



The Greater Akron Aquarium Society

# Tank Topics

January/February 2018

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And the results are in. . .  
The winner of the 2017 growth program is  
Misty White

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## Important Dates for 2018

March 4  
Spring auction

June 9 & 10  
Ultra Aqua 2018

November 4  
Fall auction

Check out our website: [www.gaas-fish.net](http://www.gaas-fish.net)

## THE GREATER AKRON AQUARIUM SOCIETY

**WHO ARE WE?** We are a local group of aquatic enthusiasts. Formed in 1952, the Greater Akron Aquarium Society is a non-profit, non-commercial organization. Our membership ranges from the beginning hobbyist to the advanced aquarist with many years of experience. The goals of our club are to promote the care, study, breeding and exhibition of aquarium related aquatic life and to promote interest in the aquarium hobby.

**MEETINGS:** Our meetings are held on the second Friday of each month at 8:00 p.m. at the Ritchie Memorial Shelter House, 109 West Avenue, Tallmadge, OH 44278. It is located West of Tallmadge Circle with access from Sperry Ave., behind Vet Clinic and across from the Chevrolet dealer. Visitors are always welcome, it costs absolutely nothing to attend a meeting and look us over.

**MEMBERSHIP:** The cost is only \$10 for adults, a couple or a family (includes children under 10 years of age) and \$5.00 for a junior membership (10 to 17 years) Membership provides an opportunity to socialize with others that share your interests, a subscription to our bi-monthly magazine and more.

**AGENDA:** Our meeting agenda is simple and informal. The meeting will begin at 8:00 p.m. with a short business meeting. Immediately following is the program for the evening which usually lasts about 45 minutes. Our programs consist of a speaker, slide program, movie or perhaps a panel discussion always on a particular subject related to the hobby or various species of fish. Following the program is a short refreshment break. After which the winners of the Bowl Show are announced, the Breeder's Award Program fish are auctioned and tickets are drawn for the raffle.

**THE BOWL SHOW:** Each month members can bring in fish for specific classes to compete for first, second and third place awards. The charge for each entry is only \$.25. Members also compete for annual awards by accumulating wins throughout the year.

**BREEDER'S AWARD and HORTICULTURE AWARD PROGRAMS:** members can receive recognition for spawning species of fish or propagating aquatic plants. All that is required is to turn in a minimum of six fry from the spawn that are between 30 and 90 days old. Members earn certificates for each species and can work towards plaques in different categories.

**EQUIPMENT RAFFLE:** The raffle table has such items as tanks, fish food and aquarium accessories that are donated by national manufacturers, area dealers or purchased by the Society. Tickets may be purchased by anyone attending the meeting. Save your losing tickets for the Christmas Party raffle.

**ANNUAL SHOW:** The Ultra-Aqua show is held during the summer at the Tallmadge community Center. This has become one of the largest all-species tropical fish shows in North America. It is an international gathering of hobbyists to display their fish in class competition, talk fish and to learn about the hobby from each other.

**TANK TOPICS:** is published on a bi-monthly basis for the members of the Greater Akron Aquarium Society. Articles and comments for this publication are welcome and encouraged. Such articles are to be submitted no later than the board meeting prior to publication. All articles may be reprinted as long as the author(s) and GAAS are given proper credit. Please send any correspondence regarding this publication to:

Editor/Tank Topics, P.O. Box 494, Akron, OH 44309-0494 or email to [dwilliamson223@hotmail.com](mailto:dwilliamson223@hotmail.com)

### The Greater Akron Aquarium Society Membership Form

Name \_\_\_\_\_ Age \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_ email \_\_\_\_\_

How did you find out about GAAS? \_\_\_\_\_

Memberships are due one year from the date of joining. Completed membership forms can be turned in at a meeting or mailed to the membership chairman at this address:

