

# AQUATICNews

Brooklyn Aquarium Society Online Newsletter & Magazine
VOL. 3 Fall 2022 No. 11





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# President's Message

I am sure all of our members are excited about getting back to a meeting in September. David has kept us in the loop, with our virtual meeting in July, but in August we will take a month off and just post a video. Then resume in September with a live event. I know there is nothing like in person meetings, with the speakers, the auction, q and a, and of course the refreshments so we will keep working to bring you those meetings.

Our meeting in September will be Saint Brendan church Parish Hall. They are located at 1202 Avenue O, on the corner of Ave O and East 12th in Brooklyn. We will have some restrictions for that night. Everyone for your own safety, please wear a mask inside, no one will be allowed in before 7:30 pm, and also try to keep your distance between members. If we follow these simple rules, we should have a great time. They have a parking lot right across the street. We will have refreshments, but cannot have members handling the refreshments. They will be given out by our staff. These simple rules are to keep us all safe, so we can continue having our meetings. We will have many items for sale, including tanks, light, and filters.

Our speaker for September will be Andreas Tanke talking on plecos of the Amazonia. We are flying in Andreas from Germany, to speak at BAS. That night we will have a 50/50 on all live stock donated, so bring in your fish, coral, inverts and plants. Each member may bring up to 10 bags.

Anyone wishing to make a donation in Joe's name can donate to either Disabled American Veterans or Tunnel to Towers Foundation. These were two of Joe Graffagnino's favorite organization to donate to.

You can check our website for future events (<u>www.basny.org</u>). We are still not allowed to use the Aquarium for meetings, but

are going to book other halls for our shows. Please look out for the locations we are to meet. When we do not have a place we will continue to bring you speakers online, with the help of our board member, David Manuel. David has



been working hard to keep things going. We thank him for all his hard work, so tune in on August 12th.

Look on our Facebook page for aquatic sales, from our club. We will post things for sale periodically. We always have tanks and equipment for sale. If you are looking for something aquatic, reach out to us.

Any hobby or aquatic information you hear or read about, please share with our Editor, Ginny Cahill. It can even be your own short stories, about your own aquatic experiences. Please send all emails to Ginny at <a href="mailto:basny.editor@gmail.com">basny.editor@gmail.com</a>. Ginny has done a great job since taking over as editor and we thank her for her dedication. The Aquatica looks awesome, Ginny. Thank you for all your hard work.

We are always looking for your input on our events. Please let us know if you want speakers on any aquatic topic. We need our members to be more involved as we are always trying to better our club.

For more info, please call out hotline 718 837-4455, or visit our site at <u>www.</u> brooklynaguarium society.org

STEVEN MATASSA, President



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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 Speaker/Events

#### **Sept. 9, 2022** Andreas Tanke

At about 10 years old, I got my first aquarium and started to gain experiences with this exciting hobby. In the 1990s, due to my studies in mathematics/computer science and the founding of my IT company, other things came to the fore. However, I returned to the aquarium in 2002.

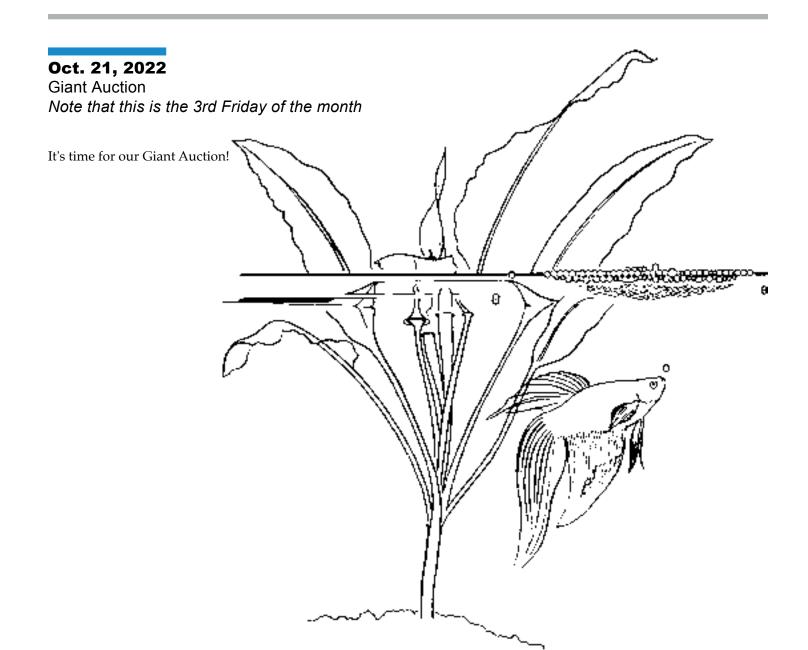
I have been a member of the German Cichlid Society (DCG), the VDA Zwergcichliden (AKZ) and the International Community Barben-Schmerlen-Salmler-Welse (IG BSSW), or their predecessor, the BSSW working group



in the VDA.

My interests are clearly in the underwater fauna of the South American continent, especially in the dwarf cichlids of the genus Apistogramma and the Loricarids. In the meantime, I have cared for

more than 25 different Apistogramma species. My biggest passion, however, are the catfish and especially the genus Panagolus, of which I currently have about 10 species.



