

Bluegrass Fishkeepers Association



The Splash is a quarterly publication of the Bluegrass Fish Keepers Association. The views and opinions contained within are not necessarily those of the editors and/or the officers and members of the Bluegrass Fish Keepers Association.

BFKA The Splash Interim Editor:
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The Splash submission guidelines for articles and art:
Please submit all articles, photos and art in electronic form. We can accept most popular software formats and fonts. Email to bluegrassfishkeepers@gmail.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..... November 01, 2022

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Upcoming Important Dates

All Dates are subject to change or be canceled due to local regulations and conditions of the pandemic please watch the Facebook group for up to date information on changes.

If you know of an event you would like added or want more information contact the editor.

Sept 23-25	Keystone Clash Morgantown PA
Oct 8	ETAA Swap Knoxville
Oct 8-9	Aquashella Chicago
Oct 15	2pm BFKA Swap
Oct 15	5pm BFKA General Meeting
Oct 7-9	All Aquarium Catfish Convention Herndon VA
Oct 15	5pm BFKA General Meeting
Oct 15	2pm BFKA Fall Swap
Oct 15	CAFE Fall Auction Columbus
Oct 22	GCAS Auction Cincinnati
Nov 18-20	OCA Extravaganza Cleveland OH
Nov 19	BFKA Awards Banquet

President's Message

Warm weather is here so our minds go to ponds and tubs. We have lots of outdoor activities and outings taking place. It is usually a slow time for the hobby and aquarium clubs. It seems like things keep hopping around here swaps and events popping up all over and this year we have in our backyard yard an event like never before as the Louisville club hosts 4 national aquarium conventions all at once in what is being referred to as The Aquatic Triple Crown. I am so glad to see fish events and things come back after the pandemic had us shut down for so long. I am very proud of our club that we were able to hold on, grow and develop throughout all of it.

John Tyler
2022 President

Bluegrass Fish Keepers Association meets monthly.

We are currently hold monthly meetings each 3rd Saturday of the month at 5pm. Special events may be held at other dates or times

Keep an eye on the Facebook group for changes or special events.

Special Thanks to our speakers

June - cookout

July - Triple Crown

August - Dustin Wunderlich

Want to share your experience? Submit an article by contacting the editor. We want to hear your stories

Meet The Board

	President John Tyler		Vice President Stacey Smallwood
	Treasurer TBD-		Secretary Donna Feters
	Director at Large Will Branham		Director at Large Laurin Howard

Breeders Award Program Standings.

	2021 points		2022 points	Total points	Title
Michael Gray	115	Ameca splendens	10	220	Intermediate Breeder
		Puntius titteya	20		
		Pelvicachromis taeniatus	20		
		Xiphophorus domestic swordtail	15		
		Hemichromis exsul	20		
Stephan Kalbli	40	rasbora vulcanus	30	70	General Breeder
Donna Fetters	60	Poecilia reticulata	5	65	General Breeder
Brandon May	50			50	General Breeder
John Tyler	40	Ameca splendens	10	50	General Breeder
Scott Breidert	35			35	
Laurin Howard		Ancistrus sp. bristle nose common	10	10	
Will Branham		Neocaridina davidi	5	25	
		Neolamprologus multifasciatus	20		
James Phillips	25			25	

Aquatic Triple Crown

ACA , AKA , ALA , NA-ANGFA JOINT CONVENTION

Many of us (about 60% of our membership) attended the 2022 convention in Louisville titled the Aquatic Triple Crown. Each of us got to see different things and took away different things from our time at the convention.

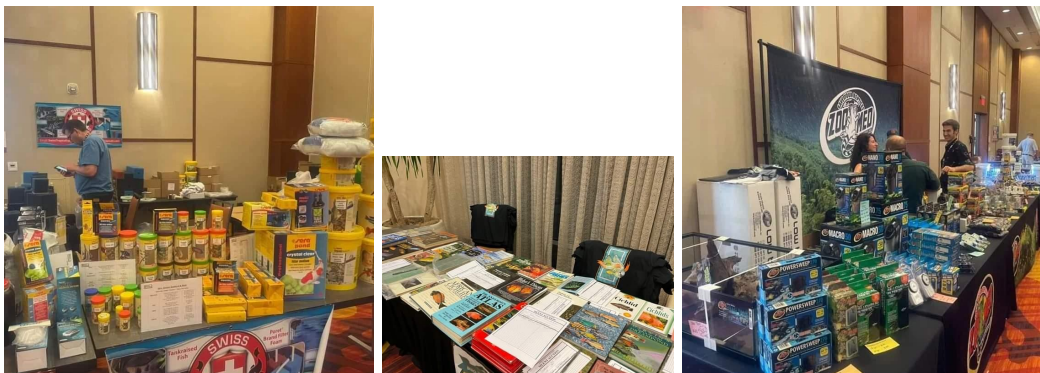
Interesting Information from the Triple Crown .

