



FOTAS

Fish Tales

Volume 9 Issue 2

**Mycos: That Dreaded
Fishroom Nuisance
Part I**

Duckweed Food

Stomatepia pindu

Xenotoca lyonsi

Mystery Snails



**FOTAS
Convention
Preview**

**Fishroom Hygiene:
Maintaining a Sterile Environment**

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Betta splendens
Photo by Mo "AquaMojo" Devlin

Design and Layout
Gerald Griffin



Volume 9 Issue 2

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Fish Tales Submission Guidelines

Articles and Artwork:
Please submit all articles in electronic form. We can accept most popular software formats and fonts. Email to herpchat@yahoo.com. Photos and graphics are encouraged with your articles! Please remember to include the photo/graphic credits. Graphics and photo files may be submitted in any format, however uncompressed TIFF, JPEG or vector format is preferred, at the highest resolution/file size possible. If you need help with graphics files or your file is too large to email, please contact me for alternative submission info.

Next deadline.....
Sept 1st 2019

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President's Message

It's that time of year again. The annual FOTAS convention is right around the corner and how exciting is it that for the very first time, it is being held in Louisiana! I have never been to "Union, Justice and Confidence" state and I'm really looking forward to it. Set your calendars to Baton Rouge August 23rd-25th! I can't wait to see all my FOTAS friends. I've planned a whole excursion for myself which includes not only attending the show, but stops at several natural areas both along the way there and on the way home. I've even weaseled my way into having Jim V's fiancée Wandee, cook for me.

You might notice that there is no CARES report in this issue of Fish Tales. Unfortunately, I had a vital hard drive crash with a lot of my created content and records on it. I am hopeful that a data recovery tech can get the stuff I had on there. I knew better and should have had everything backed up. I do have access to the last CARES data submitted so all is not lost but I have not sent out for updates to this. I am hopeful that the FOTAS exec can elect a member to become the new CARES chairman and reinstate the vigor into this program that it deserves.

At the Baton Rouge FOTAS, the board meeting is scheduled for Saturday August 24th at noon. Here we will discuss our organizations business, finances and other items of interest. Clubs are reminded that annual dues of \$20.00 are due at this meeting as well. Annual elections for board member will also take place here. Your current executive 2018-2019 is as follows:

President – Greg Steeves
Vice President – Kyle Osterholt
Secretary – Lisa Hufstetler
Treasurer – Chris Lewis

In addition to the club delegates, the following people have played an integral role in FOTAS as well:

Gerald Griffin – Fish Tales Editor
Mike Hufstetler – Technical expert
Clay Trachtman – BAP Chairman, Convention Chairman, Webmaster
Greg Steeves – CARES Coordinator
Marvin England – Advisor

These are the people that for the most part, have been in these roles for the last five years. Thank you to everyone for allowing FOTAS to operate as smoothly as it has. It has been a wonderful run so far.

As the Federation of Texas Aquarium Societies, one of the oldest umbrella organizations in the country (1953) adapts to the challenges of a modern era and evolves to keep the hobby of aquatics relevant, I hope everyone realizes the work that his executive has done to promote our wonderful pastime. I see nothing but positivity and progress in the years ahead for FOTAS. Thank you to all that have made this such a wonderful experience for me.

-Greg

Mystery Snails



**Article and Photos
by Tammy Jines**

What's so fun about mystery snails?

I added a few golden mystery snails in my aquarium to help keep it clean and I ended up falling in love with them.

It wasn't long before I found a couple egg sack above the water. If you want your snails to lay you should keep the water level down an inch so they can. It wasn't long before my tank was filled with baby snails. It was fun to watch them grow and they grow fast! It's very important to keep them feed. They love to eat. I feed mine bottom feeder pellets, algae wafers and fresh cucumber.

The funniest thing to watch is when they make a funnel and siphon the water to get the fish food off the top. They will line up at the top of the water for a bite to eat. They are so fun to watch and add a lot of color to your tank.



Duckweed Food: made easy!

Article and Photos
by Valaree Baker

As I started another weeks' water change, I started scooping out handfuls of duckweed. That stuff is EVERYWHERE. I (as usual) started thinking to myself how wasteful it is to just toss the stuff. I use it to keep the 'jumpers' from jumping, providing shrimp a place to graze, fry a place to hide, and my low light plants from getting too much light; and that is just in my own experience, which is very limited. So I Googled 'What is duckweed used for?' the first thing that came up was that it is easier to harvest than algae or other aquatic plants. I feel like I could have told them that, but the second thing that came up was that duckweed can be used to feed fish, poultry, and cattle. That caught my attention. This stuff that I have in nearly all of my tanks, can feed fish. Do I have an endless supply of free fish food that I am just dumping in the bin every week?

After being satisfied that I wasn't going to cause any loss of life, I scooped the duckweed out of the bowl onto parchment paper, folded the paper, and drained the excess water out. My thoughts were, maybe if I just dried it out, the fish would eat it. After a couple of days sitting and drying, I grabbed a couple of pinches,

and threw them in the community tank. Immediately, a couple of fish tried it, but then they all spit it out, and swim away unimpressed.

Well. That didn't work. I thought about it for a bit and decided that maybe I should make it a paste, I've heard of gel fish foods before, maybe this could be used like that. So, I went back to the parchment paper, put the dried duckweed into the food processor, added a bit of water, and started processing. The Magic Bullet worked like a charm. It created a thick dark green liquid. It didn't take me long to realize I had absolutely nothing to add as a filler to turn this into a gel though, and this certainly wasn't a paste. I was not going to pour this into my tanks.

I decided to pour the green liquid back onto the parchment paper. Maybe I can dry it out a little, and it would be okay to put in a tank. I put the parchment paper on top of a plate, and shifted the plate around a couple of times to spread it into an even layer to help it dry. Several days later, I still wasn't very comfortable about putting it in a tank, it didn't look good at all. It had dried out even more than I expected, and didn't think

it would even separate from the parchment paper. Surprisingly though, I only had to peel the parchment paper back and the dried duckweed liquid came right off. Even more of a surprise, it looked like flake food! It was thicker and denser, but looked like real flake food.

I inspected it thoroughly, making sure the parchment did in fact separate completely, and threw a couple of pieces into a fish tank. The community tank ate it, although, I think only because they didn't want to share it with their friends. I added a piece to the shrimp tank, hoping I wasn't inadvertently poisoning all of my tanks. It took the shrimp only a few seconds to find it, and after only a couple of minutes, had a feeding frenzy. It remained floating, but after several shrimp started grazing on it, it seemed to be raining duckweed flake food so it fed many others on the tank floor.

