

The  
**DARTER**



V43-NI

**JANUARY/FEBRUARY 2017**

**B&W Printed \$3 Members: / \$5 Non-members**

## PRESIDENT

Pat Tosie  
1813 Locks Mill Dr.  
Fenton, MO 63026  
314-616-4316  
[pattosie@yahoo.com](mailto:pattosie@yahoo.com)

## VICE PRESIDENT

Gary Lange  
2590 Cheshire  
Florissant, MO 63033  
314-412-7636  
[gwlange@sbcglobal.net](mailto:gwlange@sbcglobal.net)

## TREASURER

Daniell Kinder  
7918 Page Ave  
Vinita Terrace, MO 63133  
931-210-1348  
[mangomerle@gmail.com](mailto:mangomerle@gmail.com)

## SECRETARY

Angela Hellweg  
511 Sunward Dr  
O'Fallon, MO 63368  
636-240-2443  
[pugdog64@yahoo.com](mailto:pugdog64@yahoo.com)

## EXECUTIVE COUNCIL

Cory Koch	<a href="mailto:sithlid@gmail.com">sithlid@gmail.com</a>	636-278-0736
Debbie Sultan	<a href="mailto:debsultan@gmail.com">debsultan@gmail.com</a>	618-410-7150
John Van Asch	<a href="mailto:johnsfishy0731@att.net">johnsfishy0731@att.net</a>	618-604-7228
Leroy McCreary	<a href="mailto:elanor7@gmail.com">elanor7@gmail.com</a>	314-578-8659
Mark Theby	<a href="mailto:markrehabber@yahoo.com">markrehabber@yahoo.com</a>	314-688-2899
Tom Corridini	<a href="mailto:tom@farmerenv.com">tom@farmerenv.com</a>	618-210-9221

## PROGRAM LEADERS

Advertising & Promotions	Mark Theby	314-688-2899
Auction Chairman	Mike Hellweg	636-240-2443
Breeders' Award Program	Steve Edie	636-922-4232
Corresponding Secretary	Pat Tosie	314-616-4316
Exchange Editor	Mark Theby	314-688-2899
Fish Raising	OPEN	
Fish Rescue	John Van Asch	618-604-7228
Forum Liaison	Scott Bush	314-486-8872
Historian	Cory Koch	636-278-0736
Horticultural Award Prog	Mike Hellweg	636-240-2443
Librarian	Dave Rush	314-291-8932
Membership & Welcoming	Ed Millinger/Ron Huck	573-883-9943
Monthly Bowl Show	Chris Mohrle	314-541-3897
O-FISH-L Editor	Pat Tosie	314-616-4316
Points Tabulator	Guy Tinker	314-346-5166
Publicity	Debbie Sultan	618-410-7150
Refreshments	Bob & Lora Watson	217-532-3238
Convention Chairman*	Gary Lange	314-412-7636
*Convention Chairman - Vote	Charles Harrison	314-894-9761
Social Events Coordinator	John Van Asch	618-604-7228
Swap Meet	Mark Theby	314-688-2899
Webmaster	Charles Harrison	314-894-9761 <a href="mailto:charles@inkmkr.com">charles@inkmkr.com</a>

## THE DARTER

(ISSN 0192-78333) is published six times a year by the Missouri Aquarium Society, P.O. Box 1682 Maryland Heights, MO 63043. This publication is free to members of the Missouri Aquarium Society, and other qualified requesters as determined by the publisher. Subscription requests can be sent to the above address or to [editor@missouriaquariumsociety.com](mailto:editor@missouriaquariumsociety.com). Use these addresses to notify of all address changes and please allow 6-8 weeks for change of address. Include the old address as well as new.

Opinions expressed by the contributors are their own and do not necessarily reflect the opinions of the Missouri Aquarium Society.

The editor reserves the right to edit any article for length, clarity, or content.. Photos provided are by each Author unless otherwise indicated.

## REPRINT POLICY

Reprints of individual articles are allowed as stated: PERMISSION TO REPRINT ANY ARTICLE IS LIMITED TO NONPROFIT AND NOT-FOR PROFIT AQUARIUM SOCIETIES. Permission is not given to redistribute or post the Darter in bulk.

Proper credit must be given to the author and two copies of any publication in which a reprinted article appears must be sent to the exchange address below.

## EXCHANGE POLICY

MASI will exchange THE DARTER with other aquarium societies.

Failure to receive three consecutive issues of a society's publication will be considered as a termination of our exchange, unless advised to the contrary. Send paper exchange publications to: MASI Exchange, P.O. Box 1682, Maryland Heights, MO 63043-1682. Send electronic versions to [editor@missouriaquariumsociety.com](mailto:editor@missouriaquariumsociety.com)

## MEMBERSHIP

Annual membership in the Missouri Aquarium Society, Inc. is \$15 and includes an electronic subscription to The Darter. B&W printed Darter's are available at the meetings for Members: \$3; Non-members: \$5. Published six times per year.

Join or renew membership at any meeting, most club events, by PayPal from the MASI Website's Membership Page or by contacting the membership chair.

**EDITOR** Chuck Bremer [editor@missouriaquariumsociety.com](mailto:editor@missouriaquariumsociety.com) [www.missouriaquariumsociety.com](http://www.missouriaquariumsociety.com)



Cover -  
Pseudomugil By Gary Lange



**FEATURES**

**13**

**Meet MASI Fishy Folk**



**How Safe are You?**

**14**

**One Cool Cat - *Schleromystax barbatus***



**16**

**Minifins-The Spiketail  
Paradisefishes**



**18**

**Simple System to Spawn  
Challenging Fish**



**21**

**Lessons from my Fish House**



**23**

**When is a Redtail Goodeid not a  
Redtail Goodeid?**



**25**

**Accidental Spawn of Ancistris**

**26**



**Why Hobbists Shold Write for  
their Club Journal**



**28**

**Super-Simple Method of Writing  
Articles on Breeding Fish**

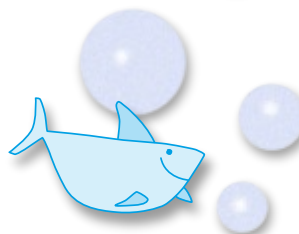
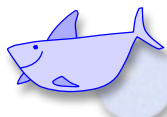
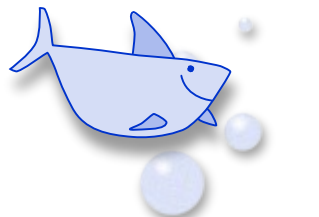
**29**



*Graphics Linked*



# INSIDE THIS ISSUE



<a href="#"><u>3</u></a>	<a href="#"><u>Features</u></a>	
<a href="#"><u>4</u></a>	<a href="#"><u>Inside this Issue</u></a>	
<a href="#"><u>5</u></a>	<a href="#"><u>From the President's Tank</u></a>	Pat Tosie
	<a href="#"><u>From the Editor</u></a>	Chuck Bremer
<a href="#"><u>6</u></a>	<a href="#"><u>MASI General Meeting and Dates</u></a>	
<a href="#"><u>7</u></a>	<a href="#"><u>MASI Fish Bowl</u></a>	John Van Asch
<a href="#"><u>8</u></a>	<a href="#"><u>Meeting Report</u></a>	Pat Tosie
	<a href="#"><u>Points Report</u></a>	Ed Millinger
<a href="#"><u>9</u></a>	<a href="#"><u>SWAP Meet</u></a>	Mark Theby
<a href="#"><u>10</u></a>	<a href="#"><u>MASI Spring Convention</u></a>	Gary Lange
<a href="#"><u>11</u></a>	<a href="#"><u>ALA Convention</u></a>	Organizers
	<a href="#"><u>Old Fish Head Cartoon</u></a>	Kathy Deutsch
<a href="#"><u>12</u></a>	<a href="#"><u>Auction Message</u></a>	Mike Hellweg
<a href="#"><u>13</u></a>	<a href="#"><u>Meet MASI Fishy Folk</u></a>	Kathy Deutsch
<a href="#"><u>14</u></a>	<a href="#"><u>How Safe are You?</u></a>	Klaus Bertich
<a href="#"><u>16</u></a>	<a href="#"><u>One Cool Cat - Schleromystax barbatus</u></a>	Ed Millinger
<a href="#"><u>18</u></a>	<a href="#"><u>The Spiketail Paradisefishes</u></a>	Mike Hellweg
<a href="#"><u>21</u></a>	<a href="#"><u>Simple System to Spawn Challenging Fish</u></a>	Jack Heller
<a href="#"><u>23</u></a>	<a href="#"><u>Lessons from my Fish House</u></a>	Kathy Deutsch
<a href="#"><u>25</u></a>	<a href="#"><u>When is a Redtail Goodeid not a Redtail Goodeid?</u></a>	Mike Hellweg
<a href="#"><u>26</u></a>	<a href="#"><u>Accidental Spawn of Ancistris</u></a>	Joe Reich
<a href="#"><u>28</u></a>	<a href="#"><u>Why Hobbists Shold Write for their Club Journal</u></a>	Wayne Leibel
<a href="#"><u>29</u></a>	<a href="#"><u>Super-Simple Method of Writing Articles on Breeding Fish</u></a>	Unknown
<a href="#"><u>30</u></a>	<a href="#"><u>Breeder's Award Program</u></a>	Steve Edie
<a href="#"><u>31</u></a>	<a href="#"><u>Hortuculture Award Program</u></a>	Mike Hellweg
<a href="#"><u>33</u></a>	<a href="#"><u>Club Hopping</u></a>	Steve Edie
<a href="#"><u>34</u></a>	<a href="#"><u>2017 NANFA Convention in Meremec State Park</u></a>	Robert Hrabik
<a href="#"><u>35</u></a>	<a href="#"><u>Classifieds</u></a>	
<a href="#"><u>36</u></a>	<a href="#"><u>Advertisers</u></a>	
<a href="#"><u>37</u></a>	<a href="#"><u>Monthly Bowl Show Entry Form</u></a>	Chris Mohrle
<a href="#"><u>38</u></a>	<a href="#"><u>MASI Supporters and Friends Link Page</u></a>	

Article Photos are provided by the Author unless otherwise noted.

To move around more easily, use the CurleyQ in the lower right corner of any page to bounce back here. Then tap/click the article you want to read next.



## FROM THE PRESIDENT'S TANK

Pat Tosie



**Participate and make our club strong.**

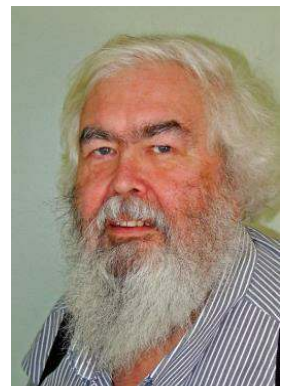
*Keep looking below water....*

## Don't forget to renew your MASI Membership!

2017 membership is \$15 and includes an electronic subscription to The Darter published six times per year. Join or renew membership at any meeting, most club events, by PayPal from the MASI [Website's Membership Page](#) or by contacting Ed Millinger, temporary membership chair, at 573-883-9943.

Chuck Bremer

## FROM THE EDITOR



### **We have begun the transformation.**

This Darter is 2-4 pages shorter but in higher resolution with similar content as we incorporated LFS ads into the body of the magazine.

There are about 8 pages on club programs, 5 pages of Reports. After a wide call for articles and content there are only 8 MASI Original articles this issue but some of your friends came through! I really appreciate them for that!!

### **However, I did resort to 3 reprints.**

Don't make others carry all the burden. If you're having trouble writing, [see page 28 & 29](#). These pages tell you why and how you can also contribute to the Darter.

### **With the help of Klaus Bertich we are collecting an electronic set of Archived Darters.**

Currently we have June 1974-1977 and 2005-2016 available and are putting these archived Darter's to good use. **Does anyone have DARTER issues prior to June 1974?**

You will find archive evidence in this issue...Can we match the show of 1977?

**2017 has lots going on, volunteer for something!**

**Next DARTER Deadline is March 6th**

**Time to renew 2017's MASI Membership.**



# MASI General Meeting - Thursday, Jan 19th!!



Topic of Discussion:  
**Getting ready for  
 the MASI  
 Convention**  
 Led by Gary Lange

7:30 PM Dorsett Village Church  
 2240 Bennington Place, Maryland Heights, MO

## MASI's Spring Convention is April 28-30.

This program will concentrate on preparations for any Fish Convention and Show and is being led by a Convention and Show Veteran.

Gary will lead a discussion on Show Classes, Training Your Fish, Equipment and how to make your Fish winners. Come participate, help plan and make sure you are ready for the Convention like a Veteran!