## **New Members**

**Christopher Schmidt** 

# Renewing Members

Gabe Scelta, James Longo, Jean Segarra, John Taylor,
Joseph Minardi, Kai Nguyen, Matthew Mason, Mike Gillespie, Nick Caputo,
Sal Amato, Curt Cocalas, Danyale English

## Donations – Thank You!

#### Individuals for May-June 2022

**Bill Amely** 

Steve Matassa

Dan Smith

Don Lang

**Nick Caputo** 

Scott Peters

Alexandr Vinnitsky

Jeff Kaye

Gabe Scelta

Yaari Felber-Seligman

#### Stores/Mfg

All in 1 Petshop, Brooklyn, NY
Monster Aquarium, Queens, NY
Pacific Aquarium, New York, NY
Petqua, New York, NY

Thank you to Dorothy Russel for the large amount of aquarium products donated this summer.

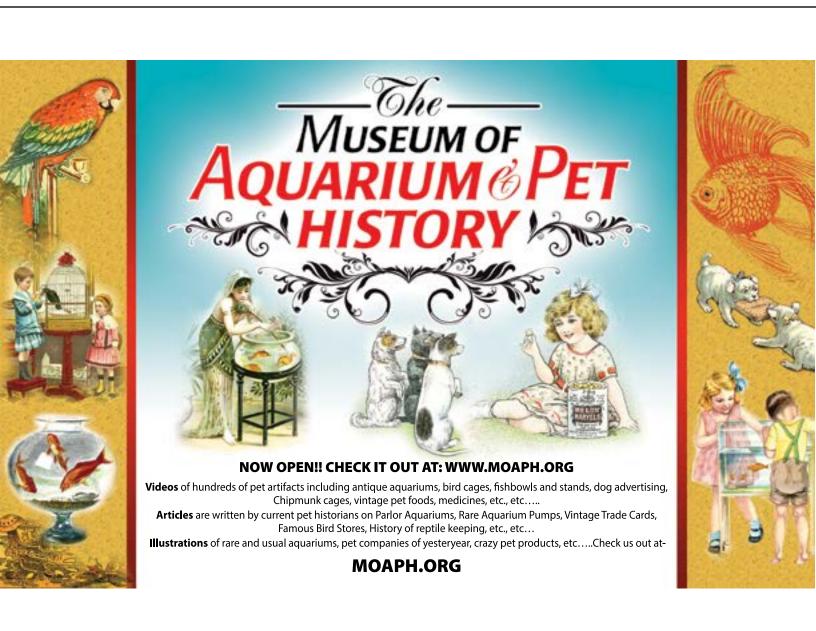
# **Open Board Positions**

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.

# Why Join an Aquarium Club

Contrary to popular belief, the main reason for joining a fish club is not for the free cake and coffee. While there are free refreshments at meetings, and even great buys on products and livestock, the really great benefit is knowledge. Joining the Brooklyn Aquarium Society is a great way to learn how to raise and breed tropical fish. Experienced members pride themselves on teaching new hobbyists and sharing their expertise.

Established in 1911, the Brooklyn Aquarium Society is over 100 years old and growing. Many members have been in the club for decades, and they are still learning from each other. We have monthly expert speakers on different topics related to home aquaria. For a small membership fee, you get access to all this. Check out our web site at www.basny.org for future events. -SM



# Club Exchange



By Alissa Sinkler

# THE KITCHENER -WATERLOO AQUARIUM SOCIETY "FINS AND TALES" JUNE 2022.



PG. 14

The Kitchener - Waterloo Aquarium Society has some nice member photos.

# BUCKS COUNTY AQUARIUM SOCIETY "THE BUCKETTE" JUNE 2022. PG. 6 & PP. 12-14

If you are looking for a good article on Scarlet Badis, The Bucks County Aquarium Society re-print article "Dario dario ~ The Scarlet Badis" by Alexander A. Priest is an engaging read. He goes into the trend of having a "Natural" tank setup and nano tanks. He makes his case on why the Scarlet Badis is the perfect fish for that type of setup. An honorable mention is their puzzle page.

#### YOUNGSTOWN AREA TROPICAL FISH SOCIETY"THE YOUNGSTOWN AQUARIST" JULY 2022. PP. 4-5

The Youngstown Area Tropical Fish Society held a Bowl Show where they displayed their betta splendens, anabantoids, and fern plants. They were judged and given points on their fish size, color, health, and show readiness.

# "GREATER CITY AQUARIUM SOCIETY "MODERN AQUARIUM" JULY 2022. PP. 11-12

A good read from the Greater City Aquarium Society is "Some tricks from my fish room," an informational piece by Jules Birnbaum. With 75 years in this hobby under his belt, he explains things that helped him succeed in his fish room. He mentions aggression control, led lighting, good feeding diets, air flow setup, and plant usage.

# BUCKS COUNTY AQUARIUM SOCIETY "THE BUCKETTE" JULY 2022. PG. 10

If you are looking for a good article on pencilfish, Bucks County Aquarium Society has an article called "Breeding the Beckford Pencilfish" by Bill Flowers. He goes into detail on how he successfully bread these fish. He also talks about temperature, tank size, routine, and maintenance.



