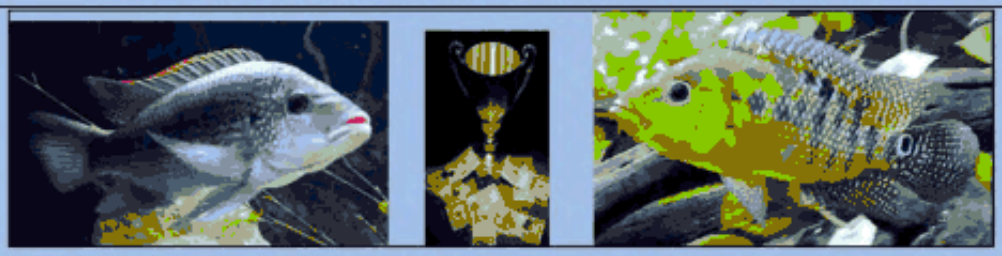
modern AQUARIUM

September 2014
volume XXI
number 7

Greater City Aquarium Society - New York

THE CCY Presents:

2ND ANNUAL
CLASH OF THE CICHLIDS!!



The Cichlid Show of the Century

SEPTEMBER 27th 2014 1pm

Inviting all neighborhood clubs from New Jersey, Pennsylvania and Maryland to enter and compete for Grand Champion Cichlid of the Year!! Cash prizes, trophies and most importantly club bragging rights at stake!!

Come join the event of the year!!!!

5.00 fee to enter per fish for members of the CCY, NJAS, CCA, ACLC, and Bucks County

8.00 fees for anyone not associated with a local tropical fish club

10 gallon tanks and treated water provided on site anyone needing larger tanks must bring their own.

modern
AQUARIUM
Series III Vol. XXI, No. 7 September, 2014

ON THE COVER

Our cover subject this month is the striped burrfish, *Chilomycterus schoepfi*. For more on this cute, quirky-looking member of the porcupinefish family, see Jeff Bollbach's "Rules are Made to be Broken," on page 9.

Photo by Jeff Bollbach

In This Issue

From the Editor

by Dan Radebaugh

I recently received an email that I think is worth sharing: *"Your 2012 nostalgia article on the Nassau Street pet shop, which I came across by chance, both caught my eye and brought back childhood memories of visits there with my father in the fifties. In fact, he worked there for a while as a teenager. I most certainly remember the tank in the window of that wonderful little crowded store. I'm glad that I've found your magazine. Thank you."*

Mark Levis

I'm grateful to Mr. Levis for his very thoughtful note. It was a very generous gesture to take the trouble to contact us. I don't know how he came upon the article. Perhaps a friend showed it to him, perhaps one of our members left it in a barber shop. I suspect he may have found it online. I forwarded the message to the article's author, Joe Ferdenzi, and reflected, not for the first time, that **Modern Aquarium** is in fact the world's window to us, and in today's electronic world, many people we'll never know are reading about what we're up to, and how we're going about our involvement in this otherwise rather private hobby (or passion, if you will).

Each of us has our own unique viewpoint, and a unique way of expressing it. **Modern Aquarium** is our common medium for sharing what we love, as well as our way of fulfilling the not-so-unspoken duty of all gatherers of skill and knowledge to "pass it on."

This issue is no exception. Our author-members Eliot Oshins, Jeff Bollbach, Joe Ferdenzi, Al and Sue Priest, Steve Sica, and yours truly have once again collaborated on a worthy entry in the library of fishkeeping lore. Rosario LaCorte contributes Chapter Seven of his storied career in the hobby. We're in good hands – our own members'. It's up to each of us to keep the ball rolling. So don't wait for "someone else" to write that article that you'd love to read. If you want a thing done right, do it yourself!

So remember, we need articles. We always need articles! **Modern Aquarium** is produced by and for the members of Greater City Aquarium Society. Our members are our authors, and with ten issues per year, we always, always need more articles. I know several of you are keeping and/or breeding fish, or working with plants or inverts that I would like to know more about, and I'm certain other members would be interested as well. Share your experience with us. Write about it! If you're a little unsure about the state of your writing technique, don't worry – that's why there are editors. If you don't share what you know, who will?

If you have an article, photo, or drawing that you'd like to submit for inclusion in Modern Aquarium, it's easy to do! You may email it to gcas@earthlink.net, fax it to me at (877) 299-0522, or just hand it to me at a meeting. However you get it to me I'll be delighted to receive it!

GCAS Programs 2014

It is our great fortune to have another admirable cast of speakers who have so graciously accepted our invitation to join us throughout the coming season, bringing us their extensive knowledge and experiences. You certainly won't wish to miss a moment of our prominent guests, not to mention the friends, fish, warmth, and camaraderie that accompanies each meeting.

March 5	**Harry Faustmann** *Live Foods*
April 2	**Rosario LaCorte** *The Fish I've Worked With*
May 7	**Leslie Dick** *Fish Jeopardy*
June 4	**Joseph Ferdenzi** *Aquascaping*
July 2	**Joseph Graffagnino** *Tips & Tricks on Breeding Fish & Raising Fry*
August 6	**Silent Auction**
September 3	**Joe Gargas** *Water and the Aquarium*
October 1	**Vinnie Ritchie** *Lake Malawi Cichlids in a Community Tank*
November 5	**Gary Lange** *Rainbowfish*
December 3	**Holiday Party!**

Articles submitted for consideration in ***Modern Aquarium*** (ISSN 2150-0940) must be received no later than the 10th day of the month prior to the month of publication. Please email submissions to gcas@earthlink.net, or fax to (877) 299-0522.

The Greater City Aquarium Society meets every month, except January and February. Members receive notice of meetings in the mail. For more information, contact: Dan Radebaugh (718) 458-8437 or email gcas@earthlink.net. Find out more, see previous issues, or leave us a message at our Internet Home Page: http://www.greatercity.org or http://www.greatercity.com.

President's Message

by Dan Radebaugh

For those of you who missed last month's Silent Auction meeting, I have some news: The T-Shirts are here! It's taken a couple of years longer than we expected, but thanks to Joe Ferdenzi's indefatigable efforts, along with those of his team, which included Mark Soberman and Warren Feuer (I apologize if I'm forgetting anyone), they're here, and available for the ridiculously low price of $10 each! We sold a lot of them at the Silent Auction (though that part wasn't so silent), so don't wait too long. Many thanks to Joe for his tenacity on this project.

Thanks also to Jules Birnbaum and Dan Puleo, for finding and engaging tonight's speaker, Joe Gargas. We look forward to absorbing some of Joe's expertise on the various aspects of water management in our tanks.

In fact, when you have a moment, look at the masthead of Modern Aquarium to see who's responsible for each of the things that we depend on when we come to these meetings: refreshments, raffle items, collecting your money, handing you your copy of Modern Aquarium, providing a projector for our speakers' use, taking photos of our meetings, running and helping with the auction, taking your money, being sure you get paid for your auction donations; in short, all the things that make these meetings possible. They don't do it for praise, but everyone likes for their contribution to be recognized. If there's one thing above all else that you like about our meetings, thank that person for their part in it! You – and they – will be glad you did...

Dan

Tonight's Speaker
Joe Gargas

Joe Gargas, a native of the south suburbs of Chicago, began his interest in tropical fish in the mid-1960s, when an aunt gave him his first fish tank, with guppies. His interest in tropical fish remained and grew through his teen years into walls of aquariums. In the late 1970s he became a law enforcement officer in those same south suburbs of Chicago. During that time he worked extensively, breeding discus and other hard-to-breed species, making some extra money in the process. Joe began writing for a number of aquarium fish publications, and had a column in one of them that ran for seven years. He also began teaching a class that he put together, called "Advanced Freshwater Fish Keeping," at the John G. Shedd Aquarium in Chicago. This was a six week, six part course that he presented twice a year.

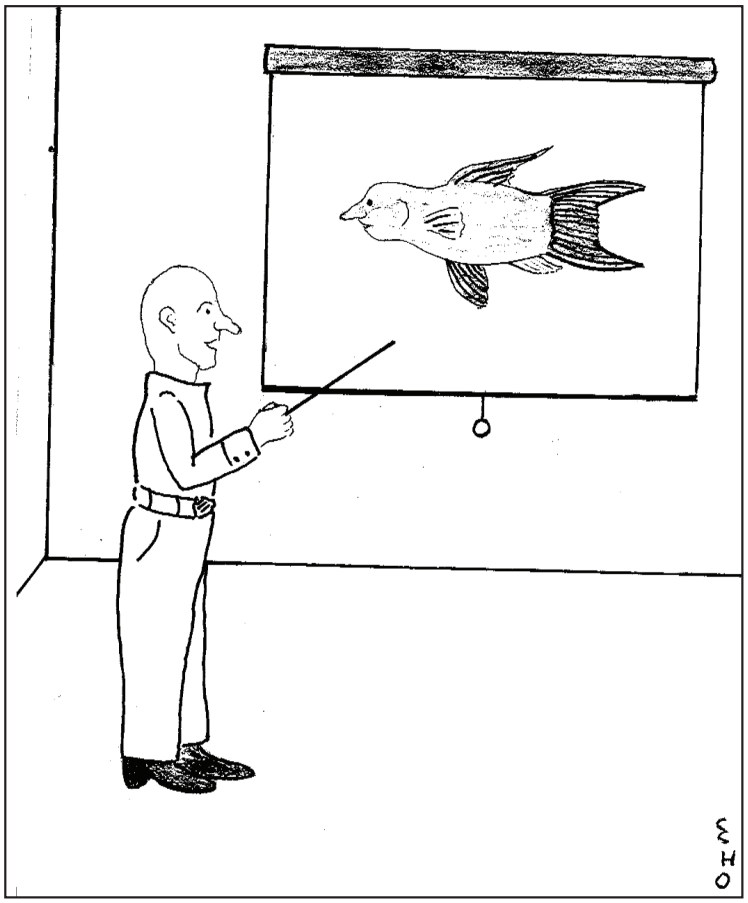
In the early 1990s he was hired as a consultant by the Wardley Corporation (an aquarium fish food company) in Secaucus, New Jersey. At that time he began doing the Pet Industry Joint Advisory Council (PIJAC) "Freshwater Fish" certification seminar throughout the USA, Canada, and the UK, speaking on all aspects of the aquarium hobby. In the mid-1990s the Wardley Corporation was purchased by the Hartz Mountain Corporation, and Joe was offered the job of Director of Research for Wardley. He and his family were relocated to the Tampa Bay area, where he lives today.