GAAS Membership Chairman, P.O. Box 494, Akron, OH 44309-0494

Dues are for 1 year or 2 years if  
email publications are chosen

☐ New

☐ Renewal

☐ Electronic ☐ Mail

Adult (18 years and older) & Family  
(includes children under 10)

\$10.00

Junior (10-17 years)

\$5.00

Dues Collected \_\_\_\_\_ Date Received \_\_\_\_\_



## January Speaker Bio

Began my interest in keeping & breeding fish when at the age of 12 my neighbor gave me a slate bottom metal frame and lid, 29 gallon fish tank. Tropical Fish Hobbyist (TFH) magazine frequently featured betta splendens in an array of spawning setups. It wasn't long before I had 100 baby food jars each containing a baby betta. Breeding fish came natural to me. This was when I first started feeding live foods to baby fish. Put the hobby on hold to attend college, returning 18 years later when given a 29 gallon fish tank.

In 2005, joined the Greater Pittsburgh Aquarium Society Inc (GPASI). Began participating in the Breeders Award Program (BAP) in 2008. BAP really sparked my interest, and in 2011, turned in 33 spawns topping my competition having only 12 tanks and setting an all-time high record for the club. From an administrative perspective, I served the Pittsburgh club as president, treasurer, and currently membership secretary. Am also Web Master, managing the [GPASI.ORG](http://GPASI.ORG) web site.

That being said, BAP has thus far been the most influential and driving force of my hobby. It has evolved into a consistency of looking for that next fish to spawn. I originally thought after spawning all the bread and butter fish there would be nothing left to spawn, but the opposite was true.

Most of the fish in my tanks were brought home from conventions and fish rooms and am always on the lookout for that next rare fish to spawn. Frequently, I find myself making community tanks out of multiple species because I see something I just have to have and I don't have enough room to spawn fish. It takes a long time to back out of this scenario in order to have enough room to spawn and dump fish for BAP.

In my talk, "Getting ahead in BAP", I will review how to spawn several species of difficult fish, the species I'm currently working with, discuss challenges faced, and the return of species to my bucket list of fish to successfully spawn and raise.

Discussion will include:

Pterapogon kauderni (Banggai Cardinalfish)  
Hippocampus Erectus (Sea Horse)  
Betta macrostoma (The holy grail of bettas)  
Loricaria sp "Atabapo, Colombia"  
Crying Whiptails Nothobranchius palmqvisti "Pangani, TZ 94-7"  
Notholebias minimus "Campo Grande CGRJ 01-12"  
Aspidoras of taurus (2") Aspidoras  
Garra rufa (Pedicure fish)  
Brachyogobius doriae (Bumblebee Goby)  
Hemiloricaria Lanceolata  
Pterophyllum leopoldi and more..

## President's Message

The Christmas party was a great success and a lot of fun, if you missed it, you missed a very good time with fellow fish nuts and friends, we had several raffles, everyone got something to take home, Santa was good to us.

Steve Brunn has got some great programs lined up for us next year and we have several club activities in mind, so join us more often this coming year and see what you were missing.

Nothing more for now, JUST HAVE HAPPY HOLIDAYS AND A MERRY CHRISTMAS, Bud.

## Editor's Message

Dave Williamson

Well here we go again, starting another year. Thank you all yet again for putting your trust in me as your editor. Another way of wording that would be "nobody wanted the job so nobody ran against me." I'll leave that to you to decide for your selves. I've got some plans that will hopefully keep up the quality and interest level in this publication for our members. First up in this issue you'll notice an article from a new author, Steve Brunn. He went above and beyond and supplied pictures and everything to support it. So much in fact due to the limitations on the size of our publication I had to split it up into a couple of installments. Thanks Steve for picking up the ball and running with it (far better than the Browns did this season!) But anyway, as you probably guessed by this point, this all leads to the perennial request for articles. If someone can jump in for a first attempt and basically fill the article section of two issues with an interesting subject why can't you? Seriously, all it takes is a subject that you know something about and go with it. We'd all like to know what it is that you do and how it works for your hobby.

