

modern AQUARIUM



November 2019
volume XXVI
number 9

Greater City Aquarium Society - New York

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Series III Vol. XXVI, No. 9 November, 2019

ON THE COVER

Our cover photo this month is from our GCAS Fishy Friends Facebook page, showing a group of young firemouth cichlids (*Thorichthys meeki*), long a favorite species among fishkeepers.

Photo by Lonnie Goldman

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From the Editor

by Dan Radebaugh

The first thing some of you may notice about this month's issue is that our Cartoon Caption Contest has a little different look. Our cartoonist extraordinaire, Elliot Oshins, has been having some health issues lately, and fighting his way back toward vitality is certainly a higher priority than thinking up another mind-bending cartoon. However, you will also notice that we nevertheless do have a cartoon contest this month. Long-time GCAS member (and winner of several caption awards in the past) Denver Lettman has stepped up with a cartoon entry of his own to help us out. See how you do with this one! Meanwhile, let's all wish Elliot a full and speedy recovery.

Steve Sica presents us this month with another in his series of beautiful underwater photo essays. This time though, instead of just showing us the stunning scenery, Steve shows us some of the changes happening in the waters surrounding the Florida Keys over the past several years. See "Trumped by Climate?" on page 9.

Jules Birnbaum has written several informative articles about the goings-on in his fishroom. In this issue though, Jules tells us about a suburb of that fishroom, which could easily be dubbed a 'fish cave.' Jules surprises me a bit though, when he reveals that he may from time to time actually fall asleep in this comfy refuge. I just can't *imagine* napping when there are fish *and* television to be watched! Well, maybe there have been one or two times...

On page 16 Joe Ferdenzi treats us to a photographic memoir of his visit to The Aquatic Experience. Don't miss this!

Our exchange article this month is by Karen Murray, of the Kitchener-Waterloo Aquarium Society (in Canada). The subject is botanicals, and it is entitled "Welcome to the Dark Side." Thank you, Darth, er, Karen!



By the way, I have noticed that Karen is a regular contributor to her club's publication, **Fins & Tales**. We at GCAS also have a tradition of distaff authors, one of the most productive of whom has been Sue Priest, who coincidentally has an article in this issue. Ever the troublemaker, Sue posits that we could arguably call ourselves the Greater City *Conservation* Society. To see why, check out her thesis on page 21.

Not to be outdone, the Undergravel Reporter reminds us of the role that Greater City has played in the origin and development of the C.A.R.E.S. program. This is a must-read for all members!

We also have an MA Classics article this month. This one, by Bernard Harrington, is entitled "How to Write an Award-Winning Article." Bernie produced his share of those for **Modern Aquarium**, so I'd guess that it contains some good advice. By the way, we only have one more issue left this year, so if you've been thinking about writing an article, now would be a great time to do it!

Remember – Our annual Holiday and Awards Banquet is next month! Please see or contact Marsha to reserve your seats if you have not already done so. We had a very full house last year, so reservations are likely to be important! Hope to see you there!





GCAS Programs

2019

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 accompany each meeting.

March 6	Gary Lange <i>Cruising Papua - Following New Roads and Exploring "The Bird's Head"</i>
April 3	Mark Denaro <i>Cichlids I Hate</i>
May 1	Harry Faustmann <i>Live Foods</i>
June 6 (Thursday)	Breeders' Forum <i>Moderated by Joseph Ferdenzi</i>
July 3	Joseph Ferdenzi <i>The Story of Endler's Livebearer</i>
August 7	A Night at the Auction
September 4	Tom Keegan <i>Spawning Various Types of Tropical Fish</i>
October 2	Jim Cumming <i>Madagascan and Indian Cichlids: 'The Jurassic Connection'</i>
November 6	Greg Steeves <i>Creatures of the Comal</i>
December 4	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. Copyright 2019 by the Greater City Aquarium Society Inc., a not-for-profit New York State corporation. All rights reserved. Not-for-profit aquarium societies are hereby granted permission to reproduce articles and illustrations from this publication, **unless the article indicates that the copyrights have been retained by the author**, and provided reprints indicate source, and that two copies of the publication are sent to the Exchange Editor of this magazine. For online-only publications, copies may be sent via email to gcas@earthlink.net. Any other reproduction or commercial use of the material in this publication is prohibited without prior express written permission.

The Greater City Aquarium Society meets every month except January and February. Members receive notice of meetings in the mail or by email. For more information, contact: Dan Radebaugh at (718) 458-8437, email gcas@earthlink.net, or fax at (877) 299-0522. For more information about our club or to see previous issues of *Modern Aquarium*, you can also go to our Internet Home Page at <http://www.greatercity.net>, <http://www.greatercity.org>, or <http://www.greatercity.com>.

President's Message

Staying Active with Back Pain: Easier Said than Done

by Horst Gerber

Raking leaves in the fall is a great way to get outside on a crisp sunny day and get your body moving! But then you wake up the next morning with crippling back pain. That was ten weeks ago, and I'm still trying to figure out exactly what movement I made that brought all this on. Water changes that day? Nothing strenuous; carrying a few buckets, but didn't expect to kick one! Used hoses—no heavy lifting. Nevertheless, the pain is excruciating! Time to see the doc! MRI points to sciatic nerve. Six shots in the spinal area accomplish nothing; the culprit is outside the spine, where the nerves go through a muscle. After ten weeks, numerous injections and acupuncture finally begin to bring the pain under control (and of course let's not forget those opioids!).



Naturally my fishroom suffered too. Between the crutches, the stairs, the pain, and the drugs, something has to give. Thanks to the help of friends and the slow improvement of my condition, ninety per cent of my fishroom inhabitants survived, but that sciatic nerve really messed up my life for the past twelve weeks! I had to cancel my cruise in the Mediterranean, a gem and mineral show in Springfield, MO that I like to go to, and my yearly vacation in New Hampshire (No fish; just mountains with all the beautiful colors of fall. You might see a trout in a stream or a black bear on the ski slope.). So now I'm just sitting here in my living room with my sciatica, reading the Vermont Country Store catalogue and thinking I should be in New Hampshire. They say time flies when you're having fun!

It looks like I'm going to miss my fourth GCAS meeting. Our refreshments, coffee, cake, and soda, are so great at break time! It just came to mind that if we held our meeting in Vermont we would probably have apple cider doughnuts! They're made by replacing the milk in the batter with freshly pressed apple cider. A different treat—sweeter than regular doughnuts. I don't know if we can get them in New York.

Lately I've been having some good days, so I guess I'm getting better. If this keeps up I'm going to make the next meeting! My heartfelt thanks to everyone for the thoughtful and much-appreciated get-well card!