Joe Gargas

Joe has lectured world-wide on behalf of the Wardley Corporation, speaking on all aspects of tropical fish keeping, and has developed many products. He currently maintains a hatchery where he breeds discus, rams, and angelfish, selling to breeders and high end stores across the country. Joe is currently an active member of the Tampa Bay Aquarium Society. Through his research and expertise he has helped aquarium hobbyists keep their fish alive, and remain in the hobby.

Joe has developed applications, and has been awarded 13 US patents for water treatment and analysis for the potable water industry, swimming pools, fountains, and the aquarium fish trade. Joe has written for **Freshwater and Marine Aquarium Magazine** and **Tropical Fish Hobbyist**. He also had an ongoing column for a number of years in **Pet Dealer** magazine (an industry trade publication) Called "Facts on Fish." Joe's Rocket Filters have been mentioned more than once by Jules Birnbaum in the pages of **Modern Aquarium**. We welcome Joe this evening, and look forward to his presentation!

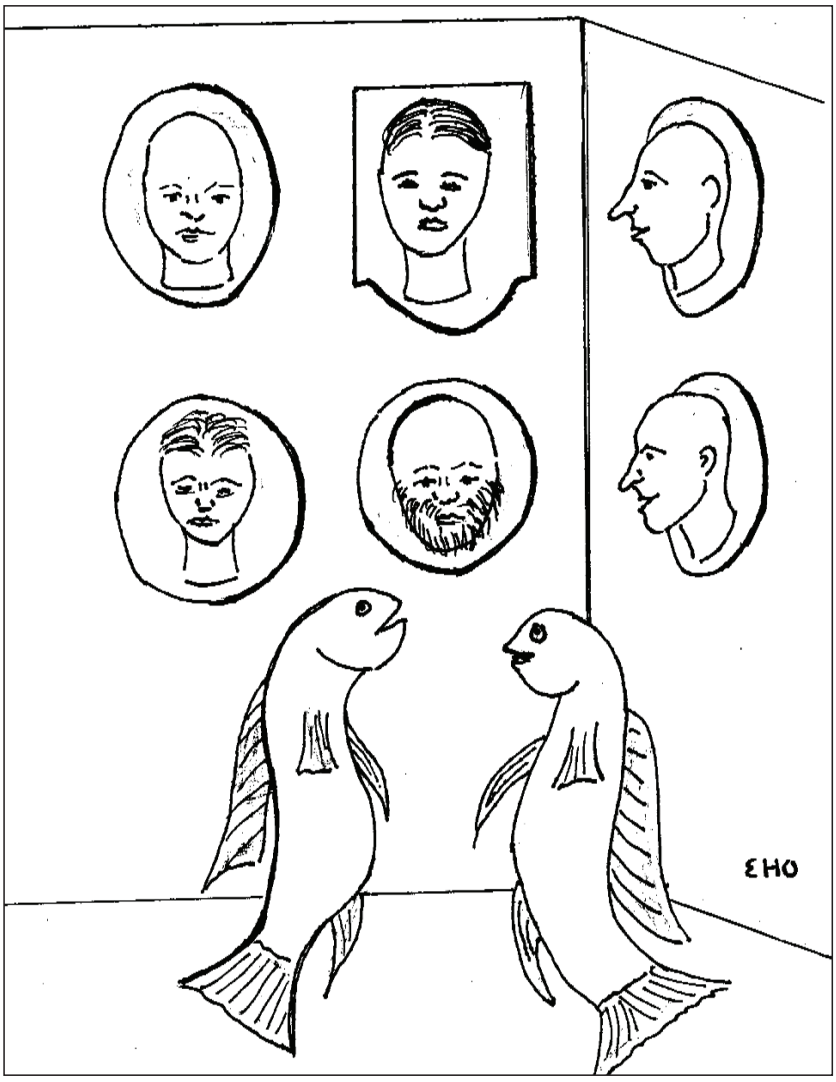
August's Caption Winner: Leslie Dick



After years of research, I can finally present my own clonefish!

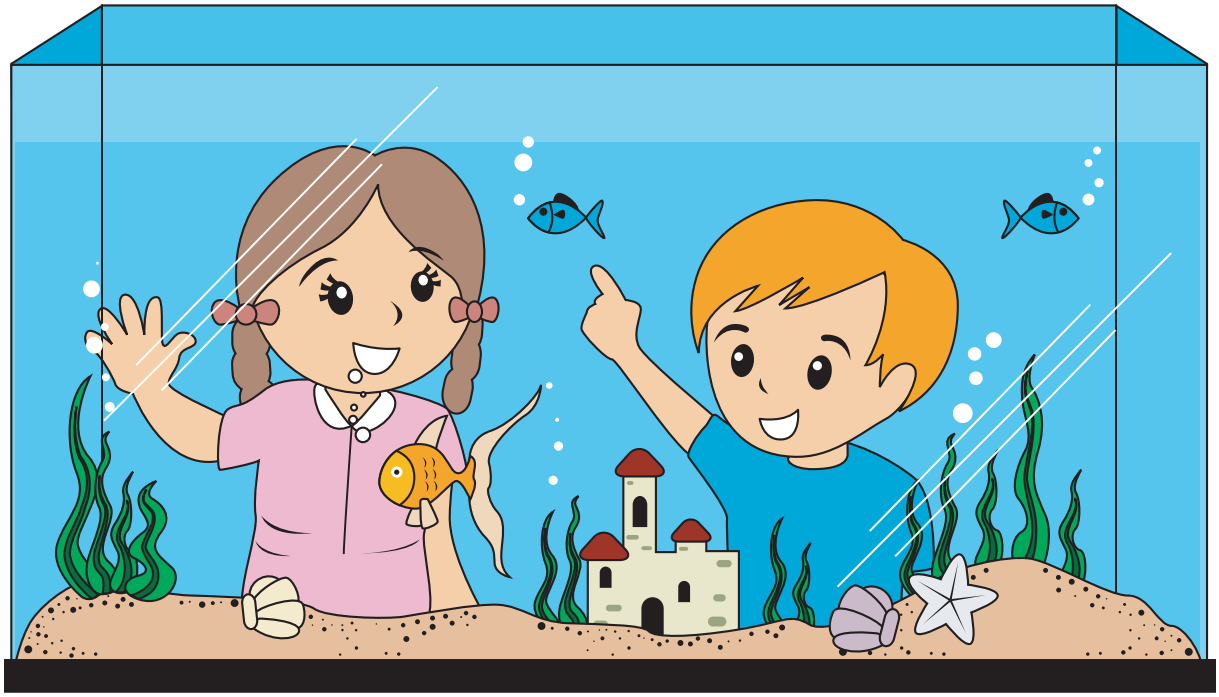
The **Modern Aquarium** Cartoon Caption Contest

Modern Aquarium has featured cartoons before. This time though, you, the members of Greater City get to choose the caption! Just think of a good caption, then mail, email, or phone the Editor with your caption (phone: 347-866-1107, fax: 877-299-0522, email: gcas@ earthlink.net. Your caption needs to reach the Editor by the third Wednesday of this month. We'll also hand out copies of this page at the meeting, which you can turn in to Marsha before leaving. Winning captions will earn ten points in our Author Awards program, qualifying you for participation in our special "Authors Only" raffle at our Holiday Party and Banquet. Put on your thinking caps!



Your Caption:

Your Name:



Support Fish in the Classroom!

If you have any 5 or 10 gallon tanks, or any filters, pumps, or plants that you could donate to NYC teacher Michael Paoli's classrooms, could you please bring them in or email Rich Levy (**rlevy17@aol.com**). If you'd like to donate larger tanks, be sure and email Rich so he can make sure Michael can accommodate it.

Rules Are Made to be Broken

Story and Photos by Jeff Bollbach

Normally I tend toward the disorganized side, but in a few areas I am able to keep order. One such place is my fishroom, and with 60 tanks and 20 plus species in an 8 x 12 foot room I really have to be organized or it will just blow up. It has worked pretty well so far, and while it isn't the neatest fishroom in existence (I think that honor goes to Ed Vukich), my little hatchery works pretty well. Part of my success is following rules like the simple and obvious ones that we all know. Everything has a place and you put it back when you use it. Always quarantine new fish or plants. Don't overfeed. Only choose fish that you are certain you can care for. Some rules are more personal. I won't let live tubifex or blackworms into my fishroom; same goes for duckweed (It's too late for Malaysian trumpet snails). Since I established my fishroom as a breeding-only facility I also don't keep any fish that I don't (try to) spawn. Rule number one though, is that fish are not pets, and you certainly don't name them. You name children, dogs, and maybe cats. Not fish.

Most of you probably know that there is some interesting collection of saltwater tropical and local fishes that goes on in the fall each year. Many of our aquarium societies organize these collecting trips, and they are well worth the experience. At first I was not very interested in going, as I really had no intention of keeping saltwater fish. But as soon as I learned that some of the collectors were coming back with seahorses, and that they could be bred in home aquaria, I jumped on it. My first collecting trip was with members of the Long Island Killifish Association (go figure), and it was a rousing success. We caught many tropical fish, and I was even able to bring home a sexed pair of seahorses! This was the northern lined seahorse, *Hippocampus erectus*, which is fairly common along most of the eastern sea coast. Interestingly, there is a southern variety, which exhibits some significant differences but is still considered the same species.

I was very excited to work with this magical fish, and things went swimmingly in the beginning. These ponies seemed to acclimate very well, and started breeding right away. However, things went south pretty quickly. The babies proved difficult to rear, and the adults were prone to certain diseases. Consulting with master marine breeder Todd Gardner, I learned that these seahorses were really not a fish that could do well in any system, and even he had difficulty with them. That fact, plus that as I learned more about seahorses I became aware that they were threatened across most of their range, caused me to decide not to keep them again. But they got me started with saltwater, and from there I moved on to breeding clownfish, which was a more successful endeavor. That brings me to the point of this writing.

