

The Darter

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THE DARTER

(ISSN 0192-78333) is a newsletter published six times a year by the Missouri Aquarium Society, P.O. Box 1682 Maryland Heights, MO 63043. The Missouri Aquarium Society (MASI) is a non-profit organization. This publication is free electronically 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. 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.

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

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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

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: \$5; Nonmembers: \$7. 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.



Cover - Aquarium Design Group, Houston, TX; Photo Pat Tosie

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The Darter

Volume 44, Number 1

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FROM THE PRESIDENT'S TANK

Pat Tosie

WOW! We had a lot of fun this month!!

One area that MASI can use help with is volunteers. YOU

GET THE MOST OUT OF THE CLUB WHEN YOU ARE
INVOLVED!

Keep looking below water....

Chuck Bremer

FROM THE EDITOR

Thank You! Thank You! Thank You!

Because of you this should be a GREAT issue of the Darter. Some changes and additions were made for sure but because of you we got Lots of good material, enough that I had to slide a bit to the next issue. Please don't let that hold you up on providing material. As Pat says, with electronic distribution we can always put in more pages at little costs.

Keep 'Em Coming!!

There is a lot of follow-up on the recent MASI Missouri Natives collecting trip to the St Francis River system. Good photos of both fish and people and some very good stories arose from this trip. Thanks to Tom Keevin, Amy Bennett, Gary Lange and Lora Watson for their photos in this issue.

On page 25 you will find a photo log of some of the fish encountered. There are 22 numbered photos there. Email me a list of your identification guesses and we'll see what kind of prize we can find for the one with the most correct. I'll have Bob Hrabik ID the fish and provide that along with the follow up article on the trip he is intending to write this fall. Sending The Book to press has priority for him now.

Not to be outdone, President Pat has provided a review of a "collecting" trip he also took to Texas.

Our educational speakers are placed on our Darter distribution for a time. This issue you will see an article by the **AGA about entering Aquascaping Contests** because Jennifer Williams was a speaker for us in the past.

We also have some intended regular columns. Mike Hellweg continues his "Mini Fins" series and Holly Paoni on Basic Aquarium maintenance and care and Derek Walker plans to make Catfish a regular thing.

Did you know that in the past two years we have added nearly 40 new members?

This issue includes an emphasis on New MASI members. With a club our size that means nearly 1/3 of our members have been with us less than two years.

There's a list of New Members on page 7. Get to know them and help them get to know the rest of us. For the new folks on that list, or others as needed, there is a link to the latest edition of the MASI Member's Handbook at the bottom of the page. The MASI Fishy Folk section has been dedicated to new members this issue. Look for more of that.

We've given an overview of the Monthly Bowl Show on page 16. Our bowl show is struggling, as you can see in the Council meeting minutes, also new, on page 14. Take advantage



and get additional meeting raffle tickets or accumulate points for future programs now being discussed in the council. Look for more information on this in later issues of the Darter. We hope to have other activities featured here as well.

The Darter is your publication. Give us feedback & ideas and let us know what you like or don't like to help improve.
For direct contributors, the next content deadline is
September 11th for an issue emailed on September 17th.

Send Feedback and Letters to the Editor to: editor@missouriaguariumsociety.com



Can you recognize your 2018/19 Executive Council?



The new Executive Council as of July

The voting portion of the Executive Council consists of 4 elected officers, 6 elected council members and 3 appointed positions.

Here is a list of the 2018/19 Executive Council as well as other Committee Chairs and Service positions within our Club. Positions normally attending Executive Council meetings are marked in BLUE and are shown with a photo but please feel free to contact anyone to provide input or to attend the Council meetings in person.

	I / LAC	cative Goain	-110
Position	Name	Email	Phone
President	Pat Tosie	pattosie @ yahoo.com	314-616-4316
Corresponding Secretary	Pat Tosie		
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Webmaster	Charles Harrison		
Executive Council	Guy Tinker	GuyTinker3@gmail.com	314-346-5166
Points Tabulator	Guy Tinker		
Swap Meet	Corradini & Tinker		
Executive Council	Tom Corradini	tom@farmerenv.com	618-210-9221
Executive Council	Sue Harrison	Suellen@inkmkr.com	636-677-1900
Executive Council	Melanie Holmes	melanieholmes7158@yahoo.com	636-293-4161
Executive Council	Scot Roach	scotroach@gmail.com	407-310-3816
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Horticultural Award Prog	Mike Hellweg		
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Historian	Cory Koch	sithlid@gmail.com	636-278-0736
Librarian	Dave Rush	fishydave2@yahoo.com	314-291-8932
Membership & Welcoming	Ed Millinger	amazoneddy I @ yahoo.com	573-883-9943
Fish Rescue	John Van Asch	johnsfishy0731@att.net	618-604-7228
Social Events Coordinator	John Van Asch		
Forum Liaison	Scott Bush	sportspicks@charter.net	314-486-8872
Breeders' Award Program	Steve Edie	sredie@charter.net	636-922-4232
Social Media	Derek Walker	jamdwalk@msn.com	314-941-9403
Advertising & Promotions	OPEN		