111 Years of Educating Aquarists

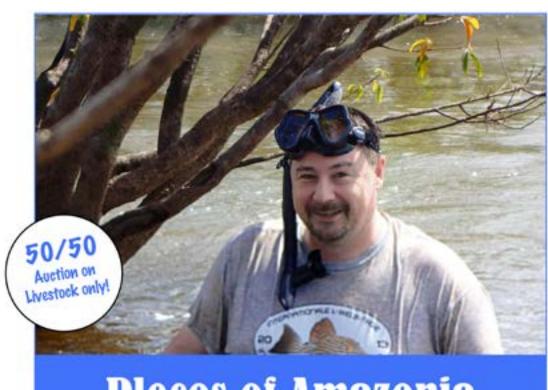
# FRIDAY, SEPT. 9th

Doors open 7:30 pm

## THE BROOKLYN AQUARIUM SOCIETY

PRESENTS

# **Andreas Tanke**



# Plecos of Amazonia

#### **AUCTION** AFTER THE SPEAKER FEATURES:

Marine Fish, Aqua-cultured Corals,
Freshwater Fish, Plants & Dry Goods
At St. Brendan's Catholic Church Parish Hall 1202 Avenue O, Brooklyn,
(off Coney Island Avenue)

Free Parking • Free Refreshments \$5 Donation for Non-members. Good towards membership that night only.

For Information Visit BROOKLYNAQUARIUMSOCIETY.COM Or Call BAS 24 hr. Calendar of events hotline (718) 837-4455

Car Directions: Belt Parkway to Ocean Parkway North (Exit 7N). Take Ocean Parkway approx. 2 miles to Avenue P, turn right on to Avenue P, left onto E 13th, left on Avenue O.

Subway Directions: The Q to Avenue M.



All sorts of freshwater fish, plants, marine fish, aqua-cultured corals & dry goods, including a new 55 gal. tank & stand. Rare & hard to find live stock & MUCH MORE! View lots 7:30pm -8:30pm

#### At St. Brendan's Catholic Church Parish Hall 1202 Avenue O, Brooklyn, (off Coney Island Avenue)

Free Parking • Free Refreshments
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# Tip of the Season

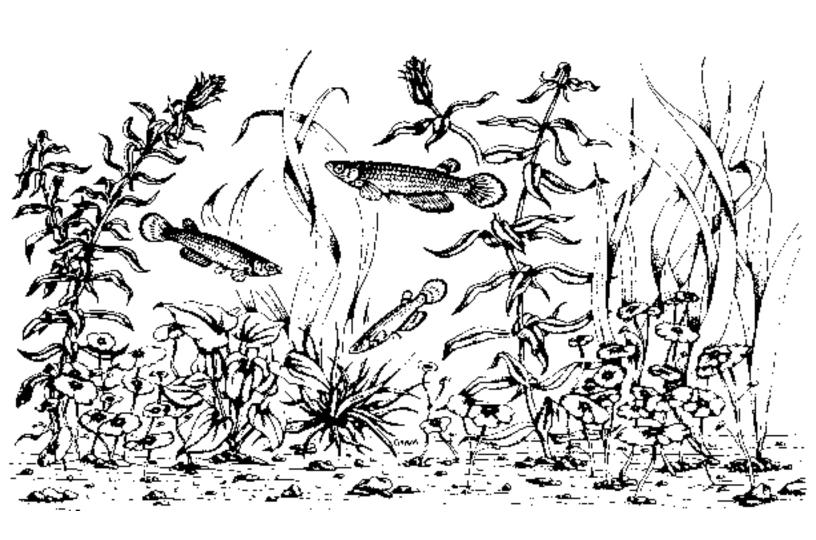
There are two ways most hobbyists use to acclimate their fish. I will try to explain these methods for those of you who do not know. The first is the drip method, where you would empty the bag with the fish in to a bucket, and set up an air line with a knot in it. Then let the water slowly drip in to the bucket until the bucket starts to fill up. Then empty some of the bucket and continue with the drip. This should take about half an hour if done right. You do not want to drip it too fast and stress the fish. The purpose of these methods is to make the transfer for the fish as stress-free as possible.

The second method is to float the bag in the tank for about fifteen minutes. Then slowly let in water from the tank to the bag. Let in a few ounces at a time, when the bag is almost full empty some water out of the bag, and continue the process.

With both methods, never empty the bag water in to your tank. Always discard this water. When fish are bagged, the bag water tends to have high ammonia levels.

After the acclimation is done, gently net and release your fish in to your tank.

Steven Matassa





Come join us at the **Greater City Aquarium Society's** 

# 100th Anniversary Gala!

Friday, October 7th, 2022 7:30 PM

**Douglaston Manor** 63-20 Commonwealth Blvd Douglaston, NY

# \$40.00 Per Person (For a \$70.00 dinner)

# Seating is limited so get your tickets now!

ONE GUEST ONLY PER MEMBER

## INCLUDES: BANQUET DINNER, GIFT BAGS, SPECIAL AUCTION & FREE PARKING

We also accept payments via F



[Select "Send & Request" then: gcas@earthlink.net then: "Sending to a Friend" then: "Send Payment Now"]

Official Sponsor: ZooMed Labs

# **Black Eggs**

By Joe Graffagnino — BAS

I have bred many species of fish, but I have never seen black eggs. I was amazed when I saw them — and from a West African cichlid no less. I obtained a breeding pair of Tilipia snyderea from fellow fish breeder Vinny Babino. Vinny informed me that these are very beautiful fish with striking color markings. They are aggressive fish when spawning and protecting their young, and they are the gift that continues to give – once they start spawning you can't get them to stop.