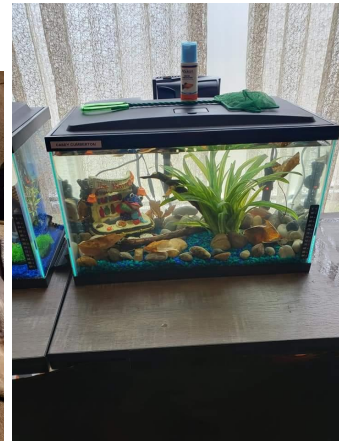
Hybridization in Species Wild Versus Captivity

I attended many presentations while at the Triple Crown oddly enough a number of them had parts that connected to other presentations I attended. On Thursday I got to speak with Dr. Michi Tobler on genetics of *Amatitlania* species and he gave a presentation where he discussed physical characteristics and hybridization. He said that while physical characteristics may change to resemble other species when genetic testing was done, very few hybrids were found in the wild in the area and time of his studies. Later I had the opportunity to hear Juan Miguel Artigas Azas speak on *Xiphophorus* species and how although there may be many species with different morphs living together in the wild in a specific area he was studying no hybrids could be found. However, he noted as soon as these species were placed in aquariums together they began hybridizing. So at this point I was intrigued as to why hybrids occur in captivity but not in the wild. Later that day I attended a presentation by Dr. Gil Rosenthal. Dr. Rosenthal spoke on *Xiphophorus* in an area north of where Juan Miguel Artigas Azas had been studying. Dr. Rosenthal talked about how he found multiple hybrids in the wild and that it was to the point that some species no longer exist as "pure" forms and hybridization is normal and important in the wild. This got me thinking, "What is the difference causing one area to have no hybrids and another to be full of them. And how does this connect to aquariums?" Dr. Rosenthal gave some more information in his talk that made it click for me. He said the areas he was looking at had a lot of run off, sediments built up in the water column and pollution. Fish breed based on pheromones and smells. A male *Xiphophorus*, for example, will release pheromones in his urine in the path of a female he wishes to breed. The female will then accept or reject him based on what she smells. In the dirty or polluted waters the female cannot correctly interpret the pheromones and accept mates of different species. It appears the pollution and dirty water masks the smell or covers what is needed for the female to make the decision to say no. The fact that we see hybrids frequently in aquariums led me to think even in aquariums of 100s of gallons we still aren't keeping the water clean enough. And we will continue to get hybrids in the aquariums until we can make the water as clean as what Juan Miguel was seeing. With this it more apparent to me the importance of not housing closely related species together, especially with rare species.



PICTURES FROM THE AQUATIC TRIPLE CROWN





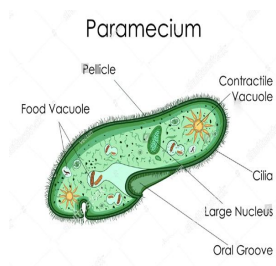
How To Culture Infusoria / Paramecium

by Paul Pierre

Infusoria refers to the many microscopic and near microscopic life forms found in freshwater habitats. When the smallest fry hatch in nature, infusoria is their first food. It is small enough for them to swallow, and it moves, triggering their strike reflex. Raising very small fry in the artificial environment of the fish room is challenging. Your chances of success increase dramatically if you provide the live micro foods needed to get the fry through those critical first days.



Paramecium are the primary organism in the infusoria cultures used in the hobby. They are single



celled, slipper shaped and move effortlessly using a fringe of tiny hairs called cilia as synchronized oar. The cilia also direct food into their oral groove which functions as a mouth. They are bacterivores eating bacteria, yeasts, and single celled algae. They are just visible to the unaided eye as white specks, and at an average 225 microns the species I work with are about half the length of a newly hatched brine shrimp nauplii. Their diameter though is just a fraction of that of the brine shrimp nauplii. Reproduction is primarily by fission (dividing in two) and occurs two to three times a day depending on temperature, with warmer temps speeding up division. Life span is measured in divisions, and is usually between 200 and 300 divisions.