Anyone is invited to attend the Council meetings to bring up issues, contribute to the discussion or just to see how they are run. Meetings are normally held the 3rd Saturday of each month at a Council member home but are changed to fit schedules on occasion.

Give them your Feedback and Support!



The Darter

2018 New Members!

Florissant, MO Fred Artis Tim Baxa Godfrey, IL Dave Bayne Oakville, MO Eric Bazzell Dave Bell St Louis, MO Johnathan Bell Labadie, MO **Amy Bennett** St Louis, MO **Dennis Blevins** Belleville, IL St Charles, MO **Andrew Bowering** St Louis, MO Jeremy Bozarth Shawn Carroll Red Bud, IL **Kevin & Betsy Cummings** Foley, MO Mark Czajkowski O'Fallon, MO

Abhinaba Dasgupta lan Eggert Jim & Nancy Farthing

Jeff Gould Matthew Grant

Laura Hansen-Morrison

Melanie Holmes Sean Ireland

Steve McCord

William Millikan

Orin Moore Caleb Pitman

Rick Renfro

Robert Rohrbough

Steven Rowan

Craig Russell

John Schlosser

Matt Schlosser

Michael Seghiri

Jeremy Stellhorn PJ Stull

Mark Vandenberg

Rich & Shelby Wiegand

Bryan Wiltfong

Brian Woodrick

Claire & Kyle Wyckoff

loe Zimmerman

Maryland Heights, MO

St Louis, MO

Mascoutah, IL

Barnhart, MO

St Charles, MO

St Louis, MO

St Louis, MO

Troy, MO

Jackson, MO

Jackson, MO

Labadie, MO

Edwardsville, IL

Festus, MO

Arnold, MO

Hamilton, IL

St Peters, MO

St Peters, MO

House Springs, MO House Springs, MO

St Louis, MO

Red Bud, IL

Foristel, MO

Gilbert, IA

Foley, MO

Kirkwood, MO

St Charles, MO

St Louis, MO Ballwin, MO

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New members or those returning in 2017 and 2018 after absence.

The Council plans to make a list of new members a regular part of the Darter.

The Missouri Aquarium Society is changing rapidly!

Over the past 2 years MASI has gained over 35 new members. About 30% of the membership is new within this period.

This is GREAT! Say "Hello" to the new members and make them feel at home. Ask them their experiences and opinions.

Make them feel welcome!

Show them around and help them become acquainted with others so they can participate to the fullest in the club.

With this many new members there are bound to be some interesting ideas that may help improve the club, renew it and make it more relevant for those who have already enjoyed it for a while.

Page: 7

Help these Folks get involved to continue to improve the club!



Member



MASI General Meeting Thursday, July 19th!!

















Rare Fish Sale & Auction

However, Memberships will be available at the meeting or for advance memberships go to our membership web page: http://www.missouriaguariumsociet y.com/membership.htm

A Catalog will be published to members of record if we get information in a timely manner.

The Sale will be held at our normal meeting location: 7:30 PM Dorsett Village Church, 2240 Bennington Place, Maryland Heights, MO































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What:

Relax & Enjoy the locally renowned Water Garden!
See Championship Koi!
Swim in the Pool
Good Fishy Conversation

When:

July 28th, 2018, 2-6:30 PM

Where:

Home of Rick & Pam Jokerst 305 Wyndmoor Terrace Ct. Town & Country, MO 63141

Who:

MASI Members Families and Guests

How:

Let Pat know then just Show Up!, MASI is providing the Meats!! Bring any special drinks you want and possibly a salad, vegetable or dessert to share



RSVP TO PAT TOSIE AT THE MASI MEETING, BY PHONE OR TEXT (314-616-4316) IF YOU PLAN TO ATTEND SO HE CAN PLAN THE MEATS!

