

modern AQUARIUM



December 2021
volume XXVIII
number 10

Greater City Aquarium Society - New York

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Series III Vol. XXVIII, No. 10 December, 2021

ON THE COVER

Our cover photo this month is drawn from our Facebook Fishy Friends page. If you haven't checked it out lately, please do! You might even consider posting a favorite photo of your own there! Who knows? It might end up on our cover!

Photo by Ryan Revilla

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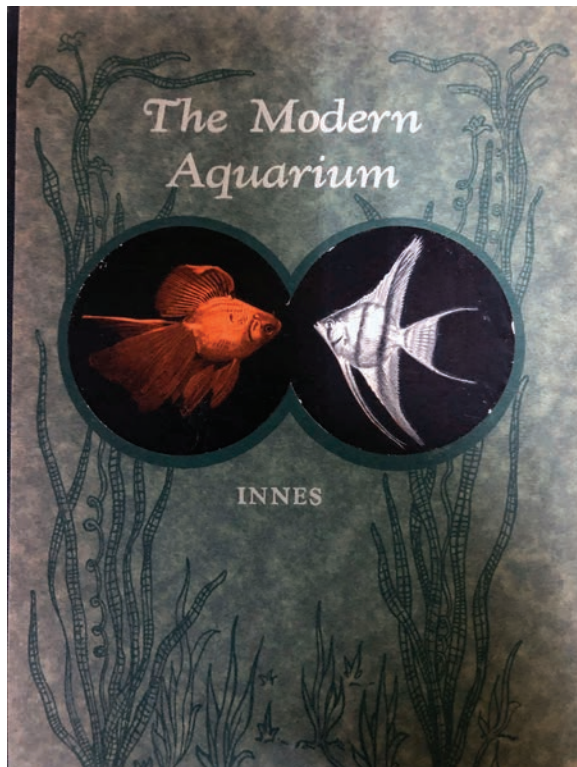
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From the Editor

by Dan Radebaugh

Well, the end of this year certainly came with an unexpected surprise! A few weeks ago I received an email and a phone call from a company called Modern Aquarium! The person on the other end of the line was quite pleasant, and assured me that when they had come up with a name for their new company they had in fact done a name search to be sure they weren't creating a conflict, but somehow did not in fact find us. Only later, once they were in business, did they come across our **Modern Aquarium**. This company sells live aquarium plants and supplies. Also, having now discovered us, they want to place an ad in our magazine! Check out their ad on the inside back cover of this month's **Modern Aquarium**.

I just got an email the other day from Joe Ferdenzi, reminding me that "Modern Aquarium" is a term that is far from new! Check out the photo below!



On the page facing this column, please note this year's installment of "Modern Aquarium in Exchanges." This list shows articles from **Modern Aquarium** that have been published in other aquarium society magazines or newsletters. Or at least it shows



us the ones that I know about. I don't regularly receive copies of *all* the society publications out there, so there may be other pickups from **Modern Aquarium** that I just don't know about. Congratulations to all of our authors whose writings have been reprinted by other journals from around the country and abroad!

I think it's safe to say that the past couple of years have put a strain on all of us in one way or another. That strain has likely shown up in all of our relationships and activities, but since this magazine is about keeping fishes, I'd like to offer this publication as a vehicle for our members to share what has happened with you *and* your fishes during this challenging time. But maybe an "article" is a bit much of an undertaking when many of us haven't been doing much other than just trying to stay afloat, so to speak.

What I have in mind is something perhaps shorter and less formal than an article; something that we members might have to say about what has been happening with us and our fishes, our fishrooms, and our relationships with our fish and with the hobby during this difficult time. Maybe just a few paragraphs summing up what has been the result of all the enforced confinement and resultant isolation. Has the hobby helped you deal with it all, or has keeping your fish produced even more anxiety and frustration? In what way?

Feel free to write as much or as little as you like; send accompanying photos if you wish. If you prefer, I won't identify you. I'll put all your comments into a larger piece—or series of pieces—that might help us all realize just how much we've all managed to stand up to during this hopefully once in a lifetime event.

Don't misunderstand—I still want your articles! I'm not looking to have Covid-19 take over the magazine. But this has been a unique time in our history—and not just our fishkeeping history. A few years from now people (maybe even people you know) will want to know how this pandemic affected us, as well as how it affected us as fishkeepers.



Modern Aquarium In Exchanges

Author	Title	Society	Publication	Issue
Berman, Steve	<i>Gymnogeophagus balzanii</i>	Victoria Cichlid Society	iCichlid	May 2015
Birnbaum, Jules	My Fascination With Shell Dwellers	Bucks County Aquarium Society	The Bucketette	Nov 2021
Birnbaum, Jules	Your Fish Are What They Eat!	Bucks County Aquarium Society	The Bucketette	Mar 2021
Birnbaum, Jules	Aquarium Plants 101	Bucks County Aquarium Society	The Bucketette	Mar-2020
Birnbaum, Jules	Divide and Conquer!	Jersey Shore Aquarium Society	The Shoreline	Sep-2015
Birnbaum, Jules	Breeding Rainbows	Bucks County Aquarium Society	The Bucketette	Sep-2018
Bollbach, Jeff	Rules Are Made To Be Broken	NEC	NEC Newsletter	Apr-2017
Chang, Tommy	MTS: Is There a Cure?	Bucks County Aquarium Society	The Bucketette	Sep-2015
Ferdenzi, Joseph	Endler's Livebearer	Bucks County Aquarium Society	The Bucketette	Dec-2013
Ferdenzi, Joseph	The Easy Way to Breed Killifish	Eastern Iowa Aquarium Association	Fin Flap	Apr-2015
Ferdenzi, Joseph	The Easy Way to Breed Killifish	NEC	NEC Newsletter	Aug-2017
Ferdenzi, Joseph	The Legacy of Dominic Isla	Bucks County Aquarium Society	The Bucketette	Dec-2013
Ferdenzi, Joseph	My Perpetual Daphnia Tank	Bucks County Aquarium Society	The Bucketette	Jul-2019
Ferdenzi, Joseph	Aquascaping Without Plants	Circle City Aquarium Club	Fancy Fins	Jul-2020
Ferdenzi, Joseph	The Fabled Blue Gularis	NEC	NEC Newsletter	Nov-2020
Fletcher, Alan Mark	When the Last Aquarium Goes	NEC	NEC Newsletter	Jul-2020
Graffagnino, Joseph	<i>Tatia intermedia</i>	NEC	NEC Newsletter	Aug-2020
Gurrado, Joseph	The Vampire in my Fishroom	Bucks County Aquarium Society	The Bucketette	Jan-2020
Gurrado, Joseph	A Slice Of Reef	NEC	NEC Newsletter	Oct-2020
Hinshaw, Steven	The Jar That Stands the Test of Time	NEC	NEC Newsletter	Dec-2016
Oshins, Elliot	To Be, Or Not to be...	Motor City Aquarium Society	Tropiquarium	May-2018
Priest, Alexander A.	The Ultimate Nano Fish	Bucks County Aquarium Society	The Bucketette	Feb-2014
Priest, Alexander A.	The Most Ornate African	Bucks County Aquarium Society	The Bucketette	Aug-2016
Priest, Alexander A.	Breeding <i>Betta Splendens</i>	Bucks County Aquarium Society	The Bucketette	Mar-2016
Priest, Alexander A.	The Fish of Many Morphs	NEC	NEC Newsletter	Jun-2016
Priest, Susan	Angelfishes Don't Eat Broccoli	Bucks County Aquarium Society	The Bucketette	Jul-2015
Priest, Susan	The Fish from Outer Space	Bucks County Aquarium Society	The Bucketette	Jun-2013
Radebaugh, Dan	Gambusia To The Rescue?	Bucks County Aquarium Society	The Bucketette	Nov-2021
Radebaugh, Dan	Golng the Distance with <i>Paratheraps synspilus</i>	Bermuda Fry-Angle Society	Fish Tales	Apr-2011
Radebaugh, Dan	<i>Paratilapia</i> sp 'fony'	American Cichlid Association	B.B. 269*	Apr 2012
Ramroop, Lauren	Angel and Betta	NEC	NEC Newsletter	Aug-2016
Sica, Stephen	In the Realm of the Moray Eel	Bucks County Aquarium Society	The Bucketette	Oct-2014
Sica, Stephen	I Still Like Duckweed!	Southwestern Michigan Aquarium Society	SWAM	Mar/Apr-2017
Sica, Stephen	Easy Rider and the Four-eye Butterfly Fish	NEC	NEC Newsletter	Oct-2017
Sica, Stephen	Duckweed: Still A Delight	NEC	NEC Newsletter	Jun-2019
Steeves, Greg	Do Some Writing!	Kitchener Waterloo Aquarium Society	Fins & Tales	Dec-2018
Tustin, Derek P. S.	<i>Melanotaenia</i> of New Guinea	Bucks County Aquarium Society	The Bucketette	Mar-2019
Unknown**	Breeding The Red-Tailed Black Shark	Bucks County Aquarium Society	The Bucketette	Feb-2020
Vukich, Ed	<i>Neolamprologus multifasciatus</i>	Bucks County Aquarium Society	The Bucketette	Oct-2020