Anyway, I'm not sure I made a fish food, but I made shrimp food. I'm thinking about playing with it a little more, and maybe adding some supplements? Or I may leave that for people who know what they are doing, I'll need to research fish and shrimp diets before I do that. But, I found a use for some of the excess duckweed that I pull out of my tanks.







Fish Room Hygiene: Maintaining a Sterile Environment

**Article by
Gerald Griffin**

This is the first part in what will hopefully be a long series on the Healthy Betta. In future articles I will focus on specific diseases and pathogens however to start I will focus on what a Healthy Betta is supposed to look like and on how you can strive to keep your betta healthy. In looking at new acquisitions there are several places you should look to see if the Betta is healthy.

First off look at the entire body. The body should have a Betta shape and not have any spinal deformities. On Doubletails they can have a bit of kink at the caudal peduncle but try to keep that to a minimum. If the body line looks like it has any kinks do not even think about obtaining or using this Betta. The other thing to look for is the “line”. Some plakat lines have a “spoon” head which is faulted and should be avoided however sometimes the spoon head cannot be avoided in some lines.

Second off look at the scales. The scales should be relatively even and none distended or missing. There are some fish lines that have malformed scales like dragons and some of the “X-Factor” fish will have malformed

scales. These are not unhealthy as far as the actual Betta goes however they will create problems for breeding projects.

Third look at the fins. The fins should be able to be held erect without any clamping. You may see some fish with ray curls or bent rays. Although undesirable for breeding these do not mean the Betta is unhealthy. If you see fin “damage” it may have been from fighting or from disease. When in doubt avoid these Bettas.

Fourth look at the belly of the Betta. The belly should be slightly rounded but not bloated. If the belly is concave then serious issues could be on hand. If possible checking the feces can give you an indicator of health. Betta feces should fall off and may be rounded. If they are long and stringy being light in color that is typical of an internal disease. It could be something minor that diet could fix or it could be something major. It is not risking your fish room on these Bettas.

Fifth is to look at the eyes. They eyes should be clear and should not be bulging. A milky eye could be a cataract or an infection that has discolored the eye or

formed the cataract. Also remember that Betta's skin actually covers the eye and opaque Bettas will as they age develop guanine deposits on the skin that clouds over the eye area eventually causing blindness. Some of your "Dragon Scale" lines also do this. If the eyes are bulging then the Betta probably has exophthalmia which is also a bacteriological infection in which gas pockets are expanding behind the eye popping them outwards.

Sixth is to look at the gills. The opercula themselves should not be extended unless the Betta is flaring. If the operculum looks distended this is either a sign of infection or permanent damage. Bettas as well as any other fish are susceptible to ammonia poisoning. Look for a normal respiration rate. If the respiration rate is not normal either the fish is stressed or it has a problem. It could be gill damage from ammonia or could be a parasite like a fluke or velvet. Velvet can and will attack the gills of adult Bettas before you see the infestation on the body.

Seventh and last is to look at the mouth of the Betta. They should have two intact lips. Sometimes you can find damage from one that has been in a fight or had lost part of one due to a bacterial infection like "mouth fungus".

Probably the most important part of keeping your Bettas healthy is maintaining a proper environment and good water conditions. Maintenance Hygiene is one of the most important part of keeping Bettas. If you are ever in a situation where you ask yourself "Oh they can probably go another day without a water change" they probably can't! Make yourself do a water change. The absolute minimum I would ever consider for a Betta is a quart container. Anything less requires minimum daily changes and depending on your feeding regimen it could be twice a day. There are all sorts of ways people do the water changes however if you are doing anything large scale it is best to have a dedicated water container. For that I recommend a 35 gallon Rubbermaid trash can either permanently mounted in a location or on casters for movement. In that I would use a water pump connected to a hose that allow for water changes.

As to the individual containers people use either plastic or glass. I am not a fan of the plastic containers because of the discoloring and the fact they really cannot



be heat sterilized. For that I have resorted to quart and half gallon wide mouth canning jars much like I did in the 1980s when I first started breeding Bettas. The glass jars allow for sterilization with bleach and heat in a dishwasher. How I accomplish this is to load them into the dishwasher and pour bleach directly into the bottom of the dishwasher. I then use the hottest setting and let the dishwasher decontaminate the jars with the bleach first and then after the rinse cycle let it heat dry the jars. This way there is absolutely no pathogens that could possibly be in the jars!

For the water change I do them in lots of 8 for the half gallon and 16 for the quart. I start by washing my hands with antibacterial soap. Then jars are lined up on a step stool and filled with water from the water can. I then pull one jar at a time down from the shelf and pour the contents of the jar through a net to catch the Betta and the water goes into a waste bucket. The dirty jars are then lined up on the floor of the fish room. The waste bucket is designated waste water and is never used for anything else. The Betta is then placed in the closest jar and that jar is placed back on the shelf. The net is then placed in a 30% bleach solution and then will go into a rinse jar and the procedure is repeated until all 8 or 16 jars have been used. Since each jar is placed back on the shelf there is no cross contamination. The bucket is then poured into the waste water removal system (Another bucket with a dedicated pump to send the contaminated water to the drain). I then wash my hands with antibacterial soap. The rinse jar is poured down the sink and refilled to prevent too much bleach contaminating the rinse jar. I then wash my hands again with antibacterial soap and repeat the process.

For the grow-out tanks each individual tank used for Bettas is plumbed out or in the process of being plumbed out. Each spawning set up is 100% sterile each and every time. To set up a spawn the tank is thoroughly cleaned with bleach and then rinsed. The sponge filter and spawning mops are boiled for several minutes and allowed to cool down before being placed back into the tank. Any item that touches any tank must be completely sterilized before it is allowed anywhere else. Some might see this fanaticism as overkill however it is the best way to make sure that you do not contaminate all of your hard work with some sort of careless mistake and have to lose entire lines.

In conclusion, if you keep your Betta in the best of conditions with plenty of clean water and adequate food then health problems should be minimal. Water conditions is where many novice Betta keepers loose it. If the water conditions become unsanitary then the Betta's immune system will be compromised opening them up to all sorts of possible infections. So keep the water clean and feed them well. If you have any questions or comments feel free to let me know. Future issues will deal with nutrition and various groups of diseases.

A perfectly healthy
male Silver Betta from
PetSmart.
Photo by Kim Hood



An interesting metallic
Photo by Mo Devlin
using a Teal Filter.