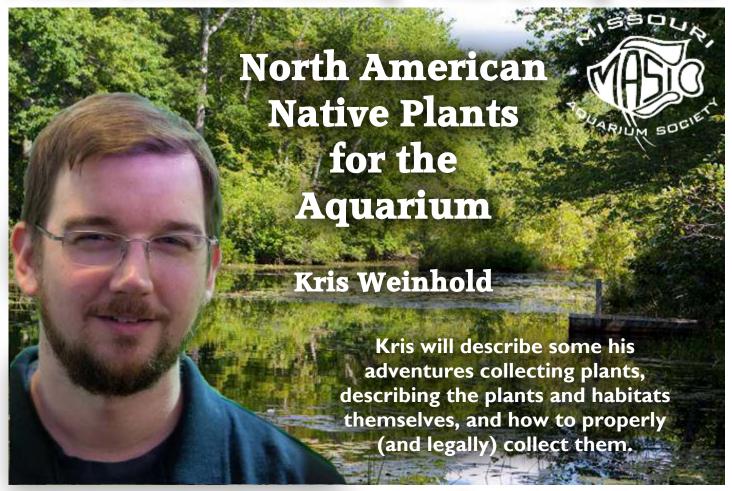
MASI SUMMER PICNIC







MASI General Meeting Thurs, Aug 16th!!



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

Kris grew up keeping aquariums, but really fell in love with planted aquariums in 2004, diving head-first into researching and experimenting with various plants, growing techniques, and aquascape designs. Kris is the vice president of the Greater Washington Aquatic Plant Association, an Aquatic Gardener's Association, and has published articles in The Aquatic Gardener, Aquarium International, and had his photos appear in several publications.

He sporadically maintains a website/blog (www.guitarfish.org) showcasing his aquarium and nature photography, with informative articles on aquarium keeping and aquatic plant





Eddy-torial

Ed Millinger

to fill in for a council member who had to step down from council and fill out the remaining months left on

their term. It had been a long time since I had served on council but I was glad to do it.

It didn't take long for me to realize just how much work goes on behind the scene to make MASI run as well as it does.

I think it is easy to take for granted what a great aquarium society we have. We have a nice meeting place that doesn't cost that much and once at the meeting we have refreshments, free items, a raffle, a bowl show, folks selling live food, flake food, plants and an auction with a great variety of aquarium related items.

Oh, and the programs we enjoy month after month, many times presented by an out of town guest. We have had presenters from England, Canada and across the United States in the past few years. We also have a terrific club publication that the editor puts a lot of work into.

All of this takes a great deal of time and effort to coordinate. I haven't even mentioned the auction and swap meets. We tend to express our displeasure if something doesn't fit the way we think things should be done. That is all well and good but we should also take the opportunity to thank those responsible for making all the great things that happen possible.

Take a look at the Darter page that lists the officers and committee chairs. Thank them at the next MASI function for providing such a great atmosphere and opportunity to meet with fellow enthusiasts.

Imagine what it would be like to not have MASI. Where would you sell your extra fish? Where would you find so many items you need and not have to pay shipping?

Most of all where would you be able to pick the brains of so many knowledgeable fellow aquarists? There are a wide variety of interests represented within our club.

Don't hesitate to step up if asked and become involved, the rewards are very much worth it.



MASI 2018 Swap Meets

Tom Corridini

Guy Tinker



Join Missouri Aquarium Society for the second of our 2018 swap meets on Sunday, September 30.

Do you have extra fish you'd like to re-home with fellow enthusiasts? Do you need to clear out extra tanks, lights, or filters? Do those aquatic plants need thinning? Reserve your table now for a guaranteed sellers spot! If you would like to donate any items, MASI will also have a table set up with all sales going to support the club.

If you are interested in selling your wares an 8-foot table is just \$20. Tables with available electricity are \$25. Based on the Spring success, we will sell out of spots available for vendors so reserve your space now!

The swap is Sunday, September 30 from Noon - 3 pm. Buyer Admission will be just \$3. Are you looking for rare fish, plants, quality food, and everything you need to set up the perfect aquarium? Plan on attending!

Tom Corradini and Guy Tinker, Jr. are this year's Swap Chairmen. Contact them with any questions you may have and to reserve your spot as a Vendor. Their contact information is:

tom@farmerenv.com
GuyTinker3@gmail.com





MASI Challenge

2018 Progress

Running River Rainbowfish Recovery Efforts





SHOP HOPPING - July 2018

Special Events and Deals!