### Other MASI Dates to Remember:

Jan 19	Council Meeting	Dorsett Village Church	7:00 PM
Jan 19	General Meeting	Dorsett Village Church	7:30 PM
Jan 27	Council Meeting	Office of Pat Tosie	7:30 PM
Feb 12	Auction	Crown Plaza Hotel	9:00 AM
Feb 16	General Meeting	Dorsett Village Church	7:30 PM
Feb 25	Council Meeting	Home of Debbie Sultan	7:30 PM
Mar 16	General Meeting	Dorsett Village Church	7:30 PM
Mar 25	Council Meeting	Home of John Van Asch	7:30 PM
Apr 20	General Meeting	Dorsett Village Church	7:30 PM
Apr 22	Council Meeting	Home of Jim Mueller	7:30 PM



\*\* Graphics are from the 1977 Workshop & Show Program



# Other MASI Programs

## If you missed this one...



## ...Don't miss another!!

### MASI FISH BOWL

EPIPHANY LANES 6:00 - 9:00 PM

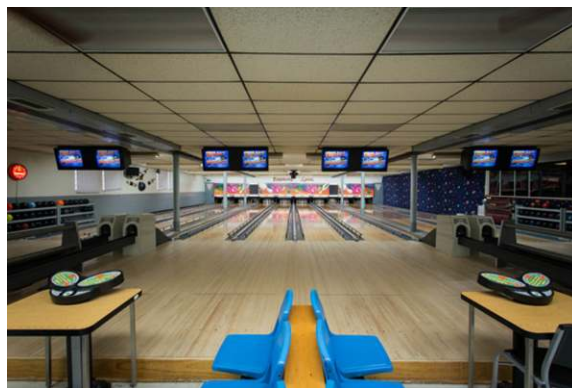
Saturday, March 18, 2017



In appreciation of its Members, MASI is sponsoring a Spring Bowling Party to get together, have some fun and exchange interests!

Free Bowling and Shoes provided for MASI Families and Guests

No outside food is allowed but there is plenty of food and drink offered at the Venue!



3164 Ivanhoe Ave.  
St. Louis, MO 63139  
314-781-8684





# MEETING REPORT

MISC Contributors

## November Raffle winners!



Thank the Sponsors!!

Purchase raffle tickets at the meetings to help support your MASI and our Sponsors

# POINTS TABULATOR

Ed Millinger

**From the points tabulator:** We averaged 49 members per month in 2016. I don't have figures for other clubs but I would think that is a very impressive number. It is great to see such terrific turnouts to our meetings, auctions and annual MASI convention. Much credit goes to everyone who plays a part in this, from the council, our officers, committee chairs and members who invite friends and MASI's presence on the web. Let's keep up the great work everyone.

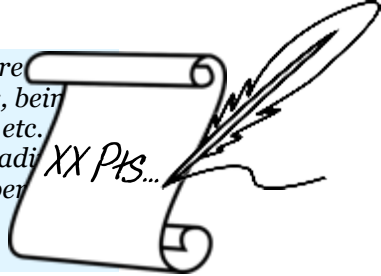
**The service and show champions will be acknowledged at the annual convention in April of 2017.** Without revealing too much I can tell you that we had seven members exceed the 100 point mark! That is a lot of work on each individuals part. There were also several members in the 90's. In alphabetical order so I don't give anything away here are the 100 plus members: Chuck

Bremer, Mike Hellweg, Daniell Kinder, Dave Rush, Mark Theby, Pat Tosie, and Kevin Wise. Congratulations to everyone who contributed to MASI's success in 2016. **You get out of it what you put in.**

**Guy Tinker will be taking over this job in 2017.** I ask that if you attend a meeting or do something outside the norm just send him a note so you will be credited accordingly. Guy's Email is [Guytinker3@gmail.com](mailto:Guytinker3@gmail.com).

Thanks to all who provided me with input over the years!  
ED

*As a reminder: Points toward club awards are awarded for volunteering at club activities, being officer, attending meetings, Darter articles, etc. more complete list may be found by downloading copy of MASI's By Laws found on our member*





Mark Theby

# SWAP CHAIRMAN



Thanks to Kevin for doing such a good job. with MASI's 2016 Swap. MASI is now known by Vendors as a place to be and the St Louis Area Aquarium Community as a place to find what they are looking for. I'm looking for ways to improve the SWAP even more for 2017. Since that Swap is in October we have some time to plan and put things in place. Any suggestions would be welcome.

You'll see Steve Edie has listed the GCCA Swaps in the Club Hopping section. It has become known as one of the biggest and best Swaps in the region. Visit the GCCA web page to get a flavor... it is BIG, and a lot of activity with 80 or more vendors in 2 large rooms. Lines form at 9:30 to get into the 10:00 swap. Some vendors have told us they think MASI has the possibility to do that for the St Louis area.

To scope out their Swap and learn from their success some of us are planning a MASI Field Trip to the GCCA Swap on January 29th. We would likely leave on the afternoon of Saturday, Jan 28th and stay overnight at the Swap location. The drive is about 4 1/2 hours from a meeting location in Edwardsville, IL. (Chicago Marriott Northwest rooms at the Swap location are about \$100-\$125 for a double and could be shared.)

After arrival in the area we would also plan to visit one of the Aquarium Adventures locations in either Bolingbrook or Hoffman Estates- some of Chicagoland's most frequented Fish destinations. The Swap opens at 10:00 and lasts till 2:00 so we should be headed back home by early afternoon. If anyone is interested in joining such a MASI Field Trip it should be a good chance to network, find new fish and learn in a Fish Filled Weekend.

See myself or Chuck Bremer at the MASI meeting if you are interested in the Field Trip so we can adequately plan. With winter weather unpredictable the final decision will be made about January 25th when the weather is known.

I look forward to working on the MASI Swap in 2017 with your help. It will take all of us!

-Mark

GCCA has already begun accumulating Vendors. See them on their Home Page: <http://www.gcca.net/>

View Aquarium Adventures here: <http://www.aqach.com/> or <http://aquariumadventurechicago.com/>  
GCCA Swap location hotel here: <http://www.marriott.com/hotels/travel/c hinw-chicago-marriott-northwest/>



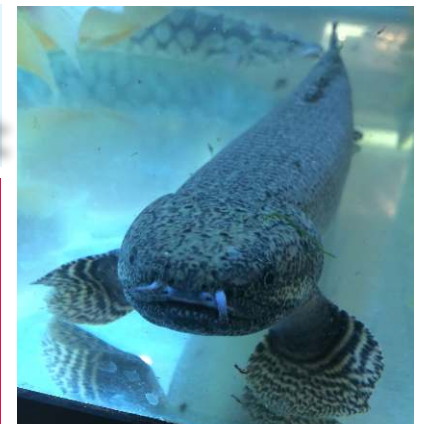
GCCA Home Page

Logos Linked

## Save the Date for 2017: Oct 1 - St Louis: MASI Swap Meet



Sunday  
Oct 1  
2017



Time to renew 2017's MASI Membership.





# CONVENTION CHAIRMAN

Gary Lange

## Time to Volunteer for the April Convention!!

Earn the Banquet points with sales Items 19 & 20 on the February Auction, and tell everyone you are busy

**Convention weekend.** Volunteer, enter fish in the show, hang out with fellow Fish Nuts, listen to and talk shop with the speakers. Attend the Banquet to receive your awards and congratulate others on theirs!!

We'll take the opportunity at the January MASI General meeting to discuss the upcoming show, how it might be improved and how to prepare for it as an individual and a Club.

### Speakers for the 2017 MASI Convention Friday night – Pizza Party and Beer be There!

**Phil Benes**—“My history in fish keeping and how the equipment has changed over the years”

#### Saturday

**Phil Benes** – “Phil and Jan’s Pond (Or What Happens When a Good Statue Goes Bad)”

**Dr. Stephan Tanner**- Filtration: Obsolete Common Wisdom, or When Science Hits the Foam!

**Mike Hellweg**- Danios, Devarios and their Kin

#### Banquet

**Steve Edie**- “The Name Game: A Classification Permutation”

We were lucky to get Steve aside from his very heavy engagements at other National Conventions. He has prepared a new, informative and always amusing talk just for the Convention occasions that he will share with us in April.

**You may wonder why the 1977 Workshop & Convention Graphics.** 2017 will mark the 40<sup>th</sup> anniversary of that event. It was a big one and, to my knowledge, there are only 3 current members who were also members in Spring, 1977. Do you know who they are?

**There were 11 fish in that Shower of Stars speaker lineup.** Some were quite big Fish for the time. Can you guess who they might have been? I'll give you a hint, 4 of them had their PhD and only one was a MASI member!

*(Find the answers to both 1977 Members and Shower of Stars questions on the Classified page in this Darter issue.)*

GARY

### A Shower of Stars



**Bring a couple of friends** to introduce to the Excellent Fish Keeping information. I've been busy lining up those speakers and working on other details for the Spring Convention. **Please let me know where and when I can count on your help...**

**Got Your Three fish for the Show Classes you plan to enter?** In the near future we will be listing Classes for the show. How many fish are you going to enter?

\*\* Graphics are from the 1977 Workshop & Show Program

days left

98

Less than 98 days till the  
**MASI Spring Convention & Workshop**

April 28th - 30th, 2017

Got you Show Fish picked out?





# ALA CONVENTION

Derek Walker & Mike Hellweg

# ALA 2017 ANNUAL CONVENTION

The ALA 2017 Convention is rapidly approaching, May 4-7, and is only one week after the MASI Spring Convention. We will need assistance with the Fish Room Tours, the Registration Desk, Box Sale, Special Fish Sale Hour and of course, the Huge Livebearer Auction.

Registration is going well and the Holiday Inn reports they already have over 50 room nights booked for the Convention so we feel it will be well attended.

There appears to be a lot of interest in the Fish Room Tours that proceed the Convention and most registrants are electing to join those as well.

We also have a full Vendor room with lots of interest, especially with local and corporate vendors.

There is excellent cooperation from the Sponsors.

Here is a copy of a Special Pre-Convention publication with reprinted articles on Livebearers from both TFH and AMAZONAS magazines. They were anxious to help support the event. Please help them and us by forwarding this publication to others you know as an

education piece. The rest is in the Pub to help draw them to the Convention if possible.

In that publication you can read the details of the Fish Room Tour, 5 Ways to Acquire New Fish, Vendor Room and other details about the convention.

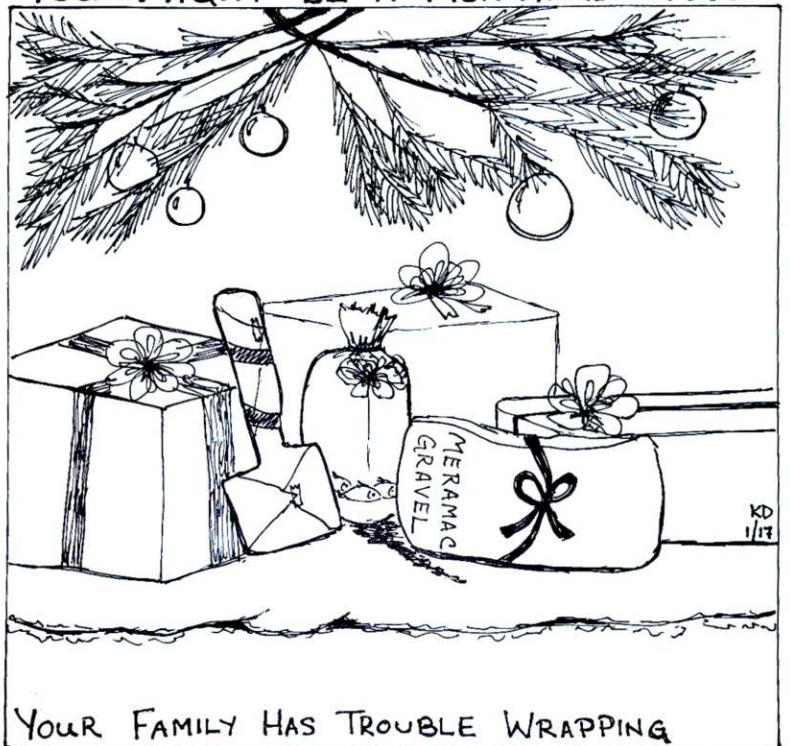
There is also an excellent general article on types of livebearers with lots of illustrations as well as a very good article that explains the Halfbeaks very well and one on some of the Fancy Swordtails currently in the hobby.

Check it out and go to [WWW.ALA2017.com](http://WWW.ALA2017.com) to register so we can plan logistics necessary.

Contact one of the Conference Organizers to let them know your availability to assist.