I guess in the not too distant future we'll come up the subject for yet another themed issue. If you've got any ideas, please share it, you may just have that great idea that everyone will want to hear about. . . you never know. . .

One last thing about the beginning of the year is that the Spring Auction season is just around the corner. Hopefully it will be warm by then!

I'll see you at the meeting!



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## BAP/HAP Report

Wayne Toven

Here we are at the end of another year, almost, so far winter has been almost non-existent. But the BAP / HAP year ended in November, so the awards were given out at the December meeting / Christmas party. In the Breeder Award Program we had a total of only 10 members participate this year, with a grand total of 47 spawns turned in, which is down from the 67 spawns last year. The Breeder of the Year for 2017 is..... wait for it, Wayne Toven with a total of only 14 spawns, the same as last year, there should have been an improvement. Come on people, any current active club member is eligible to participate in these programs, let's see if we can do better next year. On to the Horticultural Award Program, there were only two members that participated this year for a total of 21 submissions, consisting of vegetative propagations, flowerings, and sexual propagations. The Horticulturist of the Year for 2017 with a total of 11 propagations is (not him again) Wayne Toven. You would think with all of the different live plants available and the improvements in the lighting industry more people would be keeping live plants. Not only do they look more natural than plastic plants but they provide benefits for the fish, they use up fish waste as fertilizer, take up carbon dioxide, and give off oxygen. I know there have been an abundance of live plants at many of the local fish club auctions throughout the year, it's not that hard to propagate live plants, some people actually have the problem that they can't get rid of excess plant growth.

There was also a Master Breeder plaque awarded for spawning Characins & Tetras to Wayne Toven.

The BAP / HAP year for 2018 started in December with a bang, there were 5 spawns turned in at the meeting. These were added to the fish, plant, food, tanks, and other items in the giveaway, a big THANK YOU goes out to everyone that donated or obtained items for this event. This is the club's way of showing it's appreciation to the active members.

### October 2017

#### BAP

Species	Common name	Class	Points
Mike & Elsie Swanson <i>Corydoras aeneus</i>	Green Cory	Catfish	15
Dave Williamson <i>Xenotoca doadrioi</i>		Livebearer	10

### November 2017

#### BAP

Bill Bilski <i>Aulonocara jacobfriebergi</i>	Lemon Jakes	Cichlid m.b.	15
Wayne Toven <i>Xenotoca doadrioi</i>		Livebearer	10
<i>Neolamprologus leluepi</i>	Lemon cichlid	Cichlid s.s.	15
<i>Thorichthys helleri</i>	Yellow cichlid	Cichlid s.s.	5
Dave Williamson <i>Aulonocara stuartgranti</i>	Lawanda peacock	Cichlid m.b.	15

#### HAP

Wayne Toven <i>Cryptocoryne pontederifolia</i>		C – vegetative	15
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### December 2017

#### BAP

Mike & Elsie Swanson <i>Cyprichromis leptosoma</i>	Tri – color	Cichlid m.b.	10
<i>Poecilia zonata</i>		Livebearer	5
<i>Xiphophorus helleri</i>	swordtail	Livebearer	5
<i>Poecilia wingei</i>	Bumble bee endler	Livebearer	5
Bud White <i>Haplochromis obliquidens</i>		Cichlid m.b.	10

### 2017 Totals

	BAP	Points	HAP	Points
Wayne Toven	14	130	11	125
Mike & Elsie Swanson	11	105	-	-
Dave Williamson	7	65	-	-
Jeffrey Swanson	6	55	10	100
Bud White	3	35	-	-
Phil Hypes	2	20	-	-
Dan McMonigle	2	20	-	-
Rich Serva	2	15	-	-
Bill Bilski	1	15	-	-
Joe Reich	1	5	-	-

### 2018 Totals

	BAP	Points	HAP	Points
Mike & Elsie Swanson	4	25	-	-
Bud White	1	10	-	-



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# Bowl Show & Special Activities

David Girard



Congratulations to Dave Williamson for winning the bowl show in 2017. We had 11 people enter into the bowl show in 2017. Let's see if we can improve on that in 2018!