These Local Fish
Shops (LFS) help
introduce hundreds
of people to the
Aquatic Hobby every

day. They also help the Missouri Aquarium Society reach those hobbyists and keep them engaged by promoting our programs. Support their programs too!

Happy Fish Shopping!
The Missouri Aquarium Society

pecial Events and Dea	113:
What	Where
New Facebook Posts	Saltwater Paradise
New Facebook Posts	Aquatic Treasures
Fish in Stock	Midwest Tropical Fish
Current Specials	petco
In Store Specials	PetsWay
<u>Facebook</u>	Pet Connection
Monthly Specials	Sailfin Pet Shop
Facebook/Specials	Aqua World
Monthly Specials	Tropical World Pets
Weekly Specials	Corals & More
<u>Fish List</u>	Malawi Aquatics



MEETING REPORT

MISC Contributors

MAY:



Larry Allbright
Winner of a ZooMed
filter in May and a
Marineland filter at the
April meeting Raffle.



Mike Hellweg
Winner of a ZooMed
Powersweep and
Accessories.



New Member
Winner of a large
can of ZooMed
Spirulina 20.



New Member
Winner of a ZooMed
Aquasun High Output light
in the June Raffle.

Don't forget:

Bowl Show Winners now get FREE Extra Raffle Tickets!!

Meeting Bowl Shows - Chris Mohrle

May

Place	Characins	Keeper
I	Red Phantom Tetra	Chris Mohrle
2	Red Phantom Tetra	Chris Mohrle
3	Red Phantom Tetra	Chris Mohrle
Place	Open	Keeper
Place I	Open Xiphophorus variatus Platy	Keeper Ed Millinger

June Results not Available





COUNCIL MEETING

4/28/18

Pat Tosie called the meeting to

order at 7:40 at the home of Gary

Jack Heller, Angela Hellweg, Tom

Corradini, Charles Harrison, Gary

at the office of Pat Tosie.

and Chris Mohrle.

Renfro.

Lange. Present were Debbie Sultan,

Lange, Ed Millinger, Guy Tinker, Sue

Harrison, Mike Hellweg Chuck Bremer,

ANNOUNCEMENTS:

• The next Council meeting is May 19

Pat has appointed Sue Harrison to

fill the council seat vacated by Rick

Minutes from the Mar meeting. A

motion to approve was made by

seconded by Mike Hellweg. The

TREASURER: Jack read the

Treasurer's report. A motion to

seconded by Chris Mohrle. The

• **CONVENTION**: Next year will be

the same format of swap, banquet

and auction, perhaps starting the

• AUCTION: Mike said that MASI

The possibility of having fewer

BOWL SHOW: Bowl show

Suggestions such as having a

all "open" class format were

• **CORRESPONDING:** Pat has

sent out a second round of

a few boxes so far.

quarterly bowl show or going to an

donation requests. He has received

The church will be available for the

July General meeting, so alternate

OLD BUSINESS:

plans do not need to be made.

participation has been low.

auctions was discussed.

made over \$2000.00 profit from

provisionally approve was made by

REPORTS:

• **SECRETARY**: Angela read the

Charles Harrison and was

Charles Harrison and was

swap at a later time of day.

motion passed.

motion passed.

the last auction.

discussed.

COUNCIL MINUTES



 Gary is still looking into the purchase of a new laptop and projector.

NEW BUSINESS:

- The FORC meeting will be May 13 at 6:30 at Pat's office.
- Volunteers are needed to run for Officers and Council positions.
- No changes to the MASI by-laws (such as election changes) can be made until our 501(c)3 status is finalized. The IRS is hoping to have the backlog caught up by June.
- The MASI picnic will be July 28 at the home of Rick and Pam Jokerst.
- Chuck hopes to set up a meeting with local pet shops in June or July.
- Council meeting Minutes will once again be published in the Darter.
- Mike will book hotel dates for 2019 Show, Auctions and Swap meets.

A motion to adjourn at 9:40 was made by Charles Harrison and was seconded by Tom Corradini. The motion passed.

5/19/18

Pat Tosie called the meeting to order at 7:35 at his office. Present were Jack Heller, Angela Hellweg, Charles Harrison, Sue Harrison, Gary Lange, Ed Millinger, Chuck Bremer, and Chris Mohrle.