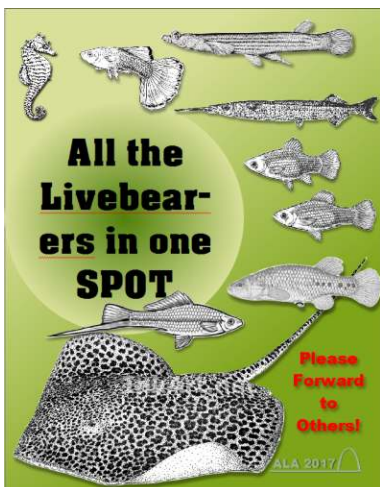


You MIGHT BE A FISH HEAD IF...



YOUR FAMILY HAS TROUBLE WRAPPING

YOUR GIFTS



Forward this Special ALA Convention Publication to your Buddies in Fish!!

Click the Cover or this link: <https://goo.gl/5jdWZt> to Download

Time to renew 2017's MASI Membership.



# MASI AUCTION MESSAGE

Mike Hellweg



**Our February 12, 2017 Auction is coming up in just a few weeks!** I hope we have good weather and that you all get a chance to come. It's always a good time, and our February auction is traditionally our largest, with the most items, buyers and sellers. It's a good chance to get some new fish, plants and/or equipment.

Don't forget, you can **EARN A FREE ANNUAL BANQUET TICKET by selling items 19 and 20 on your seller sheet.** Many members will come close to paying for their entire ticket. This is the last auction to go towards this year's Annual Banquet, so you still have a chance to accumulate and come close to covering your ticket price if your items even simply sell for close to our recent average item price.

**Always be sure to thank Chuck and the guys from Tropical World Pets for supplying the raffle tank.** Not many shops in the country can or will do that! Having not only the long-term support of TWP, but other shops as well is a huge bonus for our members! **We even get support from Sailfin Petshop up in Champaign, IL!** Make sure you let them know

you are a MASI member and please patronize them as they support us!

**We will once again have three pieces of original artwork from nature artist Sam Scalz up for auction.** He donated them to MASI and the proceeds will go to the MASI Challenge. **This time they will be there! I promise!** They will be sold at 2:30 pm. This will be the same artwork that was supposed to be sold at the Fall Auction.

Don't forget **the folks at the Crowne Plaza will be selling sandwiches, chips, nachos, and drinks right outside the door,** so there is no need to head out somewhere else for lunch.

*Mike -*

[auktion@missouriaquariumsociety.com](mailto:auktion@missouriaquariumsociety.com)

## MASI Spring Auction February 12, 2017 will be a Big One!!



Be at the Auction to  
Win a Tank or other  
Raffle items!!

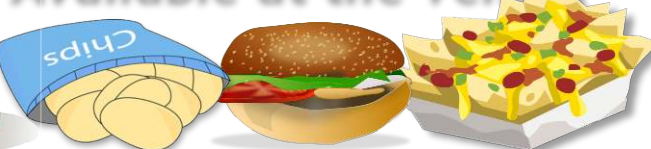
## Sam Scalz Art!



**Sells@  
2:30PM**



**Available at the Venue!**



**CROWNE PLAZA®**

**11228 Lone Eagle Dr, Bridgeton, MO  
Off I-70 by Lambert Airport**

**Time to renew 2017's  
MASI Membership.**

Darter November/December 2017 Volume 43, Number 1

Page: 12



# Meet MASI Fishy Folk - Kathy Deutsch

The Lady whom you first met if you frequented Beldt's!



**FAVORITE FISH YOU HAVE/HAD AS A PET:** as a kid, goldfish from the carnival (Grassyfork Hatcheries, I found out eventually)

**YOUR DREAM FISH:** breeding group of Altum angels

**YOUR DREAM TANK (MONEY IS NO OBJECT):** custom tank for a breeding group of Blue Eye Plecostomus. Meaning a riverine tank with flow and also dead spaces, room for the fish to dig caves to breed.



**OTHER PETS: SIGH!...** 17 bantam chickens, 3 dogs, an Eastern Flycatcher bird - whose nest is over our front door - and a black snake who is living in the garage right now.



**OTHER FAMILY MEMBERS (FISH-OBSESSED OR NOT):** husband Steve, daughter Elizabeth, son-in-law Jerry, son James

**YEARS KEEPING FISH:** 51 years

**WHAT WAS IN YOUR FIRST TANK AND HOW OLD WERE YOU:**

I always had buckets of baby blue gill. When I was 5 I got a 5 gallon tank which we promptly overfilled with angelfish, guppies, goldfish, plants, a heater and a corner filter stuffed with fiberglass and charcoal.



**YOUR REALISTIC DREAM TANK:** Got it- a 60 gallon tank All it needs is better lighting.

**YOUR LATEST FISH-RELATED ACCOMPLISHMENT:** seriously, keeping up with the tanks. Things are looking ok.

**YOUR LATEST GOAL PERTAINING TO FISH:** I have two 20 gallon tanks, one with male guppies and one with females. I want to set up a couple grow out tanks, and fix an iridescent yellow line of guppies. I also have an amazing male betta and 3 females. I want to have him raise some fry from these girls. He is fully red.

## YARNS AND TAILS

Yarn Crafts and Fishy Items  
Custom work welcome, mops any size, shape color.

**BREEDING MOPS "The One with the Leaf".** Handmade, over 140 strands. Approx. 15 inches long. Leaf acts as shade and protection for fish. All new materials. Washed in salt water, rinsed in fresh, **NO SOAPS USED.**

Kathy Deutsch  
Florissant, Missouri

314-741-0474

kathy@skdeu.com



# HOW SAFE ARE YOU?

## Common Fish Room Safety Issues

Klaus Bertich

**S**O HOW DOES your fish room stack up? Good, bad, somewhere in-between. Mine, you ask? ... well I hope I fall into that somewhere in-between area. We would all like to think we do things safely.

**I have been to my share of fish rooms and I've seen some really amazing things.** Read into that what you will. Some of the rooms were done with a little professional help, and it shows. Some were done by the hobbyist and they were just fine. But a few should have been made safer. I won't mention any names we all do things the best we know how.

I have looked at my own fish room it works for me but it is a long way from being right. I hope that this year I will have the time and inclination to make my room safer. That is why I'm writing this, hoping that it will give me that incentive to make it better.

**Some of the most dangerous things in the room are the tanks themselves,** mainly the 10 gallon and smaller tanks. Those tanks are normally made from single strength glass, really thin. It is the thinnest glass sold at the hardware stores. Just bump a 10 gallon tank the wrong way and it can crack or worse it could turn into shards.

I have never broken a tank up till now, but I have broken my share of

lids, because I make my lids out of the same glass as the 10 gallon tanks. Cleaning up after you break a tank or as in my case, just a lid, can be dangerous. I have just picked up the broken pieces with my fingers in the

### Check your:

- Tanks
- Wiring
  - GFCI
  - Adequate Breakers
  - Wire gauge
- Lights
- Ladders
- Heaters
- Floor
- Rack Bracing

past. I now use a dust pan, gloves and a broom. I use a paper bag to discard the broken glass into because the glass could cut the plastic trash bag.

I also will vacuum the area to get all of the little pieces. Broken glass slivers is one reason I never go into the fish area without something on my feet. Even flip flops are better than nothing. I also will vacuum the whole area with a shop VAC. To get the little fragments the broom might miss.

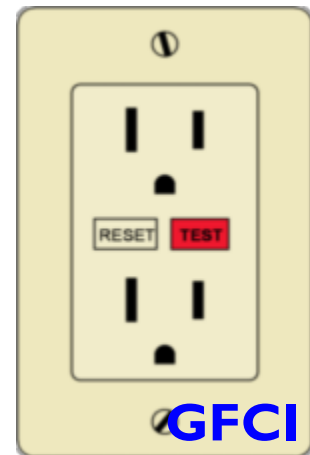


**The next thing I notice on my visits is the electrical.** OK, I'm no electrician, but...have you ever thought that it would be nice to have your fish room on its own circuit or 2, all by themselves? You could go with an electrical subpanel if your panel is

maxed out with let's say 2 or 4 breakers in it. I have seen this done.

I have seen switches that shut off just a section of your tanks. This could put the lights and the heaters in one section with a 15 and 20 amps switch.

Have you ever wondered what size the circuit breakers should be? How about ground fault outlets? This is where I'd call in help. Have an electrician do this if you have any doubts about what is safe. It's really not



that costly... a few hundred dollars maybe.

**This wiring can get really complicated if you don't know the local code.** The first outlet on the circuit should be a Ground Fault Circuit Interrupter (GFCI). Our kitchen was just redone and I count 7 GFCI. After reading a do it yourself web site according to the DIY site that maybe all of the outlets in the fish room should be GFCI because they are close to water or within a certain distance to a water pipe, a metal beam, or the stack for the air vent!!! Again not an Electrician...check the code on this distance. Whatever your decision just play it safe.

Extension cords/power strips should be made with a number 12 wire for the plug in wire. Anything smaller may be too weak. The smaller the number the heavier and more expensive the wire- don't scrimp.

Timers are great for lights. I use a strip outlet to control more than one light. Again here do not over load the timer. Most are rated by wattage. Just add up how many watts in lighting you



have plugged into it to be safe. The timer and the strips have that rating embossed on it somewhere. If it was removed or you can't read it throw that one out.

I was at an auction a while ago and an old Metaframe tank with the metal light came up for sale and I heard the comment made, **“Do you remember the tingle you could feel if you touched the light frame and you had your hand in the water?”** I know that if you ground the light fixture the tingle goes away. Does that mean you can run a ground wire to the nearest copper pipe or any ground wire you find? I think not! The light fixture needs to be rewired! Again I am not an Electrician but I would Use a three wire cord and run the green wire to the case and the black and white wire the usual way. Use a three wire plug and plug it into a properly wired outlet.

I just recently had a new power panel put in and the one thing that they ran was a ground wire from the panel to the copper pipe that runs into your water meter. You may be able to ground to that wire by using the proper connector... again not an electrician-ASK! You can see a pattern here, I have more questions than answers.

**Ladders in the fish room for me are a must. Use an insulated Ladder or step stool.** Make sure that your step stool and ladders are sound and will hold your weight. I'm not being mean here. I use a ladder that is rated for my weight I'm in that 250 pound bracket.

- **Non-electrically conductive rails.**
- **Non-slip rubber feet.**
- **Slip-resistant steps.**



Heaters are often overlooked and I have cooked more than my share of heaters. Nothing special here, you just have to remember to unplug your

heaters when cleaning or working on your tanks.

Reaching into your tank could be a shock hazard. Reach into the water where there is a broken heater and you could get shocked, if you are standing on a wet floor with your bare feet, or you are in contact with an ungrounded device. Keep those shoes on! I know it feels good on those warm days to keep your feet on something cool.

**If you take the heater out of the tank, check for water in the tube.**



Submersible heaters are noted for this. I try to put my heaters in with the top of the heater lower than the bottom of the heater. I think this method stops or at least slows down water getting into the tube, or at least staying there. If a heater is put in with the wire up and the heater turns on the air in the tube expands, forcing some air out. When the heater turns off the air will contract, and if the heater is a leaker, the air contracts at the leak, water will be sucked into the heater. I have had heaters be filled half way with water. I have tried and you cannot fix this. Not only will it still leak the thermostat will more than likely not work right any more. I am trying to go back to the old fashion hang on heaters. They are hard to find and they do cost.

**I have also found out that heaters cause static on the AM side of your radio not a safety issue but it sure is annoying when the Cardinals play.**

**About those wet floors.** This is an accident waiting to happen.

Let's look at this, you have your flip flops on and you step into some spilled water, you slip and grab a 10 gallon tank and pull it off of the rack. If you are lucky you only pull one tank off of the rack. You could pull over the whole rack. Some or maybe all of the

above we've discussed may come into play.

I build my tank racks from wood. I have used nothing but 2X4's. I now use 2X4's for the uprights and 1X4's for the cross pieces. I dado the 2x's where needed. I also screw the boards together with wood screws, not dry wall screws. That allows me to disassemble the stands later if I need to. **The tank stands should also be anchored to a wall or to the rafters.** This can help prevent a stand from being pulled over. Put these brace or braces to use running airlines and air valves.

I think that this is enough food for thought for now. I hope that you have none of the above problems.

## Safety is important in a Fish Room!!

**Sailfin PET SHOP**

Over 100 tanks and **HUNDREDS** of Freshwater species!!

**HOURS**  
Monday - Friday 9:00 am - 7:00 pm  
Saturday 9:00 am - 6:00 pm  
Sunday 11:00 am - 5:00 pm

**“The difference is Black and White”**

720 S Neil  
Champaign, IL 61820  
[www.Sailfin.com](http://www.Sailfin.com)  
Phone: 217-352-1121  
Fax: 217-352-9502  
Email: [sales@sailfin.com](mailto:sales@sailfin.com)

**15% Discount to MASI Card Carrying Members.**

**Only 2 1/2 hours from the Arch!**



# One Cool Cat

## Scleromys tax barbatus

Ed Millinger

**W**ITH APOLOGIES TO Chester Cheetah from Frito-Lay, *Scleromystax*

*barbatus* really is one cool cat. They hail from Brazil and tolerate temperatures from 60-78 degrees.