* Appeared first in *Buntbarsche Bulletin* Number 269, April 2012 -- Reprinted in *Modern Aquarium* in November, 2013

** Originally reprinted from the Horsforth Aquarium Society of Yorkshire, England -- reprinted from *Modern Aquarium*, December 1970



President's Message

by Horst Gerber

Welcome to our winter end-of-the-year meeting! We won't see one another again until March, when we celebrate our 100th consecutive year as a club. This seems a big deal to me, as we are the only aquarium society that I know of that will have done so!

If the past eighteen months have taught us anything, it is that our connection to one another and to the world around us gives us the support and strength we need to go on. Whether you are an old hand in this hobby, a beginner, just passing through, or you have decided to become a serious hobbyist, we hope you will find your connection with Greater City to be as fulfilling for you as it has been for us.

You probably have noticed the "Christmas Paper" we used for this issue. This, as many things, comes with its own back-story. I was able to acquire this paper at a very good price. I brought it to our meeting last month so that Dan could use it for this issue. Unfortunately, sometimes Dan's mind works a bit like mine, and he forgot to take it home with him after the meeting. We then made arrangements to meet at the QBG during the week so I could give it to him again. So I left my house to go to the Hutch and cross over the Whitestone Bridge. As I approached, the drawbridge began to go up. "OK," I thought, "I'll be five or ten minutes late." Wishful thinking! That bridge goes up maybe five or ten times a month, and comes back down in ten minutes. This time though, I sat there idling for a good half-hour with no cell phone to tell Dan I'd be late.

When I got to the Garden I was indeed late, and didn't see Dan, so I went inside the Garden to the Security person to ask if I could use their phone to let Dan (and my wife) know that I had been delayed. This led to a long conversation with the Security folks, who didn't want me to use their phone. They called Admin, but they were all in a meeting, so after much discussion and frustration, I went back outside and found Dan waiting by my car. So we finished our exchange, and everyone lived happily ever after (assuming this paper actually works for printing the magazine). Ever hear the saying, "No good deed goes unpunished"?

For those of you who didn't venture out into the cruel world for our November meeting, I would say that under our present circumstances the meeting went pretty well. There were around 30 people in attendance at the QBG. I'm unsure of how many tuned in on Zoom. This was the first time we've had a "live" speaker and audience at the QBG as well as a broadcast of the meeting via Zoom! What'll they think of next? Having us show up by transporter a la Star Trek?

The meeting ended at about 9:45 and we all went happily home with our auction and raffle treasures! See you next year! Merry Christmas!!



Horst





GCAS Programs

2021

March 3	Joseph Ferdenzi <i>Lake Tanganyika Cichlids (via Zoom)</i>
April 7	Dr. Richard Pierce <i>A Second Look at Tetras (via Zoom)</i>
May 5	Joe Graffagnino <i>A Pond Grew In Brooklyn (via Zoom)</i>
June 2	Markita Savage <i>The Xiphophorus Genetic Stock Center (via Zoom)</i>
July 7	Sal Silvestri <i>Interesting and Unusual Fish I Have Worked With (via Zoom)</i>
August 4	Joseph Ferdenzi <i>A Tour of My Fishroom (via Zoom)</i>
September 1	"Welcome Back" Auction!
October 6	Dr. Ted Coletti (Via Zoom) <i>Summer Tubbing! (via Zoom)</i>
November 3	Basil Holubis <i>Fish Foods, A to Z</i>
December 1	Dan Katz <i>Fish Breeding Experiences</i>

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 (347) 379-4984. Copyright 2021 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 (one copy if sent electronically). 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 to gcas@earthlink.net, or fax to (347) 379-4984. 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>.



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Zoo Med Laboratories Inc.

The Importance of Being an Earnest Reader

by Joseph Ferdenzi

After more than 50 years in this hobby, it has not escaped my attention that there are hobbyists who do not enjoy reading—anything! Since you are reading this article, you are obviously not one of them. But there are more than just articles to be reading if you wish to be an informed hobbyist, which in turn gives you a leg up on making the best decisions for the welfare of your aquariums and their denizens.



The two photos below illustrate an example of what I'm writing about. Each photo depicts the list of ingredients of two fish foods marketed as cichlid pellets. Each is a well-known national brand made by companies with deserved reputations for

quality. But do yourself a favor; read the list of ingredients carefully and then compare them. Which one would you choose to feed your cichlids?



Photo of *Nothobranchius rachovii* by the author



Tonight's Speaker: December 1, 2021

Dan Katz

Fish Breeding Experiences

Born and raised in the Bronx, I am a retired chemical engineer with degrees in chemical engineering from the City University of New York. I have a basement fish room with about 25 tanks and many small containers. In addition to killies, I am currently spawning tetras, anabantoids and some *Corydoras*. Like many hobbyists, I have been keeping fish since I was a child, more than 70 years ago. I have always been intrigued by reading about killifish, and I was finally able to join the AKA (American Killifish Association) in 1974. I joined LIKA (Long Island Killifish Association) the following year, and I have been a member of both groups since then. My main interest in killies has been South American annuals since I first laid eyes on *Austrolebias alexandri* and *A. nigripinnis*. For me, nothing in the aquarium hobby is anything like the feeling of throwing what looks like damp dirt into some water and then seeing fish swimming there a few hours later.



I enjoy maintaining species for long terms. I am proud that I have had *Cubanichthys pegelleyi* for 39 years and *Spectrolebias reticulatus* for about 25 years.

This evening I will be speaking about my fish room and about a few species that have spawned for me during this past year.



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The Fish From Outer Space

by SUSAN PRIEST
Photos by the author

Part One: The Master Plan

The first time I saw a knifefish was at a Greater City Fish Show. It was shortly after Al and I had joined the club, in the early 1990s. Carlotti DeJager had entered a black ghost knifefish. After this fish caught my eye, I had a hard time moving past it to view the killies, mbuna, or bristle-nosed plecos. I was **mesmerized!**

Let me fast-forward your attention to the year 2010. That was the year, after eighteen years as members of the GCAS, that Al and I decided to make a concerted effort to win the bowl show competition. The rules allow for entering two fish every month, which we did. As we approached the fall of the year, and had already entered most of our fish which we considered to be worthy of a ribbon, I decided to go shopping. Harsha Perera's **ZOO-RAMA AQUARIUM SHOP** (Bronx location) was not far from my home, and that seemed like a good place to start.

I was looking for something that would capture the attention of the bowl show judge (aka Leonard Ramroop). I figured that he must be bored with the steady stream of bettas and guppies which paraded past him each month. I was looking for something distinctive and unusual—something you don't see every day. There were many large, beautiful discus, lots of lovely, diminutive livebearers, even exotic shrimps and crabs. **AHA!** What's this? I'll give you a hint. Suddenly I once again found myself to be mesmerized.

The little that I could remember having read about the care of knifefishes seemed to be telling me that they were a bit fussy, so my first reaction was to hesitate. BUT, I told myself, after it wins a ribbon in the bowl show I can put it right into the auction, and someone more experienced and knowledgeable than I will give it a loving home. My plan was in place.

Then something unexpected happened. The young lady who helped me with my purchase (she turned out to be a mind reader), told me that knifefishes were not the least bit fussy as to their care, and that one fish to a tank would be best. I couldn't help but notice that there were at least half a dozen knifefish in the tank in front of me, which made me question the validity of her advice, but the next GCAS meeting was only a few days away, so I didn't let myself give in to fretting.