ANNOUNCEMENTS:

- The next Council meeting is June 30 at the home of Guy Tinker.
- The MASI picnic is July 28th at the home of Rick & Pam Jokerst.

REPORTS:

- SECRETARY: Angela read the Minutes from the Apr meeting. A motion to approve was made by Charles Harrison and was seconded by Chuck Bremer. The motion passed.
- TREASURER: A motion to waive the Treasurer's report was made by

- Chuck Bremer and was seconded by Chris Mohrle. The motion passed.
- **EDITOR:** Darter submissions are due by July 10.
- **AUCTION:** The next auction is Aug 12.
- BOWL SHOW: The possibility of discontinuing the monthly bowl show was discussed due to lack of entries.

OLD BUSINESS:

- Mike Hellweg and Jack Heller have completed the audit for FY 2017. A new accounting program may be chosen due to issues with Quicken.
- Gary will have a new projector purchased by June 30.
- Chuck is still working on planning a networking meeting for local petshops.

NEW BUSINESS:

- A motion to approve the 2018-2019 FORC budget was made by Charles Harrison and was seconded by Chuck Bremer. The motion passed.
- A motion to approve the 2018-2019 FORC report was made by Charles Harrison and was seconded by Jack Heller. The motion passed.
- A motion to approve the slate of candidates for 2018-2019 Officers and Council was made by Gary Lange and was seconded by Chris Mohrle. The motion passed. The candidates are:
- Pres-Pat Tosie, V Pres-Gary Lange, Treas-Jack Heller, Sec-Angela Hellweg, Council-Larry Albright, Tom Corradini, Charles Harrison, Sue Harrison, Melanie Holmes, Mike Huber, Scot Roach, and Guy Tinker.

A motion to adjourn at 8:50 was made by Charles Harrison and was seconded by Gary Lange. The motion passed.









Enjoy your summer, and start breeding those fish, raising those plants, and getting your tubs and water gardens going.

MASI AUCTION MESSAGE

Mike Hellweg

Hello all,

This will be nice and short this time. Our next auction, the Annual Summer Auction, will once again be held at the Holiday Inn Airport West in Earth City on August 12, 2018.

We will have several raffles. Look for more info on those as we get closer.

As always, we can use volunteer help starting at 9:00 am and throughout the day.

Even if you can only help for a few hours, please stop by and help out. The hotel will have the concession stand going again, too.

If you need a seller number, please contact me at the email below.

And for now, 'nuff said

Mike

auction@missouriaquariumsociety.com



MASI Summer Auction August 12, 2018!!



Verbal & silent auctions running throughout the day!



500-800 Lots of Aquarium FISH, Plants, Equipment, TANKS, Fish Food, Décor and all things Aquarium!!

Viewing 10:00 AM Auction Begins at 11:00 AM

Contact Info: <u>auction@missouriaquariumsociety.com</u>



Be Proud of your Fish! Enter the MASI Monthly Bowl Show

month at our regular meeting is a chance to share with other members the fish you're keeping, and to get some experience showing fish. All members get MASI Participation Points for entering and more points for placing or winning a class.

Easy to Enter!

Bring the fish in a flat-sided drum bowl or a very small rectangular aquarium. Using flat sides makes judging easier. Its easy to bring in a drum bowl with some plastic wrap over the top and a rubber band to keep it in place and not have to transfer the fish into or out of the bowl at the meeting. Give the fish plenty of room and keep the water level less than 2/3 to allow for plenty of oxygen exchange. Sign in your fish when you get there. Make things easier by having ready a slip of paper with your name and the species of the fish being entered.

How Fish Are Judged

All entries are sight-judged and ranked on a composite of standard criteria --basically: size, finnage, color and deportment.

- Size for the age of the fish is the best single indicator of the conditions in which the fish has grown--bigger size suggests more optimum food, filtration, and water conditions.
- Intact fins with full extensions are desirable but often quite difficult to retain if the fish are nippy or combative. Keeping your show fish separate can really help. A minor rip
- January: Cyprinids: Barbs, Danios, Rasboras, Minnows, Goldfish
- 2. February: Sharks, Loaches, Eels, and Oddballs
- 3. March: Cichlids
- 4. April: Killies

in the fin of a normally nippy and aggressive tetra will be penalized less than bent rays in an angelfish— one is almost impossible to avoid in normal conditions but the other may suggest a fish kept in a too-small tank or a poorly healed injury to a young fish. Permanent defects like bent spines will count more against your fish than temporary things like one or two missing scales or washed out color.