## November results:

### AO Livebearers

1st	Dave Williamson	<i>Limia garneri</i>
2nd	Dave Williamson	<i>Xiphophorous continens</i>
3rd	Dave Williamson	<i>Jenensyia onca</i>

### AO Egglayers

No entries

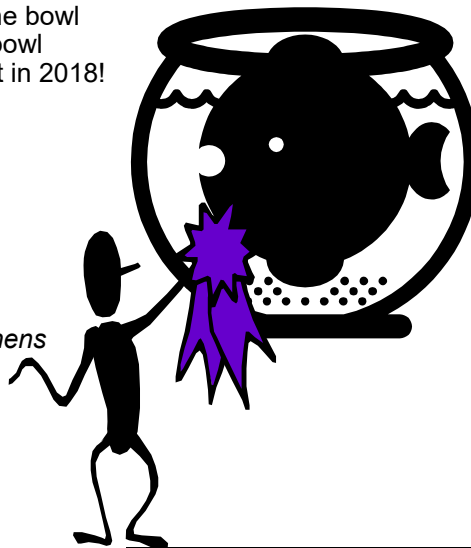
### AO Catfish

1st	Dave Williamson	<i>Tatia intermedia</i>
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From the Christmas Party. . .



What is up with this!

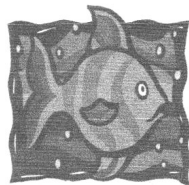


## Annual Point Totals

- 1-Dave Williamson-119
- 2-Wayne Toven-81
- 3-Jeff Plazak-59
- 4-Mike & Elsie Swanson-31
- 5-Don Youngkin-22
- 6-Misty White-21
- 7-Bill Bilski-10
- 8-Jeff Swanson-6
- 9-Todd Zettler-4
- 10-Violet Borger-2
- 11-Emilie Myatt-1

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## 2018 Bowl Show Schedule

### January:

Male Guppies  
Goldfish  
Minnows, Danios & Rasboras

### February:

Domestic Swordtails,  
*Betta splendens*,  
Characins (Tetras & relatives)

### March:

Mollies  
Suckermouth Catfish  
Barbs

### April:

Female Guppies  
Corydoras, Aspidoras & Brochis  
Photography

### May:

Rift Lake Cichlids  
Sharks & Loaches  
Aquatic Invertebrates

June: no bowl show

### July:

Native Fish  
Angelfish & Discus  
Aquatic Plants

### August:

Platies  
Rainbowfish  
Amphibians

### September:

Goodeids  
AO New World Cichlids  
Pairs (male/female)

### October:

Gouramis & Anabantoids  
AO Old World Cichlids  
Arts & Crafts

### November:

AO Livebearers  
AO Egglayers  
AO Catfish

# Exchange Report

Wayne Toven



Hey if anyone, I mean anyone is interested in reading one of the articles mentioned below please let me know and I will get a copy emailed to you or a hard copy at a meeting. In the many years I have been doing this review column I can probably count on one hand all of the requests I have had for an article. I have read many interesting and informative articles over the years.

First we had a couple of our members articles reprinted in the Erie Aquarium Society's December issue of their publication, these were Elsie Swanson's article on Jack Dempseys, and Jeffrey Swanson's article Labidochromis sp. "Hongi" – Super Red Top Breeding in the Aquarium.