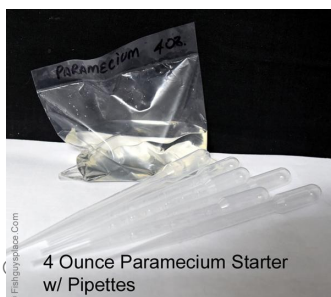


The first step in culturing paramecium is selecting a container, and getting a bacterial bloom going to feed the paramecium. They are bacterivores, consuming bacteria, yeast, and some species of cyanobacteria. I am using a cut-off, clear, two-liter Pepsi bottle for this tutorial. It is well rinsed out and filled with dechlorinated tap water at room temperature. If you are comfortable, the temperature is fine for paramecium. Several pieces of lettuce are added, and I put in four or five drops of milk to kickstart bacterial growth.

The paramecium do not eat the lettuce. It is broken down by bacteria of decay, and it is these bacteria that the paramecium feed on. You could use some rice or wheat grains, or another leafy vegetable. I like lettuce because I can dehydrate a whole head of it and store it in a baggie for use as needed. Once the culture is set up I label it with the start date and put it on a shelf in the fish room.

In 24 to 48 hours you should see the culture starting to cloud up. That is the bacteria breaking down the lettuce, and means it is ready for paramecium to be added.

If you are using one of my four ounce paramecium starters you should order it when you start the culture container, so it arrives just about when the container is ready for seeding. This starter contains paramecium from my long running mother cultures. There are enough to get your culture going in four or five days.



Paramecium and other infusoria are usually present in our tanks. If you want to try culturing without a starter, you can hunt wild protists in the bottom mulm and among java moss and other plants, in filter sponges and filter floss, and in your substrate. Collecting samples from all of these places and using them to seed the culture will sometimes produce a good mixed infusoria culture. If you go this route, just be sure to avoid introducing planaria and other unwanted guests.

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While they are large enough to be seen with the unaided eye if your vision is good, I suggest getting a magnifying glass for a clearer look. A good magnifier is a very useful tool in the fish room, and a worthwhile investment. I also include pipettes to help with harvesting and transferring paramecium.

Here at four days since seeding, the culture is doing well and populated enough to harvest from. These cultures have a cycle that starts with a big bacterial bloom, followed by a surge in the paramecium population, and a corresponding decrease in bacteria. I harvest with a pipette or baster, and pull from where the paramecium are thickest, usually around the decaying lettuce. When the paramecium population goes down, adding more lettuce or whatever you are using to promote bacterial growth bumps up the paramecium population.

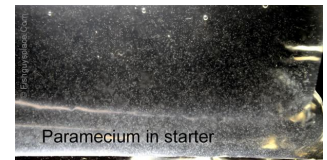
If I'm feeding a small container like a petri dish, then drops are in order. Larger fry containers or small tanks can take more. Unless you are raising fry by the natural method, it is good practice to start them in smaller water volumes. Fry should literally swim in their food.

The culture water has an ammonia level, so don't overdo it. There should be a lot more fry container water than added culture. A little goes a long way too, since this is a food that stays alive until eaten! If filtration is used in the fry container, turn it off or down for awhile when feeding this, since it can be taken up in the filter. Using paramecium the first few days with really small fry significantly improves survival.

These cultures do produce an odor as the bacteria count peaks. I always put a loose cover on the cultures to help contain it and keep pests out. A round plastic cover like the one that comes on oatmeal boxes works well. Culturing in unmodified two liter bottles, as shown above, is another way to minimize odor. Some have a filter floss plug, while others just have the cap sitting loosely in place, allowing the culture to breathe. To feed from the narrow neck bottles just pour a bit of culture out into a small, open top container.

To keep a culture producing, when the medium clears simply add a bit more lettuce or whatever you are using instead. This should generate a fresh bacterial burst, and a corresponding increase in paramecium. After two or three weeks, you can start a second bottle to have one going when the first gives out. Using smaller amounts of lettuce in backup cultures creates smaller paramecium populations that are more sustainable for a longer time. When needed to feed fry, you can add more and start fresh cultures.

Feel free to experiment with different 'foods' for these cultures. I am currently working with yeast as a possible alternative to bacteria of decay. There are also a number of alternative techniques to explore on YouTube. As with most aspects of the hobby, there are many ways to achieve a good outcome! I usually have these starters in stock and they can be ordered by email order@fishguysplace.com from my website <https://www.fishguysplace.com/livefood.html> or from the live foods section on AquaBid, where I sell as fishguy_1955.