Last September (2013) our club made plans for our annual foray, and even though I did not want any fish I attended for the fun of it. I did happen to have an empty saltwater tank though. This was my undoing. We actually did not catch many tropicals, but a few interesting fish came up in the seine. The first was a juvenile lookdown, *Selene vomer*. This very interesting young fish sported extremely long trailers on its fins. This was characteristic of the fishes' age, and the lookdowns one sees in fish stores generally do not show this. This specimen was happily taken home by long time fish guy George Grippo. The next fish of interest was a tiny puffer, no bigger than a quarter. This little guy was green with black reticulations, and

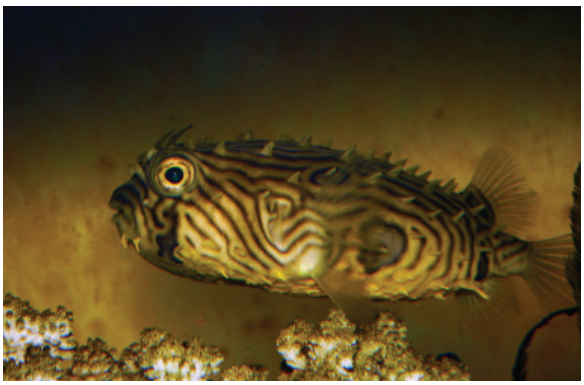
even had horns! None of us knew what it was, and we assumed it to be a tropical fish. I have always been kind of intrigued when I saw a puffer in a tank, showing puppy dog personality while begging for food, so I said "What the heck" and brought him home. He settled into a 20 gallon tank, and began eating right away. I sent a picture though Facebook to Todd Gardner, and he easily identified it as a juvenile striped burrfish, *Chilomycterus schoepfi*, a member of the porcupinefish family. This fish is found mostly in the Caribbean and Florida, but it does range up to the New Jersey coast to spawn. Its maximum size is 10 inches, and feeds primarily on crabs, barnacles, and shellfish.

The little guy very quickly learned that I was his food source, and as expected, began to rush to the front of the tank anytime I entered the room. I regularly feed all my fish frozen clam and *Mysis relicta*, so I didn't have to bring in any special food for him. He took those items with gusto! Now as a little round fish with huge eyes and a lot of personality, this puffer pushes a lot of cute buttons, and we tend to credit it with perhaps more emotional qualities than it actually possesses. That's what led me to my next mistake—I gave him a name. As he was a burrfish, my choices seemed to be either Aaron or Raymond, and I settled on the latter. The problem with giving Raymond his name is that now I have begun to become more attached to him. It becomes harder to relocate the fish, and face it, fish die a bit more easily than children or dogs. I don't have a problem with crying over a deceased dog or cat, but a fish? Well, that may be me someday.

Raymond grew like I have never before seen a fish grow. He seemed to grow an inch a month, and as of this writing he is 8 inches long. This is in less than a year's time! Early on I fed him quite frequently. He would slurp at the top of the tank, making a racket, and this tended to get my attention. I am purposely feeding less now, as I don't want to create a world record striped burrfish, and this is probably better for his health as well.

There was an amusing and painful incident a few months ago. My good buddy Ed Vukich popped by one day, and we were hanging out in the fishroom. I wanted to show Ed how Raymond would eat from my hand, but I didn't have any food ready. I knew he would just come to my hand anyway, so I took the cover off and made like I was going to feed him. Sure enough, he came up and started to bob up and down, trying to get a morsel of food. I turned to see if Ed was watching, but his attention had wandered to another tank. I said "Ed, look!" and at that moment Raymond took a Herculean leap up out of the water, sucked his way up to the first joint of my finger, and chomped down! I saw stars and yelped, reflexively yanking my hand back, and Raymond came with it. As he flew past my head I heard the whirring of fins trying to instantly evolve flight. My little pet wound up doing a belly flop in the middle of the floor, and my first thought after the searing pain was, "Oh no, I've killed Raymond!." I quickly scooped him up and placed him back in the water. He settled to the bottom and looked confused, just sitting there. Then Raymond appeared to shake it off, and came right back up to the top looking for food. I looked at my finger, expecting a gusher, but it was just very sore, with no blood. It turns out that this fish's dentition is made of crushing teeth and not tearing ones. I guess I got lucky! I watched him closely for several days for any ill effects from his flight, but none ever appeared. This is one tough fish! So I have made several rookie mistakes in this adventure with Raymond. The question is, will I err again?

There are three possible choices here: let Raymond live out his days in my fishroom, relocate him to larger environs such as a public aquarium, or return him to nature. Each of these presents problems. I like and enjoy Raymond, and folks visiting respond very well to him, but he requires a great deal of upkeep for just one fish. There is also the matter of devoting



a large tank, previously devoted to grow-out, to him. Relocating Raymond could be difficult, as this species is pretty common, but I have decent connections, and I might be successful in finding him a good home. These fish also sell for decent money in stores, but I just couldn't do that to Raymond. I know that one is not supposed to let captive fish go in the wild. The main reason for this is to prevent to possible introduction of pathogens into the wild population. I don't think that this would be a problem in this instance though, as I only use water from the same bay for Raymond's tank, and have never brought in a fish from anywhere else during his tenure. There is also a chance that Raymond might lack the appropriate survival skills. He is quite large though, and a burrfish naturally has pretty good defensive attributes, so I am not too worried about that. Letting Raymond go would also give him a chance to reproduce and live a natural life. It's a quandary, isn't it? I really am not leaning in any direction at this time, so I would welcome any opinions.

GCAS Thanks You!

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The All-Aquarium Catfish Convention

Presented by Potomac Valley Aquarium Society

October 16-19, 2014

Hyatt Dulles
2300 Dulles Corner Boulevard
Herndon, VA 20171

Registration:
http://www.catfishcon.com/register.php

All individuals registering for the conference prior to August 1 will be entered into a drawing for a prize valued at $200

Early Conference Registration Package - $165
Late Conference Registration Package (after July 31) - $175

Convention Packages include access to all speakers and include meals Friday night, Saturday Lunch, Saturday Banquet and Sunday Pizza party during the Auction.

A la carte prices:

Speaker presentations
Early registration - $45
Late registration (after July 31) - $55 (NO entry to the drawing)

Meals
Friday dinner - Meat or Vegetarian Lasagna - $32
Saturday breakfast - Elements Restaurant on Level One, Attendees on own (10% discount with convention badge) Saturday lunch - Deli Bar - $26
Saturday Banquet - Choice of pork, catfish, chicken or vegetarian - $50
Sunday Pizza during the Auction - $12

Field Trips
Collecting Trip - $45 (details are TBD)
Winery Tour - $90 - visit 3 wineries

Souvenirs
Convention Glasses - $6
T-shirts (info and pictures coming)

Margarita Tours Raffle - $50 entry

Speakers


Hans Evers


Julian Dignall


Birger Kamprath


Ian Fuller


Melanie Stiassny


Ingo Seidel

So Far, So Good

PART TWO

by Susan Priest

This is a follow-up article to "So Far, So Good," which appeared in the July 2014 issue of **Modern Aquarium**. In that article I introduced you to *Goodea atripinnis atripinnis*, a livebearer native to parts of Mexico and Central America. Since then I have made a few observations which I would like to share with you.

Breeding

Exactly four months after she delivered her first clutch of fry, the female delivered a second time. In the first week of April, 2014 she gave birth to nine fry. In the first week of August she once again gave birth. During a recent "feeding frenzy" I was able to count nineteen fry. I suspect that I must have missed a few, but the observation to be made here is that the second group of fry is approximately twice the size of the first. Is this a typical outcome? It falls to someone who has more experience with these fishes than I have to answer this question. One last point I would like to make is that, as with her first delivery, these fry arrived during the overnight hours, so I didn't get to watch.

Scientific Name: *Goodea atripinnis atripinnis*
Common Name: Blackfin Goodea
Native Habitat: Mexico and Central America
Reproduction: Livebearer
Water Parameters: 10-25GH (slightly hard), 7.0-8.0 pH (slightly alkaline)
Temperature: 64-72°F (low normal for tropicals)
Sexual Dimorphism: Female is typically larger, male has a notched anal fin
Adult length: Male 12cm (4"), Female 20cm (7.5")

Common Name

The common name of record for these fishes is either the black fin, or black finned *Goodea*. Neither my own fishes, nor those appearing in reference photos, have demonstrated this feature. However, since my previous chronicle I am now able to report the appearance of a darkening at the tips of both the dorsal and anal fins on the female.

C.A.R.E.S.

Goodea atripinnis atripinnis is on the C.A.R.E.S. list of threatened fishes. I have had them for well over a year now, and I do not find them to be at all problematic. Large and frequent feedings along with correspondingly large water changes are their basic requirements. They are active at all levels of the water column at all hours of the day, and they are a pleasure to watch. The fishes themselves are not threatened. It is their niche in nature which has become polluted, reduced to mere puddles, or both. Until such time as these conditions can be reversed and they can be returned to the healthy natural environment which God intended for them, their future is in our hands. You need not hesitate to adopt some of these delightful fishes.

Tampa Tilapia

by Dan Radebaugh

It is by now common knowledge that Florida is chock-full of introduced species, both plant and animal. Just listing them all would be a nearly unending task. It has not always been this way, but thanks to the climate the potential has always been there, and the past 30 or 40 years have seen an explosion of new species establishing themselves, especially south of an imaginary east-west line just south of Sarasota that marks the northern edge of the subtropical zone. Fish and reptiles especially have gotten a lot of press, but there are plenty of others. Even the central part of the state is now host to many new, and not-so-new transplants.

The first time I actively came in contact with some of the new fish in town was while visiting my mother in Tampa some 20 years ago. Behind the house where she still lives is a modest pond; really part of a network of catch basins to drain water from the heavy rains off of the local roads. Nevertheless, seeing it adds a feeling of being a part of nature while looking out from the patio/pool.

There is a colony of Muscovy ducks that rotates through the various neighborhood ponds, and my sisters routinely toss old bread crumbs to the fish, ducks, and other guests. I noticed several turtles basking on the far shore, and when we walked down toward the water, the turtles immediately slid into the water and came over to join the ducks and fish in the bread crumb feast. You'll also notice a great blue heron in at least one of the photos. These birds don't really care for bread crumbs, but they know that the fish do.