**Aquarium Club of Lancaster County**, Tank Tales: Nov. 2017

My Fish Room Story, by Dan Taylor

Alan & Karen's Not So Excellent Adventures: Part 3 – Bones of the Fish Room, by Karen Haas

**Circle City Aquarium Club**, Fancy Fins: Nov. 2017

Apistogramma cacauioides, by Chris Eichrodt

**Kitchener – Waterloo Aquarium Society**, Fins & Tales: Nov. 2017

Belle Isle Aquarium, by Zenin Skomorowski

Spawning Cardinal Tetras Paracheirodon axelrodi – Growing Food For Newly – Hatched Baby Cardinals, by Robert Channen

**Hamilton & District Aquarium Society**: Nov. 2017

Riding the Wave of Biotope Aquarium & Design, by Dave Holland

**Aquarium Club of Lancaster County**, Tank Tales: Dec. 2017

My New Found Cory Experience, by Dan Taylor

Alan & Karen's Not So Excellent Adventure Part 4 – Fish Room Racks & Doodads, by Karen Haas

BBS Aka Baby Brine Shrimp, by Paul Tangredi

**Missouri Aquarium Society Inc.** The Darter: Nov / Dec 2017

Breeding the Missouri Native Red

Spotted Sunfish Lepomis miniatus, by James E. Wetzel

The Three Moemas: a Successful Breeding Program, by Jack Heller

Breeding the U. S. Native Dwarf Banded Pygmy Sunfish – Elasmomacra zonatum, by Mike Hellweg

Snails in the Aquarium, by Rick Renfro

Are We There Yet? The State of Volume Aquarium Lighting, by Chuck Bremer

Dario Dario – the Scarlet Badis, by Mike Hellweg

**Greater Detroit Aquarium Society**, Tropic Tank Talk: Nov 2017

Petronotopsis a Family Forgotten From the Early Years of Our Hobby, by Bob Muller

Spawning the Emperor – Tetra That is, by Peter Melady

**Kitchener – Waterloo Aquarium Society**, Fins & Tales: Dec 2017

The Lowly Lemna, by Jelle Faber

A Comprehensive Guide to Hatching Small Batch Brine Shrimp, by Karen Murray

**Motor City Aquarium Society**, Tropiquarium: Dec 2017

The Paradise Fish, by Melissa Bukowski



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## Membership Report

Mike Swanson



Hi Everyone, We had a great turnout at the Christmas party, 41 in attendance. The weather was good, food was great and the company was awesome. Hope everyone had a good time, and went home with a lot of raffle prizes. Hope to see you all at the next meeting.

We would like to Welcome our newest member Selene Shores to the club, and would like to thank the recent renewals:

Phil Hypes, Curtis Ramsey, Jeffrey Swanson, Mike & Elsie Swanson, and Don Youngkin.

Just a reminder, the following memberships expire in January or February.

Sebastion Smith, Jeffrey Yadlovski, and Ray Hunziker

You can easily renew at a meeting or online at our new website [akronfishclub.com](http://akronfishclub.com) \$10 for 2 years (electronic subscription-BEST VALUE) or \$10 a year for paper subscription. If you want to check on your membership status email me, or ask me at a meeting or the auction.

Thank You, Mike Swanson [bigkid341@yahoo.com](mailto:bigkid341@yahoo.com)

## GAAS Spring Auction 2018

**Tallmadge Community Center**  
**80 Community Rd.**  
**Tallmadge, Ohio 44278**



Registration opens 10 am  
Auction begins at 11 am



### For more information:

**Bud White** (330) 571-0394 [bwhite@neo.rr.com](mailto:bwhite@neo.rr.com)

**Wayne Toven** (330) 256-7836 [wtoven@hotmail.com](mailto:wtoven@hotmail.com)

**Rich Serva** (330) 650-4613 [rjserva@gmail.com](mailto:rjserva@gmail.com)

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## A Classroom Tank Made Easy as 1, 2, 3! (part one)