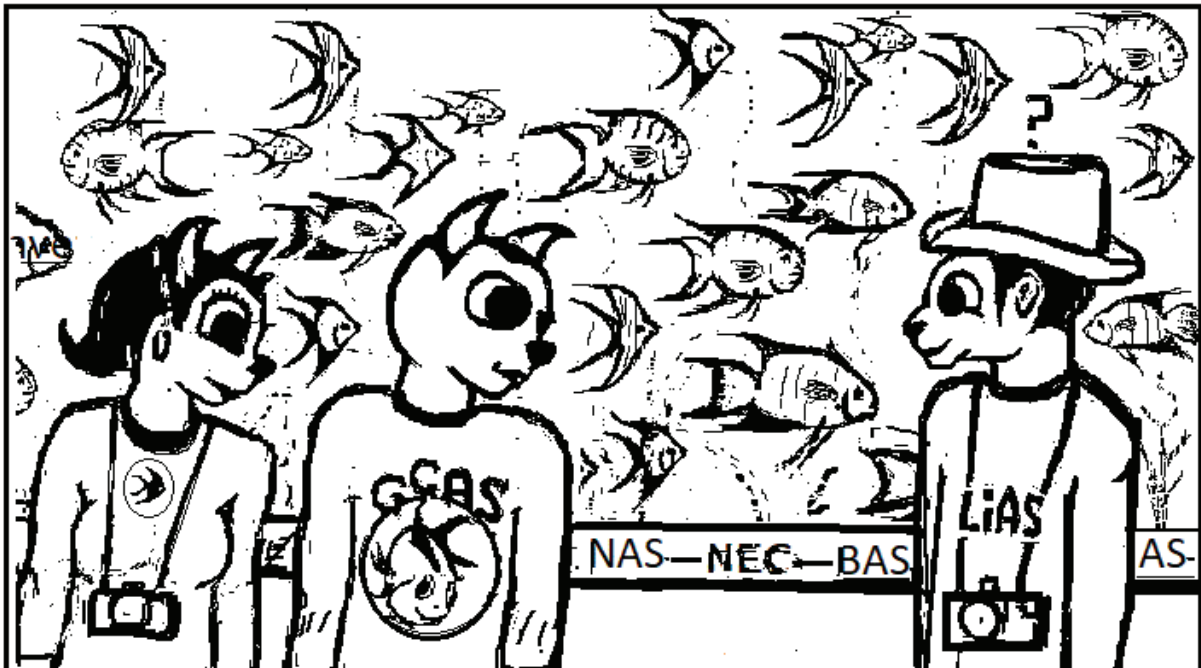
Hope to see you next month!

Horst



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:

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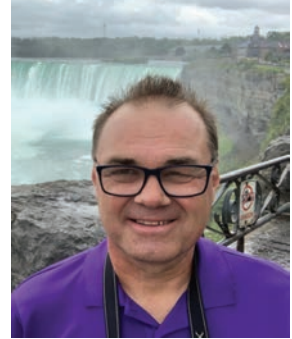
Tonight's Speaker:

Greg Steeves, on “Creatures of the Comal”

I have been a fish nerd all my life, and whenever I get the chance to jump into a new body of water I generally will. I first visited the Comal River 20 years ago, and in the many times snorkeling this wonderland I have documented the many wonderful sights I have seen. This presentation shows my favorite waterway, and I hope the passion I have for this area comes through in the presentation.

The Comal River begins as an artesian spring coming up through the ground of the Edwards Aquifer. It flows through the small Texas city of New Braunfels and merges with the Guadalupe River, eventually pouring into the Gulf of Mexico. An incredible array of plants and animals, both terrestrial and aquatic, make the region an aquarist's dream! From cichlids, tetras, and killifish to sunfish, catfish, and gar, the Comal River, one of the shortest rivers in the world at just over two miles, is an ecosystem like no other. The large strands of sagittaria, vallisneria, and cabomba wave in the current while the sun glitters through the surface causing the red ludwigia to seemingly dance. This must be seen to be truly appreciated.

It will be my pleasure to take you on my journey and present to you, the Creatures of the Comal.



Greg





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Trumped By Climate?

Story and Photos by Stephen Sica

This photo was taken between October 25 to 29, 2007. A foureye butterflyfish, *Chaetodon capistratus*, searches for food on the top of the brain coral. The remainder of the coral is in similar good condition.



Having been a certified diver for more than half a century, I hereby present myself as an “amateur expert,” or better yet, an “expert amateur” for the sake of only this article. The premise of my essay is that “seeing is believing.” Let me clarify this premise. If you see what you believe you are seeing, then you are seeing it. I cannot explain myself any more clearly. Please allow me to offer a few of my personal observations about the stunning world beneath the surface of the oceans. My definition of oceans may also include lakes, rivers, bays, seas, and other bodies of water.

When I was younger my experiences included many of these bodies of water, but recently I have been specializing in the oceans. At present I prefer the oceans with warm water temperatures. Cold water is not so appealing. When I was young I would dive in Reynolds Channel in Far Rockaway, New York through November. We would ride the current along the beach heading out of the channel toward the open sea. Then we would make an abrupt right turn and swim to the beach underwater, rest, and walk back to the car. You may not believe me, but that was fun when I was seventeen!

As you probably are aware, the Pacific Ocean off the coast of southern California is quite cold. Many years ago Donna and I were diving off Catalina Island. I was having a great time observing and photographing (on real film) kelp, bright orange Garibaldi fish, and exotic horn sharks that spend their lives within a small territory. Donna became so cold that we had to shorten the dive, much to my dismay. On another occasion, she wanted to dive off San Diego, assuming these southern waters would be warmer. I had warned her many times that the ocean here was very cold, even during the summer. Ultimately, one summer day in July, the local dive community sank a Canadian warship—a destroyer, just off the beach as a new dive site. We had arranged a trip to San Diego to sightsee and to dive the ship about three days after the scheduled sinking, but the destroyer capsized and sank on its side prematurely, so we dove it the day after it sank! The deck of the ship was at sixty feet, but the water was in the sixties. It was freezing! After a half hour we surfaced. Donna had a case of the chills because she was so cold. It was awful!

There are enough news and internet reports, as well as television shows and specials, about our



This photo was taken on October 3, 2009, two years after my photo of the top of the coral. The fish near Donna are grunts in the Haemulon family. The coral boulder still seems to be in good condition.



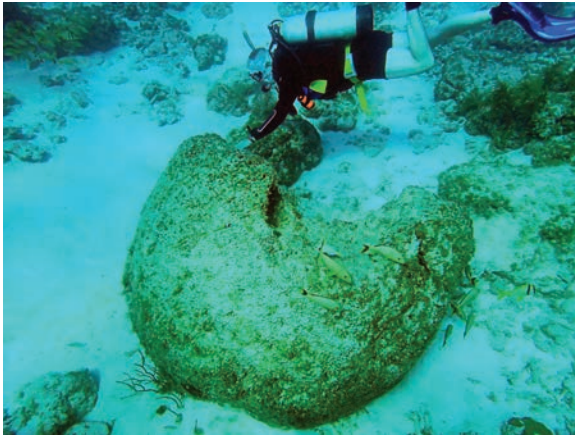
I took this photograph on October 29, 2010. This large brain coral, about seven feet tall, lies a few feet from its resident coral reef, to the left from this view. Donna hovers above the coral for a size perspective. This coral rests at a depth of about thirty feet at a dive site called "Snapper Ledge." When this photo was taken a green moray eel resided in a crevice at the coral's base



Schooling fish are the trademark of "Snapper Ledge." The two photos above were taken on November 4, 2011. Notice the whitening near the top of the brain boulder on the right.