Throughout those few days I noticed that I was spending more and more time watching this fish, which I had "**temporarily**" housed in a five gallon tank near my dining room table. I once again found myself to be mesmerized, and I convinced myself that Leonard would be, as well.

Rather than keep you in suspense, I will jump ahead to the day of the meeting. This was when I discovered that my assumptions were wrong, that Leonard was not the least bit bored, and that his

attention had once again been captured by the usual display of small, colorful fishes. My mesmerizing knifefish didn't win, place, or show!

Here is where my master plan completely fell apart. Instead of transferring the knifefish from the bowl show table to the raffle table, I put it back into my tote bag. At this point I had to

admit two things to myself: 1) I didn't want to stop looking at this fish, and 2) it was time for me to do my homework.

Part Two: Homework

A clear and reliable identification of this fish was my first order of business. I turned to no less of an authority than Baensch's **Aquarium Atlas**, Volume I. The index directed me to the section on "various true bony fishes." I thought that I had surely found my fish while I was viewing the photo of the Asiatic knifefish (*Notopterus notopterus*). But, then I got a look at the photo of the African knifefish (*Xenomystus nigri*), below it on the same



Xenomystus nigri

page. That sent me scurrying to get a good look at my own fish. Close scrutiny of both of the photos, as well as of my fish, left no doubt in my mind that the fish in my tank was indeed an **African knifefish**.

The distinguishing feature is the **absence** of a dorsal fin. It was clear to see in the photos that Asiatic knifefish had a short, narrow, upright dorsal fin, and that the African knifefish had a completely smooth back, just like my fish did. A much less distinctive, but equally defining feature, are the very small barbels near its mouth, which are observable in the photo as well as on my fish, and which are absent in the photo of the Asiatic fish. The photos of both fish clearly show the characteristic wave-like anal fin along the entire length of their body.

[There are numerous genera/species having the common name of “knifefish.” Two examples out of many are the aforementioned Asiatic knifefish, *Notopterus notopterus*, and the beguiling black ghost, *Apteronotus albifrons*.]

Now that we all know what fish we’re talking about, let’s find out more about it.

The **African knifefish** is native to Zaire, Gabon, Niger, and Liberia. In nature young fishes have been seen schooling, but the adults adopt a mostly solitary life. In an aquarium they will readily accept tankmates from other species, but will be less tolerant of their own. They are **best kept alone**, but if you want to try keeping more than one of these fish in the same aquarium, they should all be introduced at the same time. They are nocturnal, and should be provided with a darkened environment.

In the wild they are known to be **egglayers**. Sexual dimorphism has not been observed, and breeding in an aquarium has not been described. They can be expected to grow to one foot in length.

They emit a mild **electric field** around their body. The fish uses this electric field for navigation, and to “see” what is nearby. Tube-shaped hiding places make them feel secure. A perimeter of plants contributes to their comfort, but they also need plenty of open areas for swimming. The rippling motions of their long anal fin propel them both forwards and backwards.

(This feature is what makes them so mesmerizing.)

This fish is a predatory carnivore, and live foods are the optimum choice. A pH of 6.0-7.0 (slightly acidic), and a temperature range of from 72-82°F are to this fish’s best advantage. “The fish will emit bell-like sounds produced by ejecting air from the swim bladder.”

Part Three: Outer Space

We have given the knifefish a ten gallon aquarium of its own in our bedroom. We keep the tank light **on at night**, and **off during the day**. This nocturnal fish is active at all hours, and doesn’t seem to have any objections to this **reverse schedule**. At night, when sleep is as elusive to you

as your dream from the night before, it provides an hypnotic presence. The only plants in the tank consist of a thick layer of *salvinia* floating across the surface. A combination of the *salvinia*, as well as keeping the drapes closed, provide the recommended “darkened environment.”

The temperature in the tank stays within the previously prescribed range without the use of a heater. I have never tested the pH, but our tap water is consistently soft and neutral. There is a box filter in place.

The fish gets fed an alternating diet of fortified live adult brine shrimp and small pelleted food. At feeding time, when I push apart a space in the *salvinia* with my fingertip, I get nibbled!

The full frontal photo of this fish (above) reveals a very other-worldly look, rather like something from a galaxy far, far away. (Try Googling “Admiral Ackbar,” an amphibious species of dubious gender from the planet Mon Calamari, of Star Wars fame, and make your own comparison.) Actually, I have come to the conclusion that this fish could qualify as **proof of life on Mars!** But the thing that startles me the most about this photo is that after looking at this fish several times a day for almost three years, I didn’t even know what it **really** looks like until I saw this close-up of its face!

I have seldom seen a more contented fish. It shows no signs of being lonely or bored, and is not spooked by the approach of humanoids. One of



The fish from outer space!



A wide view of the tank.

the reasons it is not spooked by us is that it can't see us. This is due to the fact that its electric field doesn't extend far enough to detect our presence. (It does have eyes, of course, but is apparently quite nearsighted.) Those **clear plastic** tubes on a stand that you see for sale in the fish department of pet stores are designed with these fish in mind. (Pretty much any clear plastic bottle with both ends cut off, and a little gravel inside to weigh it down horizontally, will provide the same effect.) I have given my fish some **ceramic** tube-shaped hide-outs, which serve the same purpose, at least from the fish's point of view. There is also a ceramic brick resting against the glass at an angle. The fish likes to hang out in the shadow of this tent-like "lean to." I'm guessing that this also makes it think itself to be invisible.

The fish is around six inches in total length, give or take a half an inch, at the time of this writing. I really can't tell you reliably how long it was when we got it, but I would describe it as a **slow grower**. If it ever actually approaches twelve inches, it will definitely need a larger tank.

The still photos of this fish cannot illustrate the mesmerizing effect that I have referred to so often. To experience this phenomenon you need to see it up close and personal, in its live action mode.

I have spent many an hour trying to choose a name for this fish. **Mack** (as in "**The Knife**"), **Ginsu**, and **Mesmerelda** were all front runners for a while, but ultimately I never settled on one. I hope that this fish will be mesmerizing me for many years to come. I have never heard it produce a sound of any kind.

References

Aquarium Atlas, volume I. Riehl, Dr. Rudiger, and Baensch, Hans A., Mergus Press, 1991.

Aquarium Atlas, photo index volumes 1-5. Baensch, Hans A., and Fischer, Dr. Gero W., Mergus Press, 2002.



Pictures From Our Last Meeting

Photos by Leonard Ramroop



President Horst welcomes us all to our first meeting with an in-person speaker since March of 2020!



Our speaker, Basil Holubis



Basil's presentation in full swing



President Horst with the evening's Door Prize winner, Pete d'Orio



Our tech-meister Jason Kerner sends greetings!



Auctioneer Ed Vukich gets his game mask on.



Horst helps put some of the auction items in order.



Treasurer Jules takes a break to watch the proceedings.



Tucanoichthys tucano

The Tucano Tetra

by Don Kinyon

An interesting addition to your "nano" tank



Photo from Aquaciction.world

A relatively new addition to the hobby, the tetra *Tucanoichthys tucano* was described by Gery and Romer in 1997. It's still not a very common find, almost never in stores and rarely on import lists. They are named for the Tucano tribe that are native to the Amazonas state of Brazil, where the fish are found in blackwater streams of the Uaupes system. With the continued rise in popularity of "nano" tanks, small and unusual tetras such as these are being more and more sought after.

These tetras stay small; not reaching much more than an inch in length. The color of the fish is not extreme, but very attractive nonetheless. The sides of the body sport a distinct dark stripe, starting at the gill and tapering off to the caudal peduncle. The upper body and head are bright gold and the belly is white. There is a pinkish blush at the lower gill. Most of the fins are clear, but in some individuals the gold coloration extends through the top lobe of the tail.

An importer friend had this fish on an availability list, and I jumped at the chance to

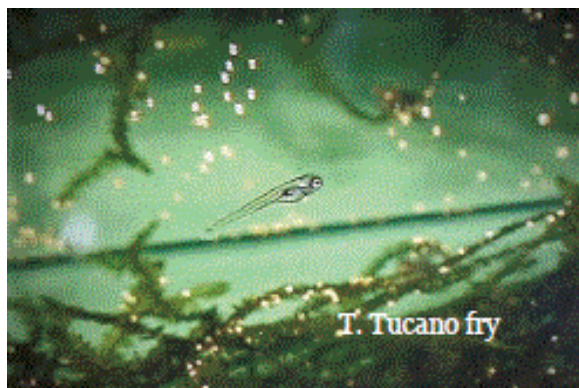
buy some. They were on the pricey end for tetras, but the rareness of the find more than made up for that. The eight specimens arrived healthy and active and were soon searching around their new home, a five gallon tank, for something to eat. I tried to duplicate the blackwater conditions of the fish's habitat, so 100% rainwater was used and lots of leaf litter and bog wood added to the setup and a clump of Java moss covered about half the bottom. The pH was 5.0, TDS of 26 ppm, and temperature of 70 to 75 degrees F. The only filtration was a small bubble-up sponge filter. There was not added heater in the tanks, so the temperature fluctuated with ambient, but the fish didn't show any ill effects.