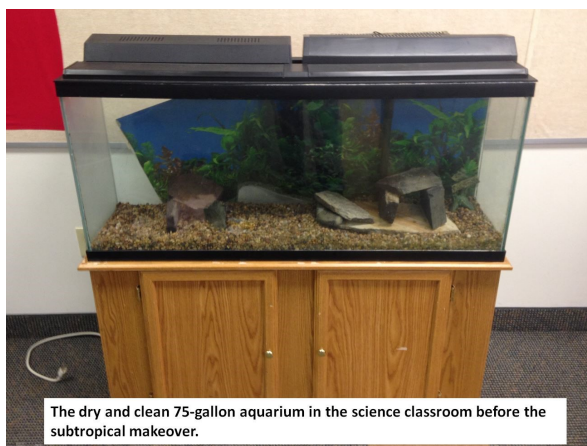
by Steve Brunn

Our schools' classrooms are places of excellence in inquiry, imagination, and learning. When teachers add an animal to their classroom—even an insect—they add an additional layer of imagination and inquiry to their students' experiences. When my daughter was a student in middle school, she was lucky to have a science teacher who kept an attractive 75-gallon tropical freshwater tank in the science classroom. It was stocked with a mishmash of active and colorful tropical fish that the students brought in for extra credit. The tropical "community" of fish species varied from year to year, but was a mix from the Amazon river basin and Indian/Asian

waters. The tank had an efficient but dated hanging heater, a hood with two florescent lights, an external double-cartridge power filter, and artificial plants that looked realistic. The science teacher, Mr. I, had a saltwater tank at his home, and he knew the value that the large freshwater tank brought to his classroom environment. He was an experienced teacher, and he knew how to maintain the tank and how to protect such a tank from the abuse that might be offered from the middle school students. Mr. I had this large tropical community fish tank up and running for the past 15 years.

Over the past 7 years—during and after my daughter's passage through middle school—I developed a volunteer fish-sitting service with Mr. I's classroom fish. That is, in the summer months, when the school would be closed, I volunteered to house the surviving fish for 3 months. In June, I would arrange to come in after

school hours and would net the fish into bags and take them to my home. In August, prior to school starting, I would bring the fish back to school, plus I would add in some purchased schooling fish, like giant



danios, and some benign cichlid species, like angel fish, to bring the population of fish up to what the tank would reasonably hold.

Unfortunately, my cycle of fish sitting for the summer came to halt in June 2017. In May, two of the students had accidentally spilled a full can of flake food into the tank on a Friday, and by that following Monday, most of the fish had perished. Only one albino *Corydoras aeneus* and a three-spot gourami, *Trichopodus trichopterus*, had survived the resulting pollution of the over feeding. On top of that, Mr. I was moving to a new school. Fortunately, he was leaving the 75-gallon aquarium behind in the classroom for the next teacher. I did take home the two surviving fish, and I vowed to myself to help the next science teacher set up the tank to carry on the tradition of having an aquarium in the classroom.

In early August 2017, by first com-

municating with the school's principal, I extended an offer to help the new middle school science teacher get the tank up and running. The new teacher, Ms. M, admitted that she knew nothing about fish or fish tanks, but she was willing to learn and was good at following instructions. Working with Ms. M's schedule, the goal would be to setup and stock the tank over a weekend and a Monday morning (3 days), so that students would see a welcoming aquarium on that Monday evening when they were to bring in their school supplies.

On Day 1, the Saturday before the students' arrival, I was dedicated to filling the tank with water and taking steps to get the biological filtration jumpstarted. On that Saturday, the school was open to teachers and staff, and I was able to enter the school to inspect the tank and prepare to fill it. Fortunately for me, over the summer, Mr. I had completely cleaned the inside of the tank. He had also washed the bigger than pea-sized gravel that was about 1.5 inches deep. This made my Day 1 job much easier than I expected—I had anticipated a complete cleanup of the tank. Using a medium sized (30 gallon) garbage can on wheels, one that I have dedicated to fish projects, I transported tap water from a janitor's closet to the science classroom. I did add appropriate amounts of water conditioner to the collected water before adding it to the tank. I then used a 5-gallon bucket to take water out of the garbage can and carefully poured it into the tank. When the tank was about half full, I stopped filling to give myself a moment to add plants and pay attention to the filters.