These three photos (left and above) were taken on November 11, 2016. The brain coral remains in good condition, although there is a small amount of deterioration near the top and a few smaller places that are not visible in these photos. The school of grunts still enjoys swimming around the coral.



I last photographed the brain coral on October 27, 2018. Two years after the previous photo, the coral has been destroyed and knocked over. Local divers say that Hurricane Irma, which ravaged the Keys in September of 2017, toppled and destroyed the coral. Many hurricanes have visited this coral during its lifetime with much less effect. Did the warming of the oceans precipitate a hurricane strong and large enough to destroy it? It appears that bleaching was bypassed for total destruction. What awaits us in the future?

changing climate and how it is affecting the oceans. All of us have read or seen on television coral bleaching events. The past twenty to thirty years have been particularly difficult for our natural world. Coping with these events is challenging because there is no easy solution. Resolution can take decades and possibly centuries. Who knows? Our current leadership seems to have their heads buried in the sand.

When corals become stressed they begin to bleach. An increase in water temperature will stress almost every living coral on this planet. During the bleaching process corals lose their primary food source, which is brown algae. They begin to lose their color, and the algae become toxic when water temperatures increase. As a result, corals' algae begin to starve and become more susceptible to disease. The result is that they begin to die. Every tropical ocean has been affected. This is a disastrous effect of climate change. I'm sure there are many more; just ask any bee, if you can find one.

I'm no scientist, so you can ask legitimate experts for additional examples, but I do believe what I see. I read in one of my dive magazines a couple of years ago that "fewer than one percent of people will ever put on a mask and snorkel and see under the ocean firsthand." One might question whether it is truly important to save the oceans. A stupid question, no doubt, but I ask it because there appears to be no shortage of stupid people today. If they are just pretending, that may be worse!

Donna and I have been diving in the Florida Keys for about twenty-five years. For the past ten or so, we have been diving in Key Largo almost exclusively, with an occasional stop in Key West. A popular dive site in Key Largo has been named "Snapper Ledge." It is mostly a shallow reef and its surrounding sandy



seafloor, with a maximum depth of thirty feet. The reef is noteworthy for schools of small fish, such as grunts and snappers. It is also home to a variety of trumpetfish. Aside from the vast number of small schooling fish, I think that the most magnificent sight is a large brain coral that some people refer to as a brain boulder. Taller than a person, it sits on the sandy bottom a few feet from the reef. A large green moray eel used to live in a notch at its base. Any time that we dove there, I would take at least one photograph. I used to photograph the moray eel, but it has been gone for several years.

When I hear instances of coral bleaching, I think about Snapper Ledge's coral boulder. I probably have about ten years' worth of photos. I did not intend to make this large coral a quasi-scientific study, or any kind of a study. Since we only dive the site occasionally, I do not have an annual record of the coral; what I do have are a few photos that I have taken of it through the years. One result is that it does tend to track the life of the coral in a broad manner. These photos are not close-ups or sectional pictures to map the advance or decline of this coral. They were strictly taken by me as a hobbyist and amateur photographer.

I have listed the date or closely approximate date when I took each photo for comparison purposes only. I have made very few remarks, if any, in a photo's caption because what I think that I see, you may not, or I may be seeing something that I am not reliably seeing. Images can be deceiving at times. Does this mean that my original premise is false? You can look at my photographs and reach your own conclusions.



WELCOME TO THE DARK SIDE

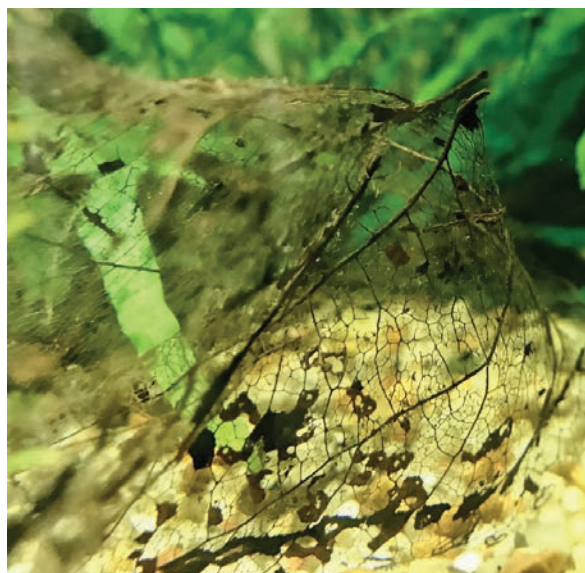
by Karen Murray

Reprinted from *Fins & Tales* – April, 2019 – Volume 58, Issue 04; The Kitchener Waterloo Aquarium Society.

It's brown, it's dark and somewhat mysterious. It goes boldly against the standard aquarium etiquette. But if you want something even closer to nature than a planted aquarium, then blackwater tanks are for you.

Botanicals are dried leaves, coconut, peat, sphagnum and tropical seed pods. Not all leaves and such are suitable for aquariums, so research before adding anything you have collected. I recommend only buying from aquarium retailers, as any pods you get from decor or plant nurseries may be sprayed with something. Many betta owners even use organic roiboos tea to tint their tanks. I haven't tried that yet, but I am going to!

You can research the natural habitat of the fish you are keeping. Smaller ponds, slower streams and any water with plants and trees surrounding it will often dictate if your fish are suited to blackwater or botanical matter. In nature there are often many leaves and branches in many of these waters. If we were really purists about a biotope we would be putting old shoes and tin cans in our tanks too!



I allow my leaves to decompose, but I don't allow a lot of mulm from them to build up. I do light substrate vacuuming. Someday I will be brave and have a deep mulm bed.



You don't have to adhere to a strict biotope guideline. Many fish will do well in a mixed environment, but some fish are not suited to tannins.

Bear in mind that everything you put in your tank has the potential to impact your water chemistry. Wood, rocks, substrate, plants and botanicals can all affect your water chemistry, so prepare well and add your botanicals slowly. Some people boil before adding, some people just rinse them in boiling water. I would do one of these two to make sure they are clear

of contaminants. I even rinse the oak leaves I collect from my yard where I know no pesticides have been used. A botanical tank needs attentive housekeeping just as a planted or rift lake tank would.

As your botanicals decompose, they often impart a brownish tint to the water, and lower the pH by the release of substances known as tannins. Tannins can have anti-fungal properties, which in turn aid in keeping your fish healthy, help in the hatch rate of your eggs, and improving the overall health of the tank.

Just because your water is brown doesn't mean your water is soft and pH low, especially if you are starting with a high TDS and pH. People have found botanicals either don't lower the pH much, or it does so only temporarily. Similarly, just because you are using botanicals doesn't mean your water will be tinted like tea. Boiling takes some of the tannins out, but your botanicals will still be beneficial in your aquarium. Botanicals can be added to soft or hard water, just be aware that soft water doesn't buffer as well as hard water, and if you add too many botanicals at once you can tip the scale and have a pH crash.