Mo Devlin



Mycos: That Dreaded Fishroom Nuisance Part 1

Article by
Gerald Griffin

History:

Mycos or more properly known as *Mycobacterium marinum* was first observed and isolated in 1926 from fish that succumbed to it in the Philadelphia Aquarium. Years later in 1951 it was found in swimmers that were infected from the bacteria in Australia. In 1962 the first case of zoonotic transmission was documented by Swift and Cohen. Since then there have been a number of outbreaks identified in fisheries and within hobbyists themselves. Although transmission is considered rare (approximately .27 cases per 100,000) there are ever increasing outbreaks in the Betta Community. Approximately half of the cases reported in humans are directly related to the aquarium hobby.

Taxonomy:

Mycobacterium marinum is a free living bacterium that can cause opportunistic infections in organisms. *Mycobacterium* are difficult to detect as they are neither gram negative nor gram positive for the most part however there have been some strains that will test gram positive and some authors state that *Mycobacterium* are a gram positive rod. Because of this

an acid fast test is needed to stain them. However the most reliable means of identification is a PCR (Polymerase Chain Reaction) test for the 65-kDa protein.

Pathology:

There are several species of *Mycobacterium* that can infect fish. *Mycobacterium marinum* however has proven to be the most common zoonotic disease of the *Mycobacterium* family. *Mycobacterium marinum* has been shown to infect a great variety of fish species however has been shown to wreak havoc with anabantoid fishes. It is not known if this is due to husbandry or an inability for anabantoids to be able to combat Mycos in their immune system. A striking note about this particular bacteria is its ability to survive the immune system of the host. When engulfed by macrophages this bacteria has shown ability to escape an encapsulating lysosome and move inside the cell and then move outside of the cell to infect other cells. This ability to escape phagocytosis is of great concern as it makes short work of the immune system of the infected fish.

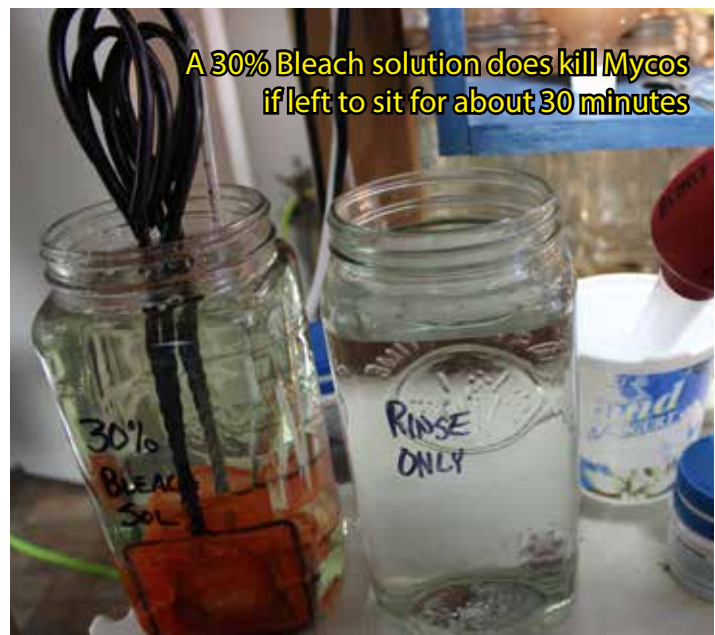
Mycobacterium marinum normally does not show any symptoms until the fish are in an advanced stage of infection. Typically the *Mycobacterium* will start out by causing abnormal growths in the liver and spleen. As this disease spreads it will cause the fish to become immunocompromised. As a result the fish keeper may notice lethargy in their specimens. This will translate into fish not eating, becoming emaciated and possible long stringy feces. If the fish has not succumbed to the Mycos yet it could then display advanced fin rot which is generally incurable and bumps (granulomas) under the skin and finally can cause eruption of lesions on the body. By the time it is in this phase the fish is terminal and will most likely die soon.

Prevention:

Fish do have some ability to fight this pathogen however the majority of outbreaks in the aquarium hobby are traced to poor water conditions, overcrowding of specimens, warm water and nutritional deficiencies. This bacteria seems to favor acidic conditions with humus in the environment. One of the biggest problems with *Mycobacterium marinum* is that it can be found in virtually every environment and even in the soil. It can also be found in a vast number of waterways so eliminating it can be virtually impossible. Some populations of wild bass show infection rates of 76%. The key to limiting outbreaks is linked to pristine water conditions and husbandry. The healthier you can keep your fish the better their ability to not contract Mycos in the first place. When setting up new tanks it is best to start with sterile tanks which have been cleaned with hot water and bleach. Mycos has shown an ability to withstand drying and sun bleaching so that method cannot be relied on. Mycos have a waxy coating on their cell wall which makes them resistant to common disinfecting agents however bleach at 2% (about 1/3 bleach to 2/3 water) will kill the *Mycobacterium*. Lysol is also effective at killing Mycos but it also kills fish equally as well and should not be used. A 70% alcohol has also shown effectiveness in killing the *Mycobacterium*.

Treatment:

There is no evidence of treatment in anabantoid fish let alone Bettas. Most of the treatment deals with fish room hygiene which is designed to prevent



infection in other fishes. The reality is that if you have Bettas in your fish room it is best to destroy them to prevent infection in your other stock. A few antibiotics like Gentamicin has been shown to kill the *Mycobacterium* however this is primary in zoonotic exposure. In fish once Mycobacteriosis is diagnosed it is considered terminal.

Zoonotic Transmission:

One of the biggest issues with "Mycos" is the ability to infect people hence it is a zoonotic disease. The first recorded case of transmission was in 1951 from swimmers in Australia when they developed granulomas from contact with the bacteria. The first recorded case from an aquarium transmitted case was reported in 1962. *Mycobacterium marinum* is inhibited from growing in temperatures of 37° C (98.6° F) and higher. This means that a Mycos infection in humans is normally in the extremities away from the body core temperature which is why the infection is typically seen in the legs or arms of the affected people. Recent reports have indicated that in immunocompromised patients the Mycos has shown the ability to actually grow in temperatures closer to 37° C. "Mycos" or fish keepers finger as it was commonly known as in the aquarium hobby goes through an incubation period of two to four weeks and after the incubation period lesions appear in the affected areas. One of the reasons this bacteria is of concern to the hobby is that immunocompromised hobbyists are at a greater risk of contracting this bacteria than non-immunocompromised hobbyists.

For that reason it is best to cover the extremities or wear nitrile gloves when working on tanks or doing water changes. The point is to avoid contact with the water.