Perhaps because *O. aureus* isn't a fish typically kept by aquarists, good photos of live specimens are difficult to find. This photo shows the yellow highlights well, but the red trim and blue hue of the body are not so apparent.
Photo from roughfish.com.

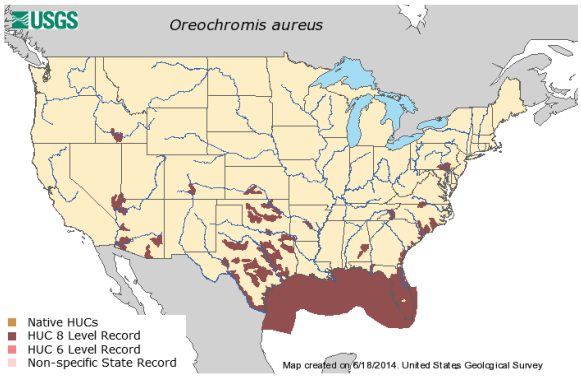
I noticed some people fishing at the other end of the pond, and taking a walk down to the water I noticed that it was heavily populated with some beautiful, blue cichlid-looking fish, though the fishermen said that they were there catching largemouth bass at their end of the pond.

Doing a little research, I learned that they were most likely *Oreochromis aureus*, the blue tilapia, a species native to northern and western Africa, and resident throughout the middle east. This fish was first brought to Florida from Israel (another common name is the Israeli tilapia) in 1961. Three thousand were released in a series of phosphate pits at the Pleasant Grove Research Station in Hillsborough County, for research on aquatic weed control. The tilapia later spread and reproduced, and subsequent efforts to eradicate it failed. This fish is now considered to be the most widespread foreign species in Florida. It can survive cool temperatures, as well as a certain amount of salinity, and there is even a breeding population in Tampa Bay. The fish is also now established in a number of other states (see map at lower left).[1]

These and other tilapia, and various species of carp have been used for years to try to control invasive plants such as water hyacinth, various species of hygrophila, and others. They have also been released to provide forage for game fish such as largemouth bass, and even states farther north to consume vegetation (and provide employee angling?) in power plant cooling ponds.

These fish can be caught on a hook, but as they're primarily vegetarian, bread balls would be a better choice of bait than the live bait or lures used for bass and other sunfish.

The fortunes of the blue tilapia in my mother's pond have waxed and waned over the years. In long summer dry spells the pond shrinks in size, and the overcrowded tilapia often suffer a significant die-off, due mostly to lack of sufficient oxygen in the very warm water. They also suffer during really cold winters, but there haven't been a lot of those lately, though there was a cold winter a couple of years



ago that also decimated other cichlid species living throughout Florida, as well as dealing a major blow to the population of Burmese pythons living in the Everglades.

My most recent visit was in late May of this year, and I discovered that the tilapia numbers are once again up. I also got a first-time, first-hand look at their breeding style. Mouthbrooders, the males will dig a round pit on the bottom of the pond, about two feet across and about eight inches deep. The male will then take up station in or by the pit and try to attract a female to come join him. In the accompanying photos you can see a few of these pits. What you can't see, because there was so much reflection off the surface of the water, is that the entire shoreline of that pond was one of those pits after another—each about 6 to 8 feet from the shore, and separated from one another by a couple of feet. An amazing sight! In addition to a male hanging out in or by every pit, there were juveniles of all sizes swimming all around the pond, by and over the pits.

Again, owing to the reflection the photos don't allow you to see how beautiful these fish are. Mostly blue, they also have some red highlights, particularly the edge of the caudal fin, with some red & yellow highlights along the flanks and the head. They grow a bit large for most aquarists. Most of the males I saw looked to be around a foot long, but they have been known to grow to around twenty inches and up to five or six pounds[2], so unless you have a really big tank, it's probably best to admire them from the shore.

The row of breeding pits along the near shoreline. The opposite shoreline looks the same from a similar angle.

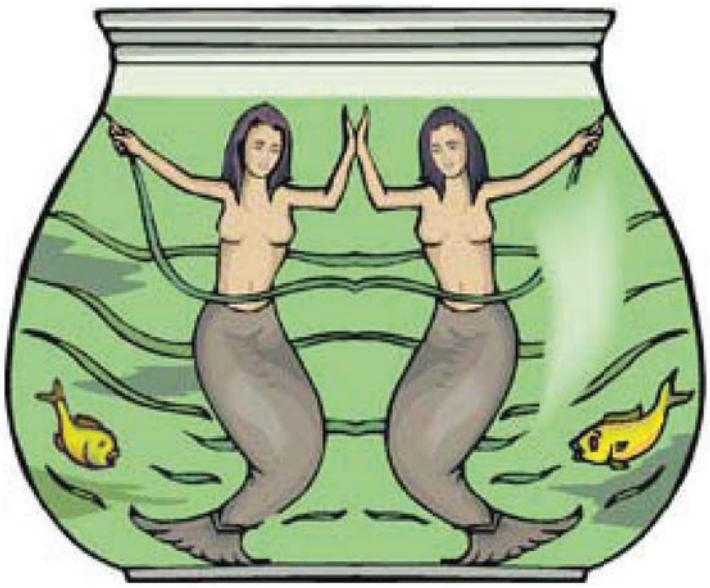
Pit with big male more clearly visible.

Breeding pits. Note turtle above and juvenile fish by the pit on the right, which contains a barely visible large male.

Two pits, with a male in each. Note great blue heron on the opposite shore.

Photos by the author unless noted.

[1] *http://nas.er.usgs.gov/queries/factsheet.aspx?SpeciesID=463*
[2] *http://www.tsusinvasives.org/database/blue-tilapia.html*



BOWL SHOW RULES

- Only current GCAS members may enter fish in the Bowl Show.
- There is a limit of 2 entries per member per meeting.
- Unlike some other clubs, every month is an "open" Bowl Show at the GCAS (i.e., there is no "theme," such that one month cichlids are judged, the next livebearers, the next anabantoids, etc.).
- Any fish that wins any prize (1st, 2nd, or 3rd) may not be entered again in the same meeting year.
- The current Bowl Show Coordinator is Leonard Ramroop, who usually also serves as judge (although guest speakers are often asked to do the judging honors).
- 2.5 gallon containers are available for use (brought to the meetings by the Bowl Show Coordinator), but entrants are responsible for providing enough (and suitable) water for their fish.
- For a fish too large (or too small) for those containers, entrants must supply a suitable container, which must be clear on at least three sides.
- Only one fish per container (i.e., no "pairs").
- No plants, ornaments, or equipment (filters, airstone, etc.) are allowed in the judging tank (an external mirror, or opaque cards between containers is acceptable, as is a cover that does not obstruct side viewing).
- Points are awarded: 5 points for 1st Place, 3 for 2nd Place, and 1 for 3rd Place.
- Ribbons are awarded: blue for 1st Place, red for 2nd Place, and green for 3rd Place.
- The person with the most points at the end of the meeting season receives the Walter Hubel "Bowl Show Champion" trophy at the Awards Banquet.
- The decision of the judge(s) is final.
- A running UNOFFICIAL total of the points awarded is printed in **Modern Aquarium**. Only the tally of points maintained by the Bowl Show Coordinator is official.
- **In case of ties**:
- 1st Tiebreaker – most 1st Places
- 2nd Tiebreaker – most 2nd Places
- 3rd Tiebreaker – most entries

In the Realm of the Moray Eel

Story and Photos by Stephen Sica

Anyone who knows fish, especially marine fish, knows that moray eels are fish. Hmmm—or are all fish moray eels? Anyway, I'm sure that it's one or the other. I'll have to look into it further at a later date.

Be that as it may, here are some little known moray eel facts from the June 2014 issue of **Sport Diver** magazine. The moray eel is highly susceptible to parasitic infections, so it spends much of its time at cleaning stations, having microscopic organisms picked from its body by small fish or invertebrates. Morays have a second set of jaws in their throat that thrusts forward to pull captured prey back into the esophagus. Moray eels continually open and close their mouths to flush oxygen-rich water over their gills in order to breathe. They are one of the few species of fish that can swim backward. Some morays tie themselves into a knot when attempting to swallow large prey. I wonder why? Is it by accident or done purposely to swallow the fish—and how do knots help to accomplish this?

This green moray exhibits its breathing by gulping water into its mouth and expelling it through its gills on the lower left of the body in this photo. This profile is the typical menacing image of the moray eel. All eels are harmless, if you keep your distance. I know of no unprovoked attacks on humans.

Morays depend upon a highly developed sense of smell, rather than sight to locate prey, so if you come across a moray eel, keep your fingers and hands to yourself, because those skinny digits may look like a meal to the eel. If you have fat fingers, all the better, because dessert is included in the bite! What your hands and fingers smell like, only a moray knows for sure.

Only once have I seen a diver bitten by a moray. Many years ago in Grand Cayman we did the eleven foot deep Stingray City dive. After feeding and interacting with the southern stingrays, the divemaster led us a short distance away to a small coralhead, which was the residence of Waldo, a green moray renowned in those days. Waldo would be waiting in his lair, anticipating the encounter where he would be fed a few dead fish or leftover squid scraps. The divemaster would entice Waldo out with the food, and hand-feed him. On this day the moray mistook the divemaster's hand for a piece of food, and bit it. I could feel the pain as the divemaster carried on like a good soldier. As soon as we surfaced the wound was cleaned and bandaged. That day he earned his tip! The bite is not toxic, but invariably the teeth harbor decayed food particles, along with attendant bacteria. Likewise, morays should not be consumed, because some are capable of causing severe food poisoning which may be fatal.

Here's one that I never knew. Crab-hunting chain morays can stay out of the water for thirty minutes at a time, if their skin remains damp. Since I had never heard of the chain moray, I decided to look it up on the internet. I was especially curious to find out about its habitat. According to Wikipedia, they are found in the Caribbean, and western Atlantic islands, such as the Bahamas and Bermuda. The body is dark brown to black, with a yellow interconnecting lattice-work color. The eyes are also yellow. I saw a few unique morays in Grenada several years ago that fit the description of the chain moray, but those eels would bury themselves in the sand.