In the fourth revised and expanded edition, 1984, of Exotic Tropical Fishes by Dr. Herbert R. Axelrod, Dr. Cliff W. Emmens, Dr. Warren E. Burgess and Mr. Neal Pronek they wrote about then called *Corydoras barbatus* (Quoy and Gaimard) / Banded Corydoras: "While *Corydorus barbatus*, because of its size, is not considered to be one of the



better catfishes for the community tank, the fish is occasionally brought into the country and put on the market. Usually only young specimens are sold, and many purchasers are amazed to find that their catfish, which they originally supposed would grow no larger than the popular *C. aeneus*, is soon outgrowing its tank. For hobbyists with big tanks this is no problem, but for the hobbyist who buys a couple *Corydoras* just to fit into the general framework of a small community tank, *Corydoras barbatus* is best left alone."

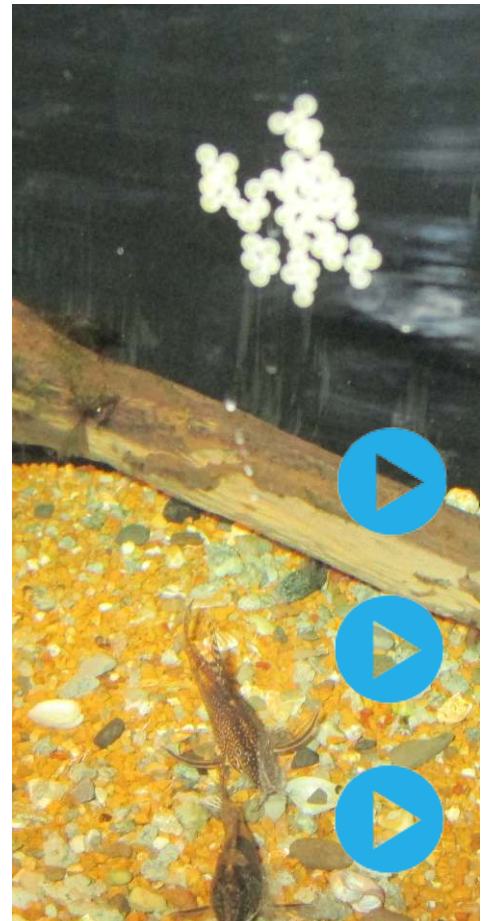
The website Planet Catfish offers synonyms- banded cory, bearded catfish, and checkerboard cory. They note that they hail from Brazil and offer that *scler* comes from the Greek word "hard" and *mystax* comes from the Latin word "moustache." They list maximum size as 3.7" while Exotic Tropical Fishes lists it as 5.11 inches.

**I had heard of these catfish before and was interested because I have a few tanks outside my heated fish room that I devote to cool water fishes.** I have seen them go through our auctions occasionally but was never

able to win the bid. I looked on Aquabid and found a young pair (around two inches) and was fortunate to obtain them. I believe they cost around \$60 plus shipping.

**Upon delivery I placed them in a 20 long. I fed them the same as most of my other fish,** frozen food ( brine shrimp, mysis shrimp, plankton, and blood worms) in the morning and live black worms in the evening. Within a month they laid eggs on the front glass near the top. You couldn't ask for more!

I removed the eggs with a razor blade and placed them in a small plastic container filled with the same tank water to which I had added alder cones. This container also contained a thin



layer of sand on the bottom. As in the pictures the alder cones turned the water a dark tea color. The P.H. also dropped and this inhibited the growth of any fungus.

**Hatching is usually at four - six days** but is hard to tell right off the bat because the water is so stained and the





fry so small. I train a flashlight on the container and this usually induces movement by the fry.



**I then begin adding micro worms for a week or so four times a day.** Before each feeding I remove a small amount of water with a turkey baster and then refill with fresh water. This serves two purposes, it removes foul water and increases the P.H. back to a normal state. This is very important as twice now I have transferred fry before the water in the hatching container matched the water in the ten gallon rearing tank and lost the entire spawn!

The cones can be removed because once they have been used that are of no further use except to give the fry some place to hide. I leave the cones in the

container for just that reason. Once I feel the water parameters are similar I pour the water and the fry into a ten gallon tank with about six inches of water (enough to cover the sponge filter).

**A normal hatch is between twenty five and forty babies.** I feed these guys four times a day and as in the rearing container I remove a small amount before each feeding and replace with fresh dechlorinated water. At this time I also introduce live baby brine shrimp. After another couple of weeks I



also feed a small amount of flake, some crushed Red Sea pellet food, and occasionally some grindal worms.

**After another spawn occurs, which is usually two to three weeks** I transfer the now quarter inch fish to a fifty five with a sand bottom. With more room to roam the fry appear very happy and eagerly await being fed which they know is coming because of the water change that happens right before I introduce the food. I wouldn't say they grow fast but then again who among us is happy with the growth of

our fry. They can always grow faster right?

My breeders are now three inches long. They spawn fairly regularly but you don't see them much despite only being in a twenty long. I have a florescent bulb that is a little weak and a long piece of driftwood on top of a gravel layer about an inch and a half thick. They seem to prefer the dimmer light so I do not plan to replace the bulb.

**There is also some hornwort floating in the twenty that helps keep a little less light** from getting through. Lately I have noticed the adults are not eating the bloodworms so I have stopped feeding that. They do however relish the live black worms. The male tries to push the female out of the way so it is wise to spread them out.



I apologize for the quality of the photos (eggs on the glass, alder cones, the hatching container and the adults). It is tough for me to get a good picture of the adults. If you like you can call me Yrag Egnal- that's Gary Lange spelled backwards!

**Photos by the author;  
ChesterCheetah ©Frito Lay**



**Your Family  
Owned Pet  
Store Since  
1951**

10040 Gravois Rd  
(314) 833-5116  
Mon-Sat: 9:00am-8:00pm  
Sun: 10:00am-6:00pm

St. Louis  
Springfield  
Joplin  
Poplar Bluff

[www.petsway.com](http://www.petsway.com)

**Time to renew 2017's  
MASI Membership.**

Darter November/December 2017 Volume 43, Number 1

Page: 17



# Minifins

## *Pseudosphromenus dayi* and *P. cupanus*

### The Spiketail Paradisefishes

Mike Hellweg, CFN  
(Certifiable Fish Nut)

**W**HEN SOMEONE MENTIONS Paradisefish, most folks immediately think of *Macropodus opercularis*.

That's only natural, as they were one of the first tropical fish to be imported into the hobby (right here in St. Louis in 1876!). But there are several species of *Macropodus*, and a couple of other Anabantoids that are closely related in the genus *Pseudosphromenus*. That's where our topic this issue comes in.

*Pseudosphromenus cupanus* was described as *Polyacanthus cupanus*



*P. dayi* Male

nearly 180 years ago in 1831 by the famous naturalist (and "father" of paleontology) Georges Cuvier. It for a while was also known as *Macropodus cupanus*.

There is a bit of confusion about when Day's Spiketail Paradisefish was first described, but by about a little over



*P. dayi* Female

100 years ago, it can be said to have been "published". In the ensuing century, this diminutive bubble nester has moved to different taxa no less than 7 times! It is now *Pseudosphromenus dayi*, with full species status, and that is likely where it will stay. While the Spiketails have been reported as coming from both south eastern India and the western coast of Malaysia, in fact they likely are only found in India, and on the Island Nation of Sri Lanka, though more work will have to be done due to the very different populations that have been available in the hobby over the past 20

years. I would be willing to bet that at least one more species will be described in the genus.

**In the wild, Spiketail Paradisefishes are found in ditches and shallow, slow flowing streams, as well as in and along rice fields throughout its natural range.** Both species are similar in size. Their maximum size is about

two and three quarters inches, but most specimens are a bit smaller.

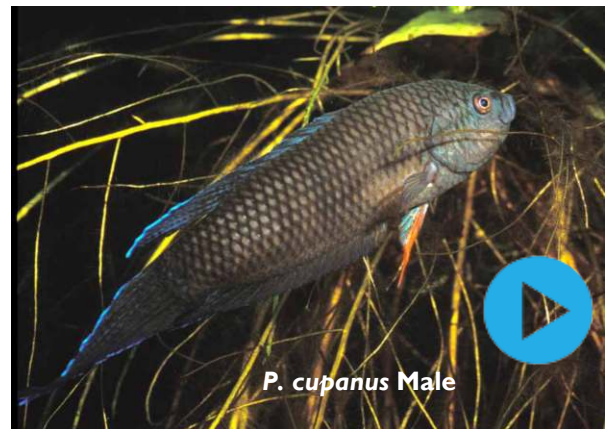
**They are commonly available and if your local shop doesn't stock them, they can usually order them**

**from one of their suppliers.** Their biggest drawback is that in a dealer's tank they are shy and spend most of their time trying to look invisible. While *P. cupanus* are a pale gray or tan color, *P. dayi* are usually a washed out orangey-pinkish color.

Usually their beautiful extensions are nibbled on by tank mates, so they look kind of pale and ratty - even when they are in perfect health. Bring a small group home and put them in a planted 20-gallon long with peaceful tankmates or even by themselves in a species tank, and presto-chango they become beautiful and

outgoing.

**Once they settle in, *P. dayi* take on a beautiful pinkish orange overall color with bright blue-white edging to their fins.** Their central caudal rays and the last rays of their dorsal grow into what could be called spectacular extensions. *P. cupanus* appear to have at least two color variants - one



*P. cupanus* Male

chocolate brown with red highlights and one coal black with light blue highlights, though recently I've seen a third that is tan with bright blue and red fins. These could wind up becoming separate species as they are better studied. *P. dayi* are generally more gracile in appearance, while the *P. cupanus* types are all a quite a bit chunkier in body depth.

**From here on, I will just call both species "Spiketail Paradisefish" or more simply, "spiketails" as both species' care and breeding are very**



similar, as apparently is the care of the newer color variant (or species).

While they are basically small fish, they do best when kept in medium sized tanks. You can keep a pair together in a 10 or a group of a half dozen or so adults in a 15 or 20 long. I would not mix the species in case they interbreed. I'm not sure if they would, but why risk it? They like to feel secure, so provide them with peaceful tankmates like small tetras, Rasboras, Blue-Eyes and similar fish.

**I would not keep them with cichlids,** medium or larger tetras, rainbows or barbs as these fish either compete for the same space or would just harass them continuously. Surprisingly, if you keep them in a tank with a lot of plant cover, driftwood tangles, piles of rocks, etc. you will see them much more than if they are in a tank with little cover. If you want to get them to spawn, having large leafed plants like Anubias and small lilies like the tiger lotus or dwarf aquarium lily allows them plenty of spawning choices.

**One of the great things about the spiketails is that they are not picky about water parameters as long as extremes are avoided.** Here in the St. Louis area, folks should be able to keep and breed them in our tap water without having to do anything special other than performing regular water changes.

Choose a filter with a slower turnover so as not to create a strong



*P. cupanus* Male guarding Nest

current and give them plenty of places to get out of the flow altogether and they will be happy. I use air driven sponge filters, box filters and Mattenfilters in all of my tanks and they

**Time to renew 2017's MASI Membership.**

do very well with these. Water temperature is also less important than with some other species. Anything from about 70 degrees Fahrenheit into the low 80s will be fine.

**They are also not too picky about food.** Generally, if it is floating



*P. dayi* Male tending Fry

or slowly sinking they will go for it. Even wild caught fish will strike flakes and pellets on the surface or as they sink. Some specimens will eat the food off the floor of the tank, but others won't touch it. So it might be a good idea to include some peaceful small loaches, Corys, shrimp, snails or other

benthic feeders to eat this food.

**It's a good idea to include some live and frozen food a few days a week** to bring them into condition for spawning. They will eat any smaller

live food, but absolutely love Grindal worms, white worms and blackworms! I also feed them newly hatched brine shrimp every day and daphnia when I have it available.

When I was keeping and breeding them a lot back in the 1990s, I would

also raise and feed them mosquito larvae, which they absolutely love! Unfortunately with the health risks associated with mosquito borne illnesses, most municipalities look unfavorably on culturing mosquito larvae these days.

**The spiketails are what I call hidden bubble nesters.** That is, they build small bubble nests usually in a hidden quiet corner of the tank under leaves of a plant like Anubias. They will also spawn in caves, building their nests under the roof of the cave. Their bubble nests are fairly small, usually about the size of a half dollar. Spawns are usually small as well, with a spawn of 50 being pretty large.