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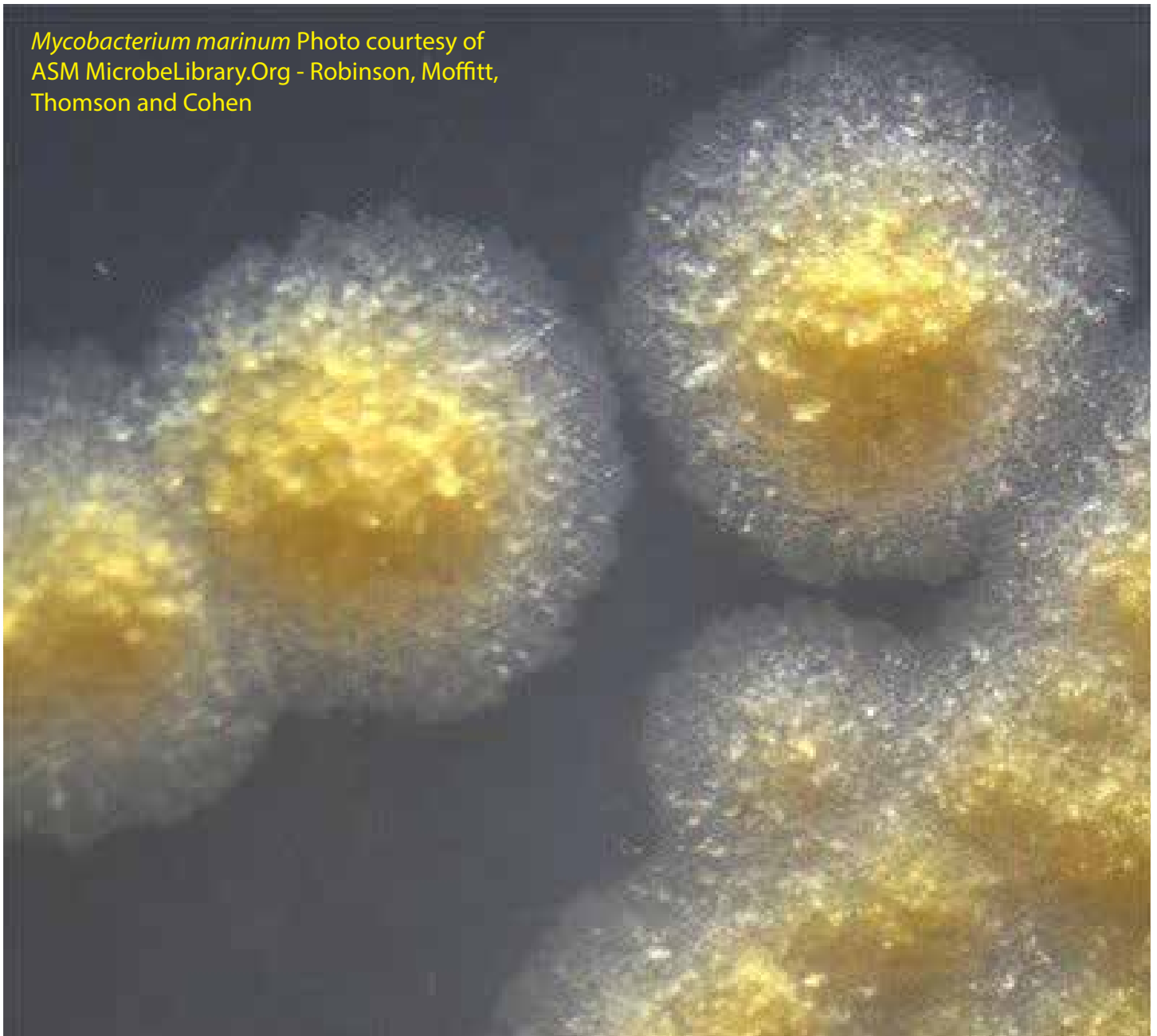
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Mycobacterium marinum Photo courtesy of ASM MicrobeLibrary.Org - Robinson, Moffitt, Thomson and Cohen



Xenotoca lyonsi

Article by
Ethan Grantham

Family: Goodeidae

Breeding: Livebearers. Females have about a 2-month gestation period.

Size: 1.5"

History: This species was previously called *Xenotoca eiseni* with the collection location of Rio Tamazula. The *eiseni* had three regional variants and all were very distinct. In 2016, the *X. eiseni* was reclassified based on the regional locations. From the reclassification, the *Xenotoca lyonsi* was born. The other two were *X. doadrio* and the initial *X. eiseni* for the type location it was classified. Multiple ESUs still exist.

Aggression: Semi peaceful. They get along with their own species, but can be very nippy to other fish. I have heard stories of goodeids killing off tanks in which they were introduced. In a species only tank, you may see some fin nipping, but with a larger tank and many eye sight breakers, it is no issue. Like many livebearers there can be harassment from males toward females, to prevent this make sure

the tank contains many sight breakers and is large enough for the females to get away. Adults are hard on fry and I have a hard time keeping fry in the tank.

In the Aquarium: I do not use a heater on the aquarium. They are very hardy fish and the best temperature is low 70s and not any higher than 75. A cool down period in the 60s for a couple months can help the health of the fish. Constant higher temps will cause constant breeding and may shorten life span. Personally, I do not do a cool down period and I keep the fish between 72-74. Feeding wise, these fish are very omnivorous. In my tank the staple is Northfin community pellets and ZooMed spirulina flakes. Once a week I give protein treats in the form of shrimp pellets and bug bites. I stay away from higher protein foods like bloodworms.

Endangerment: One key not to make on this species is that they are endangered. Data is not up to date, but it is now estimated that they are critically endangered. When keeping this species, one should keep them species only and not cross breed or hybridize.

Stomatepia pindu

Article by Jim Valenzuela
Photos by Dave Hale

A short introduction to this wonderful group of fish from West Africa Cameroon's Barombi Mbo, near the town of Kumba is a very small crater lake. The recorded depth is approximately 364 feet, while only the top 131 feet supports enough oxygen due to lack of large current for fish to live. The cichlids from Lake Barombi Mbo possibly come from a *Sarotherodon* species that may have evolved over thousands of years. All Lake Barombi Mbo cichlids are on the CARES priority list and are critically endangered. Over fishing and over harvesting of lumber are the main reasons for the needed urgency for breeding and distribution. In addition, this lake provides drinking water for this town. Here are the eleven endemic cichlid species found in this lake.

- *Stomatepia mariae*, feeds primary on shrimp, insect larvae and small fish.
- *Stomatepia mondo*, feeds primary on shrimp, insect larvae and small fish.
- *Stomatepia pindu*, feeds primary on shrimp, insect larvae and small fish.
- *Myaka myaka*, monotypic genus, feeds on phytoplankton in open water.
- *Pungu maclareni*, monotypic genus, feeds mostly on freshwater sponges.
- *Konia dikume*, lives in open water prefers deeper water, prefers mosquito larvae.