Add your botanicals slowly. Over a few days you will see your water tinting. If your water is not tinting it is likely because of your filtration. Charcoal, as well as many plants, may filter out the tannins.

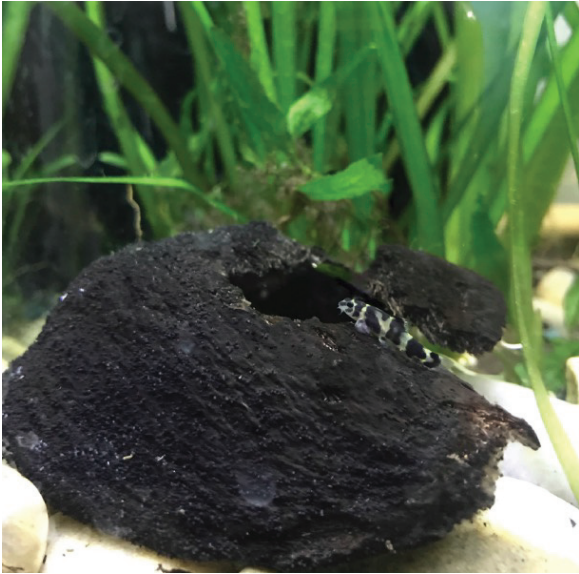
For smaller tanks I usually add one leaf or item at each water change. In larger tanks you can add a

Note: If you want leaf litter but NOT the tint, simply boil and then soak your botanicals long enough to remove the tint, then add to the tank.

few more. Watch the tank, and determine the amount of tint you want by going slowly.

After a few weeks you may get 'biofilm,' a white fuzzy coating, that easily comes off with a wipe (or you can leave it). Some fish will eat it, and for the most part it leaves on its own. It is not harmful to your fish, but if you don't like how it looks you can remove it easily.

In a few months, all your botanicals should have settled, and some might have completely decomposed. Now you can decide whether you want to leave the decomposing matter. You will have to assess how



I have some botanicals in my 30 gallon long. There are so many plants that I don't get tannin. I don't *want* tannins in this tank because the fish I have like fast moving waters and bright light. But the botanicals are great for feeding, hiding and entertaining fry.

Weapons of Darkness



Starting at 12 o'clock you have almond leaves, oak leaf with an almond pod, peat moss, banana leaves and alder cones. I will show you many more botanicals but this sample is easily attainable and inexpensive.

Coco crowns (right) from 520 After Dark (520Buce) are my favorite botanical. They are about 2" in size and last a long time. The company is located in Ontario, and has lots of botanicals listed on their website.



Lotus pods are really cool looking in a tank, but they take a little while to sink. I sometimes shove a few small rocks into the holes. They will degrade and leave a fine brown bed in the tank! You can also buy botanicals from Maginarium in Montreal:

<https://www.maginarium.com/collections/botanicals/products/lotus-seed-pods>



much is beneficial for your aquarium inhabitants. If you are used to a pristine tank and that is the look you like, simply vacuum up the decomposed material. But like compost, this material has some benefits of its own. Fish can spawn in it, and fry can hide in it and feed on the microorganisms that live in it.

You can pick your own alder cones and oak leaves from an uncontaminated source, and almond and banana leaves are readily available in specialty stores or on eBay. If you don't mind waiting, the price is very good!



Your tannin tinted botanical tank can have wood, stones, and substrate, just as any other tank. If you want the tinting to stay you can have fewer plants or no charcoal filter. In this tank I have one small Java fern and Java and moss, with frog bit floating. My *A. striatum* are spawning in this tank, and the fry are hiding in the plants and botanicals. There is a little buildup of mulm, and I leave at least half of it when I vacuum the tank.



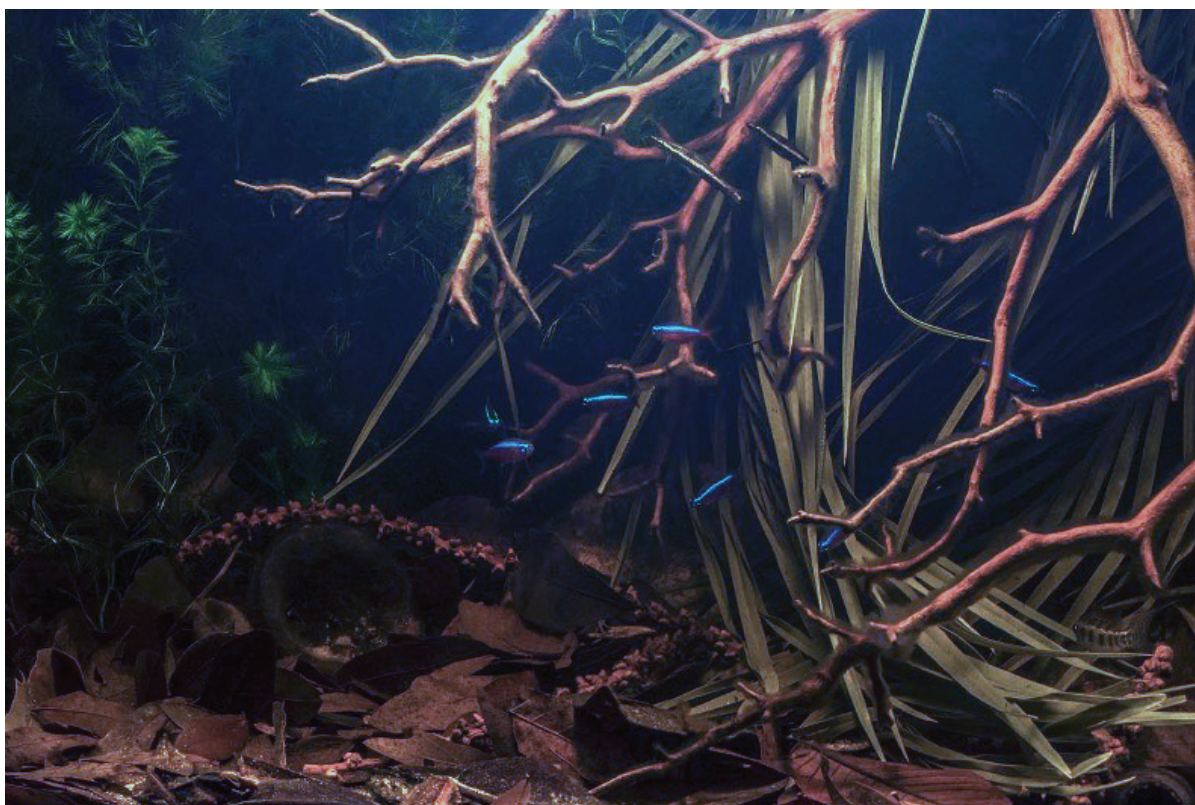
The frogbit is a little overgrown here, but there are fry in there, so I am letting it be thick for the moment. The substrate is a fine light sand, and I have the floor covered in pods, cones and leaves. There is a little java moss and a small fern.