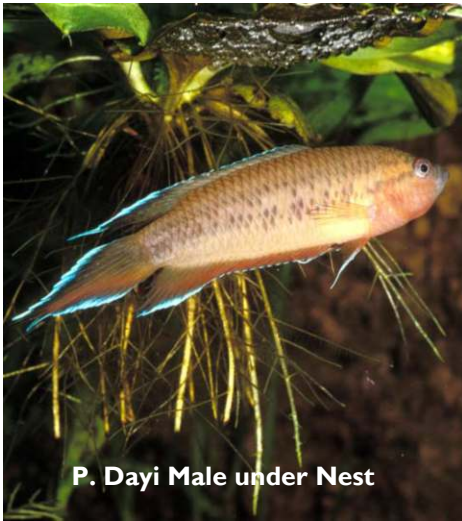
**The male defends the nest, often with the help of the female.** I have even seen more than one male guarding a nest at the same time in the same tank. What's even better, the adults don't seem to bother the fry. So once the fry leave the nest, they are on their own, but are not pursued by the adults.

**Sometimes the adults are so secretive, you won't even know they have spawned until you see 3/8" or 1/2" young fish flitting about the tank,** dashing after particles of food. That's one of the reasons I feed them newly hatched brine shrimp every day. You might miss a spawn, but still be



providing food for the fry until you one day start seeing them!

**It is not uncommon for multiple spawns, and fry of different sizes, to be in the tank at the same time.** With



**P. Dayi Male under Nest**

many Anabantoids, younger and smaller fry are one of the natural foods of other larger and more quickly growing fry. While the adult spiketails are not a threat, their older or larger siblings might be.

You get what some folks call "tear aways" that grow twice as fast as their siblings. As they get larger, they get to more food more quickly than their siblings and continue to grow more quickly than the others, eventually getting to the size where they can eat their siblings. If you think of it practically, in the wild they are living in a small area and their siblings are protein packed sources of nutrition. This breeding strategy ensures that at least a few fry will be able to get enough food to grow quickly enough that they can reach adult size and breed



**P. cupanus Pair in Spawning position**



**Malawi Aquatics**  
**Custom Aquariums & Maintenance**  
 IMPORTERS OF QUALITY AFRICAN FISHES  
 AQUARIUM CONSULTANTS

Over 50 species of Cichlids of both Africa and South America as well as many other aquarium species and oddities.

Huge selection of aquariums, rock and décor to help all display their best



**TAP for VIDEO TOUR**

**11619 W. FLORISSANT BLVD.**  
**ST. LOUIS, MO 63033**  
**(314) 830-6460**





**Dog**  
**Cat**  
**Fish**  
**Small Animal**  
**Reptile**      **Pet Services**  
**Bird**            **Dog Training**  
                          **Grooming Salon**  
                          **Affordable Vaccinations**  
                          **Pooch Hotel**  
                          **Pet Sitting by Rover.com**

**Pet Adoptions**  
**Online Adoption Search**  
**www.petco.com**  
**17 St. Louis locations**

for themselves. <http://www.petco.com> While it may seem cruel to us, it is part of these amazing animals adaptation to the environment in which they live.

**In our aquaria, to avoid this phenomenon, it is a good idea to remove the larger fry as you see them.** Set them up in a tank with water from the adults' tank, add some plants, and feed them well. They will grow quickly and hopefully soon you will have fry to share with your fellow fishkeepers.

**The spiketails are a good example of an "ugly duckling" fish.** When you find them hiding in the corners of a pet shop tank, don't hesitate to give them a new home. You'll be surprised by their interesting behavior and their beauty once they settle into a proper home. If you do your job well and provide them with the proper environment and lots of good food, maybe they'll spawn for you, too.

**Photos by Gary Lange**



# A Simple System to Spawn Challenging Fish.

## The Benefits of Small Tanks

Jack Heller

**BUILT A SMALL rack a few years ago** to accommodate four five-gallon tanks, and I have realized some unexpected benefits from this set up that I wanted to share in this article.

The rack was built because I had a small space left to accommodate some five-gallon tanks that had been in storage for some time, and I needed them to grow out young killifish.

**The rack has a footprint of roughly 16" x 24" and takes up very little space.** It is made of 2" x 4" s, and is 23" wide, 10 1/2" deep, and 61" tall. After cutting the boards, I assembled the rack using deck screws. I then attached 3/4" schedule 40 pvc pipe, to the front legs on each side, joining the pipes with a cross piece on top of the rack. I fitted each of the vertical pipes with two air valves and hooked the unit up to my central air supply (Exh. 4).

The vertical space between the shelves is 18", which provides plenty of space to work on the individual tanks.

I covered the outside bottom of the tanks with black contact paper to darken the tanks and reduce the stress on the occupants and then placed the tanks on the rack with the short end forward. I fitted each tank with a tight hinged-glass cover, a sponge filter and

a 25 watt heater. I filled the tanks with treated water and added Java Ferns, floating Hornwort, a spawning mop and some Rams Horn snails. The tanks were now ready for their residents.

**About the time I set these tanks up, I was given a young pair of *Apistogramma borelli*** by Don Atkinson



at a MASI meeting, and, not having a ten gallon tank available, placed them in one of the five gallon tanks temporarily, intending to move them to a 10 when one became available. I added a breeding cave as protection for the female, who was quiet a bit smaller than the male, and them left

them to wait until a ten became available. Other than doing weekly 50% water changes and feeding them daily on a diet of baby brine shrimp and frozen food, I ignored them.

Around a month later, a ten did become available, and I went to get the pair to transfer. To say I was surprised is an understatement. There was a tank full of babies that were already over a quarter of an inch long. Best of all, the parents appeared to be leaving them alone, so I decided to leave the parents with the fry for the time being and not to disturb that tank.

The only change was to add some alder cones to the tank to provide some tannins. I had already moved the temperature up to 76 F. when I introduced the pair to the tank, so I was careful to raise the water temperature in my water treatment barrels so the fry would not suffer shock during a water change.

**I thought that this early success might be an accident,** and did not yet fully appreciate the value of this set up until I experienced a second unexpected success.

**The next success came with a pair of fish that Mike Hellwig brought to a MASI auction.** I had been looking for Croaking Gouramies, *Trichopsis vittata*, for some time, never actually having seen the fish except in photos. Suddenly, there was a pair in the silent auction. I was fortunate to win this pair.

Again I placed them in one of the fives awaiting the availability of a ten and moved the temperature up to 76 F. The male did not look like much at that point, mostly a brown and white striped little gouramie.



This time it wasn't even a month



before I went to do a water change on this tank and found a large spawn of Croaking Gouramie fry swimming in the Hornwort at the top of the water column. Again, I left the parents in the tank as they did not seem to be bothering the fry.

A few weeks later, I found the female floating and dead, obviously the victim of male aggression, so I moved the male to another tank. I noticed that his fins had developed and his colors had come in and he was as beautiful as the images that I had seen of this fish in the aquarium books and magazines. I probably provided less cover in this tank than I did in the *borelli* tank, and need to remember this for the future.

I realized two things at this point about Croaking Gouramie males, first that they can be aggressive and have to be watched with the females, and second, they do get beautiful colors and finnage, but it takes some time for the fish to mature and color up. Patience is required!

The male has since died, but the fry are now half grown juveniles and are growing rapidly - filling out in the ten to which they were moved a few weeks ago.

**After the successful spawn of Croaking Gouramies, I realized that I might be on to something,** so I was very pleased a month later to win a young pair of *Apistogramma cacautoides* at a MASI meeting auction. This pair was quite young and I knew it would be a while before they spawned so I put them in one of the fives feeling confident that I would succeed with them even though my previous spawns of this fish had yielded almost entirely males.

The temperature was cranked up to 76 F. and in around three months, the tank was loaded with fry. As of this

writing, the parents are still in the tank with the fry, the fry are free swimming and growing and are now at 1/4" in length. It will take a few months before I know if I have a balanced sex ratio with these fish but am pleased to report that the other species yielded very well balanced ratios. These fish are currently growing out in ten-gallon tanks and doing well.

**The unexpected benefit of my small rack with small tanks is the tremendous success I have had in spawning some otherwise challenging species.** The species I have successfully spawned in this setup, with very little effort, include



*Apistogramma borelli* - Borelli's Dwarf Cichlid, *Apistogramma cacautoides* - the Cackatoo Dwarf Cichlid, and *Trichopsis vittata*, the Croaking Gourami. The last of the Borellis and the Croaking Gouramies have been moved to ten gallon tanks to grow up, but a large spawn of *Cacautoides* remain in their five gallon setup being tended to by their parents.

**I believe that my success has been the result of two factors:** the smaller tank size allows for better control of the tanks as long as I am careful to do regular water changes, and close proximity of the fish to each other, with no other adults in the tank to distract them, increases the chance of regular encounter and spawning.

I unexpectedly discovered another advantage of this setup today. I cleaned three of the four tanks in the system and found that these tanks are very easy to drain with my Python drain system and are very light and easy to carry to the sink to clean. In cleaning out the *borelli* tank, I collected six more fish including the original large alpha male, and put them in with the juveniles in the ten, which are now half to three quarters

grown. The gouramie tank yielded five more juveniles, which went into the ten with the other juveniles.

I placed the tanks back on the rack and filled them half full with clean aged aquarium water and the rest of the way with treated tap water. The whole process took around twenty minutes. The tanks are now ready for their next occupants and I plan to try these tanks with several more *Apistogramma* and Gouramie species.

**I hope that those species prove to be as productive as the last three.**

Photos provided by the author

## PET CONNECTION



### Between The Hill and Botanical Garden

2212-2214 S. Vandeventer Ave.  
- St. Louis, MO. 63110

**Pet Connection is the place to come, whether you're looking for a new pet or just need to take care of one you already own.**

[www.petconnectionstlouis.com](http://www.petconnectionstlouis.com)  
[petconnection89@sbcglobal.net](mailto:petconnection89@sbcglobal.net)  
314-773-7387 / 773-PETS  
Mon - Fri: 10 AM till 6 PM  
Sat: 10 AM till 4 PM

**For fish products shop the yellow and blue aisles.**



# Lessons from my Fish House: Balloon Guppies

Kathy Deutsch

Department Store fish are always a surprise

**T**HE DEPARTMENT STORE near my house has a multi-tank system that works pretty well.

More importantly, they have people who try to care for the fish. The workers are willing to chat as they work, and they ask smart questions.

This store brings in the most amazing male guppies. They are NOT IFGA standard, but they are flashy. So a few months ago I came home from Walmart with dog food, oranges, and 5 male guppies. Apparently this is common at Walmart.

Curiously, there were no female guppies, so I got those from a local fish shop. I kept them secluded from the males, until they had no more fry. Then I put a flashy red boy in with these buxom gals.

**Within a couple months, I had a tank with about 20 small guppies** that had the rounded shape of a balloon molly. They are not growing very big, but they are very cheerful and the males are less aggressive than the other males. Tail color is reddish.

I moved the group to another tank and am eagerly watching to see if the male balloon guppies can mate with the female balloon guppies. Will they have fry?

In my female guppy tank, I left the best looking balloon female, along with the original females, and introduced a different flashy male. He is a golden yellow "veiltail" and while eager, not mean.



**No telling where this experiment will lead.** Our local fish shops sell wonderful, healthy fish and I support them. But don't ignore the fish from Walmart, which can be a nice surprise. Just be sure to QUARANTINE them for a month.

**Always Be Ready For Fry....Always**

**My female guppies had not dropped any fry in months.** They were in a roomy 20 with greens and snails, nothing else. I was priming these girls with good food and rest, to be bred with some pretty male guppies I had.

And on one unusually, chaotic morning with dirty dogs that needed cleaning at 7 AM, when I turned the tank lights on, 2 miniscule fish swam out to eat flakes with the older fish. I had fry, and who knows how many. Leaving them with the females was out

of the question, since I was going to put males in the tank soon. Of course, the females eating the fry was a possibility.

By sheer luck, I had the perfect breeding set up. And I won't ever be without it again.

**First:** a covered tank, with a heater, filter, and good, somewhat dirty gravel. Fry find all kinds of things to eat in matured gravel. The tank was full and running, with a couple snails and young whiptail cats. There were a couple of places to hide. I threw some *Cabomba* in the tank, and it was ready to receive the fry.

**Second:** I had a clean net with a very fine mesh, and a clean holding container. My usual "wash" is salt water or vinegar water, with a dechlorinated water rinse. I don't do it often (and I should), but by chance I recently had.

**Third:** I had high quality, protein-rich flake food that finely crumbled. In the best circumstances, yes, I should have started some brine shrimp. There is nothing like baby brine shrimp for fry. But the flake was fresh and good, and plenty of fish have been raised on flake food.