Tilipia snyderea are the smallest of all Tilipia and they hail from Lake Bermin in Cameroon, West Africa. This species' common name is "Snyder's dwarf tilapia." There are three colors that these species can display, based on their mood and especially during breeding. They can go from a pale bland color to a green, to a red. In breeding dress, both the male and female are absolutely stunning with a green top that goes to the middle of their body (lateral line) which extends from the head through the anal fin. The lower portion of the body is an orange red. But that's not all — the face changes color as the mouth becomes a dark black, while the lips become pure white — truly amazing coloration on a fish that gets no larger than 4 - 5 inches.

When I received this beautiful pair of fish, I realized they were too large for a 20 gallon aquarium, so I quickly did some rearranging and moved them to a 30 gallon wide aquarium. I believe in species tanks so I kept them by themselves. After less than one month in their new home, they started moving large amounts of gravel in the tank. They really like to landscape. Four days after the landscaping began, the female took up residence in a small clay breeding cave that had an opening the size of a thumb. It was obvious that the male could



Anton Lamboj

not enter. I assumed that they would lay their eggs on the glass bottom since they made it bare by moving all the gravel away. A day or two later I used a flashlight to see into the cave and lo and behold! I saw around 20 or so black eggs.

A few days later, they must have hatched because the parents moved the fry one foot away from the cave and under a piece of coral. I was worried for the fry because this tank was overrun with Malaysian burrowing snails, who I thought may go for the babies. However, within a few days my snail problem was a problem no more. After their yolk sacs disappeared and the fry started free swimming I fed them microworms, vinegar eels and frozen baby brine shrimp. The fry grew quickly and they tended to clone each other, for although I initially counted around 20 eggs I now counted about 80 swimming fry.

I would highly recommend this beautiful, but aggressive West African cichlid as a welcome addition to a species only tank. Also, this fish is on the endangered list of fish species, so maintaining this fish will help it from becoming extinct in the wild. Please share this wonderful fish with other members of local fish clubs and let everyone enjoy them.



Photos by Virginia Cahill

# Remembering Joe Graffagnino

By Daniel K. Smith — BAS

I loved visiting Joe's basement fishroom. Being in that tiny space surrounded by so many beautiful and exotic fish brought back that magical spell I first experienced in my local tropical fish store when I was 7 or 8 years old. The smells, the gentle sounds of water bubbling and the low hum of an air pump felt like I was in beating heart.

Crammed into that small room were buckets

of water, tubes, valves, and all kinds of devices to create the right water for his aquatic charges. His goal was to get the fish to spawn and he was a master at it. He has 3,620 BAS Breeder points and earned the title of Senior Premier Breeder. In 2018 he earned Expert Specialist Award by maintaining 7 different species groups.

In October of 2020 we had some club business so I dropped by his house in Dyker Heights. In those days everyone was aware of the COVID protocols and I wasn't planning on coming into

15











I replied.

Joe got some large plastic bags and transferred about half of the fish into one of them.

"Aw, Joe, this is great, I've aways wanted Congos and these are beautiful." I said. Joe just smiled. He got another bag out and started filling

it with water from the tank.

the house. But of course he invited me in and I had to see what new fish he had.

Joe had all of his fish carefully labeled. In one tank were Stoniatepia mariae, Lake Barombi Mbo, a CARES species, in another he had danakilia sukoray, and chopolichthys encaustus, a CARES goodeid. Joe would turn on a little flashlight and reveal some exotic killifish, like epiplatys annulatus, the clown killie. One tank that was covered in black water contained a species of catfish that had never been bred in captivity.

In a bottom tank were a small school of Congo tetras that he was breeding. The fry were almost as large as the parents and Joe wanted to make room for more fish.

"Want some of those Congos?" Joe asked. "Sure, I'll take whatever you need to get rid off,"

"These are plenty Joe, I don't need anymore," I said. Congo tetras aren't cheap fish and I didn't want to take advantage of Joe. But Joe just smiled. He emptied the rest of the fish into the bag and I left with 20 big beautiful Congo tetras.

Joe seemed very comfortable in his own skin and he made everyone feel welcome. He was a person everyone trusted and respected. If things got testy at a board meeting he knew how to break the tension with a joke or provide a resolution. He was a calming presence amid the confusion of setting up the general meeting. It seemed nothing could throw him off.

Joe Graffagnino was generous, capable, compassionate, and sympathetic. He was all heart and he is missed terribly.

# My Friend Joe Graffagnino

By Joseph Ferdenzi — GCAS

I'm going to write about Joe in a way no one else can. I'm going to describe what Joe meant to me. It is not an easy thing to put into words, but I'm going to try.

What Joe was to me, above all, was a friend. Not some phony friend who is there only when times are good. Joe was there for me even when times were so bad that they would have broken many a man, and many a friendship.

Joe was a man full of grace — not matter what, he never made me feel that I wasn't worthy of his friendship. I distinctly remember one evening, before I was to give a presentation at BAS, he took me out to dinner at this fabulous old-time Italian restaurant. During that meal, he told me things that only a real friend would confide. Given the way he made me feel, it never puzzled me that Joe had no detractors and was universally admired. More importantly, my friendship with Joe always made me realize how important he was to his family. I can't even begin to imagine how profoundly his loss has affected them. But, I'm sure Joe would want them to keep their chins up



Joseph Gurrado

and carry on with their joy in each other.