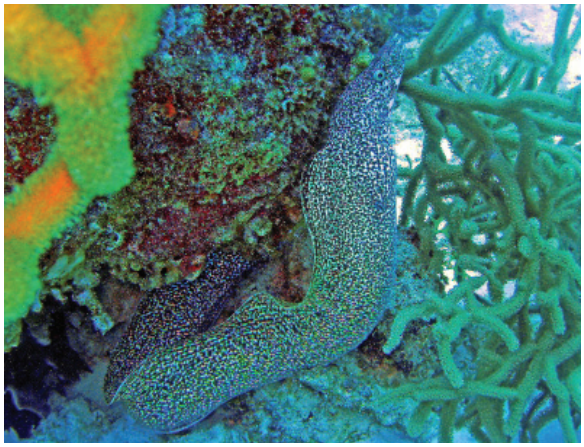
Chain morays can be purchased for your home aquarium. They can grow to five feet in length in the wild, but more commonly do not exceed two feet.

Finally, another fact that I did not know: Green morays from the Caribbean are actually brown! Their

Does it seem that this spotted moray is sticking its neck out to give me a photo opportunity? Notice the small but healthy brain corals around the eel. Since a moray breathes through its mouth, timing the photo allows either a mouth open with teeth, or a mouth closed photo. Teeth make for a more dramatic photo.

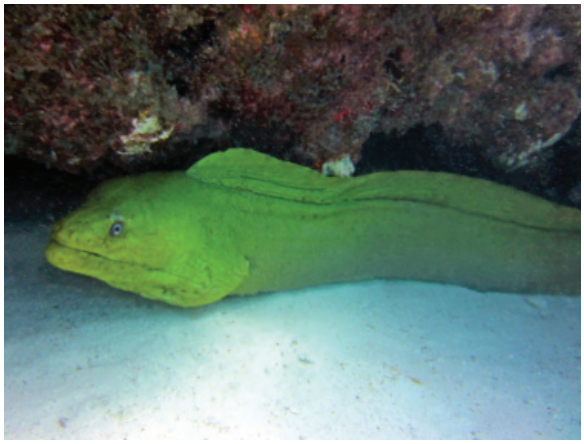
This is the pose of a typical green moray breathing through its mouth and showing it toothy smile. Since morays have poor eyesight and depend upon their sense of smell, do not get too close, or your hand may be mistaken for an easy meal!

A typical spotted moray pose with head poking from a crevice in a coral reef. Since morays travel through and around the reef, it's difficult to determine if the moray is in it's home crevice, or if it even has a regular home in the reef. Notice a two inch long cleaning goby, *Gobiosoma genie*, on the eel's head above the right eye.

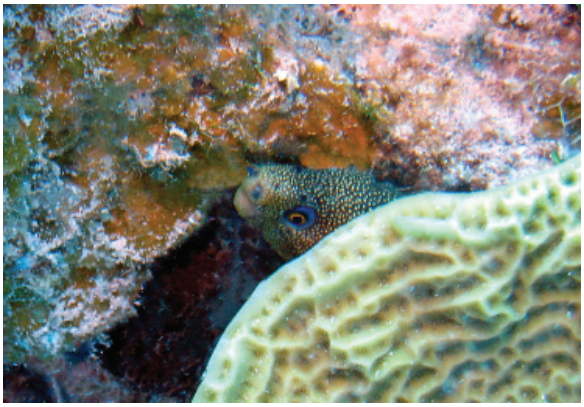


A rare opportunity to see the full body of a spotted moray eel. While eels prefer the protection of hiding places in the reef, occasionally you may be lucky enough to observe a free swimming eel. Notice that this eel did not stray far from the protection of the reef.

This spotted moray is not about to leave its crevice anytime soon. Hardly noticeable is a cleaning shrimp that is located in the shadow near the back of the eel. The shrimp's long antenna is resting on the long fin that covers the length of the eel's body.



This green moray was just reclining in the sand by an overhang. Notice its long top fin, travelling along the back, around the tail, and up along the underside of the body. This single fin substitutes for the many shorter fins on a typical fish.



The head of this tiny goldentail moray eel peeks out from behind a section of bleached coral. This eel never exceeds two feet in length. A young specimen can be as thin as a pencil, while an adult circumference is about the same as your thumb. I have never seen this eel in the open—they never leave their den during daylight. They must know that their small size makes them a tempting meal to a larger predator.

This green moray eel seems fo be at a cleaning station. It is being preened by a cleaning goby on the side of its head and a banded coral shrimp, S*tenopus hispidus*, also commonly known as a cleaning shrimp. Another cleaning shrimp waits its turn in the back of the crevice.

green appearance comes from a yellow mucus that covers their body. I guess that the green moray has probably been misnamed. Perhaps they should have named it the yellow-mucus moray. How is that for a name?

The green moray, *Gymnothorax funebris*, can grow to more than six feet. This makes it the largest of the morays. When I first began visiting Caribbean islands to dive, I thought that green morays were the most common eel. After many years now, I have probably observed more spotted morays, *Gymnothorax moringa*, than any other. This is a shallow water moray that can grow to four feet. The depth that it inhabits may be why I thought it to be more common.

Less common moray eels I have observed include the goldentail, *Muraena miliaris*, and purple mouth, *Gymnothorax vivinus*. The goldentail is very small, growing only to about two feet. It has tiny teeth, but all morays have sharp teeth no matter their size. Goldentails that I have observed appeared to be a medium to dark shade of brown, with gold speckles. They would pop their tiny heads out of and back into their crevices, depending upon how close the diver's approach. Some were pencil-thin and looked like miniatures.

I think that goldentails are either less common, or just too difficult to find due to their size. Donna, as usual, was fairly adept at finding them. Often, she would point one out and I'd just have a dumb stare, trying to see what she was pointing at. Then she would swim right up to it and point her finger at the tiny head. My problem was that I could never find a goldentail to observe from head to tail. Locating a tiny head and mouth protruding from a small crevice on a typical coral reef is quite difficult. I guess that could have gotten Donna bitten, although her fingers are probably thinner than a goldentail.

Morays have no pectoral or ventral fins. A long, continuous fin that begins behind the head is the dorsal, caudal and anal fin. Their bodies are scaleless. All morays, in addition to the green, are protected by a mucus layer. Green and spotted morays are nocturnal feeders. The goldentail, purplemouth, and others feed during the day, often cooperating with small groupers and other fish. This behavior is known as nuclear hunting.

There are three primary eel groups; in addition to morays, the other two include conger eels and snake eels. A few years ago, I observed my only snake eel in the shallows of Key Biscayne, Florida. I wrote a brief article that was published in **Modern Aquarium**. My only Conger eel encounters have been through the glass in large public aquariums.

Some people find morays to be like snakes, and are repulsed by them. Personally, I do not find snakes to be repulsive. As for moray eels, they are just another fish with a mouth and teeth. Unlike too many persons I know, when a moray opens its mouth, it's speechless—and for now, so am I.

Chipi Chipis On the Move

Researchers from WCS's Bolivia Program have documented a natural phenomenon new to science: the mass migration of a small, obscure fish known locally as the "chipi chipi." WCS Conservationist Guido Miranda recently captured footage of the tea-colored Beni River virtually boiling over with millions of 1-inch long juvenile fish.

"It's amazing that this natural wonder has gone unnoticed by science for all this time," said Miranda, who is publishing a study on the new finding. "The new footage will help us better understand the migratory movements of these fish and to protect the population, which is utilized by local communities as a food source."

Migrating by the Millions

Miranda and his colleagues in the Greater Madidi-Tambopata Landscape are not yet sure why the fish are migrating, but it appears that juvenile chipi chipis migrate upstream to complete their development into adult fish. Once in the foothills—it is thought—the adult fish breed, after which the fertilized eggs end up downstream where the next generation of chipi chipis hatch. After two weeks of development, the next wave of chipi chipis (which means "smallest" in the local Takana language) then migrate approximately 217 miles back into the foothills.

"The presence of this migratory event in the Beni River hints at the surprises that still await researchers in these biologically rich waterways," said Dr. Julie Kunen, Executive Director of WCS's Latin America & the Caribbean Program. "Conserving Amazonian waters is vital in protecting both the migrations of fish populations on which local peoples rely and the health of the Amazon River basin system at its source."

To view video footage of the chipi chipi migration and learn more about WCS's efforts to protect the Amazon's ecosystem and its species, please visit wcs.org.

Photos: Mieniusz Spanowicz /WCS

Get to Know a Species: Chipi Chipi

The chipi chipi—also known by its scientific name Trichomycterus barbouri -is a member of the pencil catfish family, a group containing more than 100 species and ranging in size from 2-6 inches in length. Other members of the pencil catfish genus include a blind species that lives in deep caves, a species living in hot thermal springs, and one that lives up to 15,000 feet above sea level in the Andes (the highest occurring fish species in South America).

Reprinted from the Summer 2014 issue of ***Conservation Frontlines****, published by the Wildlife Conservation Society.*

MA CLASSICS

Last month, in his article, "Do Oscars Get Along With Guppies?," Joe Ferdenzi referred to a piece he had written about the Aquarium Society of New York, in the April 1998 issue of ***Modern Aquarium****. Some months ago, coincidentally, I had noted this article as a good candidate for an MA Classics appearance. A cautionary tale, it reminds us that without new blood, eventually there's no blood at all.*

The Rest Of The Story:

The Aquarium Society of New York

A Study in Extinction

JOSEPH FERDENZI

In my "History of the Greater City Aquarium Society" (Modern Aquarium, May 1997), I focused on the shrouded origin of a society conspicuously absent from Albert Klee's monumental work, A History of The Aquarium Hobby in America (American Cichlid Association 1987). The focus of this current article is the very opposite — it concerns the mysterious extinction of a society that is prominently featured in Klee's book: The Aquarium Society of New York.

According to Klee, The Aquarium Society of New York was the first American aquarium society, having been established in 1896 (the second was the Philadelphia Aquarium Society, started in 1898). Its founding members were distinguished hobbyists from New York and New Jersey. The early activities of the society are well documented in Klee's book. Owing to its preeminence among aquarium societies, it was often referred to as, more simply, "The Aquarium Society." Indeed, that is how a famous novelist of the 1920s and 30s, S.S. Van Dine, referred to it in his best-selling novel, The Dragon Murder Case (see Modern Aquarium, February 1998, for my article on that book).