- *Konia eisentrauti*, lives in open water, may prefer deeper water.
- *Sarotherodon caroli*, lives in all areas of the lake, phytoplankton feeder.
- *Sarotherodon linnellii*, lives in all areas of the lake, phytoplankton feeder.
- *Sarotherodon lohbergeri*, lives in all areas of the lake, phytoplankton feeder.
- *Sarotherodon stenbachi*, lives in all areas of the lake, phytoplankton feeder.

At this time, I'm very fortunate to have 4 of the above species. Never did I dream that I would be the proud owner of *Stomatepia mongo*. This was my Holy Grail fish for a long time. *Stomatepia mongo* at one time was thought to be possibly extinct in the wild however recently was made available and is now being bred by a very small select group of breeders in the country. My five fish arrived on 08/13/18 from Connecticut. My goal will be to maintain them and hopefully breed and distribute to my local club. I'll keep records for a future article.

This article will focus on my experience with *Stomatepia pindu*. I acquired 10 small fry in 2016 at the ACA in Cincinnati. They were less than an inch. Although I never kept them, I was confident that I could keep these fish in a species only tank. Due to unforeseen



circumstances, I needed to downsize. I decided at this time to donate 6 of these fish to my club's Rare Fish Auction HCCC in San Antonio. I now had the remaining 4 in a 55 gallon tank. Months later I was given a much larger Pindu from a friend. It turned out that this fish was a female. In a very short time, this fish was holding. Since the tank was outside, I didn't pay much attention to these fish. I was not aware just how long she had been holding? When I decided to strip her, I had a difficult time catching her. Unfortunately, she spat and all the eggs were immediately eaten by the other fish. Lesson learned. The eggs were all a green color, later I was told this is normal coloration for the Pindu's fertile eggs. I had to add more fish to this tank due to acquiring fish. Unfortunately, downsizing has not worked out for me. The female continued to fill with eggs. I tried several options to get fry from her. At times, she would be holding and a couple days later she wasn't holding. Once when I decided to strip, she had a mouth full of bad eggs. This went on for a least 5 times. The original fry had now grown to about 3.5 inches, while the lone female was about 4.5 inches.

Nothing really happened until June 19th 2018, when I noticed that one of the ACA's fry was holding. I wasn't sure when the actual spawning took place. It barely had a noticeable bump in her buccal cavity. I was hoping that she'll continue to hold. I decided to strip on June 27th, just exactly one week before the ACA 2018 in Houston. I carefully caught her, and she still spat in the bucket no matter how gentle I was. I was so happy to finally get fry from *Stomatepia pindu*! She had 24 fully formed black miniatures of herself! The fry were put into a 10 gallon tank and were fed finely

crushed flake food. The fry are currently doing well and growing. They're now sharing a tank with similar size *Pungu maclareni*. I brought a small group of the *Stomatepia pindu* to my club's recent auction. I hope the winning bidder will be breeding them soon.

Three months went by without any more spawning. I moved all fish indoors for the winter on October 7th, 2018. I attended the FOTAS fish convention on the 12th, in San Antonio, Texas returning on the 14th. The next day, I noticed one of the *Stomatepia pindu* and a *Pungu maclareni* were both holding! With the *Pungu maclareni*, I count out 13 days from when I notice them holding before stripping. No scientific reason, it just works out better for me in my opinion. If too early the fry are not developed far along in my experience. I don't really want to wait too long either for her to spit in the tank. I'm afraid the fry would immediately be eaten by the other fish. I'll probably use this same method with the *Stomatepia pindu* since it's worked very well for me with the *Pungu maclareni* the fifteen times so far that they have spawn.

October 24th, I decided to catch both fish and strip. I'm happy to say I got 3 *Stomatepia pindu* and 12 *Pungu maclareni*. I was somewhat disappointed with the Pindu's total count. However, I realize that they all add up. All fish, due to my current tank limits were put into breeder boxes. This will be the first time, using these types of boxes. They hang on the outside on the tank, pulling water in the box and then returning back to the tank air driven. Hopefully, they'll work fine for me. On November 10th, I noticed I had another Pindu holding. I decided to strip on 19th. I got 19 wigglers.

Conclusion, *Stomatepia pindu* has been a really cool fish to work with for me. I'm not sure at this time, what will be the next Barombi Mbo fish that I'll be able to acquire and breed. The cichlids from this Crater Lake have been absolutely fascinating for me, a brand new and exciting interest for me in keeping fish again. All the cichlids from Barombi Mbo are seriously threatened. I would highly recommend this fish to anyone that desires something a little different and not often seen in the hobby. If you have the space, setting up a tank with cichlids from Barombi Mbo would be very satisfying and keeping a fish that is on the CARES priority list would also be rewarding as a hobbyist. Now if only the *Myaka myaka* will spawn.



FOTAS 2019

Holiday Inn South
Baton Rouge, LA
August 23-25, 2019

Events

- Guest Speakers
- Banquet Dinner
- Funny Money Auction
- Large Fish Show
- Vendors
- Huge Auction

Speaker Sessions*

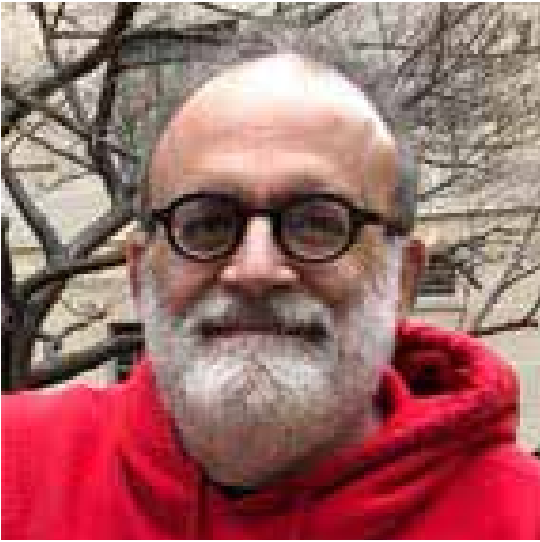
- Bill Allen – Livebearers
- Jon Armbruster – Plecos
- John Hawke – Fish Diseases
- Karen Maruska – Cichlids
- Jeff Senske – Planted Aquariums
- Greg Steeves – History of FOTAS

Visit WWW.SELAS.US for more information.



* Speakers subject to change

Bill Allen



When Bill Allen's uncle Bobby from Lafayette Louisiana heard that he had a new ten gallon aquarium, he had to buy him a few fish. After putting them in the tank, Bobby said, "Da guy at da sto 'said dat da big black one gonna have babies". Sure enough, in a few days the big black molly delivered about a dozen babies which were placed in a smaller plastic container. And so began Bill's life-long fascination with tropical fish in general and livebearers in particular.