The small tetras always seemed to be looking for their next meal, so feeding was not a problem as long as the food was small enough for them to fit into their mouths. I found that mosquito larvae when full grown were too large for the fish to eat, and pupae much too large. Mosquito egg rafts collected from an outside pool and floated onto the tanks surface

gave an almost constant supply of fresh, properly sized live food for the group. These were supplemented with daphnia and newly hatched brine shrimp. The tank had previously been without fish residents for some time, and there was a population of cyclops crustaceans present. I'm not sure how much nutritional value the tetras received from the tiny animals, but they did seem to enjoy chasing them around.

Water changes were done weekly at around 50% with fresh rainwater. The fish always got more active afterward, and displayed what seemed to me to be courting behavior. One of the males always played the aggressor and chased the other males from one corner of the tank near the filter. I've read that these fish will stake out a nesting site and protect it until the eggs hatch, but I can't say that I witnessed this. The dominant male stayed around his territory unless he was eating, and kept all others away. Two of the females were heavy with eggs, by their appearance, but they were chased away with as much vigor as were the sub dominant males.

On returning home one evening, I noticed one of the females was much thinner. The male that had been guarding his spot was still there, but rather lackadaisical in his patrol duties. Assuming the fish had spawned, I removed the adults to another 5-gallon tank and checked the breeding tank for any signs of eggs. After a thorough search I found nothing, but didn't really know what the eggs would look like; whether they would be scattered or gathered, brightly colored or clear. A sticky note on the tanks with the date the adults were removed reminded me to check on the progress, if any, every so often.



Two nights later, a flashlight check revealed several very tiny fry hanging on the glass near the surface of the water. They were clear, maybe an eighth of an inch in length, and looked like tiny shards of glass. The must be

very light sensitive, because as soon as the light shone in their vicinity they would dive for the tank bottom. After another day they could be seen free swimming. The fry were too small for even newly hatched brine shrimp, but the moss and filter of the established aquarium provided first food, at least for a few days.

After that, an outside pool was harvested for the fry's food. A bucket of water from the pond was poured through a standard fine fish net to remove the larger crustaceans and larvae, then through a brine shrimp net to catch the smaller animals. The net could be dumped directly into the fry tank. I'm not exactly sure what the food was, but a cloud of micro food came from the net every time, which was usually every second day, and the fry always had full bellies.



The young tetras grew steadily on this diet, and in three weeks they were around three-eighths of an inch long and showed some very nice color. At this point they could easily take newly hatched brine shrimp. The immature *Tucanoichthys tucano* display a brilliant blue-green iridescent stripe just above the lateral line. A group of them together is quite a light show. It's a shame, but in a few more weeks the line disappears and the fish acquire the adult coloration.

This spawn produced only eight fish, but all grew to adult with no problems. Later spawns using the same method averaged around ten fish each, which isn't what you'd expect from a tetra. This tetra, in this hobbyist's opinion, is worth the extra work. At this writing, the adults and some of the young are ready to be passed on to other breeders, and a few of the young are set up in a breeding tank in hopes of a more abundant outcome!



HOW TO MAKE A PLECO "CHRISTMAS TREE."

ONE OF MY FAVORITE PLECOS IS THE FLATHEADED OR MEDUSA PLECO L-34, *ANCISTRUS RANUNCULUS*. THESE FISH ARE SO UGLY I DON'T EVEN THINK THEIR OWN MOTHER THINKS THEY'RE PRETTY!

by Anthony P. Kroeger



Both sexes are well endowed with spines and the males have an especially nasty set beneath their eyes. These fish should always be caught in a plastic bowl or cup; never use a net as they will either snare themselves or cut up the net.

Male Medusa Plecos are territorial and have no problems using their spines on each other in turf battles. Battles usually occur in defense of a cave.

I had problems because all the males wanted the same cave. How could I stop the fighting?

I was not trying to breed them, but rather just keep them in good shape in my tank.

Medusas and many other Plecos prefer caves on an angle. In nature they dig caves in clay. Using this idea and knowledge, I came up with what I call the "Pleco Christmas Tree." It's easy to make. The only materials you'll need are

a piece of black slate, aquarium sealer, PVC pipe (sized to your Plecos) and a saw to cut the PVC.

I used 2 inch PVC cut into 10 inch lengths. I make sure the PVC is cut 4 inches greater than the mature length of the Plecos I am keeping.

I have created two versions of the "Pleco Christmas Tree." One is shaped like a regular Christmas Tree and the other is inverted.

SEE DRAWINGS AND INSTRUCTIONS, NEXT PAGE.

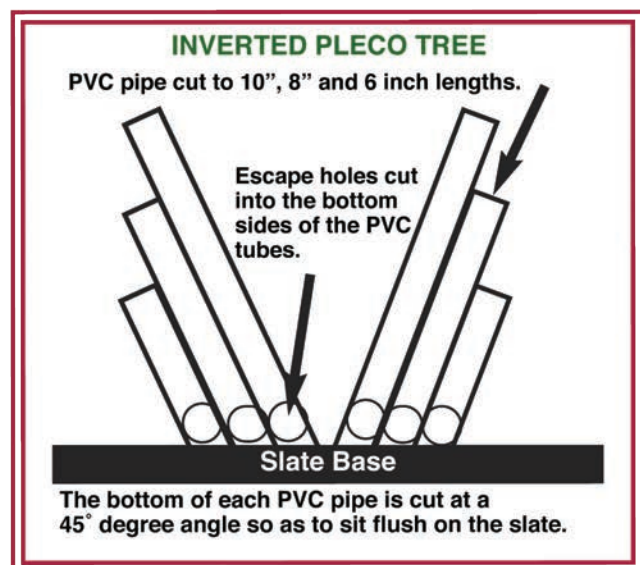
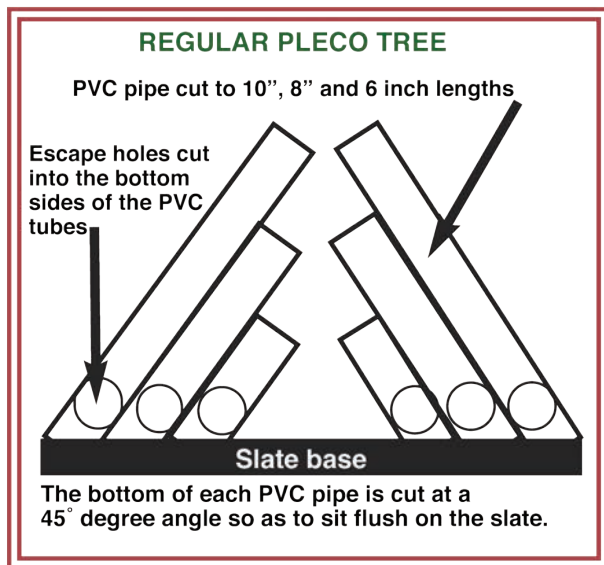
By making all the caves the same size, my Plecos stopped fighting. I have found that Bushynose breed readily in "Pleco Christmas Trees."

I have used these trees with Gold Nugget Royal Clown Plecos and *Psychedelic* zebra L-66 with great success.

Continues on next page →

The PVC Tubes lean against each other and are sealed to each other with Aquarium sealer.

The bottoms of each PVC tube are cut at a 45° degree angle so as to sit flat on the slate base. In addition, each tube bottom has a hole cut out to allow the fish to exit at the top or the bottom.



Note: do not use a light colored stone or slate as the base. I have found that Plecos will not use the caves if the base is too light in color. The darker the base, the better. That is why I use black slate; also the weight of the slate helps to hold the PCV tree in place.

I have also used Pleco Trees with great success for fish such as Red Tail Sharks, variegated Labeo Sharks and various *Gastromyzon* species of catfish. Redfin Botias really like them too.