During most of its existence, The Aquarium Society met at one of New York City's most prestigious cultural institutions, the American Museum of Natural History. It even held its shows there (again, see my article on The Dragon Murder Case for documented references to this fact).

Klee's work indicates that, as of its writing, The Aquarium Society was still in existence. Although Klee's work was published in book form in 1987, it should be remembered that it was originally published as a series of articles in the now defunct The Aquarium magazine from December 1967 to September 1968. Therefore, Klee's reference, at the latest, is to 1968. Yet, by the time I became involved in the organized hobby in New York City, in 1984, The Aquarium Society had disappeared. What had happened to cause its demise?

I pondered this question for many years, but had never come across any answers in my researches. Recently, however, I discovered an engaging clue that eventually lead to the answer.

It happened when long-time GCAS member Marcia Repanes supplied me with two copies of Modern Aquarium (Series II) that had been missing for years from my otherwise complete collection of that series. One of the missing issues was the December 1968 edition (Vol. I, no.2), which featured an article entitled "Mr. Aquarium Society" (a reference to well known hobbyist Tony Cirincione), and authored by the editor at that time, Dan Carson. In describing Tony's involvement in the hobby, this passage appeared: "Tony Cirincione, President of the United Aquarium Societies of New Jersey and Treasurer of the New York Aquarium Society . . . ." I was galvanized. I knew Tony, and had met him on several occasions. I never knew this about him, and he had never mentioned it.

Here was my big chance to finally unravel the mystery. Surely, Tony, as the Treasurer of the society in 1968, must know what had happened. Although at the time of my discovery of this lead (October 1997), it had been several years since I had seen Tony, I thought it would be a easy matter to contact him inasmuch as he was a member of one of our neighboring clubs, The North Jersey Aquarium Society, and I had a complete roster (including phone numbers) of their members. I was elated.

Unfortunately, my elation was short lived. Tony is not a young man. When I contacted him by phone, he informed me that he was not well, and had no desire to answer any questions, either on the phone or by mail. Of course, I respected his wishes. I thanked him and wished him better health.

Despite this setback, I conceived of one last hope — Dan Carson, the author of the article on Tony. There was a slim chance that, due to

Dan's active involvement in the hobby in the 1960s and 70s, he had some knowledge about the subject of the demise of The Aquarium Society.

Quite fortunately, in preparation for the publication of our 75th Anniversary Show Journal, Modern Aquarium's Managing Editor, Al Priest, had established contact with Dan via the magic of the Internet in early 1997 (see Al's reference to this in his article, "The Making of a Show Journal," in the September, 1997 issue of Modern Aquarium). Dan is living in Hawaii now, and is still very much involved in the organized hobby.

I therefore asked Al to e-mail Dan a desperate message: Did Dan know anything about the demise of The Aquarium Society? The response that came back via the computer was everything I could have hoped for, and more. It is a detailed and atmospheric retelling of an event that fascinates while it foretells a gloomy end for those of us in the organized hobby who do not heed its warning.

With Dan's permission, here is reprinted his recollection of that event from the past:

I do remember writing "Mr. Aquarium Society," about Tony Cirincione which appeared in volume 1, No 2 (December 1968) of "Modern Aquarium." Tony was the then Treasurer of the New York Aquarium Society, and either shortly before or shortly after that article was written, Tony took me to a meeting of the NYAS at The American Museum of Natural History.

I remember the meeting very clearly. We were trying to interest the NYAS members in participating in such things as the society "Bulletin Board" in Modern Aquarium, and the other activities like shows in which the many aquarium societies around NY were taking part at that time. I remember Tony telling me before we went that the group wasn't likely to respond. But, being young and optimistic (I was about 36 or 37), I thought we could convince them.

The night of the meeting I met Tony down below the big main staircase at the front of the museum. It was dark and foreboding. A guard admitted us – he obviously recognized Tony – and went to a nicely furnished room which reminded me of a movie set of an "Explorer's Club." There were only six or seven members present, and the first thing I noticed was that I was by far the youngest person in the room. The next youngest was Tony who I'd guess might have been in his late 50's at the time. The rest of the members looked dignified, and ancient.

Tony introduced me as the speaker for the evening, and I made my pitch, but I could see the group was not impressed. They were, it seemed to me, living in the past, content to dream of past glories. They were polite, but not interested in making any changes in the way they did things. When we left, Tony told me that membership was by invitation only, and they hadn't invited anyone to join in years. That meeting was probably one of the last the NYAS ever had.

Tony was devoted to the hobby, and particularly to aquarium societies. I'd guess he continued to serve as treasurer until nobody showed up at the meetings. There probably was no money in the treasury, but if there was he would have given it to the museum as a gift. I'd suppose it was a very painful thing for him to watch a club die, particularly one as prestigious as the New York Aquarium Society.

Postscript:

Despite all the advantages that The Aquarium Society enjoyed — being first, being famous, being associated with the American Museum of Natural History — it was doomed by the wretched vanity and short-sightedness of a majority of its latter-day members. (Judging by his invitation to Dan, I doubt Tony was one of those members.) How ironic it is that in the year in which we celebrate the centennial of the founding of the Greater City of New York in 1898, The Aquarium Society of New York has been extinct for nearly 30 years, and, yet, a society established in its shadow in 1922, but named in honor of that great unifying event of 1898, the Greater City Aquarium Society, still survives because it evolved into a friendly society with no pretensions of exclusivity. This is probably an overly dramatic comparison, but doesn't it remind one of the evolution of mammals, whose origin dates back to a time when they lived under the rule of the dinosaurs, but who now dominate the world? "Dinosaurs" have perished; we have not.

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AN AQUARIST'S JOURNEY

Story and Photos (unless noted) by Rosario LaCorte

Chapter 7

We departed for São Paulo after a few days in Rio. The flight was rather short. Upon arrival, we hailed a cab and headed for our hotel, which was very clean and in a good area. We had no contacts to take us collecting, so it was a shot in the dark as to what we were going to do. We relied on one contact, Harald Schultz, to make our stay successful. The name Harald Schultz first came to me during my attendance at the Pet Trade Show, which was an annual event held in the Hotel New Yorker. Jay Winter was the chairperson of the event. Each year I looked forward to this show, for many prominent writers and professional fishkeepers gathered there. Harald Schultz's name came up on a number of occasions, and all of us were under the impression that Schultz had written an in-depth book on Brazilian fishes. No one had ever seen the book; it turned out to be a rumor that all of us believed as factual.

From left to right: Larry Konig, Harald Schultz, and Rosario LaCorte circa 1959 in front of Larry' s fish house. Harald visited the US and spent the day at my home.

Shortly before we made arrangements to go to Brazil, the New Jersey Aquarium Society, of which I was a member, had Alan Fletcher, Editor of **The Aquarium** magazine, as a guest speaker. I had made all of the arrangements for his appearance, as well as having taken him out to dinner prior to his presentation. Upon our return to my home, we discussed the upcoming trip to Brazil. Earlier I had told Axelrod about Harald Schultz, whom he'd never heard of, and I mentioned that upon our arrival in Rio we would contact Schultz by phone. In my conversation with Alan I mentioned the trip to Rio, and Alan told me that Schultz did not live in Rio, but in Sao Paulo. I asked Alan if he could forward Schultz's address to me prior to our departure, and he said he would do so the following day.

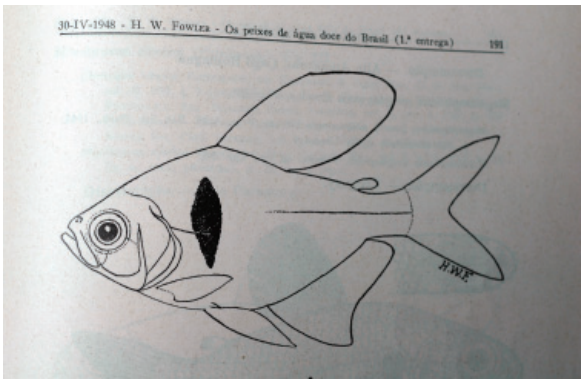
As it turned out, Alan had been corresponding with Harald Schultz for quite a while. Harald, a wonderful photographer of fishes and native peoples, was an associate curator of the Paulista Museum in Sao Paulo and an ethnologist, which is the study of indigenous peoples. Once we had reached our hotel and made ourselves comfortable, the next step was to contact Schultz by telephone. We searched the telephone book only to be disappointed; there was no Harald Schultz listed. What to do? Axelrod suggested, "Why not send a telegram? Perhaps he will contact us." I reached into my wallet and removed the address given to me by Alan Fletcher. Now the suspense—would he be available? Would he come to our hotel?

In due course Harald arrived and contacted us. His English was excellent, which was a relief to us, as none of us spoke Portuguese. The reason we had been unable to find a phone number for him was that there was a seven year "waiting period" there to get a telephone.

That evening Harald had an engagement to present a program to the German Club on a tribe of Indians with which he was closely associated. It was a pictorial program, presented entirely in German. Neither I nor Herb's wife Evelyn understood a word of German, so it was difficult to stay awake, but Axelrod and Ulf understood German and were able to enjoy it.

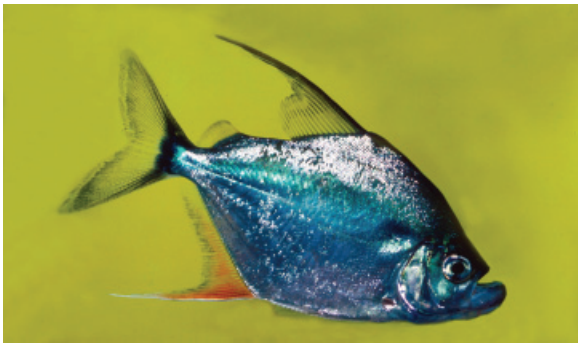
We rode to the German Club all crammed rather uncomfortably into Harald Schultz's Volkswagen beetle. After the program we were taken to Harald's home, where he showed us his collection of fishes collected in the state of Matto Grosso. It was the first time we had seen the wimple piranha *Catoprion mento*, or the black phantom tetra *Megalamphodus megalopterus* (now *Hyphessobrycon megalopterus*) with positive identification. It was a wonderful array of fishes none of us had ever seen. No one knew the names of any of the miniature tetras. The one tetra that stood out was *M. megalopterus*, but at the time no one knew its name. I had brought Fowlers 4-part volume of Brazilian fishes, given to me by Carvalho, so I was able to identify *megalopterus* by the drawing in Fowler's book. It was a pretty good rendition of the fish, and my assumption was correct (I must say though, that line drawings are not generally a good way to identify fishes, as they are often not accurately detailed). I asked Harald about possibly getting some of these fish, and he said I could have specimens of all of them. He was extremely generous.