And so, I will do likewise — I will do my part to heed Joe's message and keep his spirit alive by being a good friend to others, by helping whenever I can, and by doing it for whatever years I have left. Joe may have left this world, but he has not left me.



# **My Memorial Tank**

By Paul Santiago — BAS

The Christmas fulu were Joe's fish.
After Joe passed away I was fortunate to get them, and 3 other fish. Since then the other 3 died and they survived.
Therefore the tank was named after him in remembrance of him. Jo and I would have a monthly discussion session on fish. I learned about his son ...the crisis that he went through and he taught me a lot about this hobby. I am just thankful that his family was willing to share a man like him with the world. He is DEARLY MISSED.





By David Manuel — BAS

Joe was that really funny mentor that always made himself available for every event. While his microphone constantly echoed his voice throughout the online meetings we enjoyed the humor because it was typical humorous Joe in rare form.

# DROP A HAMMER IN YOUR REEF TANK!

# Hammer Corals Euphyllia ancora and Euphyllia paraancora

By Tony Kroeger — BAS

Native to a wide area of the Indo-Pacific, these corals come in bright fluorescent green, glowing brown and fluorescent blue colors.

Commonly available both in stores and online, hammer corals are always moderately priced. Two species are offered commercially under the name hammer corals: Euphyllia ancora and Euphyllia paraancora. The main difference to the hobbyist is their shape. Euphyllia ancora looks like a zigzag miniature version of the great wall of China when its tentacles are withdrawn, while Euphyllia paraancora, on the other hand, branches from the base.

Care for both species is the same. Standard reef water parameters - salinity 1.023 - 1.025, pH 8.2, temperatures in the mid 70's - are fine. Be sure to add calcium and strontium additives regularly, per manufacturers instructions.

Most reef lighting is just fine for hammer corals.

Keep them in a medium current. If the current is too strong, they will not extend their tentacles.

Hammer corals can grow rapidly into impressive sized colonies, so give them plenty of room. Keep them in at least a 55-gallon aquarium.

Hammers have very potent stinging sweeper tentacles. They will sting, injure and possibly kill any coral that is too close to them. Always leave at least a 6" inch diameter coral-free buffer zone around any hammer coral.

I feed my hammer corals any meaty tidbits (chopped krill, clam, fish, mysis shrimp) via a

turkey baster once a week.

Hammer corals can suffer photosynthetic (light) shock. Unless the hammer you are interested in buying is a captive grown frag, you will have no idea what light intensity the coral was under or at what depth they were collected from. If this is the case and you are not sure, then initially place them at the bottom of your reef aquarium and move them up as they accustom themselves to your specific lighting conditions.

You can place hammer corals in close proximity to each other. Likewise, you can place them near any related Euphyllia or torch corals.

They will not sting each other. Placed together, the various shapes and stunning colors will make an unforgettable display in your reef aquarium.

If your hammer seems to be developing a lot of stinging sweeper tentacles, move it to an area of less current and lower light intensity.

Doing such will usually minimize the extension and use of the sweeper tentacles.

When you put your hammer coral into your aquarium, always epoxy it or very securely wedge it in place. The base of hammer corals are not covered in living tissue; therefore, the coral has no way to attach and secure itself, so it needs and appreciates your assistance to do so. I suggest you use plenty of epoxy as the hammer will grow and as it grows it will weigh more. Better to secure that future weight with epoxy than to find out one day that it has crashed down upon everything below or, worse yet, a pane of glass.



Euphyllia ancora photo by Reef Builders

Observe closely and choose carefully when selecting a hammer coral at your dealer.

Collection and shipping are tough on hammers.

Specimens are usually broken off of large colonies. This results in tissue damage and shipping compounds the problem as these corals have large and sharp structures called septa topping their skeletons. When sloshed around in the bag during shipment, it's not uncommon for the septa to cut living tissue of the hammer.

For most corals, this damage is not a problem, but for Euphyllia family corals it can be.

Hammers in particular are suseptible to what in the trade is called "brown jelly" or "brown goo" infection. The injured flesh is attacked by microorganisms turning it into what essentially looks like a mass of brown goo on the coral. Such infections can start very small but grow extremely rapidly, sometimes killing a colony within hours. If this occurs on a branched (Euphyllia paraancora) hammer, you can simply break off the branch taking extreme care not to

get the goo on any other part of the hammer coral or any coral in your reef tank, for that matter.

The walled hammer (Euphyllia ancora) needs an immediate freshwater dip to treat a "brown jelly" infection. Place it in fresh dechlorinated tapwater that is the same temperature as your reef aquarium for 2 to 5 minutes. This usually kills the microorganisms but not your hammer.

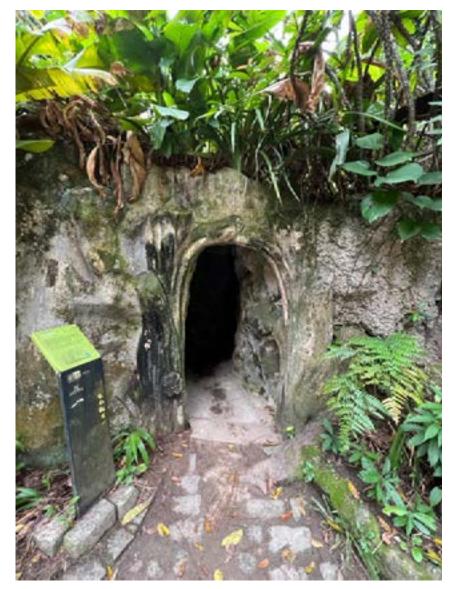
It may require several dips: morning, noon and late night. If you go with multiple dips, keep the time duration of each to the shorter of the recommended dip times, 2 to 3 minutes each. Untreated "brown goo" infections are usually fatal to hammers corals. Always watch for it and quarantine all hammer corals so it does not enter your reef tank. All Euphyllia species are susceptible to "brown goo," but hammers more so.