Presently Bill has a fish room of about 50 tanks, specializing in fancy platies and swordtails along with a few guppies, mollies, and some more exotic wild livebearers. After retiring from teaching after 20 years, he began "Mr. Bill's Fish", an aquarium maintenance company. His clients include "Blue Southern Comfort Foods", a Shreveport Louisiana restaurant. Their 55 gallon tank contains breeding populations of *Xiphophorus nezahualcoyotl*, "Tiger" limias (possibly a new unnamed species), and the extinct-in-the-wild "Tequila goodeids" (*Zoogoneticus tequila*), along with information to educate any interested patrons.

Bill has also served as the editor for the "Journal" of the American Livebearer Society and has had articles on livebearers published in "Freshwater and Marine Aquariums", "Tropical Fish Hobbyist", and "Aquarium" magazines. He has also discovered what appears to be the most northern population of wild sailfin mollies (*Poecilia latipinna*) in Shreveport and Bossier City Louisiana and has published information on these fish.

In addition to his published articles, Bill has presented programs at several American Livebearer Association conventions, the Southeast Louisiana Aquarium Society, and the Northeast Council of Aquarium Societies.

In addition to his interest in fish, Bill is also a musician. He has performed with groups as diverse as the Shreveport Symphony (bassoon) to soul legend Percy Sledge (keys and saxophone). He also performs with The Sultans, a local oldies cover band (bass guitar).

Bill's topics at the Convention will be "Livebearers – They're Not Just for Feeders Anymore"... He also plans to jam on guitar in the Hospitality Room until thrown out.

"Mr. Bill" Allen is sponsored by Louisiana Fish Store.





Jon Armbruster

Dr. Jonathan Armbruster is the Director of the Auburn University Museum of Natural History and Curator of Fishes. Jon got his start with aquarium fishes while he was in high school. One of his defining memories that got him interested in plecos was when he was working in a pet store and a large shipment of common plecos were delivered. When he came in the next morning, many of them had jumped out of the tank and lay dry on the floor. As he was cleaning them up, one managed to twitch. They were alive thanks to a respiratory stomach that he would later go on to describe.

Jon is a veteran of many trips to collect fishes including all across the United States and South America as well as trips to Africa, Asia, and New Guinea. His main work has been on Loricariid catfishes, where he has described over 50 species, several genera, and a subfamily. He has also published on the relationships of the species using morphology and genetics and studied their anatomy and ecology. He has recently begun to get interested in other neotropical taxa such as the pencil catfishes (*Trichomycterus*), the South American darters (*Characidium*), and has published several papers with his former graduate student, Dr. Edward Burrell, on cichlid morphology, ecology, and phylogenetic relationships.

In addition, Jon has been examining North American Cavefishes of the genus *Typhlichthys*. There are multiple undescribed species that are present in the group. He is also working on North American minnow ecology and relationships, and is examining the taxonomy of the African small barbs of *Enteromius* and related genera.

Dr. Jon Armbruster is sponsored by Aqua-Fest.





John Hawke

John Hawke's interest in aquatic animals began at a young age when he kept aquariums at home but was developed further by his experiences with the estuarine environment. From the time he was 10 years old until he went to college, he would spend at least a month each summer at his Aunt and Uncle's house on Palmetto Creek which feeds into Perdido Bay in South Alabama. It was here that he learned to fish, crab, shrimp and developed a curiosity about the diversity of aquatic life in this brackish water environment.

His interest in the study of fish health began at Auburn University where he was involved in a project with his mentor Dr. John Plumb, investigating a large fish kill that involved portions of Perdido Bay in Alabama and Escambia Bay in Florida.

Currently, Dr. John Hawke is a professor of Aquatic Animal Health at the Louisiana State University (LSU) school of Veterinary Medicine, where he teaches various courses including the graduate course of Diseases of Aquatic Animals. In addition, Dr. Hawke is also the Chief Diagnostician and Section Head of the Louisiana Aquatic Diagnostic Laboratory.

Dr. Hawke has been involved in fish health research, teaching, and diagnostics for over 40 years. He has served as the President of the Fish Health Section of the American Fisheries Society and received the S.F. Snieszko Distinguished Service Award from the American Fisheries Society in 2010. Dr. Hawke is probably best known for the discovery and naming of *Edwardsiella ictaluri* the causative agent of Enteric Septicemia of Catfish.

Dr. Hawke still enjoys helping aquaculturists solve their problems through his position with the Aquatic Diagnostic Lab and enjoy teaching the vet students. He also enjoys fishing, playing bluegrass music with his wife and friends, as well as playing with his 6 grandchildren.

Dr. John Hawke is sponsored by Charles' Fish Room.





Karen Maruska

Karen Maruska has been enamored with fish since early childhood. Growing up, she had fish tanks, did lots of fish-ing, and constantly begged her parents to go to aquariums. In school, she used every opportunity for class projects to do something with fish. In 7th grade, she used her mom's fish-shaped pan to create a paper-mache fish mold and then used random objects to recreate all of a fish's internal organs inside it. Then in 9th grade, she convinced her Earth Science teacher to let her write a paper about great white sharks!

Karen's first real research opportunity in fish biology was in college when she worked in a lab that studied lampreys and salmon. Since then, she has worked on a variety of different fishes including sharks and stingrays, gar, toadfish, coral reef fishes such as damselfish, gobies, butterflyfish, wrasses, and now freshwater African cichlids.

Currently, Dr. Karen Maruska is an Assistant Professor in the Department of Biological Sciences at Louisiana State University (LSU). She graduated with a B.S. degree from University of New Hampshire, M.S. degree from Florida Tech, and Ph.D. degree from University of Hawaii at Manoa. She was a Grass Fellow in Neuroscience at the Marine Biological Lab in Woods Hole, and then an NIH postdoctoral scholar at Stanford University. Dr. Maruska has over 50 peer-reviewed publications and 8 book chapters on diverse topics ranging from sensory physiology to neural plasticity to reproductive function.

Dr. Maruska runs the Maruska Lab at LSU. At the lab, her current work uses the African cichlid fish *Astatotilapia burtoni* to study how fishes communicate in different sensory channels, and how the brain integrates all of this sensory information to allow the fish to make decisions necessary for reproduction and survival.

In order to relate her studies to the general public, Dr. Maruska and her lab have a blog called "Burt's blog" which describes their research from the perspective of Burt the cichlid fish (and Toni, his girlfriend).



Jeff Senske



Jeff Senske has been involved with aquariums all of his life, starting with his father owning a tropical fish store while in veterinary school. Jeff and his brother Mike started a retail store from scratch in 1990 and it quickly became a true hobbyist's shop. Unfortunately, as successful as the shop was, the brothers were young and not very business savvy, spending all of the profits on new displays and cool rare fish.