Black phantom tetra first seen in Harald Schultz's home aquarium. Found in the State of Mato Grosso in 1958. First named *Megalamphodus megalopterus* and later revised by Dr. Stanley Weitzman to *Hyphessobrycon megalopterus.*



It was from this drawing,in Fowler's *Fresh Water Fishes of Brazil,* that I deduced that the black phantom tetra was (at the time) *Megalamphodus megalopterus*. Not a great way to I.D. a fish, but at the time it was a good guess.

This characin was unknown for many years until named for Harald Schultz, *Hyphessobrycon haraldschultzi* . This photo taken by the author of specimens given to him by Schultz 1959.



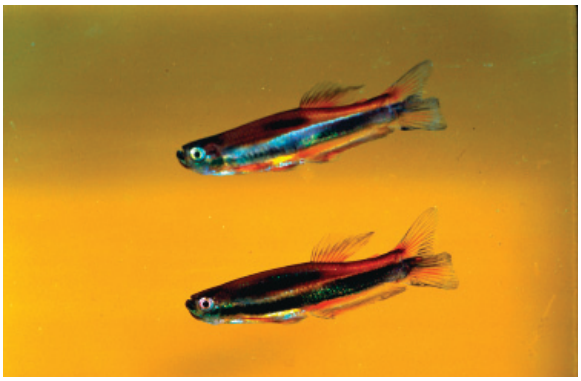
***Catoprion mento,* the Wimple piranha. First time seen by me in Harald Schultz's home in 1958. Author collected specimens in Aruana, Brazil, in 1988. It is a scale-eating fish, hence the undershot jaw, used to scrape scales from their victims.**

We also met Schultz's wife Vilma, about 20 years his junior. The two worked together as ethnologists. Vilma could not speak English, but we had a common bond, as both of us were of Sicilian ancestry. My Italian was not that good, but I was able to converse with her.

The following day we collected in the surrounding countryside of Sao Paulo. We also traveled to Santos seaport in Sao Paulo state. Close by the ocean, where blackwater streams emptied, we collected *Otocinclus* cats and ***Coelurichthys*** *lateralis,* at that time erroneously called *Mimagoniates barberi*. During this excursion, Carlos Stegemann, a German immigrant and close friend of Harald, accompanied us. Carlos had a small fish house in the back of his home, where he held any new species that Harald would collect during his trips into areas where he maintained contacts with indigenous peoples. Harald discovered many new species of fish, and many of these found their way into Germany and the tanks of the late discus breeder, Dr. Edward Schmidt-Focke. Edward would breed them, and some of the monies generated by this arrangement would be funneled back to Schultz to aid his studies. Edward's brother was the owner of Tropicarium, a wholesaler with a good reputation. Edward himself, a well-known medical doctor, became involved with breeding fishes, and also became a well-known breeder of discus and bettas.

The author collecting *Coelurichthys lateralis* in Santos, S.E. Brazil, 1958.

The author, collecting with Harald Schultz, in Santos, 1958.



***Coelurichthys lateralis*, formerly known as *Mimagoniates barberi*. Mostly always found in black water. The author reproduced them in 1958 using live spagnum moss as a spawning medium, which I believe to be instrumental in their reproduction. In nature a rich harmony of colors. In the aquarium they quickly lose these colors and turn dark brown. This photo was taken immediately after capture, revealing their beautiful coloration. Photo taken June 14,1981 in Itapoa, a small coastal town in S.E. Brazil.**

The area of Santos where collections were made was very similar to the pine barrens of New Jersey. Both areas had large populations of mosquitoes, and most of our time was spent swatting them. The blackwater stream had a huge population of *Otocinclus affinis*. Harald and Carlos had a shallow net that was round, and reinforced with a wooden band to which the net was fastened. Moving toward the shoreline, the net would be pushed beneath hanging plants, and then in an upward thrust the net captured many *Otocinclus* that were foraging in the mass of hanging vegetation.

Our collection of fishes was interesting, with *Mimagoniates lateralis* being the most colorful. It was a symphony of rich mahogany colors, with yellow and a smattering of red. Once removed from the blackwater and placed in the aquarium, it became brownish in color. None of the photos I have seen of this fish have ever captured the beauty of its coloration. It wasn't until 50 years later that I was able to collect them again in southeastern Brazil and photograph them upon capture. This is the only photograph that I have seen that portrays its true colors. This species is also unique in that its reproductive behavior is quite different from the majority of the characoids of South America. One of a large group of fishes that use internal fertilization, the caudal peduncle area has a gland which produces a pheromone during its spawning activity.

The prize of all the fishes that I eventually returned with from Brazil was the group of new species that we obtained at the home of Harald Schultz. Some of these were the aforementioned *Hyphessobrycon megalopterus, Aphyocharax paraguayensis*, and *Aphyocharax rathbuni*.

Within a few months, I was able to reproduce many black phantom tetras and make them available to the hobby. They were easily bred, but rather slow growing. The name black phantom was first coined by Harald Schultz. It was a very appropriate name, a name which stuck, and 50 years later is still in use in the hobby. The following summer, Harald visited the United States, and I was most pleased to reciprocate his generosity when he spent the day at my home.

In 1959 I met Tom Schubert, a real pioneer in the American hobby. He was closely associated with Dr. William Innes, considered the father of the American aquarium hobby. Schubert was from Camden, New Jersey, and was well known as the aquarist who produced a gold form of *Barbus semifasciolatus*, for years known as *Barbus schuberti*. It was quite popular as a staple for community tanks and easily reproduced. Of course *Barbus schuberti* is invalid, as the species was already classified, and Schubert's success with developing a gold strain didn't scientifically qualify it for a new species name.

Tom was a very nice man, and was up in years when I met him. He had a greenhouse attached to his home, allowing his fish to display their pleasing coloration. It has been so long since I was there, but the one sight that I can never forget was a male *Microgeophagus ramirezi* that to this day was the largest male I have ever seen. The front dorsal ray reached back to the caudle fin. It was a spectacular specimen—a perfect example of a fish that one can use as a model to aspire to. It's too bad it was not photographed.

Schubert mostly bred bread-and-butter species, so there wasn't anything that I saw there that was rare. He had a large pair of Oscars, *Astronotus ocellatus*, and from that pair he was able to produce many offspring. He was proud of the fact that the pair afforded him the luxury of purchasing 3 new cars. Now remember, in those days some car models cost less than a thousand dollars. The *ocellatus* fry sold for 25¢ each. Oscars are capable of producing huge spawns, and in the early years most good breeders also maintained abundant daphnia ponds. I gave Schubert his first black phantom tetra, which he had never seen. He was quite elated over his new additions.

In 1957, prior to my excursion to Brazil, Gene Wolfsheimer (1922-1979), one of our premiere American aquarists, visited the east coast. I believe I had met Gene earlier, but am not certain of when. Anyway, we were acquainted with one another, so

***Astronotus ocellatus*. This cichlid, commonly referred to as the Oscar, was a favorite of Tom Schubert as well as many other old-time aquarists. It is amazing how many color forms there are presently, as these few specimens reveal.**

it was great to spend quite a bit of time with him. Gene was also at that time one of our top-notch photographers, with many photos gracing the covers of books and magazines. His photo of kissing gouramis kissing was a classic shot, appearing on the cover of **Life** magazine.

Lois Saphian, of St. Louis, Missouri, had some success with brown discus, and raised a number of them. At that time in our hobby discus success was very rare. Gene was able to acquire seven offspring of the initial spawn, and from these seven youngsters he obtained three spawning pairs, and then documented, with photos, the spawning, and the fry feeding from the sides of the parents. They were dramatic photos, and in 1960 were published in **National Geographic**. Gene also operated a hatchery in Sherman Oaks, California, from which he supplied shops with the offspring of his spawns.

Gene and I corresponded from 1957 until his death—much too young—in 1979. We had a wonderful pen-pal relationship, and on one occasion Gene mentioned that our exchanges should have been published. It probably would have been good reading, as our letters were jam packed with fish talk. One of the mistakes that I made upon moving from my last home was destroying so many of the correspondences that I had with so many of our historic figures, including Gene. Bobby Ellermann, an historian in his own right, never lets me forget that blunder, but while I was in the process of moving I had so many papers it was impossible to store everything, so there were some sacrifices that had to be made.

An unsuccessful attempt to start a national guppy society took place at the Hotel New Yorker. During that time the first Bronx Aquarium Fish Fair and the 3rd Annual Convention of the International Federation of Aquarium Societies were held. Gene was one of the aquarists invited to judge that show, as was I.

It was an active visit, as we had the chance to take Gene on a tour of some spots in New York. A group of us had a visit with Jim Atz, who was the Assistant Director of the New York Aquarium, at that time still in its construction phase on Coney Island. Despite that, our association with Jim allowed us a behind-the-scenes view of the Aquarium. We also met Christopher Coates, Curator of the Aquarium, who wrote a weekly column for the Herald Tribune. Sam Dunton was then the official photographer of the Aquarium, as well as of the New York Zoological Society.

We took Gene to the famous Nathan's hot dog stand in Coney Island. That was before it became a chain. As previously mentioned, some of the real pioneers of the guppy world attended a meeting at the New Yorker Hotel in an attempt to form the AGA, the American Guppy Association. Most of the members in attendance were friends whom I knew well. I met Bill Sternke there for the first time, but all of the others I knew quite well because of my association with the many aquarium societies that were functioning at that time. Bill Woods, Frank Alger, Dr. John J. Rutkowski, Herb Axelrod, Bill Sternke, Ed Bueschel, Paul Hahnel, Larry Konig, Walt Kelly, Arnold Sweeney, all were heavy hitters in the guppy world at that time. Gene Wolfsheimer was the Vice President, assisting the President, Dr. John Rutkowski. One young fellow who was selected as a trustee, but not present, was Don Dewey, who later (1978) founded the aquarium magazine **Freshwater and Marine Aquarium**, and was its editor until his untimely death in 2000.