If your PVC is 1/2 inch wide Kuhlii Loaches will jam themselves into it like sardines. This makes them easy to catch.

The trees can be easily cleaned with hot water and a

bottle brush.

If you are having territorial problems with bottom dwelling fish, try a "Pleco Christmas Tree." 

Happy fishkeeping!

TONY



GCAS Author Award Program

We are always very pleased to welcome new names to our member/author list, and you will see a few new names once again this year! Also, a couple of our authors have moved up the ladder this year in our Author Award points rankings.

Congratulations to Geri Domingo and Lonnie Goldman for achieving new titles, and special congratulations are due Steve Sica, our **Author of the Year** for the *third* year in a row!

Modern Aquarium is primarily the product of our members. We are grateful for every article and photo from every member, and we hope to hear more from each of you in 2022! Hopefully we'll also get to see more of one another as we move through next year, hopefully free of pandemics!

Overview of the Author Award Program

The GCAS AAP awards points for contributions to **Modern Aquarium**. Persons acquiring a specified number of points will receive additional recognition in the form of a certificate for having reached designated Accomplishment Levels. (See "Accomplishment Levels.")

Each person making a qualifying contribution to **Modern Aquarium** receives points, as well as chances for a **Prize Drawing** at the Annual Holiday Party.

Eligibility

Any member of Greater City who makes a contribution to **Modern Aquarium** is automatically a participant.

Points

Five points will be awarded for an original article of 500 words or less.

Ten points will be awarded for an original article of 501 words and over.

Five points will be awarded for an original photograph, drawing, or illustration submitted with, and as part of, an original article. If more than two photographs, drawings, or illustrations are submitted with a related article, only two will be given points (this is in addition to the points awarded the article, based on its size).

Ten points will be awarded for an original color photograph that is used on the front cover. Photographs must be the work of the member submitting them, and must not have been previously published, or submitted for publication, in any commercial or amateur publication.

Two or more related photographs or illustrations submitted with captions, and occupying one or more pages, will be counted as two photos (10 points) and as an article over 500 words (10 points), for a total of

20 points. An example would be a photo spread with captions.

An original article on a fish in the **C.A.R.E.S.** Preservation Program will receive **double points** (i.e., 10 points for an article of 500 words or less, and 20 points for an article of 501 words or more). Photos and drawings of a **C.A.R.E.S.** eligible species will also receive double points.

Five points will be awarded for an original puzzle which is used on the "Fin Fun" page of **Modern Aquarium**.

Points are awarded only once for an article, drawing, puzzle, or photograph. No points are awarded for subsequent reprints, regardless of whether the original article was awarded points previously in the AAP. To be eligible for AAP points, a contribution must first have been submitted to **Modern Aquarium**. However, if an article previously published in **Modern Aquarium** is significantly revised by its author (as a result of new information or developments), and if such a revision is first submitted to **Modern Aquarium**, it will be treated as a new article. Points are awarded in the year the article is printed. Editorials and President's Messages are excluded.

An article deemed unacceptable by the Editorial Staff of **Modern Aquarium** for reasons of appropriateness of topic, suitability, or possible violations of copyright or libel laws, will be ineligible for participation in the GCAS AAP. Decisions of the Staff are final.

Points credited to an author may not be carried over or credited to subsequent calendar years for the purposes of raffle prize chances or "Author Of The Year" designation.

Bonus Points

If, in the year following its publication in **Modern Aquarium**, an article is given a 1st, 2nd or 3rd place award by the North East Council of Aquarium Societies ("NEC") or by the Federation of American Aquarium Societies ("FAAS"), an additional 10 points will be awarded if the author is a GCAS member in the year the NEC or FAAS award is announced. This applies only to articles (not to drawings, columns, cartoons or photos). These bonus points are credited in the year that the award is announced, not the year for which it is awarded.

Prize Drawing

For every 5 AAP points earned in a calendar year, the recipient is given one chance in our "Authors/Contributors Only" raffle.

Continues on next page

Author of the Year

The person with the most points in a calendar year receives a certificate as “**Author Of The Year**” for that year. This is our most prestigious award, and the winner truly exemplifies the high value which they place on the contribution of experience and knowledge to the aquarium hobby at large.

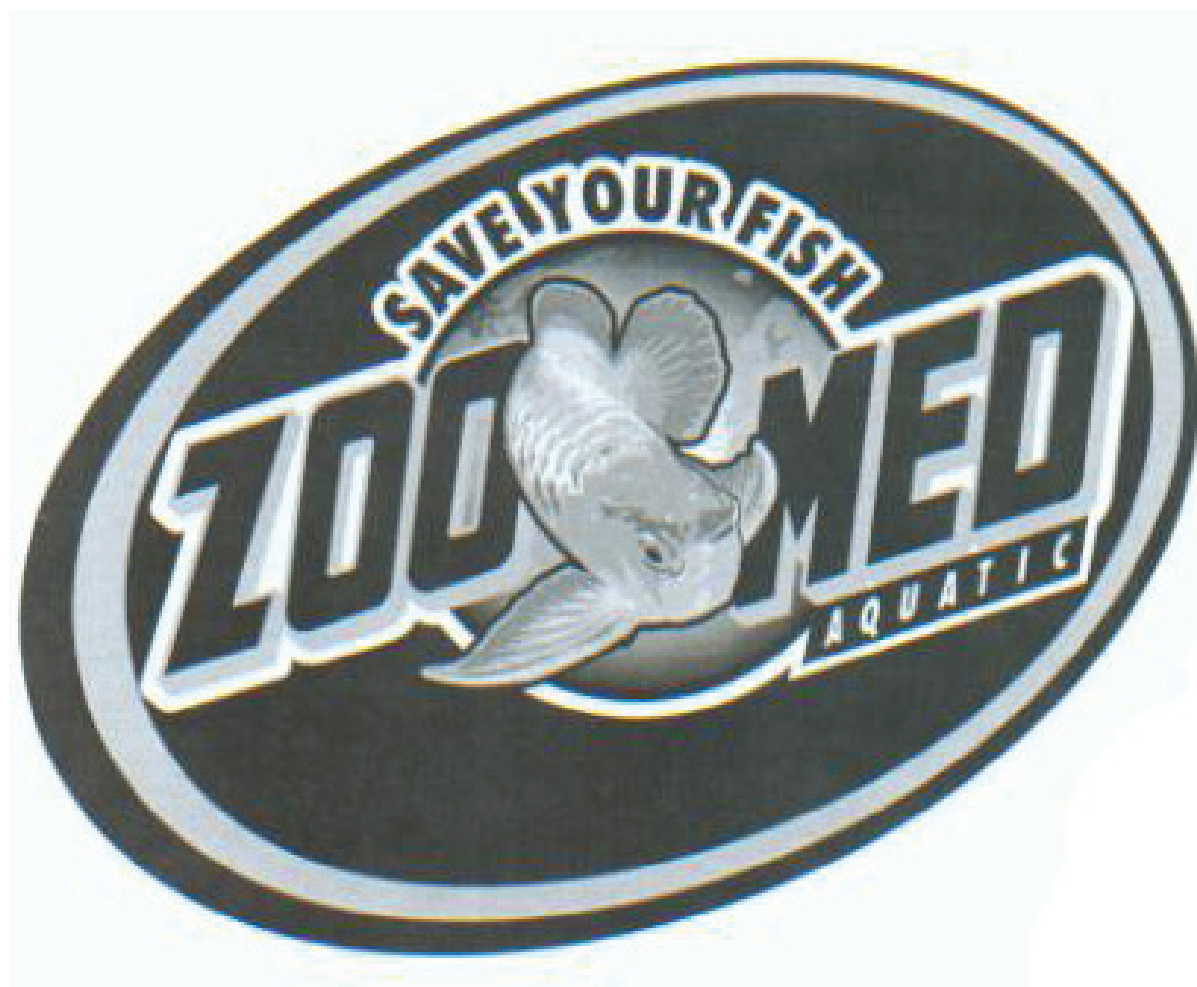
Accomplishment Levels

For the accomplishment levels specified below, points are cumulative over the life of the AAP program. Points are **doubled** for each article on a fish in the C.A.R.E.S. Preservation Program. Points are also **doubled** for each photo or drawing of a C.A.R.E.S. fish used on the cover.