Assuming you obtain a healthy specimen, hammer corals will prove hardy, gorgeous, long lived and grow well. So drop a hammer into your reef tank soon!

Happy reefkeeping

# Fish Grotto in Rio

By Virginia Cahill — BAS





- 1. The main entrance to the grotto.
- 2. Little Siamese Shark from Thailand.
- 3. Some native tetras.
- 4. Rummy Nose, Neons with swordtails.
- The Piranha tank.

I was intrigued when my husband described a fish grotto in a park in Rio de Janeiro, Brazil. "There are fish tanks built into the sides of rock in a small cave," he told me when we visited Rio together this past Spring. He had been to Parque Lage in November and now wanted to show it to me.

We entered the lush park and took a short walk through every shade of green to get to the fish tanks. There was a rock formation that had a small opening in the side of it. We had to duck our heads as we entered this man-made cave that held about 12 freshwater fish tanks with a wide assortment of fish. The tanks were beautifully arranged and looked so natural. It was such an unusual exhibit in that you walked through a rough rock interior and followed the natural curve of the layout, leading you from tank to tank.

There were lots of fish common to me like rummy noses, cardinals, platys, plecos. And then some more unusual one like the Lumbar (Astyanax janeiroensis Eigenman) and the Tambaqui (Colossoma macropomum) both from



the Amazon river basin. Being holed up in this private aquarium was so relaxing and interesting. It was a nice presentation of fish and a rather unusual way to discover aquatic life. We had the place to ourselves and could linger in front of the little Siamese shark from Thailand, or back up a tank or two to have another look at the Piranha tank.

The aquariums housed in the form of an artificial grotto in Parque Lage as well as the original landscape design of the park is attributed to John Tyndele, an English landscaper who was hired by an English nobleman who owned an old farm on the site. Fantasy landscaping of the

romantic gardens were in vogue especially in the second half of the 19th century. The construction integrates the landscaping as part of a romantic or English style garden, with several internal paths.

When walking inside the small building, each one of the tanks has a description of the type and species of fish. The aquarium house is integrated into the gardens, simulating natural forms all surrounded by plants, trees and winding paths completing a scene of great beauty.

If you happen to be in Rio you can find Aquario Parque Lage at 414, Jardim Botaánico Street, Jardim Botanico District.

Reprinted with permission from The Aquatic Gardener, the Journal of the Aquatic Gardeners Association.

#### TAG FEATURE

#### SPECIES SPOTLIGHT

by Rachel O'Leary, USA Photos by the Author

Most aquascapers want a fish that provides a vibrant pop of color against their plants, and compliment their design by using the negative space provided. Without a doubt, Green Neon Tetras (Paracheirodon simulans) are one of the most predictable and beautiful choices. With aquascaping judging increasingly focusing on fish choices, these little gems are absolutely amazing for a wide range of aquariums, from nano to quite large. They are also easy to manipulate to interact in our contrived environments.

They are substantially smaller than Neon or Cardinal Tetras, and with a vivid gold and green overlay against a vibrant blue body truly make an exceptional punch of color, visible from across the room. They can easily be differentiated in that they have substantially less red pigmentation in their flanks and their green stripe covers their entire head all the way to the caudal peduncle.

Despite their small stature, with a max size of just under one inch (25mm), they are very easy to feed, readily accepting a wide range of



foods including dried, frozen, freezedried and live. Because of their size, they are not appropriate to be housed with fish like angelfish, but are particularly good with dwarf Cichlids like Apistogramma or Ram Cichlids, and do quite well with other tetras, pencil fish, hatchetfish, Corydoras catfish, or peaceful suckerfish like Otocinclus and Ancistrus.

While they won't actively predate on adult shrimp it should be noted, as with most fish, they will readily eat juvenile or newly hatched shrimp. That being said, providing areas of very dense planting will go a long way in ensuring that a shrimp population maintains its numbers over time.

Because of the Green Neon's small stature and definitive social structure, a group of 10 or more is recommended. The larger the group, the more outgoing and predictable is the behavior of this beautiful little fish. They are not at all nippy or fractious, so are well suited for a peaceful community aquarium. By manipulating the filtration to create a channel of calm in the open area of the tank, they will readily school in a very directional and predictable fashion.

In the wild, these fish come from blackwater areas rich with vegetation and with moderately flowing water, often acidic-making them especially appropriate for a planted aquarium setup with a carefully constructed wood aquascape. They can take a range of temperatures from 75-84°F (24-29°C), but tend to exhibit their best coloration around 78-80°F. These fish are a compelling choice for a biotope aquarium, as they very much appreciate driftwood tangles, leaf litter, and both underwater and

riparian plant growth. In very bright lighting, they may fail to exhibit their best coloration without areas of overhanging plants to provide shade and comfort.