You may get many visitors asking you why your tank is so dirty. They don't see how clear the water is even though it is tinted like tea. They don't see the beauty of leaf litter on the bottom of the tank, or a pair of blue eyes peering at you from the cover of an oak leaf.

But *you* see the rich colour of the water and the golden brown nutrient rich bed. You see your fish happily darting and picking through the particles of the fallen pods and branches.

Really though, what you see is a little piece of aquatic nature that you sliced out and created in your home. Your mind wanders; a little pair of eyes stop and look at you momentarily before it draws into it's exploration of an imaginary stream.

Those other people (the non-fish people), they don't know what they are looking at. But you do!



A classic blackwater botanical biotope aquarium. To my eyes, the colors of the fish are enhanced by the tinted water, and I love the way the light glints off the neon glow of the cardinal tetras. You can read about the build of this tank here: just click and go!

<https://www.reef2rainforest.com/2017/06/06/building-a-biotope-a-step-by-step-rio-negro-aquarium/>

IT TAKES A VILLAGE

Story and Photos by Jules Birnbaum

It's an old expression, but to me it means that it takes many to make life livable for one. Every day I sit in my upstairs den, which is really my man cave. In this room there is a sliding door leading to a deck, where in summer I keep my house plants and sometimes a 60 gallon pot where I breed whatever fish is of current interest to me.

This man cave houses my reclining chair, lamp, desk, and four fish tanks. The room has two skylights, which give me a nice bright feeling and indirect lighting for the tanks. I have a large TV, a MacBook Pro, an iPad and an iPhone. Here I keep track of our finances and preparation of our tax returns (Turbo Tax). This room is also where I prepare our GCAS monthly Treasurer's report.

Next to the TV is a 55 gallon tank with a colony of 21 adult *Amphilophus robertsoni*. I started with approximately four juveniles that I acquired from Rusty Wessel some years ago. *A. robertsoni* cichlids are found in Central America. Their common name is ‘false firemouth’ or ‘turquoise cichlid.’ They have no special water requirements and eat anything. If they are not eating it is usually because the water quality has declined, in which case a large water change is a must. I keep their temperature at 78 degrees (F) using a quality heater. I’ve found no trouble breeding the fish by just letting them do their thing, laying eggs on a lava rock, and taking care of their fry. Through the years, a few fry have survived and added to the colony. I’ve been observing this tank daily as I watch the news, Mets, Yankees, football Giants, Islanders, and Knicks.

Over the past few years the population of the tank has increased as pairs formed, staking out breeding spots. With more fish in the tank, aggression became less and less. There are just too many fish for a bully to cope with. Each fish is now anywhere from 5 to 6 inches in length. With 21 adult fish in a 55 gallon tank I am violating every basic rule of biomass. I cope with this by feeding them sparingly, just once a day with a pellet food, and two days a week with frozen bloodworms. I use two filters, an Eheim canister which is cleaned four times a year, and an Emperor that has home-made permanent sponges in place of cartridges. I clean the sponges each week using tank water. The water change is 80% each week, using a pump with a hose to the sink. I add

a powdered water conditioner from JEHMCO as the tank is refilled. While the water is being pumped out I use a Marineland internal polishing filter to stir up the bottom between the lava rocks. There is a thin layer of substrate that the cichlids move around as they sift through the sand to extract bits of food. There are no plants, which these cichlids have in the past uprooted and destroyed. The lighting is a 48" Current LED.

My (all LED) lighting is controlled by timers, and since there are no plants, is on for just a few hours a day.

The fish have stopped spawning, but Rusty Wessel, who visited my fish room last year, said they will spawn again if the colony is decreased. What is in the *A. robertsoni* brain or genes that tells them that bringing excess fish into the world is dangerous to the colony?

So many questions science still has to answer, both for fish and for humans.

If you have not tried keeping and breeding cichlids you are missing one of the real treats of our hobby. If you have only small tanks, there are so many dwarf species available, whose breeding habits and parenting are fascinating.

While writing this article I'm watching 24 hour news, switching back and forth between CNBC, CNN, and Fox. It is mostly commentary, not 24-hour news. The sound of flowing water in my den's four tanks is soothing, while the so-called news is not. The noise of flowing water sometimes puts me to sleep for a short "power nap" (old-timer's nap, really).



Zzzzzzzzzzzzzz.



Scenes from The Aquatic Experience 2019

by Joseph Ferdenzi

The author attended this event, which was held the weekend of October 12-13 at the Meadowlands Exposition Center in Secaucus, New Jersey.



One of the many beautifully aquascaped tanks on display.



Joe sharing a moment with Doug Estes of the long-time favorite Estes Company, which specializes in aquarium gravel and stones.



Barbara Romeo (left) and Nancy Villars-Hallgriing staffing the NEC booth.



The NEC installation included a map of the northeast, showing the locations of all its member clubs.



With Carlotta Gandini, daughter of the founder of the Italian aquarium company Elos, and employee Samuele pointing out that I'm a fellow Italian.



Another beautiful display tank.



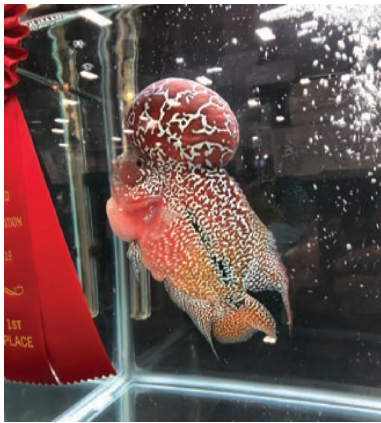
Joe with long-time friend Alex Brooks of the renowned San Francisco Bay Brand Company.



Among other things, the Fluval company sponsored an aquascaping competition.



Joe with another longtime friend, Karen Randall, a nationally recognized aquarium plant expert and one of the founders of the Aquatic Gardeners Association.



A Flowerhorn Cichlid with a nuchal hump that had to be seen to be believed was entered in the American Cichlid Association show at the event.



A beautiful reproduction of a Victorian era fishbowl was part of the Zoo Med display.



An interestingly colored Red Devil was also entered in the ACA show.



There were many beautiful bettas on display, and for sale as well.



With the crew at the impressive Zoo Med installation which featured a wide variety of tanks and other products.



Fishy Friends' Photos

by Greater City Aquarium Society Fishy Friends

Below are photo submissions to our “Fishy Friends” Facebook group. I’ve left the subjects unnamed, but not the photographer. If you see a shot you like, and want more info, ask the photographer about it! I’m sure he or she will be delighted to tell you!



How To Write An Award-Winning Article

by BERNARD HARRIGAN

I've noticed that almost every issue of Greater City's magazine, Modern Aquarium, has a plea going out to the membership to write articles. Personally, I think that begging doesn't work. If you want someone to do something, show them that it's to their benefit to do it, and then make it simple for them to do.

Perhaps, up to this point, you never thought of writing for the club, and are asking yourself, "Why should I?" The reasons are many. It will increase your knowledge as a hobbyist. You will look more deeply into, and question, things you have always taken for granted. You will learn things in your research that you never knew before. Even if you don't use the information in the article, you will still learn it. The more you know, the better aquarist you'll be. Plus, you'll be sharing your knowledge with other members, thereby giving back to the club.