**Within 15 minutes, I had 7 fry caught,** transferred to a big, comfortable tank with greens overhead, hiding places, a little grunge in the gravel, placid tankmates, heat, filtration, a lid, and food. The transfer



was done with a clean net and container.

**My point is this:** it was a happy set of circumstances that led to this (read: miracle). It was a busy day when those females decided to birth those fry. I cannot imagine the expense of time and (possibly) money if I had to get a filter, a tank, a heater, food, a lid, a stand. Had my net and transfer container been dirty, or missing, there was more time lost.

**Thinking back on it,** there are some work-arounds to the problem of housing tiny fry. A clean bucket can hold fry. Dechlorinated. Warm water is a must. a small heater (like the ones used for nano tanks) and a thermometer would keep the bucket water warm. To protect the bucket from being burned by the heater, I would submerge a glass canning jar in the bucket and place the heater inside that. There is no substitute for hiding places, both above and below for fry. A clean terra cotta flower pot and floating cover plants are necessary. I have used plastic wrap to cover a fish bucket.

**Fresh fish food is important.** For fry it is mandatory. Old food has no nutrients and could be spoiled. I keep my food in the freezer. Small containers hold a week's worth. Yes, it is a pain to constantly refill the little containers. It is a worse pain to deal with spoiled, smelly fish food that has been sitting on the tank lights.

If you have fish, the possibility of baby fish is always a hope. But, just like human babies, they don't emerge when you expect them to. It may be a hassle to be prepared, but it does help in the long run. **As I finish this article I am feeling guilty about my nets; time to give them a vinegar soak.**



## Your Hometown Pet Specialist

314-849-4020 [www.twpstl.com](http://www.twpstl.com)



Freshwater, Salt Water, Reptiles, Dry Goods

8444 Watson Rd.

St. Louis, MO 63119

Mon.-Sat. 9:30-9:00

Sunday 11:00-6:00



\* Excludes Sale items.

# AQUA-WORLD

FAMILY OWNED AND OPERATED FOR OVER THIRTY YEARS



3910 GRAVOIS AVE.

St. Louis

314-772-0100

M-F 10:30-8:00

SAT 10:30-6:00

SUN CLOSED

16063 MANCHESTER RD

Ellisville

636-391-0100

M-F 10:00-8:00

SAT 10:00-6:00

SUN CLOSED

[Aqua-World facebook](#)



Time to renew 2017's MASI Membership.





# When is a Redtail Goodeid not a Redtail Goodeid?

## *Xenotoca eiseni*

**M**ANY FOLKS TEASE diehard BAP participants about keeping a long location name with the species name. Some folks even think it's okay just to keep a common name with a fish and that is good enough, but as has been proven over and over again, keeping the location with the scientific name can be important. So important, in fact, that our (and many other club's) BAP programs recognize this convention and award points for each recognized locality variant. Yes, you get more BAP points for the "same" species, but every once in a while, something happens that validates this practice.

In early November of 2016, this once again happened with *Xenotoca eiseni*, the Redtail Goodeid. Many of us have been keeping various populations of this popular Goodeid, noting that especially the population from San Marcos looked very different. Well, some scientists have looked more closely, and guess what? They have determined that they ARE different species!

Omar Dominguez-Dominguez, Dulce Maria Bernal-Zuniga and Kyle Pillar have published a paper "Two new species of the genus *Xenotoca* Hubbs and Turner". In it they recognize two former populations of *Xenotoca eiseni* as new species. *Xenotoca eiseni* "San Marcos" is now *Xenotoca*

*doadrioi* and *Xenotoca eiseni* "Rio Tamazula" is now *Xenotoca lyonsi*. Copies of the paper are circulating widely online.

**So be sure to keep those location names with your fish, and don't mix populations. You may be mixing species!**

Reference:

Omar Dominguez-Dominguez, Dulce Maria Bernal-Zuniga and Kyle Pillar [Ichthyology • November, 2016] [Two new species of the genus \*Xenotoca\* Hubbs and Turner, 1939 \(Teleostei, Goodeidae\) from central-western Mexico](#)



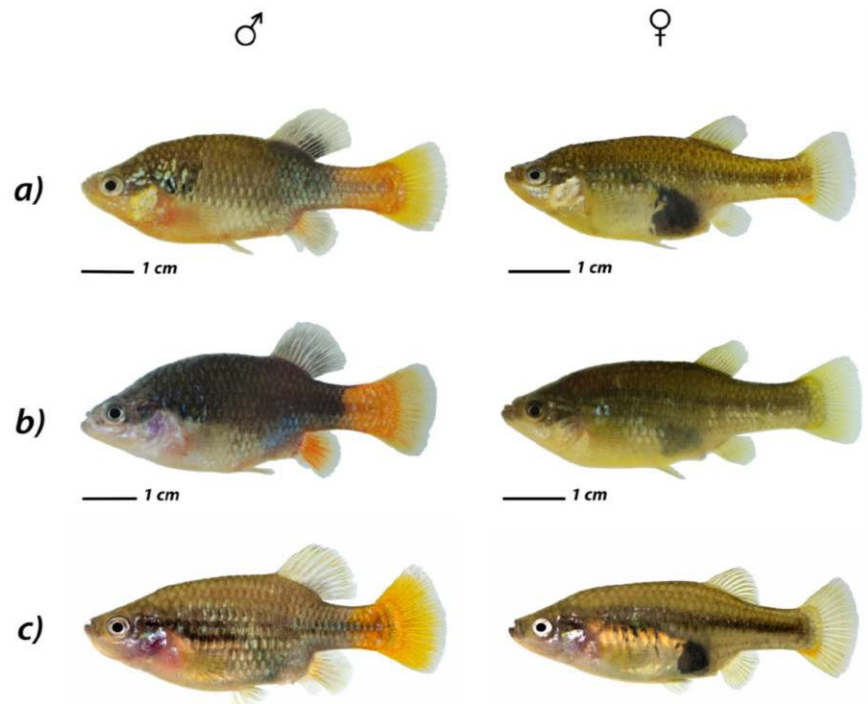
Photos by Greg Sage



*Xenotoca eiseni* "San Marcos" is now *Xenotoca doadrioi*



*Xenotoca eiseni* "Rio Tamazula" is now *Xenotoca lyonsi*



a) *Xenotoca doadrioi*, Holotype male CPUM-9589 and female from San Sebastian b) *Xenotoca lyonsi*, Holotype male CPUM-9590 and female from Tamazula c) *Xenotoca eiseni*, male and female from Compostela population picture by Wolfgang Gessl www.pisces.at



# "Accidental" Spawn?

## *Ancistris temminckii*

Joe Reich

Reprint from the Mar/Apr 2014 issue of Tank Topics, Newsletter of the Greater Akron Aquarium Society



KNOW, I KNOW, Bristlenose catfish are supposed to be easy to breed! I've been told this a number of times over the years, but for some reason or another, mine never spawned successfully for me...until recently.

So most of you hobbyists will probably be bored with this article, but our editor has re-requested some reading material, and this is about the only thing I have to write about at this time. So here it goes...

**I've been keeping this species for about the last 6 years or so.** I've had them spawn for me in the past, but it was always in the uplift tube of my sponge filter. Needless to say, the eggs never got fertilized due to the up current of water inside the tube and they would always fungus.

**Then last summer after a fish auction,** I ended up having to move fish to various tanks to make room for my new acquisitions. As it happened I ended up putting an older (one of the first ones that I bought), much bigger female into a tank with a younger and much smaller male. At first it didn't look like it was going to work out because the female would chase the male away from anywhere that she wanted to go.

**Time to renew 2017's MASI Membership.**

Inside the tank was a cave made for *Altolamprologus* species, I had a species of cichlid spawn in it earlier in the year. I noticed that the male Bristlenose was hanging out close to the cave and I assumed he was just staying close to get away from the female. After all, it didn't look like she would be able to fit inside.

**One day the male was "flapping" his ventral fins from the inside of the cave,** I had no idea what

long for an "easy" BAP I didn't want to take any chances on losing them.

I have this species in a number of my tanks, and it wasn't long after the first spawn in the 29 gallon, that the male in my 180 gallon started flapping his ventrals also. The 180 tank has one male and two females. Since this tank is located in my kitchen, I pass by it often and get to watch a lot of the aquatic entertainment that this community tank provides.



this was about, but I assumed it was an indication of bad water quality because of feeding the cichlid fry in the tank finely powdered flake food. So I immediately did a partial water change. The next few days the male stayed inside his cave, only poking out once in a while at feeding time. I didn't think anything of this behavior other than he was hiding from the female. Was I ever wrong!

**One day during feeding time I noticed a tiny pleco near the surface of the tank.** I was totally taken away by the sight of all those tiny pleco's outside the cave, on the tank walls and airline tubing! One BAP coming up! The cichlids didn't even try to eat them! I fished all the fry out and into a 10 gallon for raising, after waiting this

This time the cave the male was flapping next to had the opening facing the front of the tank. I was able to watch the development of the eggs and fry by shining a flashlight inside. I didn't do it too often though, it looked like the male was taking offense to the bright light. I get the impression that this species is somewhat territorial.

**They seemed to have their "areas" where they would prefer to hang out.** Whenever one ventured into the close proximity of another it was chased away. One day while I was passing by I noticed a female approaching the cave and I had already seen the male go inside. I have occasionally seen a female go into it before, so this was nothing new.

I thought I would watch to see what would happen. She then entered





the cave and the male came out. I thought maybe she chased him out, but he went back inside and they stayed in the cave together. I got out the flashlight and peaked inside thinking that maybe they were fighting and I just wasn't seeing it, but all was tranquil.

**After about a half hour, I shined the flashlight inside again,** and low and behold, there were eggs attached to the roof of the cave. Cool! What happened next also surprised me. The second female approached the cave and went inside. Again I expected some fighting and a quick eviction, but none came.

I can't say for absolute certainty that both females spawned because I had to leave for work. But when I got home there were eggs laid in two separate spots with one clutch bigger than the other. So it's possible these fish may be harem spawners.

Every day I would shine my flashlight into the cave and watch the development. The eggs were pretty large, bigger than some of the mouth brooding cichlids that have spawned for me. They were light amber colored and seemed to get just slightly darker as they developed. From spawning day to hatching day, it took five days.

**After they hatched, they remained attached to the top of the cave where they were laid** and they looked like little eggs with a tiny, tiny tail wiggling back and forth. They

stayed in this stage for another five days, but each day the yolk sac would

## *It's possible these fish may be harem spawners*

get smaller and the tail would get bigger. Their color stayed a light amber color.

**At day four I noticed that they were starting to move around inside**

**the cave** and it looked like they were attaching themselves with their sucker mouths. Once they looked like miniature adults bodily, they took on the adults coloration too. The male continued to guard any fry that remained in the cave, he seemed to even herd them away from the opening. It wasn't until about the fourth day that I noticed that the fry were becoming less and less in numbers.

**I resolved that when I got home from work that I would fish out the rest.** Unfortunately, all I got was six fry from that batch. Oh well, lesson learned! I put that lesson to good use when they spawned again two weeks later. There were less eggs in that spawn, but I sure got more fry than I need!!

There is one pleco food that I've been feeding them on a supplemental basis. They seem to go after it with much gusto. It's made by sera and called Catfish Chips. I'm not one to jump on the popularity/fad bandwagon, but I'll try new products, and my *Ancistris* are telling me that this food is delicious!

**I also occasionally give them french cut green beans, straight from the can.** As well as canned spinach. Any left over food that makes it to the bottom of the tank is cleaned up by the Pleco's too, no surprise there.

**All in all, an easy fish to keep, and now at least I can say that I turned in that BAP too.**



# MASI STUFF!

An expanded line of MASI Logo merchandise is now available from Café Press. Pick from

*T-shirts, jerseys, caps, tote bags, coffee cups, and more. Go to*

[www.cafepress.com/MissouriAquariumSociety](http://www.cafepress.com/MissouriAquariumSociety)



# Why Hobbyists Should Write for their Club Journal.

-

Wayne S. Leibel

First appeared in *The Shoreline Jersey Shore AS*, March 2002



Current Reprint from  
the *BAS Aquatica* Jan  
2017

**W**E STAND ON the shoulders of others who come before us. This is no less true of the aquarium hobby than it is for most other aspects of life.

**We learn by hearing of or reading about other people's experiences.** In the case of the beginning aquarium hobbyist, this is usually through books or slick magazines. But once having joined an aquarium society where hobbyists of all experiences and abilities meet and exchange ideas (and fish!), our learning increases exponentially. This can happen via speakers invited to share their knowledge specifically because of their expertise in particular areas of the hobby or, better, through informal chat with members of the club over coffee or the auction table, or, yes, through club publications like *Jersey Shoreline/DARTER*.