They were once difficult to source, always being wild caught out of Brazil, but have become increasingly available as their reputation and exposure within the hobby has increased. These are without a doubt my favorite small tetra for a planted aquarium.



#### PARACHEIRODON SIMULANS

Rachel O'Lear

ADULT SIZE: 1" (25cm)

pH: 4-7

TEMPERATURE: 75-84°F (18-22°C), 78-80°F ideal

**DIET:** Dried, frozen or live foods of appropriate size

- Green neons: In this photo, you can see the green and gold overlay that gives this little Tetra its common name.
- When maintained in larger groups, Green Neons are very directional schoolers, interacting beautifully with our aquascapes.



# Hygrophila lancea

a new aquarium plant

Christel Kasselmann. Translated by Anja Stæk. Photos by the author.

For two years a new Hygrophila with the retail name Hygrophila sp. "Araguaia" has been known. Recently its scientific name was published.

When new aquarium plants are introduced and are not immediately scientifically identified, they often receive a retail name. Widely used retail names are for example sp. "Guinea," sp. "Manaus," sp. "Africa" and sp. "Araguaia," which refer to the origin of the plant. However, it is not recommended to rely on the retail name only when publishing an article, as they are sometimes only chosen to increase sales and are often not scientifically correct. The water plant that was re-

cently introduced as Hygrophila sp. "Araguaia" is not from Brazil. The distribution of this genus is predominantly in Asia and Africa. However, there exist a few Hygrophila species in South America.

In 2011 I received Hygrophila sp. "Araguaia" from the Danish nursery Tropica Aquarium Plants. The emerse specimens that were sent to me flowered on my windowsill, so that I was soon able to produce sufficient herbarium material. When I asked the Acanthaceae specialist Dr. Dieter Wasshausen (Smithsonian Institution, Washington DC, USA) to determine this species, he told me immediately that the plant's scientific name was



An unusual feature of Hygrophila lancea are its narrow, elongated, tan leaves.

An emerse specimen with flowers.

Hygrophila lancea (THUNBERG) MIQUEL. He informed me that its large corolla is a reliable indication that it is not a South American, but an Asian species.

#### A Botanically Old Species

Hygrophila lancea was described in 1794 as Justicia lancea THUNBERG and was 1865 assigned to the genus Hygrophila by MIQUEL. The genus belongs to the acanthus family or Acanthaceae. Hygrophila lancea occurs in Asia. I found its description in floras from China, Hong Kong, Taiwan and Japan. When comparing this plant with cultivated plants, I have no doubt that its classification is correct. The young specimens were collected and used until 1950 in Taiwan. In China people eat the leaves of Hygrophila lancea with oil and salt. The species name "lancea" means "lanceolate" and refers to the shape of the leaf blade.

#### Description

Hygrophila lancea is a marsh plant with straight, submerse, reptant or ascending, branched, bare sprouts with a max. height of 2'4". The stem is 0.08 - 0.16 inches thick and woody. The leaves are crosswise opposite, sessile, with a distinct midrib. Both emerse and submerse leaf blades are small elliptical, 2.4 - 3.9 inches long



and 0.16 - 0.4 inches wide, acuminate, base descending. Emerse color is olive green, submerse is tan.

The flowers are sessile, in every axil growing in groups. Bracts egg-shaped, about 0.4 inches long, 0.08 - 0.12 inches wide, hairy. Bracteole 0.16 - 0.2 inches long, 0.06 inches wide, hairy. Sepal about 0.4 inches long, hairy, light green. Corolla 0.4 - 0.47 inches long, hairy on the outside, light purple. Upper lip bilobate, lower lip trilobate, bulged, hairy on the inside with a dark purple delineation. Four stamina, two reach the margin of the upper lip, two remain shorter. Style bare, with



The hairy flowers of Hygrophila lancea.

stigma in two columns, growing higher than the stamina. Capsule 0.47 - 0.55 inches long, light brown with numerous big (approximately 0.04 inches), brown seeds.

#### Cultivation

Hygrophila lancea is a slowgrowing, demanding water plant, which develops best in bright and warm conditions. They grow best in medium hard water with a pH of between 6.5 and 7.2. Fertilizing the plants with CO<sub>2</sub> proved to be beneficial. Emerse plants need several weeks before the color of their leaves change into an attractive tan. The plants grow slowly and can be planted either in the foreground or in the centre of the tank. Because of its slim and long leaf blades, the stem looks quite delicate and is therefore a good choice for a nano tank.

Hygrophila lancea is similar to th small-leaved Hygrophila polysperma but grows significantly slower and has shorter internodes. It has also a more intense tan color. Submerse specimens are rather robust. Cultivating this plant above water is also very easy. The sprouts grow straight, branch lushly and flower without problems under warm and light conditions, e.g. on the windo sill. Even in winter with few daylight hours I had many flowering specimens. To grow enough plants for an aquarium, I recommend starting with emerse cultivation. To change from emerse to submerse growth, cut the ends of the plants (max. 2 inches long) and plant then close together in the foreground.

#### Evaluation

Because of its beautiful color, Hygrophila lancea is a decorative

addition to the aquatic flora. However, it is definitely not a plant for beginners. It grows slowly, but steadily. Therefore, this species only occasionally must be trimmed. Hygrophila lancea proliferates through side sprouts.