Don't think that you don't know enough to write. There are always people who know less than you. Even if you're a beginner, you might have an insight that no one else has. Beginner articles help our hobby to grow. And, finally, a funny thing will happen once your article is written and published. You will be proud of what you were able to do.

Modern Aquarium wins a lot of awards. Just look at the number of FAAS (Federation of American Aquarium Societies) and NEC (North East Council of Aquarium Societies) awards bestowed on the Greater City Aquarium Society. Maybe you've wondered how to write an article that is so good it wins an award. Maybe you want to get in on the action, but you're not sure how to start. Maybe you like the way our Editor, Al

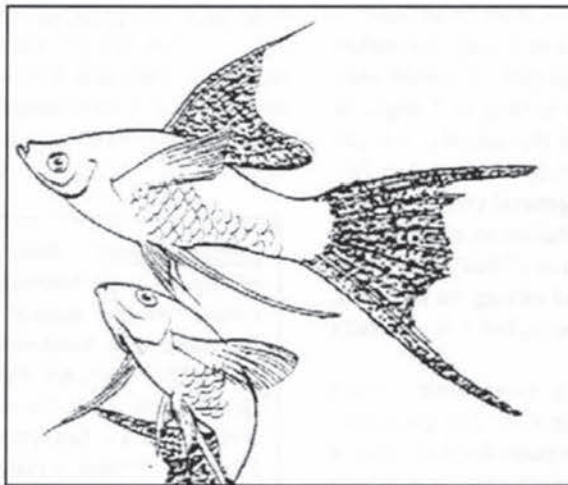
Priest, smiles, and you want to see him smile more often, so you'll help him out with an article for our publication. I guarantee that if you even mention to Al that you're thinking of writing for Modern Aquarium, you'll see him smile.

Now for the "how-to-do-it" part. The first, and some say the hardest, step in writing an article is finding something to write about. But this is not as hard as you might think. You could write about your favorite fish. Possibly, your favorite fish is a species of swordtail, or even a whole genus. It could be a saltwater fish, or an invertebrate, or a plant. It could be about how to

aquascape your tank, or how to do something for your fish (like making a spawning mop, cutting glass, rewiring your tank hood, or how you raise earthworms for your Oscars). Maybe you went on a fish collecting expedition to the Jersey Pine Barrens, visited a tropical fish wholesaler, or a fish farm. Perhaps you attended another club's meeting or show, or met someone who specializes in the hobby — like Jack Wattley, Ginny Eckstein, or Herbert Axelrod. Or,

maybe something funny crossed your mind that relates to the hobby. You could even do a drawing, or just take a picture. (Of course, for those last two, you might actually need some talent!) To write an article you don't need much. I'm living proof of that.

Now that you have a topic, you should take notes when something happens. Let's say your fish just spawned. On what day and at what time did it happen? How were the fish behaving? Where in the tank are the eggs? How many eggs were there? Or, maybe you're visiting another club. What's the President's name? Was it hard to find their meeting place? Who was the guest



Are Swordtails your favorite fish? You can write about them, or draw them.

Drawing by the author

Reprinted from *Modern Aquarium* – June 2003 Volume X Issue 6; Greater City Aquarium Society.

speaker? What impression did the club leave you with? Did anyone in the club stand out? What was their publication like? These are just some of the questions you can ask — and eventually answer — with your notes. Always make notes. If you leave it to memory, important information will be lost. When, where, why, how, who? These are the words you should be thinking about when you're trying to capture the information.

Next, brainstorm all the ideas you want to include in your article. Make a list of these ideas. Take the list and organize it into topics and subtopics. Then, make an outline. In this article, one of the topics is "taking notes." The subtopics are "spawning fish," and "visiting another club." As you can see, your topics will generally end up being paragraphs, and your subtopics will be the sentences. Some topics will be too big for just one paragraph, and you will have to devote a paragraph, or even more, to each subtopic.

If you think your topic is too small, or that you don't have enough of them, use your reference books to fill them out. You don't need to use everything in the books, but you might come across something interesting that you want to include.

Organize the topics in a way that makes sense. It might be a timeline (which would work for breeding fish, or visiting a club), or it might be in an instructional order (like this article). It might be the standard order that hobbyists use when they are talking about a fish in general (when it came into the hobby, where it is native to, the different types of that fish, a description of that fish, how to keep it, how to breed it, and raising its fry, etc.). This order isn't written in stone, but it is generally followed.

Your next step is a rough draft. Don't worry about spelling or grammar. Just get it onto paper. It's best to use a computer for this, since it will save you a lot of re-writing time. Keep your reference books handy, to look up things you don't know. For example, the Latin name of our old friend, the common swordtail (*Xiphophorus helleri*), or where it originated (Mexico).

Once I have done my rough draft, I use a little trick. I put it away for a day or so. Later, when I look at it again, I'll be looking with "fresh eyes." I see things I didn't notice before. This is when I fine tune it, and tighten up my writing. I might even re-arrange the whole thing so that it makes more sense.

My next trick is to give it to someone else to read. This person is someone who isn't a hobbyist. I figure if that person understands the article, I've done a good job. My reader is also proofreading my work. Proofing is a never-ending job.

Finally, I make the last of my changes, and turn in my completed article to Al, either by email, in person, or by snail mail. Then, Al and his wonderful staff of elves work their magic. The grammar and spelling will be fixed, if needed. The current Latin name will be checked. (Latin names can change faster than guppies can spawn!) Al typesets it and formats it, and then turns it over to Jason Kerner, who has it printed and bound. Then, Al hands it out at the meeting, with his lovely wife, Sue, at his side.

Al also submits original articles to FAAS and NEC for award consideration, and he even hands out Author Awards of his own at the Holiday Party. So you see, there are a lot of ways your article could win awards. A few of our articles have even been published in national magazines like Tropical Fish Hobbyist, Aquarium Fish Magazine, and Freshwater And Marine Aquarium.

Now that you know why writing an article is a good idea, and how to do it, the only thing stopping you from writing an article is you. So, put your words down on paper, and wait for the awards to roll in.

Editor's note: Bernie Harrigan is a multiple award-winning author and artist. At last month's meeting, GCAS President, Joe Ferdenzi, announced that, in the 2001 FAAS Publication awards, Bernie won First Place for "Best Marine Article on an Invertebrate" and Third Place for "Best Article on a Genus of Fish" (both for "Tridacna Clams," see Modern Aquarium, November 2001), and Third Place award for "Best Original Artwork" for his drawing of an Iridescent Shark (see the illustration in Modern Aquarium November 2001, in the "Fun Fish" article). Elsewhere in this issue, you will see that Bernie won a Third Place FAAS award for his humorous "How To Kick Fisholohism" (October 2002). His artistic contributions have also enhanced the articles of many other members.