Because I had suspected that the power filter was dry and not biologically active, I had brought with me a box filter that was taken from one of my existing home tanks. This is an aquarist's shortcut to provide biological filtration to the new tank and to seed the tank with mature, functioning bacteria. I also added some new filter floss to the box filter. The box filter and a large disk air stone would be driven by an air pump. When the water level was raised to near the top, I plugged in the existing power filter, and it worked fine. Additionally, I added aquatic plants that I hoped would retard the nitrogen levels of the fishes' waste. I added several stands of *Najas* grass (*Najas guadalupensis*), 1 Anubias plant (*Anubias barteri*), 2 Java ferns (*Microsorium pteropus*), clumps of Java moss (*Taxiphyllum barbieri*), and 2 to 3 portions of the filamentous green algae known as "Marimo moss ball" (*Aegagropila linnaei*). I also added some algae that I scraped off the sides of a mature tank from home in hopes that it would populate the tank on a microscopic level. All of this plant material and filtration preparation was now in place to give the fish a fighting chance to flourish.

On Day 2, the Sunday before opening day, I went shopping for fish and invertebrate livestock. I ultimately targeted 4 aquarium stores in the Cleveland/Akron, Ohio, area, and in those stores I went on a focused shopping spree. I had made a wish list of subtropical fish, not tropical fish. Unlike Mr. I's tank that was heated and had silk plants, I was planning a tank "makeover" to a subtropical aquarium. That is, I was planning an aquarium that was to have no heater, high oxygen levels produced by live plants and increased aeration, and fish species that could handle extremes in temperature—especially the cooler temperatures of an unheated tank. Subtropical climates exist in the world

where it is usually very warm in the summer but where winter temperatures drop to freezing only temporarily or rarely. Florida and Arizona in the US, northern Mexico, southern China, and the northern highlands of India all come to mind as examples of subtropical environments. Subtropical fish do well in these areas of mild temperatures rather than hot ones, and they do not seem to mind fluctuations in temperature as long as they are not too extreme or too long in duration (Monks 2007). A good example of a subtropical fish is the rosy barb (*Puntius conchonius*), which comes from northern India. This summer I kept a trio of rosy barbs in a 25-gallon half-barrel tub, and they endured several days where the air temperature reached 90°F and a few October nights with the air temperature dipping below 40°F—and they were fine. When I brought them inside late in October, the water temperature was 54°F and they showed no ill effects.

For the subtropical tank I obtained the following species (with a general geographical location given to show their subtropical heritage): 3 variatus platys (*Xiphophorus variatus*—Mexico), 9 bloodfin tetras (*Aphyocharax anisitsi*—Argentina), 9 white cloud mountain minnows (*Tanichthys albonubes*—Guangdong Province, South China), 2 zebra danios (*Danio rerio*—India), 3 rosy barbs (*Puntius conchonius*—India), 4 pepper corys (*Corydoras paleatus*—Uruguay/Argentina), 2 weather loaches (*Misgurnus anguillicaudatus*—Asia), and 1 golden algae eater (*Gyrinocheilus aymonieri*—Cambodia [not subtropical]). I also obtained 2 apple snails (*Pomacea* sp.—Florida) and a gold mystery snail (*Pomacea* sp.). All the fish appeared to be healthy and without any obvious disease. I brought all of these fish to my home where I housed them overnight in a plastic shoebox container with an air-driven box filter to provide aer-

ation. I would then take the entire tub with the fish to the school the next day.