Bonus points are awarded to participants for awards (other than Honorable Mention) received from the Northeast Council of Aquarium Societies (NEC) Article Awards, in the year these awards are **announced**, not in the year for which they are awarded.

Modern Aquarium staff members are ineligible for the Raffle. Family members of staff ARE eligible.

Author	25 to 45 pts
Correspondent	50 to 95 pts
Writer	100 to 145 pts
Essayist	150 to 195 pts
Journalist	200 to 295 pts
Columnist	300 to 495 pts
Laureate	500 to 745 pts
Senior Laureate	750 to 995 pts
Master Laureate	1,000 to 1,495 pts
Grand Master Laureate	1,500 to 1,995 pts
Sr. Grand Master Laureate	2,000 to 10,000 pts
Editor Emeritus	over 10,000 pts



2021 Totals	Art Work (in points)	Number of Articles		Awards	Total Points	Prize
Author	Photo/ Drawing (up to two per article)	500 Words Or Less	Over 500 Words Or Caption Contest Winner	Bonus Points	Current Year Total March to December	Raffle Chances
Jules Birnbaum	35	2	1	25	80	16
Geri Domingo	10			10	20	4
Joseph Ferdenzi	65	3	7	20	170	34
Horst Gerber				10	10	2
Jason Gold	15	0	3		45	9
Lonnie Goldman	0	0	0	10	10	2
Joseph Graffagnino	30	4	1	10	70	14
Joseph Gurrado	95	0	0	45	140	28
Victor Huang	10			20	30	6
Denver Lettman	2				2	0.4
Rob McAlister	10		0	15	25	5
Jack McDonnell	2	1	1	0	17	3
Alexander A. Priest	50			10	60	n/a
Dan Radebaugh	10	2	1	45	75	n/a
Leonard Ramroop	2	1			7	1
John Sciacca	5			5	10	2
Stephen Sica	25	0	3	5	60	12
Gilberto Soriano	0			30	30	6
Undergravel Reporter	0	10	0	10	60	n/a
Ron Webb	0	0	0	15	15	3

Following are the total AAP points for all GCAS members as of December 2021. If you have questions, or feel that there are errors, please contact Dan Radebaugh.

Shunmugan Al	40	Victoria Bohme.	25
Tamer Altan	5	John Brill	5
Bill Amely	245	Gerry Brostek	10
Glen Aqua	5	Jeffrey Bollbach	150
Sharon Barnett	30	Roger Brewster	10
Fred Bellise	10	Tommy Chang	105
Mario Bengcion	15	Donald Curtin.	10
Steve Berman	25	Doug Curtin	90
Jules Birnbaum	1,460	Carlotti De Jager	200
Tom Bohme	15	Adrian Deng	10

Wallace Deng	140	Bernard Harrigan	1,800
Xavier Deng	50	Steven Hinshaw	165
Les Deutsch	5	Victor Huang	45
Leslie Dick.	55	Andrew Jouan	125
Brad Dickinson	20	Tom Keegan	30
Claudia Dickinson	3,195	Jason Kerner	140
Al DiSpigna	5	Charlie Kuhne	10
Pete D'Orio	5	Denver Lettman	179
Geri Domingo	50	Rich Levy	105
Rod Du Casse	5	Bill Lockett	
Rita Dunne	10	Ruben Lugo	360
Evelyn Eagan	25	Beth Macht	10
Frank Fallon	65	John Malinowski	5
Harry Faustmann	65	Desiree Martin	45
Anita Ferdenzi	15	Rob McAlister	25
Francesca Ferdenzi	5	Jack McDonnell	17
Joseph Ferdenzi	2,350	Tom Miglio	25
Marisa Ferdenzi	20	Jackleen Minassi-Haftvani	20
Alison Feuer	5	Temes Mo	5
Warren Feuer	327	Jerry O'Farrell	317
Michael Foran	25	Elliot Oshins	1,033
Artie Friedman.	15	Jim Peterson	5
Peter Foster	10	Margaret Peterson	10
Mike Gallo	10	Artie Platt	20
Jeff George	165	Alexander A. Priest	4,410
Joe Galarza	10	Susan Priest	3,855
Horst Gerber	160	Dan Puleo	135
Linda Gerber	10	Dan Radebaugh	1,130
Steve Giacobello	15	Marsha Radebaugh	430
Jason Gold	45	Jannette Ramirez.	220
Peter Goldfien	15	Lauren Ramroop	62
Lonnie Goldman	50	Leonard Ramroop	52
Joseph Graffagnino	545	Mark Rubanow	5
Steve Gruebel	10	Charley Sabatino	170
Al Grusell	25	John Sciacca	20
Joseph Gurrado	1,235	Donna Sosna Sica	10

Stephen Sica	2,810	Undergravel Reporter	1,880
Vincent Sileo	50	Anton Vukich	5
Danielle Soberman	5	Ed Vukich	105
Ilyssa Soberman	15	Michael Vulis	55
Robin Soberman	10	Tom Warns	65
Mark Soberman	75	Ron Webb	155
Gilberto Soriano	230	Larry Whitfield	60
Jack Traub	20	Greg Wuest	25



GCAS Breeder Awards 2021

		Date	Name	Pts	1st	Cares	Type	Origin	Common Name
Ferdenzi	Joseph	03/22/21	Corydoras schultzei (black)	15	*		Catfish		
			Total Points	15					
Graffagnino	Joseph	04/02/21	Platytaeniodus RTS	30	*	✓	Cichlid	Lake Victoria	Same
		03/03/21	Chromidotilapia guentheri	25	*	✓	Cichlid	Lake Victoria	Guenther's Mouthbooder
		12/28/20	Chapalichthys encaustus	30	*	✓	Goodeid	New World	Barred Splitfin
		12/29/20	Cichlasoma paraense	20	*	✓	Cichlid	New World	
		12/29/20	Danakilia shukoray	25		✓	Cichlid	Africa	
		12/29/20	Haplochromis sp. Katiri Point	20	*		Cichlid	Lake Victoria	
		02/04/21	Rasbora trilineata	25	*		Rasbora	SE Asia	Scissortail Rasbora
		12/29/20	Puntigrus tetrazon a (Barbudas)	10			Barb	SE Asia	Glo-Red Tiger Barb
			Total Points	185					
Peters	Scott	06/27/20	Apistogramma ortegai	25	*		Cichlid	New World	same
			Total Points	25					
Soberman	Mark	06/01/20	Fundulopanchax oeseri	10			Killifish	Old World	same
		06/01/20	Phallichthys tico	5			Livebearer		Dwarf Merry Widow
			Total Points	15					

An Aquarist's Journey

Rosario La Corte is one of the world's leading authorities on breeding fish and he has written numerous articles and books, contributing greatly to our understanding of fish and their habits.

Now, for the first time, here is a compilation of his travels, adventures, successes (and, very occasional failures) all relating to collecting, keeping, and breeding fish, and in his own words (and edited by Modern Aquarium's Editor, Dan Radebaugh).