Photo of meeting at the Hotel New Yorker in an unsuccessful attempt to start a guppy society. 4th from left is Dr. John Rutkowski, then Herb Axelrod, Bill Sternke, Ed Bueschel (standing). The fellow obscuring part of Ed's arm is Paul Hahnel, the well-known guppy breeder. The AGA did eventually form as a national club. Photo by Gene Wolfsheimer.

This is Sam Dunton, the official photographer for the New York Zoological Society. Photo by Gene Wolfsheimer, 1957.

From left to right: Harry Yee, Rosario LaCorte, Dr. James Atz, Bill Harsell, Ross Socolof, and unknown person. Years later Ross and I could never figure out who this was. Photo taken by Gene Wolfshiemer in 1957.

On one of our first gatherings, we met for a social evening at the home of Aaron Dvoskin. His wife Shirley was the hostess, and presided over the refreshments. It was a really great gathering of many well-known aquarists: Aaron of course, Jim and John Maris, whose father founded the Maro Pump Company, Ed Buschele, who worked for Ross Socoloff, at the time the owner of General Aquatics in Brooklyn, Ross himself, Bill Harsell, Gene Wolfsheimer, Dennis Simonetti, myself, and Harry Yee, who owned Kandy's Pet Shop in Honolulu.

Taken in 1957 by Shirley Dvoskin, using Gene Wolfsheimer's camera. From left to right: Jim Maris, Ed Bueschel (who worked for Ross Socolof at General Aquatics in Brooklyn), Bill Harsell, Rosario LaCorte, Ross Socolof, Aaron Dvoskin, Gene Wolfsheimer, Dennis Simonetti, Harry Yee, and John Maris. Jim and John are brothers who, along with their father, manufactured the well-known for its time Marco Pump, which their father designed.

Harry Yee was a very outgoing and generous man. Upon his returning home to Hawaii he took it upon himself to send each one of us who attended that social gathering a box of goodies featuring products of Hawaii. Not too many years later, Harry died, much too young.

GCAS Happenings September

Last Month's Bowl Show Winners:

No bowl show last month.

Unofficial 2014 Bowl Show totals:

Mario Bengcion	16	Ruben Lugo	15	William Amely	5	Richard Waizman	7
Carlotti DeJager	1	Leslie Dick	1				

A warm welcome back to renewing GCAS members Michael Henderson and Peter H. Steiner!

A special welcome to new GCAS member Anthony (Tony) Kojalowicz!

Here are meeting times and locations of some aquarium societies in the Metropolitan New York area:

GREATER CITY AQUARIUM SOCIETY

Next Meeting: October 1, 2014
Speaker: Vinnie Ritchie
Event: *Lake Malawi Cichlids in a Community Tank*
Meets: Meets the first Wednesday of the month (except January & February) at 7:30pm:
Queens Botanical Garden
43-50 Main Street - Flushing, NY
Contact: Dan Radebaugh (718) 458-8437
Email: gcas@earthlink.net
Website: http://www.greatercity.org

BIG APPLE GUPPY CLUB

Meets: Last Tuesday each month (except Jan, Feb, July, and August) at 7:30-10:00pm.
Alley Pond Environmental Ctr.: 228-06 Northern Blvd.
Contact: Donald Curtin (718) 631-0538

BROOKLYN AQUARIUM SOCIETY

Next Meeting: September 12, 2014
Speaker: Greg Sulivan
Topic: *Starting A Saltwater Tank*
Meets: 2nd Friday of the month (except July and August) at 7:30pm:
NY Aquarium - Education Hall, Brooklyn, NY
Call: BAS Events Hotline: (718) 837-4455
Website: http://www.brooklynaquariumsociety.org

LONG ISLAND AQUARIUM SOCIETY

Next Meeting: September 19, 2014
Speaker: TBA
Topic: *TBA*
Meets: 3rd Fridays (except July and August) 8:00pm.
Room 120 in Endeavor Hall on theState University at Stony Brook Campus, Stony Brook, NY
Email: Margaret Peterson - president@liasonline.org
Website: http://liasonline.org/

EAST COAST GUPPY ASSOCIATION

Meets: 2nd Tuesday of each month at at 8:00 pm.
Alley Pond Environmental Ctr.: 228-06 Northern Blvd.
Contact: Gene Baudier (631) 345-6399

NASSAU COUNTY AQUARIUM SOCIETY

Next Meeting: September 9, 2014
Speaker: TBA
Topic: *TBA*
Meets: 2nd Tuesday of the month (except July and August) at 7:30 PM
Molloy College - Kellenberg Hall ~1000 Hempstead Ave - Rockville Centre, NY
Contact: Mike Foran (516) 798-6766
Website: http://www.ncasweb.org

NORTH JERSEY AQUARIUM SOCIETY

Next Meeting: September 18 2014, 7:45 PM
Speaker: Steve Edie
Topic: *Tank-ganyikan Cichlids*
Meets at: Quality Inn, 10 Polito Avenue • Lyndhurst, NJ
Contact: NJAS Hotline at (732) 332-1392
Email: tcoletti@obius.jnj.com
Website: http://www.njas.net/

NORWALK AQUARIUM SOCIETY

Next Meeting: September 18, 2014
Speaker: Tom Sands
Topic: *How to move your fish with you when you move*
Meets: 8:00 P.M. - 3rd Thursday of each month except for July & December at: Earthplace - the Nature Discovery Center - Westport, CT
Contact: Sal Silvestri
Call our toll free number (866) 219-4NAS
Email: salsilv44@yahoo.com
Website: http://norwalkas.org/

Open Wide!!

A series by "The Undergravel Reporter"

In spite of popular demand to the contrary, this humor and information column continues. As usual, it does NOT necessarily represent the opinions of the Editor, or of the Greater City Aquarium Society.

The scientific name *macrostoma* is derived from the Greek *makros* (meaning long or large), and *stoma* (meaning mouth). So, we can correctly infer that species such as *Betta macrostoma* (the spot-fin betta), or *Synodontis macrostoma* (a species of upside-down catfish) likely have proportionally large mouths.

But, have you ever seen a *Neoclinus blanchardi* (A.K.A. the sarcastic fringehead) in action? This foot-long marine fish makes its home in abandoned snail shells. Fringeheads are found in the Pacific, off the coast of North America, from San Francisco, California, to central Baja California. Their depth range is from 9.8 to 239.5 feet (3 to 73 metres).[1]

When it feels threatened, or when another sarcastic fringehead tries to move in too closely, fringeheads engage in what could loosely be described as "mouth wrestling" by expanding their jaws into nightmare-ish like features and pressing their distended mouths against each other, as if they were kissing. When so engaged, the fringehead's appearance changes from a fish so ugly that some might call it "cute," into something resembling a creature from a Hollywood monster or vampire movie (see the YouTube video)[2].

[1] http://en.wikipedia.org/wiki/Sarcastic_fringehead
[2] https://www.youtube.com/watch?v=BjexNXJYblQ

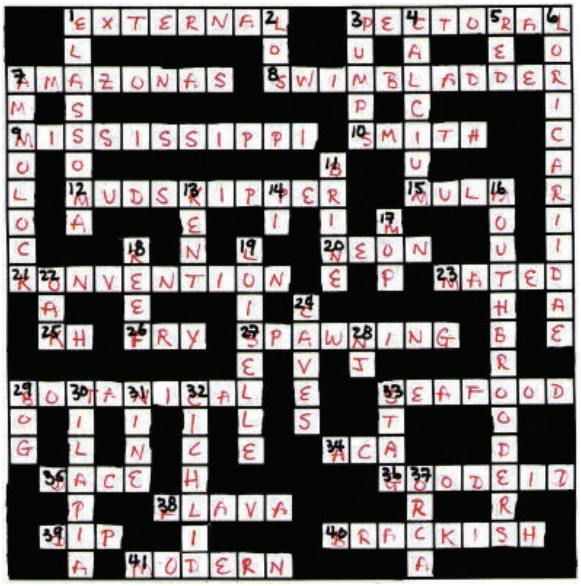
Fin Fun

Spelling Bee

Everyone is going back to school this week, including <u>you</u>. Each of these familiar, or not-so-familiar, fishes whose names begin with "**B**" are spelled once correctly and once incorrectly. Your task is to underline the CORRECT spelling. Don't be afraid to guess, as you won't be graded on the first day of school!

BUTTERFISCH SCAT	**BUTTERFISH SCAT**
BARBEROS CHARACIN	**BARBERRIS CHARACIN**
BOWDONI BARB	**BAUDONI BARB**
BADUS BADUS	**BADIS BADIS**
BALUNGA BETTA	**BALOONGA BETTA**
BULLSEYE CTENOPOMA	**BULLSEYE TENOPOMMA**
BERDER KILLIFISH	**BURDUR KILLIFISH**
BRYCIN BREVIS	**BRAYCIM BREVIS**
BRICHARD'S SYNODONTIS	**BRITCHARD'S SYNODONTIS**
BARTINS MOUTHBROODER	**BURTONS MOUTHBROODER**

Answer to last month's puzzle: **Cross-fish Puzzle**



Norwalk Aquarium Society

48th ANNUAL

TROPICAL FISH SHOW

Sponsored by the

Earthplace, Nature Discovery Center

Saturday, September 27th, 2014 (9:00 a.m. to 4:00 p.m.)

Special Feature

For those of you that have a creative/artistic mind, this is your chance to show us your talent. This year we will have a new specialty class…..

"Planted Tanks"

Sponsored by CAPE (Connecticut Aquarium Plant Enthusiasts).

&

Auction

NAS Annual Auction

Sunday, September 28th, 2014

Auction Starts at 12:00 p.m.

At

Earthplace, Nature Discovery Center

Westport, Connecticut

For more information visit websites: www.norwalkas.org *or* Call Barry at (203) -363-9808 or contact Sal at salsilv44@yahoo.com


Greater City Aquarium Society
Established 1922