On Day 3, opening-day Monday, I arrived to the school around 8:15 am with the fish being transported in the tub that housed them over night. Because I was not going to float them in bags to slowly acclimate them to the new tank, I instead slowly added some tank water into their tub to eliminate the shock of any temperature difference and to begin the acclimation process in the tub. After I determined that they were in no danger of being harmed if I added them into the tank, I simply netted them and released them into the tank. They all survived the three difficult temperature and water chemistry changes from (1) the retail store to (2) my home and now to (3) an unheated subtropical tank. This was a real testament to the hardiness of these subtropical fish. With the addition of the fish and snails, the goal of setting up the tank in 3 days was met.

Over that weekend, I had also purchased a 54-inch LED lamp that was timer compatible to replace the old florescent lights. This addition made the tank emit a beautiful glow, as if it was a dose of sunlight to the classroom. This bright light would also promote the plant and algae growth that would assist the biological filtration of the tank. Additionally, because the LED lighting ran on a timer, the aquarium would be lighted consistently every school day and on weekends and holidays. I set the timer for 10 hours of "daylight" so that the aquarium would be lighted at 7 am and would go off at 5 pm. With activity in the building before and after school, the fish would most likely experience twilight external to the tank before and after the 10-hour period of intense light from the LEDs.

... to be continued

## The Greater Akron Aquarium Society

P.O. Box 494  
Akron, OH 44309-0494

«firstname» «lastname»

«address»

«city», «state» «zip»

### Meeting Notice - Do Not Delay

# Meeting Notice

## Friday, January 12

**Program:** The achievement of breeding a variety of different aquatic animals and sharing that knowledge and experience with others is a valuable part of the hobby and is rewarded through the Breeders Award Program (BAP). In his talk "Getting Ahead in BAP," Mr. Joe Doyle will review how to spawn several species of difficult fish, discuss challenges faced, and present his bucket list of fish to successfully spawn and raise. The discussion will include breeding *Betta macrostoma*, whiptails, bumblebee goby, and others, including saltwater fish species. Since 2005, Joe has been an active member of the Greater Pittsburgh Aquarium Society, Inc. and he has served as President and has held other executive positions with GPASI. Please make plans to attend the January 2018 program and learn from Joe's BAP experience.

**Bowl Show:** Male Guppies, Goldfish, Minnows, Danios & Rasboras

## Friday, February 9

**Program:** "Protecting and Feeding Fry." Brian Shrimpton, an active member of the Northeast Ohio Fish Club (NEOfish), will once again present his experiences in the hobby to GAAS. For our February program, Brian will be speaking on how he provides food and protection to fry that allows them to get to a safe size. If you have fish that are spawning, then don't miss this program for the important next steps that will allow the fry to thrive.

**Bowl Show:** Domestic Swordtails, Male *Betta splendens*, Characins (Tetras & relatives)

**General meetings begin at 8:00 p.m. at the Ritchie Memorial Shelter House**

## Coming Events

**Feb. 10 - 2018 Saturday**  
- starts at 11 am

**Ohio Cichlid Association - OCA winter auction**

Holiday Inn – 15471  
Royaltown Rd. Strongsville, Oh 44136  
[www.ohiocichlid.com](http://www.ohiocichlid.com)

**Feb. 17 – 2018 Saturday**  
– starts at 10:30 am

**Motor City Aquarium Society – MCAS spring auction**

876 Horace Brown Dr.  
Madison Heights, Mi. 48071  
[www.motorcityaquariumsociety.com](http://www.motorcityaquariumsociety.com)

**Feb. 25, 2018 – Sunday**  
– starts at 11 am

**SCALES - Spring Auction**

Perry Grange, 6300  
Richville Dr. SW,  
Massillon, Ohio

<http://www.scalesclub.com>

**Mar. 11 – 2018 Sunday**  
– starts at 11 am

**Youngstown Area Tropical Fish Society – YATFS spring auction**

J.V. Johnson Community Center – 800 Gillmer Rd. Leavittsburg, Oh 44430  
[www.yatfs.com](http://www.yatfs.com)