Available in softcover at Amazon.com





GCAS 2021

Breeder Award Totals

<u>NAME</u>	<u>POINTS</u>	<u># BRED</u>	<u>NAME</u>	<u>POINTS</u>	<u># BRED</u>
1 JOSEPH GRAFFAGNINO	2,495	151	39 LOUIS KROMM	170	16
2 JEFF BOLLBACH	1,760	126	40 JEFF GEORGE	165	17
3 JOSEPH FERDENZI	1,230	78	41 DICK MOORE	160	5
4 MARK SOBERMAN	1,190	64	42 LESLIE DICK	160	8
5 WARREN FEUER	990	64	43 JEAN BRAUDE	155	12
6 ANTON VUKICH	910	70	44 BARRY LYNCH	150	18
7 TOM MIGLIO	875	66	45 JOE CUCINIELLO	135	9
8 EDWARD VUKICH	835	64	46 JORGE RODRIGUEZ	135	9
9 STEVE SAGONA	655	47	47 THADDEUS TURA	135	9
10 JOHN STORA	540	47	48 SHARON MIRABELLA	135	10
11 JOSE ARANDA	505	47	49 JERRY SCHULTZ	120	11
12 JOHN IANNONE	485	44	50 KEN BRUST	120	14
13 THE ECKSTEINS	455	39	51 FRANK GANNON	120	16
14 CARLOTTI DE JAGER	440	33	52 JOE MANCUSI	115	8
15 CLAUDIA DICKINSON	435	27	53 GEORGE MAROTI	115	8
16 RICHARD SORENSEN	420	33	54 THE KELLYS	115	12
17 FRANCIS LEE	380	28	55 HARRY EVANS	110	10
18 CHARLEY SABATINO	360	20	56 HERB FOGAL	100	13
19 THE REPANES	355	27	57 DENNIS EGIELSKI	95	4
20 JACK OLIVA	355	42	58 JERRY MAYER	95	7
21 GERALD GORYCKI	350	41	59 JOE FLANAGAN	95	12
22 HAROLD KETTERER	335	30	60 BRIAN KELLY	90	6
23 AL PRIEST	330	8	61 PETE D'ORIO	90	9
24 THE LOMBARDIS	325	32	62 ROBERT MC KEAND	85	5
25 DON SANFORD	310	25	63 NOEL RODRIGUEZ	85	7
26 GREGORY WUEST	310	30	64 EDWARD SZABLEWICZ	85	7
27 TED KURDZIEL	295	24	65 BOB KUHLE	80	6
28 TONY FERRARO	275	23	66 BRADLEY PLOTKIN	80	6
29 THE BUGEIAS	270	31	67 LEONARD RAMROOP	80	11
30 STEPHAN ZANDER	230	14	68 JOHN LEE	75	5
31 DOMINIC ISLA	225	20	69 JOSE PEREZ	75	6
32 ARTIE PLATT	210	16	70 DAN RADEBAUGH	75	6
33 YEZID GUTIERREZ	206	20	71 BRUCE WEILER	75	6
34 PHILIP INGENITO	205	13	72 TOM BOHME	75	7
35 JULES BIRNBAUM	195	13	73 DOUGLAS CURTIN	75	12
36 ROD DU CASSE	190	14	74 PAT PICCIONE	70	7
37 THE DONATONES	175	18	75 BOB RADAMACHER	70	9
38 JOHN MORAN	170	11	76 DONALD CURTIN	70	10

NAME	POINTS	# BRED	NAME	POINTS	# BRED
77 SARA MONHEIT	65	6	107 STUART KRICHEVSKY	20	3
78 JOEL FORGIONE	60	4	108 DANNY SHEPARD	20	3
79 CHARLES KUHNE	60	8	109 IGNACIO ARENCIBIA	15	1
80 HORST GERBER	55	4	110 THE FERNANDEZ	15	1
81 BOB DU BOIS	55	5	111 PETER GOLDFEIN	15	1
82 SCOTT PETERS	50	2	112 WILLIAM SADERA	15	1
83 BOB WRANOVICS	50	4	113 JOE ARONNE	15	2
84 MIKE CASSANO	50	5	114 DAN GAWIAK	15	2
85 WILLIAM BRANDOFINO	45	4	115 RICH LEVY	15	2
86 WARREN BURKE	45	7	116 BILL ARONNE	10	1
87 CHARLES SHATAKA	40	5	117 KATHY BUSBY	10	1
88 BARRY CENTER	35	3	118 FRANK FALLON	10	1
89 ARTHUR MAYER	35	3	119 JASON KERNER	10	1
90 VINNIE RITCHIE	35	3	120 JERROLD MEYER	10	1
91 BRIAN STERN	35	4	121 HORST MIEHLBRAD	10	1
92 THE MARTINS	35	5	122 DIANNE SPELLMAN	10	1
93 AL PHANEUF	35	5	123 ABE COOPER	10	2
94 CHARLES BENEFATTI	35	6	124 JOHN MC CAFFERY	10	2
95 ROB ALTONEN	30	2	125 WALTER ROSTOWSKI	10	2
96 ROGER BEAULIEU	30	2	126 JAMES BROOKS	5	1
97 THE STEGMANS	30	3	127 DANNY CIRNIGLIAR	5	1
98 GENE BAIOTTO	30	4	128 GEROLD COCH	5	1
99 MICHAEL VILLANO	30	4	129 KATHY FERNANDEZ	5	1
100 VINCENT BABINO	25	2	130 ADAM KLEINROCK	5	1
101 STANLEY WEGLARZ	25	4	131 JAY LIEBOWITZ	5	1
102 STEVEN MILLER	20	1	132 EDYTH MONSOUR	5	1
103 PETER SCHLEISMAN	20	2	133 THE QUINNS	5	1
104 ARNOLD FREED	20	3	134 BILL SMITH	5	1
105 EMMA JORDAN HAUS	20	3	135 WILLIAM STALZER	5	1
106 GUNTER HORSTMANN	20	3	136 RICHARD WALSH	5	1



GCAS Past Award Winners

JOSEPH FERDENZI ROLL OF HONOR

Gene Baiocco	Claudia Dickinson	Al Grusell	Jack Oliva	Marsha Radebaugh
Jules Birnbaum	Charles Elzer	Paul Hahnel	Al Priest	Marcia Repanes
Joe Bugeia	Joe Ferdenzi	Ben Haus	Susan Priest	Nick Repanes
Mary Ann Bugeia	Warren Feuer	Emma Haus	Herman Rabenau	Don Sanford
Dan Carson	Herb Fogal	Jason Kerner	Dan Radebaugh	Mark Soberman

DON SANFORD BREEDER OF THE YEAR

1981-83, Ginny & Charlie Eckstein	1992-93 Steve Sagona	2002-05 Anton Vukich
1983-85 Rich Sorensen	1993-94 Joe Ferdenzi	2006, 2018 Warren Feuer
1985-86 Yezid Guttierrez	1994-95 Steve Sagona	2007, '08, '09, '10 Jeffrey Bollbach
1986-87 Joe Ferdenzi	1995-96 Tom Miglio	2011, '12, Joseph Graffagnino
1987-88 Patricia Piccione	1996-97 Mark Soberman	2013 Leslie Dick
1988-89 Joe Ferdenzi	1997-98 Jeff George	2014 Mark Soberman
1989-90 Francis Lee	1998-'00 Tom Miglio	2015 Artie Platt
1990-91 Eddie Szablewicz	2000-01 Mark Soberman	2016, '19, 20 Joseph Graffagnino
1991-92 Dominic Isla	2001-02 Alexander Priest	2017 Joe Ferdenzi

GENE BAIOTTO AQUARIST OF THE YEAR (Since 1990-91)

1990-91 Diane & Harold Gottlieb	2006 Anton Vukich
1991-92 Doug Curtin & Don Curtin	2007 Ed Vukich
1992-93 Mark Soberman	2008 Al Grusell
1993-94 Warren Feuer	2009 Dan Radebaugh
1994-95 Steve Sagona	2010 Pete D'Orio
1995-96 Alexander & Susan Priest	2011 Jeffrey Bollbach
1996-97 Joe Ferdenzi	2012 Jules Birnbaum
1997-98 Claudia Dickinson	2013 Dan Puleo
1998-99 Vincent & Rosie Sileo	2014 Leonard Ramroop
1999-00 Pete D'Orio	2015 Alexander & Susan Priest
2000-01 Bernard Harrigan	2016 Elliot Oshins
2001-02 Joe Ferdenzi	2017 Joseph Gurrado
2001-02 Jason Kerner	2018 Dan Radebaugh
2002-03 Carlotti De Jager	2019 Marsha Radebaugh
2003-04 Jack Traub	2020 Jules Birnbaum
2004-05 Claudia Dickinson	

WALTER HUBEL BOWL SHOW CHAMPIONS (Since 1983-84)

1983-84, 84-85 Tom Lawless	1996-97, 97-98 Steve Sagona	2009 Mario Bengcion
1985-86, 86-87 Joe Ferdenzi	1998-99, 99-2000 Tom Miglio	2010 Alexander A. Priest
1987-88 (tie) Mark Soberman	2000-01 Pat Coughaine	2011, 2012 Richard Waizman
and Mary Ann & Joe Bugeia	2001-02 William Amely	2013 Jerry O'Farrell
1988-89 Jason Ryan	2002-03 Evelyn Eagan	2014 Ruben Lugo
1989-90 Eddie Szablewicz	2003-04 William Amely	2015, '16, '19 Richard Waizman
1991-92 thru 93-94 Steve Sagona	2004-05 Evelyn Eagan	2017, 2018 William Amely
1994-95 Carlotti De Jager	2006, 2007 Ed Vukich	2020 Harry Faustmann
1995-96 Mary Eve Brill	2008 William Amely	