CONSERVATION CORNER

A Look at a Fish Threatened with Extinction

4 Spot Merry Widow

Phallichthys quadripunctatus

There is a whole world of livebearers out there beyond the guppies, mollies, platies, and swordtails we see in the pet stores. While not as popular or determined a staple for most aquarium keepers, wild type livebearers can prove very rewarding to keep and breed. *Phallichthys quadripunctatus* is one of these more rare livebearers. Not only is *P. quadripunctatus* not a fish you find on every corner its also been in trouble of going extinct in the wild. The IUCN classifies it as endangered, confirming this status in 2019.



Phallichthys quadripunctatus has a very interesting history behind its name. The scientific name, *Phallichthys quadripunctatus*, breaks down into the species *quadripunctatus* where quadri means four and punctatus means spots. So the species name is four spots. The genus *Phallichthys* breaks into Phallic which refers to phallus and ichthys which means fish. So the genus is phallic fish. The reference to being a phallic fish is in reference to the gonopodium. Some species of the genus have gonopodiums that are over half the length of their body. *Phallichthys quadripunctatus* is not quite as endowed as its other relatives but it still gets the name. The common name four spot merry widow is also as humorous as the scientific. The four spot part of it is pretty straight forward but why merry widow? These fish have a little black coloring on their dorsal fin and at the time of discovering these fish the color black was associated with death and mourning. The operetta *The Merry Widow* was very popular at this time also and Frederick H. Stoye who wrote about his aquarium hobby both in English and German tagged these fish with the name Merry Widow for the first time and it became accepted. I find this funny because its

comparison to a modern situation would be if someone were naming a fish today and calling it the Top Gun Maverick or something like that.



Native to the Atlantic coastal areas of southern Costa Rica and northern Panama, the *Phallichthys quadripunctatus* is a very hard fish. Originally discovered in a variety of bodies of water in the area from roadside ditches to marshes and turbulent streams this livebearer can adapt to a lot of variation. With the males topping out at $\frac{3}{4}$ inch and females reaching $1\frac{1}{2}$ inches a 10 gallon tank is a perfect size for them. They prefer tropical temperatures of 72°F and higher and pH on the higher side between 7.0 and 8.0. Tank mates are typically suggested to be smaller species such as pygmy cories and shrimp with bristle nose plecos and other smaller livebearers

being on the list. *Phallichthys quadripunctatus*, although part of the Poeciliidae family cannot reproduce outside their genus due to differences in their reproductive structures. Some hobbyists have reported keeping this little fish alongside tetras, barbs, gouramis and even the smaller Central American cichlids like firemouths and convicts. I personally would lean towards the smaller tank mates so that you could better appreciate the *P. quadripunctatus* behaviors and personality. *P. quadripunctatus* seems very aware of what is going on in its tank and the surroundings outside the tank as well. They appear to recognize their primary keeper while at the same time will ignore other humans.

Breeding these fish is as easy if not easier than that of other livebearers like guppies and endlers. For best results males should be kept with more than one female to reduce his attention to a single female. Gestation is 24 days and they will produce between 5 and 20 fry. It has not been documented that these fish have any interest in eating their fry. Since their natural habitat includes aquatic vegetation they will appreciate a planted tank. Fry will eat similar foods to the adults just on a smaller scale, and the adults are not picky when it comes to food. While in nature they may pick at detritus and algae, in the aquarium they are happy to accept many prepared foods including tropical flakes.

The conservation status of *Phallichthys quadripunctatus* was deemed endangered and declining in 2019 as only 5 collection points could now be found. Deforestation and conversion of forests into plantations has resulted in runoff and sediment accumulation in the rivers. Massive broad spraying of pesticides have polluted and contaminated much of the waters making it uninhabitable for many species. On a number of collecting trips to the area multiple streams were found to be devoid of any life. While the government of Costa Rica is putting forth conservation efforts they do not seem to be enough to slow or stop the decline of this species. At this rate it's only a matter of time until this wonderful little livebearer will only be able to be found in someone's basement or somewhere in an outbuilding fishroom.

Get to Know Board Positions

Elections are just around the corner and we can use your help not only as officers but in other areas as well. To better help you understand what the officers do in case you want to run here is a brief breakdown of their duties

President- Leads the meetings and helps to organize the structure of the board

Vice President- steps in and does presidential duties when the president isn't available

Treasurer- handles finances for the club and keeps records of and reports out to the board on these finances

Secretary- handles the paperwork of the club. Maintains notes of meetings and board decisions.

Director at Large- fills in the gaps and completes tasks as requested. An example of such activity could be communicating with a speaker or organizing the auction.

If you would like to help in an officer capacity or otherwise please let one of the officers know we would love the assistance.

2022 COOKOUT & COLLECTING