It was in 1997 when Jeff's passion changed to aquascaping as he saw the Nature Aquarium World books by Takashi Amano and was determined to recreate the fantastic aquascapes that he saw in the books. After years of study, Jeff was to accomplish this and is now a world renowned aquascaper in his own right, giving talks around the country as well as judging planted aquarium competitions.

Jeff has been a fixture at the biennial Aquatic Gardeners Convention, giving talks on multiple subjects such as effective designs, commercial aquascaping, and aquarium photography.

In May of 2000, Jeff and his brother Mike started Aquarium Design Group (ADG) in Houston, Texas. The store combines their lifelong passion for aquariums with their love for art, design, and architecture. From the beginning ADG focused on freshwater aquariums as opposed to the existing standard of saltwater. The brothers believed firmly in the ability of the freshwater aquarium to transcend the somewhat fixed aesthetic of saltwater aquariums with the wider array of decorative elements and overall visual opportunity a well composed freshwater aquarium offers. Different species of driftwood, stones, and substrates can be combined to create many different looks, providing a more unified, harmonious connection to various interior styles. Add the ultimate simplicity of a freshwater system (filtration, lighting, etc) and it becomes the preferred style and a wonderful new design opportunity for many clients.

Jeff Senske is sponsored by Fritz Aquatics.





Greg Steeves

As a life long aquarist, Greg Steeves is known for his fascination with the family cichlidae, in particular haplochromine cichlids. He has written three books, authored many articles in a dozen languages and speaks on the subject internationally. Together with Lee Ann (Mrs. Steeves), they maintain a fairly large collection of cichlids, catfish and other lineages of aquatic creatures. Greg is the founding member of the Hill Country Cichlid Club and president of the Federation of Texas Aquarium Societies (FOTAS). He is a fellow of the Haplochromis Society based in France as well as the Cichlidroom Companion for whom he has contributed nearly since its inception. He considers his greatest accolade his association with the CARES Conservation Program where he coordinates the Lake Victoria cichlid species.

His love of cichlids and people, together with his message of conservation can be heard (with an ever present humorous undertone) loud and clear on his internet radio show called “Let’s Talk about Cichlids”.

Native South Texas aquatic plants and animals have been an interest of Greg’s for many years and he has both explored and written on the diverse life found in this area, particularly the out flows of the Edwards Aquifer.

Greg and Lee Ann travel to fish events around the country whenever possible meeting old friends and making new ones at every stop. Fish and fish people are a large part of his life as is spreading his message about the joys of working with haplochromine cichlids and the importance of ensuring that they survive for the next generations to enjoy.

Greg will be giving a presentation during the banquet on the “History of FOTAS”.

Greg’s presentation is part of the American Cichlid Association’s Cichlid Speaker Program sponsored by ZooMed Labs.



FOTAS Convention Fish Show

Basics

All entries must be registered with SELAS at least 2 weeks before the show (no walk ups). Note: SELAS reserves the right to change the registration period.

All entries must have their own aquarium (10 gallon recommended), water, and sponge filter. SELAS will provide air supply.

No aquariums are to be larger than 29 gallons unless you have pre-approval from SELAS.

No dither fish are allowed.

No lights on the aquariums. A glass top or canopy without lights can be used.

Aquariums are not to be labeled in anyway. A label will be provided for the aquarium by SELAS.

There is no cost to enter the fish show (however, you must be a paid attendee of FOTAS 2019 to participate).

Main Judging

The classes of fish are the following:

- Old World Cichlid
- New World Cichlid
- Catfish
- Other (includes any fish without a scientific name, ie. hybrids, flowerhorns, ob's, etc.)

In the event that there are less than 5 fish entered into a class, that group will be removed and all fish from that group will be placed into the Other class.

Judges will score the fish based on the following:

- Animal looks as close to ideal as one would expect of a perfect representative. (not oversized or undersized, good color that is not abnormal, etc) (10 Points)
- Anatomy of animal is ideal (fins, scales, jaw, etc) (10 Points)
- Judges' discretion which could include attitude, fin extensions, and personal choice (10 Points)

Judges will add up their scores, with the winner of the class being the fish with the highest score in that class. In the event of a tie, Judges will meet and decide on a winner.

The fish with the highest score overall regardless of class, will be named Best in Show. In the event of a tie, Judges will meet and decide on a winner.

Judges decisions are final.

People's Choice Judging

All attendees of FOTAS 2019 will get 1 vote for the People's Choice Award. Attendees will write the ID number of the fish that they are voting for and the votes will be counted. The fish with the highest number of votes will receive the People's Choice Award. In the event of a tie, all ballots of the tied fish will be put into a bowl, and a winner will be drawn from those ballots.

Awards

Winner of each class will win \$20.

Second place of each class will win \$10.

Winner of People's Choice will win \$20.

Best in show will win \$50.

So theoretically 1 fish could win \$90 total.

Other

There are 2 other non-cash prizes for winning entries. First, the American Cichlid Association will award a medallion to the Best Cichlid in the show (New World Class or Old World Class). Second, the Federation of Texas Aquarium Societies will award a medallion for the best CARES fish.

FOTAS Convention Fish Show Entry Form

Your Name (required)

Your Email (required)

Please provide the following information for each fish that you plan to enter into the show:

Scientific Name(s) (if there is one)

Common Name(s) (if there is one)

Which class the fish should be entered into (show organizers will verify this)

Is this fish a CARES fish?

Aquarium size that you are bringing for the fish

Send this information to <https://www.selas.us/FOTAS2019/fish-show/>

FOTAS Convention Auction - Sunday

Seller sheets can be downloaded as a pdf from the FOTAS Convention website..

SELAS will not accept responsibility for any item's safe keeping nor its condition before or after the sale.

TIME

Auction Registration begins Sunday at 9 AM.

Auction starts promptly at 11 AM.

Save time by filling out your seller sheet before you arrive!

ITEMS

Only fish or aquarium related products are allowed in the auction.

All items must be properly bagged.

Proper fish bags must be used.

Zip-locks and baggies are unacceptable.

Live animals must be properly bagged with air and water. Please double bag.

Larger fish may be kept in buckets or other suitable containers, but the bucket becomes property of the buyer.

Items such as driftwood or decorations do not need to be bagged; however, they must be labeled appropriately.

Items not properly bagged will be rebagged by SELAS volunteers. There will be a \$2 fee for items that need to be rebagged. This is NON-NEGOTIABLE.

LABELS / SELLER SHEETS

All Sellers must fill out a seller sheet.