GCAS PRESIDENTS (Post 1945 — number in parenthesis = consecutive terms)

1946-49 Elliott Whiteway (4)	1968-70 Walter Hubel (2)	1981-84 Brian Kelly (3)
1950-51 Robert Greene (2)	1970-72 Dave Williams (2)	1984-86 Jack Oliva (2)
1952-53 Robert Maybeck (2)	1972-73 Dan Carson (1)	1986-97 Joe Ferdenzi (11)
1954-55 Leonard Meyer (2)	1973-75 Herb Fogal (2)	1997-99 Vincent Sileo (2)
1956-57 Sam Estro (2)	1975-76 Richard Hoey (1)	1999-00 Jeff George (1)
1958 Leonard Meyer (2+1)	1976-77 Ted Tura (1)	2000-08 Joe Ferdenzi (11+8)
1959-64 Gene Baiocco (6)	1977-78 Gene Baiocco (6+1)	2009-16 Dan Radebaugh (8)
1965 Andrew Fazio (1)	1978-79 Louis Kromm (1)	2017-21 Horst Gerber (5)
1966-68 Charles Elzer (2)	1979-81 Don Sanford (2)	

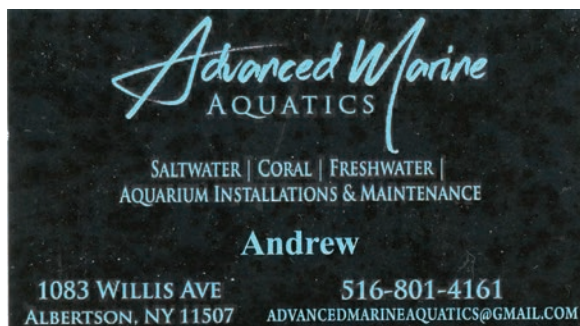
Fishy Friends' Photos

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!



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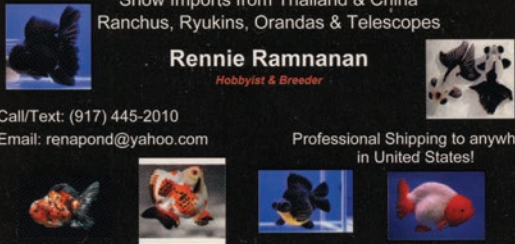
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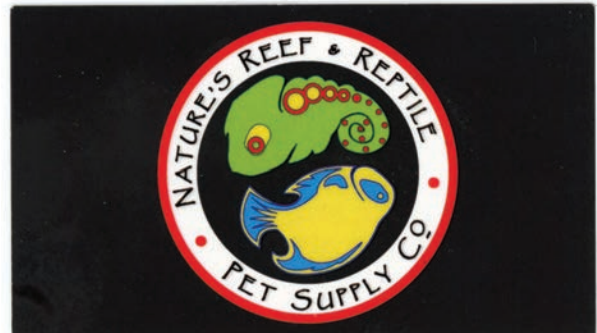
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February 1999	<i>Echinodorus bleheri</i>
March 1999	<i>Satanoperca surinamensis</i>
April 1999	<i>Fundulopanchax sjoestedti</i>
May 1999	<i>Cyaolebias magnificus</i>
June 1999	<i>Bedotia madagascariensis</i>
September 1999	<i>Nothobranchius rachovii</i>
October 1999	<i>M. praecox</i> and <i>M. boesmani</i>
November 1999	<i>Aphyosemion australe</i>
December 1999	<i>Balantiocheilus melanopterus</i>

Jason Kerner
by Joseph Ferdenzi
by Joe Lozito
by Joseph Ferdenzi
by Horst Gerber
by Joseph Ferdenzi
by Joseph Ferdenzi
by Joseph Ferdenzi
by Joseph Ferdenzi
by Alexander A. Priest



YUCK !!

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.

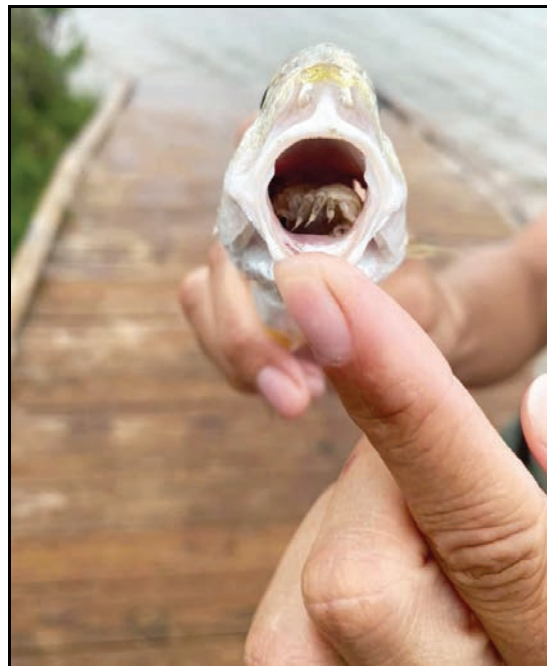
A series by the Undergravel Reporter

The San Antonio, Texas television station KSAT reported on an unusual news item just eleven days before Halloween this year (i.e., October 20, 2021). That news segment was titled “Tongue-eating creature found inside fish at Texas state park is the stuff of nightmares.”¹

A tongue-eating louse was found inside the mouth of an Atlantic Croaker and officials with the Texas Parks and Wildlife Department took a photo and shared it on Facebook. The fish containing the parasite was found at Galveston Island State Park.

Officials jokingly suggested on Facebook that the creature was a Martian before offering the true science surrounding the crustacean. “Martian spotted at Galveston Island State Park,” the post stated. “Ok, so not really...but this is still pretty spooky.”

The parasite detaches the fish’s own tongue, attaches itself to the fish’s mouth, and then actually becomes the fish’s tongue. The parasite will then feed on the fish’s mucus. This happens to be the only known case where a parasite functionally replaces a host’s organ. (It does not kill the fish, or affect humans.)



Inside this Atlantic Croaker’s mouth is a parasitic isopod called a tongue-eating louse. This parasite detaches the fish’s tongue, attaches itself to the fish’s mouth, and becomes its tongue. The parasite then feeds on the fish’s mucus. It also happens to be the only known case where a parasite functionally replaces a host’s organ.

Photo: Facebook

“Tongue-eating louse or ‘snapper-choking isopod’ are somewhat common among certain species of fish, like Atlantic croaker, spotted seatrout, and a few species of snapper,” said Coastal Fisheries Science Director Mark Fisher.² “These are isopod crustaceans and are related to the pill bugs, aka rolly-pollies, you can find in your yard.”

Gives a whole new meaning to “Cat’s got your tongue!”



References:

1 <https://tinyurl.com/2ta2r4we>

2 <https://tinyurl.com/y26cp75m>



Fin Fun



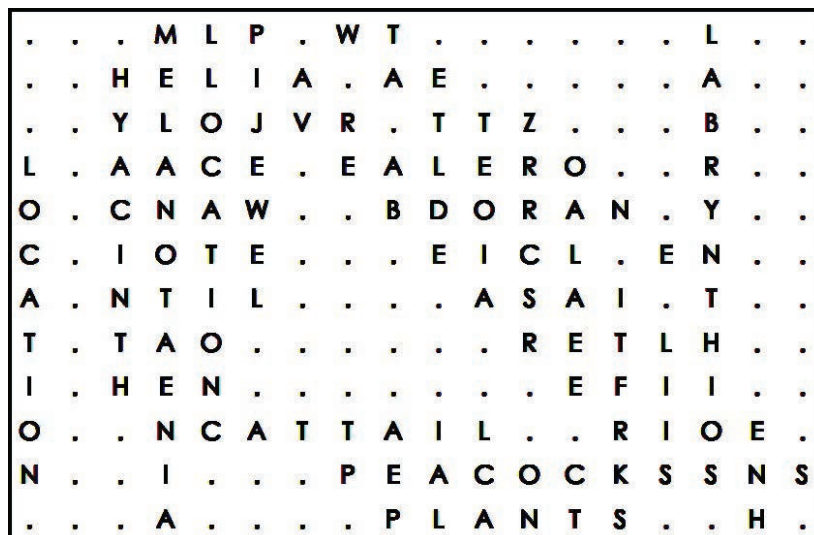
Let it Snow!

Can you find the ten differences between these two scenes of snowpersons?



Solution to our last puzzle: *Take it outside!*

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