**Although my major lifelong hobby interest has been cichlids,** I find nuggets of useful information in

virtually every talk I have attended, be it about guppies, bettas, or even marine fishes, or in conversation with other members about some weird fish they've spawned, or fielding a question or problem they might bring me (and more often than not I don't have a clue, but learn something from discussing!), or reading an article in the club journal, be it a short BAP report about some fish I have never kept, or a longer feature article.

**There is always something to be learned, and it is what keeps us vital in the hobby.** A club's publication is its lifeline to the membership and its lifeblood for information exchange. In my talks to various and sundry groups I always try to give hobbyists a pep talk on how what we do as hobbyists is important. I think, as a group, tropical fish hobbyists have a collective inferiority complex; we think that our experiences in captive rearing and spawning of fishes is unimportant -



simply a "hobby" (with all the lack of seriousness that implies), particularly, relative to science. But nothing could be further from the truth!

**We have much to contribute, even to that serious activity we call "science."** Let me tell you why. These days, the number of professional ichthyologists and other scientists actively engaged in research on fish has dwindled in favor of more molecularly oriented research. That's where the action and money is these days! Fact is, too, most professional ichthyologists are great with the dead and pickled fish they study and name, and not so good with

the living critters! (Though there are some exceptions, thankfully.) Also, with so few ichthyologists and so many fish, a lot of interesting observations just never get made: So many fish, so little time, so few professionals to do it!

**Here's where we hobbyists come in.** Our stock in trade as aquarium hobbyists is creating conditions that encourage our fish to spawn in captivity, where we can watch what they do at close range and learn from them. We do this for a variety of reasons: to accumulate Breeder Award points, to have young fish to sell at auction or to stores to help defray the cost of our hobby, or simply for the challenge and bragging rights of being the first to spawn some difficult or little-known, seldom-kept, or new fish. But along with these activities comes the opportunity also to observe - really observe - what our fishes do, record what they do by taking notes on the conditions we spawned them under and the behaviors we witnessed, and to share that information with other aquarists either through brief BAP reports or better, through articles published in the club bulletin (or even national slick hobby magazines!).

**The information is important not just to other hobbyists who would like to learn how to spawn a particular fish, but also to science!**

**Really!**

**Here's one (of several) examples** of how hobbyists have contributed to ichthyology in a direct and important way. About 15 years ago, in the mid-1980s, some of us playing with South American cichlids of the genus *Geophagus* (earth eaters) noticed that one of the "species" appearing in the hobby and sold as "*surinamensis*" differed from batch to batch. Although all "forms" had blue and red longitudinal striping along their sides, and the same basic body shape, and all sifted sand for food, they differed in the coloration of their tail fins; some had flag stripes (alternating blue and red), some had spotted tails, and some of the spot-tails had black throats and others did not. We also knew they came from different river systems in South America, since, among others, Ben Rosler, (Metropolitan Pets), a



knowledgeable local wholesaler, kept track of where they were collected and exported from: Colombia, Venezuela, Peru, Guyana, Brazil, etc.).

**At the time, ichthyologists (J. P. Gosse, 1974) who had studied the dead, pickled bodies** of these "surinamensis" eartheaters, concluded that it was one very widely distributed species. A (then) newcomer to South American cichlid ichthyology, Sven Kullander, thought otherwise, and suggested that these were discrete, different species, not just various flavors of *Geophagus surinamensis*, in need of different species names. He thought the colorational and other differences (body shape, scale numbers, etc.) were different enough to justify splitting them as different species.

**It was hobbyists who bred these fish that provided the final clue and proof:** some of the popular forms were "immediate" mouthbrooders, and picked them up in their mouths immediately to incubate them to hatching, while other forms were "delayed" mouthbrooders, which pasted their eggs down on a rock, guarded them for a few days, then took them in their mouths for final incubation, and some were simply non-mouthbrooding "substrate brooders" who did the typical cichlid thing and pasted and guarded their eggs!

**Clearly, there was more than one species involved! And it was hobbyists who provided the crucial information.** How did Kullander learn about this? There was no ichthyologist sufficiently skilled in getting live fish to breed in the aquarium, leastwise not Dr. Kullander. He didn't breed these himself, rather hobbyists did and wrote about their experiences in hobby magazines that Kullander had the good sense to be reading, and went "aha!"

**In fact, Kullander and other ichthyologists have increasingly looked to the aquarium hobby community to provide observations of fish behavior they would never see in the wild.** Have you heard about mouthbrooding severums! Or contact feeding pike cichlids? Of killifish who inject their eggs into cracks in rocks in fast moving streams? Or splashing tetras that jump out of the water to spawn on overhanging plants? Or bubblenest brooding catfish? or etc., etc., etc. The list goes on and on, and science would be ignorant of all if it were not for tropical fish hobbyists and the articles

they have written about observations they have made in their home aquaria!

We should give ourselves a huge pat on our collective back!

Ok, well maybe your experiences breeding this or that may not prove important or crucial to science (though you never know!), but **I am certain someone, somewhere, would love to learn about them even if it is just to repeat them and rack up BAP points.** Our hobby is, among other things, about generating and sharing information.

**I can think of no better chatter vehicle for doing this than a fish club,** and no better way for sharing the information within and between fish clubs than through club publications, particularly in this age of the internet and websites, where club journals and your writings are posted on the web for all to access and learn from.

**So, please, really observe your fish, take good notes and SHARE them with the rest of the tropical fish community by WRITING FOR YOUR CLUB PUBLICATION.**



## A SUPER-SIMPLE METHOD FOR WRITING ARTICLES ON BREEDING FISH

The following article is a reprint from the **DARTER - Sept., 1976.** It was then taken from a 1974 Sarnia Aquarium Society paper but the original source is unknown.

**I'LL BET ONE of the most often heard comments cried when people are asked to compose an article for the bulletin is "How do I begin?"** Maybe I can help eliminate the stalls and false starts by providing an outline that could be used as a guide or

even turned in with the blank spaces filled to be turned into a full article by the editors of the newsletter/bulletin. Give it a try and see how it works for you!

### A. Name of Fish

1. Common name (if it has one)
2. Latin name (if you possibly can)

### B. Description of Fish

1. Color and General Shape
2. Sex differences
3. Size at maturity
4. Temperment

### C. Fish's Natural State

1. Geographical Location
2. Climate of area
3. Water chemistry, if possible

### D. Spawning Tank

1. Size & description of tank
2. Water temperature and chemistry
3. If chemistry altered, how?
4. What substrate, plants, etc.?
5. Type of filtration
6. Situation - light sources, distance tank from floor, traffic by the tank, etc.

### E. Set-up

1. Pairs or multiples
2. How introduced to tank
3. Any special time of day
4. When to expect the spawning
5. How long to leave set up?
6. Feed during set up

### F. Conditioning

1. Were sexes separated? How long?
2. Food, what and how much?
3. Raise temperature?

### G. Description of Spawning

1. What is spawning site?
2. Courtship and spawning actions
3. Spawning colors and patterns
4. Number and description of eggs
5. Parental care

### H. Raising the Fry

1. How long until eggs hatch?
2. Special care of eggs
3. Size and % of hatch
4. When do fry begin to eat?
5. What did you start them on and when and what did you switch their food to?

**Happy Writing!!**



## 2017 BREEDER'S AWARD PROGRAM - Steve Edie

### November

Member	Genus	Species	Common Name	Points	Bonus	CARES	Total
Ed Millinger	<i>Neolamprologus</i>	<i>multifasciatus</i>		10			915
	<i>Scleromystax</i>	<i>barbatus</i>		15			930
Chris Mohrle	<i>Aulonocara</i>	<i>stuartgranti</i> "Hai Reef" *	Blue Neon Hai Reef Peacock	10	5		130
Dan Rios	<i>Julidochromis</i>	<i>marlieri</i>		10			50
Pat Tosie	<i>Cryptoheros</i>	<i>spilurus</i> "Rio Danto, Honduras" *		10	5		5170
Kevin Wise	<i>Limia</i>	<i>melanogaster</i>	Black Bellied Limia	0			865

### December

Member	Genus	Species	Common Name	Points	Bonus	CARES	Total
Chuck Bremer	<i>Ameca</i>	<i>splendens</i> "Rio Colomo" @	Butterfly Goodeid	15		15	932
	<i>Characodon</i>	<i>lateralis</i> "Guadalupe Agularis" @		15		15	962
	<i>Metriaclima</i>	<i>livingstonii</i>		10			972
	<i>Phallichthys</i>	<i>quadripunctatus</i> #@	4 Spot Merry Widow	0		5	977
	<i>Xiphophorus</i>	<i>evelynae</i> "Rio Necaxa"	Rio Necaxa Platy	5			982
	<i>Zoogoneticus</i>	<i>tequila</i> #@	Crescent Splitfin	0		15	997
Mike Huber	<i>Chapalichthys</i>	<i>percaticus</i> @		15		15	949
	<i>Iodotropheus</i>	<i>sprengerae</i>	Rusty Cichlid	10			959
Gary Lange	<i>Melanotaenia</i>	sp. "Kali Semen" *		10	5		1889
	<i>Pseudomugil</i>	<i>luminatus</i> *	Red Neon Blue-Eye	10	5		1904
Debbie Sultan & Tom Corradini	<i>Hypselecara</i>	<i>temporalis</i>	Chocolate Cichlid	15			775
	<i>Mylochromis</i>	<i>spilostichus</i> "Makakola" *		10	5		790
	<i>Neolamprologus</i>	<i>brichardi</i> "Kiku Fire Tip" *		10	5		805
	<i>Neolamprologus</i>	<i>multifasciatus</i>		10			815

#### BAP Key:

- \* = First MASI species spawn (5 point bonus)
- \*\* = First MASI species and genus spawn (10 point bonus)
- \*\*\* = First MASI species, genus and family spawn (15 point bonus)
- @ = C.A.R.E.S Species at Risk (Double base points)

# = Species previously submitted = 0 points, except for C.A.R.E.S. = base point bonus

^ = Species previously submitted, limited points for additional color varieties

Sources: Cal Academy - <http://research.calacademy.org>

CARES - <http://www.carespreservation.com>



# HORTICULTURE AWARD PROGRAM - Mike Hellweg

## November & December 2016 Submissions

Member	Genus & Species	Common Name	Type	Points
<b>Daniell Kinder</b>	<b>145 points</b>			
	<i>Anubias barteri nana</i> "petite"	Petite Anubias	V	15
	<i>Anubias barteri barteri</i>	Common Anubias	V	15
	<i>Bolbitis heudelotii</i>	African Water Fern	V	10
	<i>Ceratophyllum demersum</i>	Hornwort	V	5
<b>Chris Mohrle</b>	<b>335 points</b>			
	<i>Cabomba caroliniana pulcherrima</i>	Purple Cabomba	V	10
	<i>Echinodorus grisebachii</i>	Amazon Sword	V	15
	<i>Aponogeton crispus</i>		V	15
	<i>Bucephalandra</i> sp. Avocado		V	20
	<i>Bucephalandra pygmaea</i> Brownie Firebird		V	20
	<i>Bucephalandra pygmaea</i> Brownie Ghost		V	20
	<i>Hygrophila salicifolia</i>	Blue Hygro	V	5
	<i>Lilaeopsis brasiliensis</i>	Micro Sword	V	10
	<i>Nymphaea lotus zenkerii</i>	Green Tiger Lotus	V	20
<b>Kevin Wise</b>	<b>1370 points</b>			
	<i>Cryptocoryne willisii</i>		V	15
	<i>Hygrophila corymbosa</i>	Willow Leaf Hygro	V	5
	<i>Saururus cernuus</i>	Lizard's Tail	V	5
	<i>Zosterella dubia</i>	Willow Grass	V	10
<b>Chuck Bremer</b>	<b>635 points</b>			
	<i>Lemna trisulca</i>	Chain Duckweed	V	5
	<i>Wolffia columbiana</i>	Columbian Water Meal	V	5
<b>Steve &amp; Kathy Deutsch</b>	<b>100 points</b>			
<i>Anubias barteri nana</i>	Dwarf Anubias	IB	20	

### HAP Key:

Reproduction Key: V = Vegetative, OB = Outdoor Bloom, IB = Indoor Bloom, S = Seedling;

\* MASI First!



# Horticultural Award Program Blooms submitted in December



***Anubias barteri nana* or Dwarf Anubias Indoor Bloom by Kathy Deutsch**

*Anubias* sp. may be a slow growers but if conditions are right rewards the patient aquarist with blooms.

## 2016 HAP Year End totals

81 entries from 14 entrants represent 62 different species from 27 different families with 11 Outdoor Blooms, 8 Indoor Blooms, 1 Seed Reproduction, 61 Vegetative Reproductions

The most widely propagated species in 2016 was *Anubias barteri* - with 6 submissions from 5 different variants.