“The Greater City **Conservation** Society”

By Sue Priest

Raise your hand if you know the “official” name of the Bronx Zoo. Hmm. Jim’s hand was the first one up, and in the back I see Al’s (the one that’s married to me). I see a couple more, and I won’t consider it to be cheating if you pull out your Zoo membership card to refresh your memory. The correct answer is “The Wildlife **Conservation** Society.”

Definition of conservation: “a careful preservation and protection of something, especially planned management of a **natural resource**, to prevent exploitation, destruction, or neglect.” Now I’m challenging you to come up with your own definition of a natural resource. I’m still working on mine, but I will come back to you with it later.

You will be glad to know that I am finally getting to the point I want to make, which is that each and every one of us attending this meeting is a conservationist. Whatever brought you here, whatever your contribution, however humble, defines you as a member of this group. What group might that be? Well, for the purpose of this one brief article, I am renaming Greater City as “The Greater City **Conservation** Society.” Wear it proudly!

Most of us are keeping fresh and/or marine tropical fishes. Some of us just love to look at and learn about tropical fishes. Some of us are hoping to win the door prize, which is usually an interesting and informative book, and others of us have their eye on that large container of fish food on the raffle table. Conversation with fellow members can’t be overlooked as a valuable resource. Then there is the

auction, and the Vienna Fingers on the snack table. Last but not least, and at the top of my list, is **Modern Aquarium**. If you are engaging in any of these activities, as well as others I haven’t named, you are a participating conservationist.

I have been tossing around a few different definitions for the term **natural resource** in my brain. I keep reminding myself to adhere to the KISS principle (keep it simple, stupid), so here is what I have come up with. “A natural resource is any life form (plant or animal), which depends on the availability of water to exist.” (This definition excludes rocks, so I’m not sure if it really works!) How does it compare with yours?

Anyway, once you have decided what a natural resource means to you, and you have chosen one in particular, you are ready to devise a planned management thereof. It doesn’t have to be complicated. It doesn’t have to be a fish. It could be a plant or an insect, or even a rock! Just go ahead and “get your hands wet,” so to speak. When you can observe the outcome of your efforts, write it down (again, keep it simple). Then you can share it with the rest of us.

As I bring this brief article to a close, I will return Greater City to its rightful name, “The Greater City **Aquarium** Society,” which I’m sure you can all agree represents the spirit of conservation of all natural resources.

Reference: Webster’s Universal Encyclopedic Dictionary, Barnes and Noble Books, 2002.

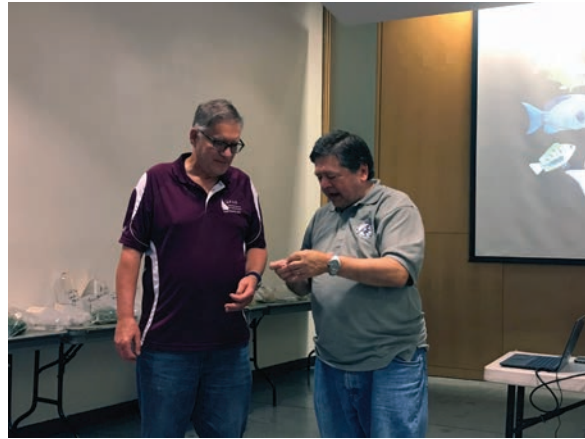


Pictures From

Photos by Joseph Gurrado



Our speaker Jim Cumming begins introducing us to Indian and Madagascan cichlids.



Joe Ferdenzi presents Jim with a GCAS pin.



The hall starts to fill up in anticipation of Jim Cumming's presentation.



Rapt anticipation.



Ed Vukich (behind the plastic bag) gets the auction going.

Our Last Meeting

and Jules Birnbaum



New member Joshua Modeste wins the Door Prize!



Gilberto Soriano brought son Logan.

Bowl Show Winners



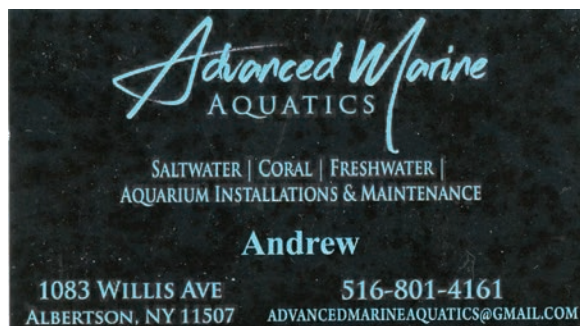
Richard Waizman accepts 2nd and 3rd place Bowl Show awards from Joe Ferdenzi.



Bill Amely picks up the blue ribbon.



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10% Discount on everything.



10% Discount on everything.



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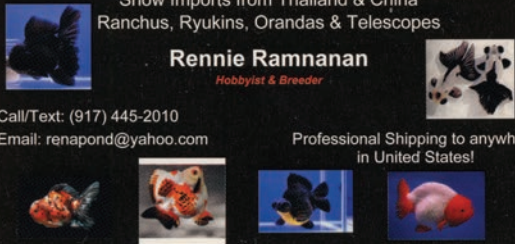
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GCAS Classifieds

FOR SALE: African cichlids -- all sizes, as well as tanks and accessories.
 Call Derek (917) 854-4405

FOR SALE: Coralife 9-Watt Turbo-Swift U/V, bulb recently replaced.
 Call Kris: 516-282-6677



GCAS Happenings

November

Last Month's Bowl Show Winners:

- | | |
|-------------------|---------------------------|
| 1 WILLIAM AMELY | RED DOUBLETALE MALE BETTA |
| 2 RICHARD WAIZMAN | KOI BETTA |
| 3 RICHARD WAIZMAN | BLUE DOUBLETAIL BETTA |

UNOFFICIAL 2019 BOWL SHOW TOTALS:

RICHARD WAIZMAN	36	WILLIAM AMELY	12	CHRISTOPHER KOENIG	5
JOHN BUZZETTI	5	TOM KEEGAN	3		

A WARM WELCOME BACK TO RENEWING GCAS MEMBER RODERICK GRIFFIN!

A SPECIAL WELCOME TO NEW GCAS MEMBER SKY TO!

Meeting times and locations of some of the aquarium societies in the Metropolitan New York City area:



GREATER CITY AQUARIUM SOCIETY

Next Meeting: Wednesday, December 4, 2019

Event: Annual Holiday Awards Banquet

Topic: N/A. See page 6 for details.

Meets: The first Wednesday of each month

(except January & February) at 7:30pm:

Queens Botanical Garden

43-50 Main Street - Flushing, NY

Contact: Horst Gerber (718) 885-3071

Email: pilotcove43@gmail.com

Website: <http://www.greatercity.net>

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: November 8, 2019

Speaker: Lou Ekus

Topic: Reef Chemistry Made Easy

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: November 15, 2019

Speaker: TBD

Topic: TBA

Meets: 3rd Friday of each month (except July and August) at 8:00 PM. LIAS Meetings are held at SUNY Stony Brook's Maritime Science area. Room 120 in Endeavor Hall on the State University at Stony Brook Campus, Stony Brook, NY 11790

Email: president@lisonline.org

Website: <http://lisonline.org/>



EAST COAST GUPPY ASSOCIATION

Meets: 2nd Tuesday of each month at 8:00 pm at Alley Pond

Environmental Ctr.: 228-06 Northern Blvd.

