prevent pH swings in the aquarium. Instability in the aquarium is often much more harmful than maintaining a stable pH outside of the ideal range. Stability is crucial!

BROOKLYN AQUARIUM SOCIETY PRESENTS

THE JOHN TODARO MEMORIAL WRITING PROGRAM (%) (%)



GOAL

To honor Editor John Todaro and encourage original writing about the aquarium hobby.



PROGRAM CRITERIA

The writing program is on a fiscal year basis (July 1 - June 30).

There is no limit on the number of articles submitted by an author. However, only three (3) articles will be evaluated by the committee for the writing awards. Judged by the committee and if a tie the Chairperson's decision is final.

Articles on breeding fish will have a dual submission in both the writing program and the Breeders Award Program. The writing program is open to members and non-members of any age.

The committee will evaluate and vote on each article based on the following criteria:

- The originality of the article (past year, plagiarism of another's work or previously published articles will be disqualified).
- Clarity of species and subject matter.
- Depth of research research articles to include citations and footnotes to sources if any.
- Use of scientific names for fish, plants and corals.
- Spelling
- Artwork &/or photos submitted with the article will receive extra points if related to the article or deduct points if incorrect or unrelated to the article.
- If an originally submitted article is printed by another club, within the same year as the same article is submitted to BAS, the author will not be penalized.

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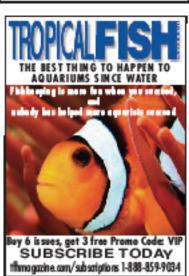
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YOUR MEMBERSHIP BENEFITS INCLUDE:

Free Admission to all general meetings, held on the 2nd Friday of the month (except July & August) at 7:30 pm at the Education hall of the New York Aquarium, at Coney Island, Surf Avenue at West 8th Street , Brooklyn , N.Y. The Society presents expert speakers on all aspects of the hobby, from freshwater fish to marine aquatic life. Door prizes and raffles at every meeting. Breeder Awards Program (BAP) – Certificates and trophies awarded. General meetings are open to the public (\$5 donation is requested for non-members). Free parking and free refreshments.

Special Interest Groups (SIGs) hold meetings, free at members' homes, for members only. Here's your chance to network with members with the same interests. Discuss, ask questions, learn, teach and develop your expertise in freshwater and/or marine aquarium keeping.

Aquatic News The Journal of the Brooklyn Aquarium Society, our tri-monthly (4 issues except July & August) award winning publication is on our website. Each issue is filled with articles on both marine and freshwater aquaria keeping. Articles can be downloaded.

Meeting reminder! All members receive flyers announcing speakers via email, keeping members up to date.

Calling all writers, artists and photographers! All members will have the opportunity to submit articles, photography and illustrations for publication in the AquaticNews!

BAS is on-line at BASNY.ORG. You'll find up-to-date information about our monthly events, links to other aquarium societies in the US and stores, manufacturers and related aquarium sites. We have an on-line library with downloadable articles. We have our own BAS forum, where you can interact with other freshwater, marine or reef members and post free hobby-related classifieds where members sell and trade fish, corals, plants and equipment.

BAS Hotline: For the latest information call the BAS 24 hour Hotline 718 837-4455 for event and inclement weather information. If you need advice on fish keeping, breeding or where you can find rare or hard to find fish, you can often get help calling the Hotline. Help from the Hotline is always free.

Volunteer: The Brooklyn Aquarium Society is an organization run by volunteers. Without them there would be no BAS. Volunteers help set up events, write articles, coordinate projects, assist and work on committees, help at auctions and meetings. Join in, help, learn and have fun doing it. Call Steven Matassa, President (347) 277-4793.

Video Tape Library: We have a video tape library on different aspects of fish care and breeding plus past BAS Speaker Events. These video tapes are available via our BAS Forum. You must be a member of our Forum. Membership is free.

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