The most frequently submitted genus in 2016 was *Cryptocoryne* - with 10 submissions from 9 different species/variants.

Member	Level	2016		Lifetime					For Next Level	
		Points	Subs	Points	Subs	IB	OB	Seed	Seed	Articles
Bruce Mayhew	Senior	30	2	255	26	2	2	0		
Charles Hoppe	Advanced	35	3	160	18	3	0	0		
Chris Mohrle	Senior*	195	16	335	30	1	0	0	1	
Chuck Bremer	Master	130	12	635	65	4	6	1	1	6
Daniell Kinder	Advanced*	60	6	145	13	2	1	0		
Debbie Sultan & Tom Corradini	Advanced*	40	4	120	10	1	2	0		
Ed Millinger	Senior	5	1	330	42	0	12	0	1	
Gary Lange	Grand Master	30	2	1835	159	11	13	2		
Guy Tinker, Jr.		10	2	10	2	0	0	0		
Jim Mueller	Senior*	55	9	210	26	1	7	0		
Kevin Wise	Master	150	13	1370	114	7	0	1	1	6
Mike Hellweg	Illustrious Grand Master	135	9	3645	309	38	16	15		
Robby Simmons		20	1	20	1	1	0	0		
Steve & Kathy Deutsch	Advanced*	40	2	120	12	2	0	0		

\* Level to be awarded at Spring Convention





# CLUB HOPPING - Steve Edie

Jan 22 - Alsip, IL: Greenwater Aquarist Society - Winter Auction

Jan 29 - Chicago: Greater Chicago Cichlid Association - Swap Meet

**Feb 12 - St Louis: MASI - Winter Auction**

Mar 5 - Chicago: Greater Chicago Cichlid Association - Swap Meet

**Mar 10-12 - Hartford, CT: Northeast Council - Annual Convention**

Mar 11 - Kansas City: Heart of America Aquarium Society - Auction

Mar 18 - Peoria, IL: TriCounty Tropical Fish Society - Auction

Mar 19 - Alsip, IL: Greenwater Aquarist Society - Swap Meet

Mar 19 - Indianapolis: Circle City Aquarium Club - Spring Auction

Mar 25 - Hiawatha, IA - Eastern Iowa Aquarium Association - Auction

Apr 15-16 - Cedar Rapids, IA: Eastern Iowa Aquarium Association - Annual Show

**Apr 28-30 - St Louis: MASI Annual Convention**

**Apr 28-30 - Denver, CO: Aquatic Gardeners Association - Annual Convention**

**May 4-7 - St Louis: American Livebearer Association - Annual Convention**

May 21 - Chicago: Greater Chicago Cichlid Association - Swap Meet

**May 26-28 - Chicago, IL: American Killifish Association - Annual Convention**

Jun 8-13 - Meramec SP, MO: North American Native Fish Association - Annual Convention

**Jun 22-25 - Orlando, FL: International Betta Congress - Annual Convention**

**July 13-16 - Detroit: American Cichlid Association - Annual Convention**

Jul 22 - Cedar Rapids, IA: Eastern Iowa Aquarium Association - Summer Seminar

Jul 27 - Urbana, IL: Champaign Area Fish Exchange - Summer Auction

**Aug 6 - St Louis: MASI - Summer Auction**

Aug 12 - Kansas City: Heart of America Aquarium Society - Swap Meet

**Sep 22-24 - Madison, WI: Madison Area Aquatic Hobbyists - Cataclysm Catfish Convention**

**Oct 1 - St Louis: MASI - Swap Meet**

Oct 1 - Chicago: Greater Chicago Cichlid Association - Swap Meet

Oct 28 - Peoria, IL: TriCounty Tropical Fish Society - Auction

Oct 29 - Alsip, IL: Greenwater Aquarist Society

**Nov 3-5 - Chicago: Aquatic Experience**

**Nov 17-19 - Cleveland: Ohio Cichlid Association - Extravaganza**

**Nov 19 - St Louis: MASI - Fall Auction**

Dec 3 - Chicago: Greater Chicago Cichlid Association - Swap Meet



Nearby Clubs linked to their logo



Other links are on the MASI

[Linkpage.](#)

Convention LogosHotlinked!



Michigan Cichlid Association Presents

Cruisin' for Cichlids



ACA 2017

Novi, MI  
July 13th - July 17th

Time to renew 2017's MASI Membership.



# North American Native Fishes Association



## The 2017 NANFA Convention will be June 8-13, 2017 at the Meramec St Park, near St Louis, MO

A full itinerary appears below.

### Registration

[Go to our registration page here to reserve your spot!](#)

### The Venue

The venue for the 2017 NANFA Convention will be Meramec State Park, <https://mostateparks.com/park/meramec-state-park> located near Sullivan, Missouri. All the facilities we will need to hold the convention are located within the park (convention center, hotel, cabins, camp sites, stores, and most importantly, access to the Meramec River!).

The hotel has 22 rooms. Twenty of the rooms can hold 4 people and two rooms can hold 8. Thus there will be plenty of space for all expected participants. Prices range from \$70 to \$100 per night. The hotel (all rooms) has been placed on hold until April 15. The cabins could not be held, so if anyone wants a cabin you will have to reserve it sooner rather than later. Online registration for hotel rooms starts on Jan 1, 2017. After April 15, 2017 all cabins,

camp sites, and, especially, the hotel rooms (for our Convention dates) will be available to anyone reserving on-line.

To reserve a hotel room at this time, go to the reservation page or contact Bob Hrabik (Robert.Hrabik@mdc.mo.gov). If you have questions about room or cabin specifics, call 573.468.6519. Do that before April 15 (preferably much earlier) to ensure you get the cabin you want. You



may have to leave a message as the concessionaire is available intermittently.

For those of you looking for other accommodations, there are several hotels located along Interstate Highway 44.

### The Itinerary

**June 8 (Thursday)** Travel day and check-in (registration desk will open at 2 pm and close at 10 pm) For those who arrive early, a reception room will be available in the Conference Center and a guest speaker will entertain folks about some aspect of Missouri folklore (7 pm program)

**June 9 (Friday)** Morning travel and check-in (registration desk will open at 9 am and close at noon) Afternoon field trip to the Missouri River at Pelican Island Natural Area (access by boat only). Buses will be provided. There will be trawling trips and ample space to collect fishes from a magnificent and

expansive gravel bar. Evening cookout on-site.

**June 10 (Saturday)** Convention meeting and presentations begins at 9 am Evening banquet and fundraiser goes to 10 pm

**June 11 (Sunday)** Collecting trips Three trip options: canoe float and two other collecting trips. The collecting trips for the Convention (including the Missouri River trip on the 9th) has been schemed to cover Big Rivers, the non-wadeable (or medium-sized rivers), and smaller streams to give the convention attendees exposure to as many habitat types and fish species as possible.

•**Trip 1: LaBarque Creek:** highest fish species diversity in the Meramec River basin for a stream of this size (over 40 species), Labarque Creek and Labarque Conservation Area •**Trip 2: Canoe float** (to be determined, either Big River or Meramec River) •**Trip 3: Still deciding**, so many good options

**June 12 (Monday)** Collecting trips The same three-trip options so folks can

decide which other trip they want to take (we may ask up front what trips are of most interest and then assign days to attend).

**June 13 (Tuesday)** Hrabik personally-guided trip to wherever in Missouri die-hards may want to go. This will have to be a democratic process and be a reasonable drive.

### Updates

For additional information, if you would like to volunteer, or you have other questions, please contact:

Robert Hrabik:  
[robert.hrabik@mdc.mo.gov](mailto:robert.hrabik@mdc.mo.gov)



## MEMBER CLASSIFIEDS

Buy/Sell	Member	Item	Bid/Asked	Contact
Sell	Jim Miller	Bloodworms and brine shrimp. Brine Shrimp eggs 16 oz. can.		314-638-1134
Sell	Charles Harrison	Thiosulfate crystals (Chlorine Remover) - pound	\$4.00	(314) 849-9761
		OTO double strength Chlorine/Chloramine test kits - 4 ounce	\$12.50	<a href="mailto:charles@inkmkr.com">charles@inkmkr.com</a>
		Flubendazole, 10% powder 25 grams	\$20.00	
		Lavamisole HCl Powder - 5 grams treats 100 gallons	\$10.00	
		Methylene Blue 5% solution (4 ounces)	\$12.75	
		Acriflavine Concentrate (4%) solution, 2 ounces	\$12.70	
		Bromthymol Blue pH test solution, 4 ounces	\$7.00	
Buy	Mike	Small Styro shipping boxes - 12 x 12 x 12 or a little bit smaller. If your company uses them and throws them away, save them! Bring to the meeting or I'll come pick them up	Free	636-240-2443

## MASI INSULATED FISH BAG

Transport your fish in style!

Insulated, rolls up for easy transport, expandable, fits in luggage, carry your fish anywhere and keep them safe from temperature changes while displaying your pride in your club!

22" x 16" x 12" - holds several fish bags

Made of 100% recycled materials

Get yours today, before they're gone! Available at each monthly meeting or other events while they last!



## Got Green Backs swimming in those Tanks?

Got something fishy to sell? Bringing something to sell at the next MASI meeting?

## Advertise here!

Deadline is 10 days prior to the January, March, May, July, September or November MASI Meeting. The Darter is Emailed about 3 days prior to each of these meetings.



**The 1977 Workshop**  
**Speakers were:** Dr. Herbert R. Axelrod, Dr. Gene Lucas, Dr. Dave Koran, Dr. James Thomerson, Ron O'Brien, Pat Austin, Ed Gralewicz, Jack Connery, Homer Arment, Larry Arnold, and MASI's own Jim Thale

Larry Albright, Klaus Bertich and Rich Smith have been **MASI Members since before that Workshop.**

MASI Members of good standing can place a fish related classified ad in the Darter for free. Free ads may be up to 30 words in length. Send your ads to the editor. The 30 word ad can run each issue unless specified how long to run, in which case it will run as requested.



# Please Patronize our Advertisers and Sponsors



**SUNSET**  
CUSTOM HOMES, INC.



**Patrick A. Tosie, Sr.**  
President

Cell 314/616-4316  
Voice Mail 314/401-0400  
PatTosie@yahoo.com

P.O. Box 1327  
St. Louis, MO 63026



Real Estate Consultants

A member of the franchise system of BHH Affiliates LLC

## Tosie Team

Your Father-Daughter Duo!

Pat: 314.616.4316

Meghan: 314.566.1320

PatTosie@gmail.com

www.PatTosie.com



**BERKSHIRE  
HATHAWAY**  
HomeServices  
Select Properties

Office: 314.775.2050  
Fax: 314.698.5811  
13275 Manchester Rd.  
Des Peres, MO 63131



# InkForYourPrinter.com

## (636) 677-1900



Locally Owned and Operated Since 1987  
4600 South Square Dr. High Ridge, MO 63049  
OEM & Compatible Inkjet and Refilled Inkjet Cartridges



**NATIONAL LASER & INK JET  
CARTRIDGE SERVICE**



Call, Click or Come in for your printing needs.



Hard-to-Find Tropical Fish  
 True Aquatic Plants  
 Live Foods

Michael Hellweg  
 Owner



All major credit cards accepted via PayPal.com  
 We'll ship to your door anywhere in the USA!

636.544.3276  
 636.980.1611 fax  
 mike@minifins.com



### Monthly Bowl Show Entry Form

Entrant Name \_\_\_\_\_

Month/Year \_\_\_\_\_ Monthly Class \_\_\_\_\_

\_\_\_\_\_ Fold here and place in front of bowl(s) with Entrant name hidden \_\_\_\_\_

Line	Species: Latin or Common Name	SEX	Monthly	Open
1		M F		
2		M F		
3		M F		
4		M F		
5		M F		
6		M F		
7		M F		
8		M F		
9		M F		
10		M F		

### Upcoming Bowl Shows

**January**  
 Cyprinids:  
 Barbs, Danios,  
 Rasboras,  
 Minnows,  
 Goldfish

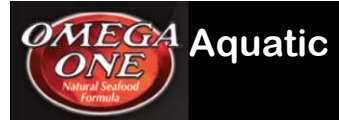
**February**  
 Sharks,  
 Loaches, Eels,  
 and Oddballs



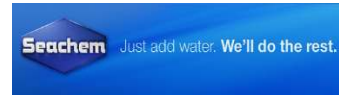
# MASI SUPPORTERS AND FRIENDS



Thank you to our corporate sponsors! Please support the Companies that support MASI all year long!



Midwest Pet



YOUR TRUSTED SOURCE FOR THE BEST IN PET PRODUCTS SINCE 1955



**Keep Watching for Additional Supporters Here!!**



Tap/Click a Logo to visit their site

Time to renew 2017's MASI Membership.