Contact: Gene Baudier (631) 345-6399



NASSAU COUNTY AQUARIUM SOCIETY

Next Meeting: November 12 2019

Speaker: TBA

Topic: TBA

Meets: 2nd Tuesday of the month (except

July and August) at 7:30 PM. Molloy College, at 1000 Hempstead Avenue, Rockville Centre, NY, in the Hagan Center for Nursing building, in the lower level, classroom #H006. See website for directions.

Contact: Harry W. Faustmann, (516) 804-4752.

Website: <http://www.ncasweb.org>



NORTH JERSEY AQUARIUM SOCIETY

Next Meeting: November 16, 2019

Speaker: Artie Platt

Topic: Helpful Hobby Tips and Tricks

Meets: 12:30 PM - 3rd Saturday of the month, Clark Public Library in Union County, just off the

Parkway at exit 135

Contact: NJAS Hotline at (732) 332-1392

Email: tcoletti@obius.nj.com

Website: <http://www.njas.net/>



NORWALK AQUARIUM SOCIETY

Next Meeting: November 21, 2019

Speaker: Tom Allison

Topic: ZooMed

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/>

Taking C.A.R.E.S.

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.

A series by “The Undergravel Reporter”

Modern Aquarium has had many “firsts” in its history. It placed first as “Best Publication” in its class numerous times in publication awards programs by both the Northeast Council of Aquarium Societies (NEC) and the Federation of American Aquarium Societies (FAAS).

But, in my opinion, the fact that it was the first publication to report on the **CARES** (Conservation, Awareness, Recognition, Encouragement, and Support) Fish Preservation Program may be this publication’s most significant first (and, let’s not forget that the GCAS was the first aquarium society to adopt it).

Recently, an article posted on the [newscientist.com](http://www.newscientist.com) website makes the CARES program known to others outside of the aquarium hobby. The article quotes Kapil Mandrekar at the State University of New York as stating, “There are cases in which the pet trade has been harmful, but many fish are now bred in captivity or caught on a sustainable basis with the help of local communities.” This was echoed in the article by Jose Valdez at Aarhus University in Denmark who remarked that, “Many species already extinct in the wild only exist because they are being kept and bred by these hobbyists.”



The article then goes on to discuss “The CARES (Conservation, Awareness, Recognition, Encouragement, and Support) Fish Preservation Program, founded by enthusiast Claudia Dickinson in 2004, is doing much more. It is encouraging fish-keepers to keep, breed and exchange endangered fish to help preserve viable populations.” (Note, also see the January 2005 issue of *Modern Aquarium*.)

CARES has compiled its own priority list of nearly 600 freshwater fish, which has now been assessed and compared with official lists of endangered species by Valdez and Mandrekar. The pair found 80 of the species on the CARES list have yet to be formally described by scientists.

The list of species CARES says is extinct in the wild also includes 30 additional species to those on the Red List of threatened species maintained by the International Union for Conservation of Nature. Members of the preservation program are keeping populations of these alive.

Many of the species on the CARES list have no commercial value, says Mandrekar. “So if they weren’t on the list no one would be doing anything to preserve them.”

The pair didn’t independently check the assessments by CARES. But

Valdez says many of the hobbyists dedicate their time to certain fish and even go on field trips to study them in the wild.

“Since they are passionate and are directly involved with these fish they are more knowledgeable than scientists, who don’t have the luxury to study a small subset of fish in a particular lake or travel to remote areas for a scientifically non-important fish species,” says Valdez.

If you want to help save species you can take part, too, says Mandrekar. “As long as you have a good understanding of how to care for an aquarium it’s something you can get involved in.”



Reference:

<https://www.newscientist.com/article/2218831-home-aquarium-hobbyists-are-helping-save-30-rare-fish-from-extinction/>

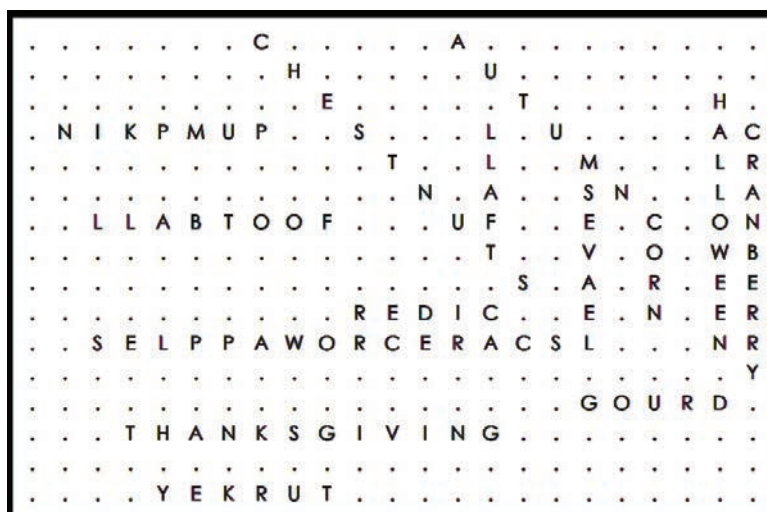
Fin Fun

Scrambled Rivers

Below are the scrambled names of ten famous rivers around the globe, along with their (unscrambled) locations. See how many river names you can unscramble.

Location	Scrambled River	UNScrambled River
New Guinea	SPIKE	
Africa	BMAIZEZ	
Russia	GALVO	
India	ANEGGS	
Europe	UBANED	
China	TANGYEZ	
South America	ZAMANO	
Venezuela	ICROONO	
Canada	MALIBUCO	
Turkey	GRISTI	

Solution to our last puzzle: **ALL FALL DOWN**



APPLES
AUTUMN
CHESTNUTS
CIDER
CORN
CRANBERRY
FALL
FOOTBALL
GOURD
HALLOWEEN
LEAVES
PUMPKIN
SCARECROW
THANKSGIVING
TURKEY

Meeting Reminders



Almost every month at least one meeting reminder postcard is returned undelivered. Sometimes the member moved and just forgot to update his or her contact information with Greater City. Other times, well it's a mystery—the address was correct, but the Post Office marked it as “undeliverable.”

Unlike some aquarium societies, at Greater City there is never a charge for non-members to attend, there is no “bidder card fee” to bid on items in our monthly auctions, the refreshments are free to everyone at the meeting, and anyone can purchase raffle tickets. But membership does have its privileges, including this award winning magazine, door prize chances, the ability to participate in our bowl shows, and advance reminders of our meetings. If you have an e-mail account, please consider getting your meeting reminders by e-mail, instead of by postcard. You will be getting two notices (one a week in advance, the other a day in advance) instead of only one, and the chances of non-delivery are virtually none (unless you change your e-mail address). While it's a very small thing, you'll even help the environment by using less paper. An e-mail sign-up sheet is at the membership/Modern Aquarium table, or send an e-mail to gcas-webmaster@usa.net.

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