Your Seller ID are your initials. For example, if your name is Homer Jay Simpson, your Seller ID would be HJS.

All items that you are selling must be listed on your seller sheet.

All items must be labeled with your Seller ID and Item Number. Your labels should match the numbers on your seller sheet. You may put a reserve price on your item.

Below are examples of acceptable labels:

HJS003 3 Yellow Labs (<i>Labidochromis caeruleus</i>) (1 Male, 2 Females)	HJS008 3 Yellow Labs (1 Male, 2 Females)
HJS016 Pygmy Chain Sword (<i>Echinodorus tenellus</i>)	HJS022 Slate Cave Reserve: \$5

SELLER STICKERS

Blue – This is the first color that is auctioned off. This includes SELAS donations and Move-Up items.

Red / Yellow – These are the standard auction items. For each item that a person is entering into the auction, that item will get a sticker and be placed on the corresponding color table.

Green – Late arrivals will get a green sticker and go last in the auction. A \$2 fee can be paid to move the items up.

FEES

You must have a bidder card to bid.

Move Ups – If a seller or buyer wishes to move an item up to the beginning of the auction (or to an earlier place in the auction if the auction has already started), a fee of \$2 cash must be paid.

AUCTION PAYMENT

When a bidder is ready to leave, that person must turn in their bidder card to the cashier. The cashier will print out a receipt. The bidder must pay the total amount that is owed at that time.

Acceptable forms of payment are cash and credit cards.

SELLER PAYMENT

Final prices paid at the auction will be split between SELAS and the seller.

The first dollar, goes to SELAS, after that there is a split of 80% going to the seller and 20% going to SELAS.

Sellers will receive a check in the mail approximately 2 -3 weeks after the auction (make sure that your address is correct on the seller sheet).



Below are a couple of poems I wrote for a couple of "Fish Club Newsletters" for a bit of humor in the hobby:

Feel free to submit your poems, cartoons, and other humor to our magazine for publication.

Thanks

Gerald Griffin

Fish Tales Magazine Editor

Ode to Duckweed

Duckweedius Infestitium is what I call thee
Anyone with a tank of it can plainly see

Oh Mat of Green which I detest
Plant to some, to others a Pest

I hateth thee to see in tank
You taketh over of that I bank

Large or small it matters not
Infestations make me hot

Eradication is mostly in vain
Your rate of growth drives me insane

I remove with net and get buckets full
And next week removing, this is bull

One little piece is all it takes
Then to the top it overtakes

Some fish will eat it it is said
If they are starved to near dead

Nutrient sump? Yeah right that's crap
Oh wait I see, a five point HAP

Ode to a 10 Gallon Tank

Once Glass with Metal trim
Now elegant and very thin

Not too big not too pricy
When decorated right looks quite nicey

Does not take up much space
Easy to find just the right place

A mainstay for several years
Enough volume for fishy cheers

Many fish have enough fin room
Overstock means fishy doom

Check pH and ammonia too
Don't and your in deep Doo Doo

Cycle right and problems end
Don't Cycle and fish ascend

To the fish heaven oh so high
And those that love them cry

Previous Issue of Fish Tales

What would you like to see in the next Fish Tales Magazine?

Contact the Editor if you have story ideas or would like to contribute to Fish Tales!



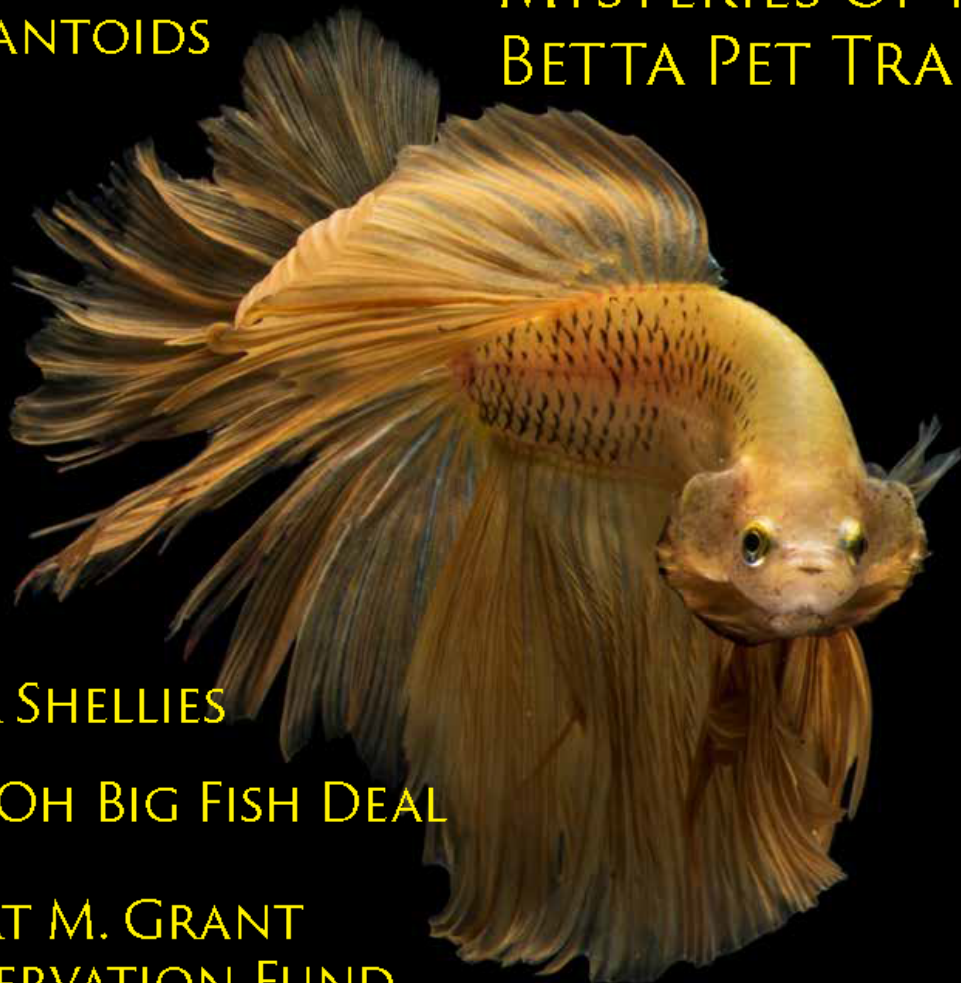
FOTAS

Fish Tales

Volume 9 Issue 1

CARES SPOTLIGHT
ANABANTOIDS

UNRAVELING THE
MYSTERIES OF THE
BETTA PET TRADE



SUPER SHELLIES

BFD? OH BIG FISH DEAL

STUART M. GRANT
CONSERVATION FUND