#### Note

A few months ago a species of the family Acanthaceae was introduced into the hobby. It was sold as *Hygrophila lancea* or *Hygrophila* sp. 'Sarawak.' Since I have not seen flowering sprouts of this plant yet, I am not sure if this plant is really a form of *Hygrophila lancea* or if it belongs to a different species. It is very similar to the species described and shown in this article, but has submerse leaves with darker venation. In addition, it grows significantly slower.

#### Acknowledgments

I thank Dr. Dieter Wasshausen for the determination of the species.

#### Bibliographical References

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Shiu-Ying Hu (2005): Food Plants of China. Chinese University Press. Hong Kong.

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.

# **Cycling Aquasoil Amazonia**

Aquasoil Amazonia is one of the best substrates available to the Dwarf Shrimp hobbyist. It helps maintain a slightly acidic pH and helps keep the water soft. There is, however, one major drawback to Aquasoil Amazonia, it causes a large ammonia spike when new.

When Aquasoil Amazonia is first put in an aquarium ammonia in that aquarium will spike up to 2.0ppm (or mg/l). Because of this it is important to cycle any Aquasoil Amazonia before adding to an established aquarium, or make sure it is cycled in a new aquarium before adding any invertebrates or fish.

#### Cycling in a new aquarium:

When setting up a new aquarium with Aquasoil Amazonia you should follow these steps:

Add Substrate to the aquarium.

Fill the aquarium with water.

Activate filter.

Perform a 95-100% water change in 24 hours.

Perform another 95-100% water change 24 hours later.

Perform a 50% water change 24 hours later.

Add any live plants you plan on adding.

If you have filter media from an established aquarium add the media to the filter.

Watch Ammonia levels and Nitrite levels.

The aquarium should be fully cycled in 1.5-2 weeks. Oppm Ammonia and nitrite indicate a fully cycled aquarium and it is ready for inhabitants.

#### Cycling for an established aquarium.

If you plan to add Aquasoil Amazonia to an already established aquarium the substrate must be cycled before adding it to the aquarium.

Place the substrate in a spare aquarium or large holding container

Fill with water

Add a small filter or power head.

Perform a 95-100% water change in 24 hours.

Perform another 95-100% water change 24 hours later.

Perform a 50% water change 24 hours later. Watch Ammonia levels and Nitrite levels.

The aquarium should be fully cycled in 1.5-2 weeks. Oppm Ammonia and nitrite indicate a fully cycled aquarium and it is ready for to be added to the aquarium

Note: Be sure to add the substrate to the aquarium gently to avoid stirring up a mess and causing another possible Ammonia spike.

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

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- Spelling
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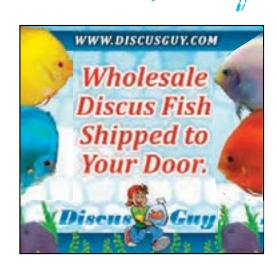
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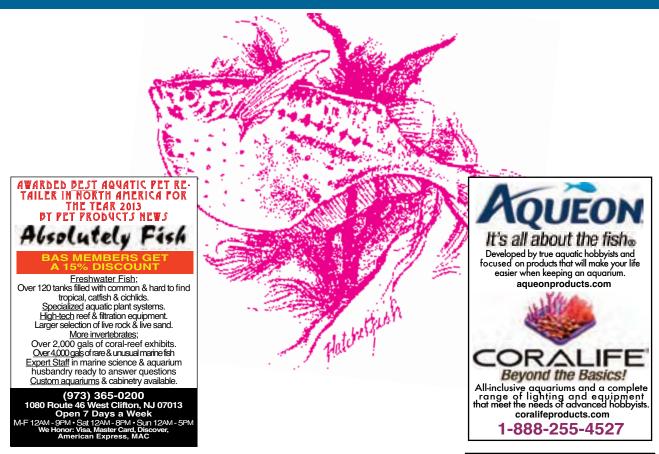
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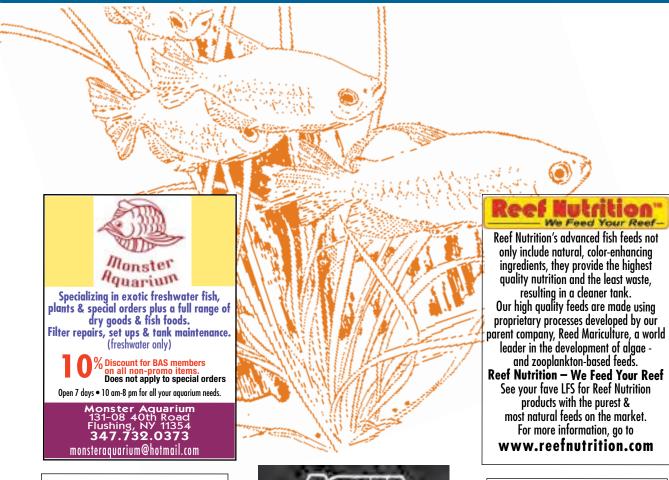
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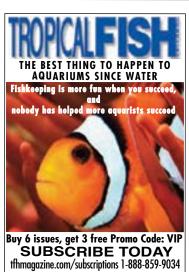
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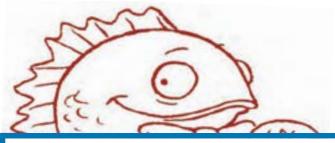
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