- Healthy, well-fed fish will show better color. Those who have some exposure to sunlight or better yet, a natural diet outdoors can really make them bloom. A female who is unusually bright for her species can beat a brighter male who is drab for his kind.
- 4. **Deportment** is the most variable thing and will vary by the natural temperament of a particular species, and by the individual fish's ability to cope with being isolated in a small bowl. The judge will look for fish not hanging out in a corner with clamped fins; fish of a more outgoing or pugnacious species should be aggressive and a fancy guppy should show off those long, flowing fins while a loach may sit quietly on the bottom of the bowl but be alert and appropriate.

If you have questions about the judging, just ask! And if you have a particularly unusual fish, please feel free to educate the judge. If your dwarf cichlid is so large that it might be mistaken for a small individual of a closely related but larger species, or if you're entering a female who is so colorful that she might

- 5. May: Characins: Tetras, Pencilfish, Piranhas, Pacu, Silver Dollars, etc.
- 6. June: Catfish
- 7. July: Livebearers
- 8. August: Anabantoids: Bettas, Gouramis, Ctenopomas, etc.

be mistaken for a male of the species, let the judge know. There are so many fish, and so little time, judges can't be experts on all of them.

Monthly Bowl Show Classes

If you show in at least 7 monthly Bowl Shows you can compete for the Annual Bowl Show Champion Award. The winner will be determined by the entrant accumulating the most points overall for the year combined with participation in other annual bowl shows like the MASI SuperBowl.

Participation Points earned for each entry: 5 points for first place, 3 points for second place, 2 points for 3rd place, one point each for all other entries up to 5 nonplacing entries per member per month. Each month there will be one special class and one open class. Below are the monthly special classes. **A Printable Entry Form is** placed as the Last page of this Darter!!

- 9. September: Rainbowfish
- 10. October: Aquatic Plants
- 11. November: Aquatic Critters: Aquatic Invertebrates, totally aquatic amphibians (Pipid frogs/toads, Caecilians)
- December: No show at the Holiday Party.



Be Proud of your Art! Enter the AGA Aquascaping Contest!

Why Participate in an Aquascaping Contest?

Bailin Shaw AGA Contest Chair

HE AQUARIUM HOBBY has seen a recent increase in the popularity of both online and live aquascaping competition, especially for planted tanks.

Taking advantage of this growing trend, the Aquatic Gardeners Association was the first organization to use the increasing popularity of aquascapes and organize an online aquascaping competition. Shortly thereafter, Takashi Amano, famous for the Nature Aquarium aquascaping style, established the IAPLC competition. Since then numerous other competitions have sprung up - many open to competitors from around the world.

I have had the unique opportunity taking part and am now also managing and promoting the AGA International Aquascaping Contest. Many different styles and trends have emerged throughout the years and the aquascapes get more and more complex. Aquascapes can be incredible works of art and require a great deal of skill to create and complete.

It is important to understand and use basic concepts of art and there is the added difficulty of knowing how to grow and prune the plants to look their best in the aquarium and to time it perfectly for pictures to be submitted to contests.

So, why participate in these competitions?

These contests force one to become a better hobbyist by gaining an immense knowledge about growing the plants being used. By understanding and using basic information, the hobbyist learns how to prune the plants to look their best and the amount of nutrients, lighting, or carbon dioxide dosing to optimize both their color and health.







The community of aquascapers is quite small, offering many opportunities to interact with fellow aquascapers and chances to exchange ideas and advice. Many of my competing friends seek out mentors in the hobby as guides to develop further. Friendly

competition amongst hobbyists pushes design innovationsobvious when contest results are unveiled. Through these interactions, lifelong friendships develop by sharing the passion.

The biggest reason to compete is to develop and improve skills by making better and better aquascapes. Practice makes perfect and the more a hobbyist creates, matures, and perfects- the better

they become. By learning trends and replicating styles and techniques, an aquascaper builds a repertoire from which to design. Whether one is creating a Nature Aquarium aquascape, an Iwagumi aquascape, or a Dutch aquascape, the more a hobbyist learns and perfects their skill, the more they mature as a hobbyist.

There are many other reasons to compete in an aquascaping contest, but hopefully, these few will convince you to take that opportunity. Competitions

can be stressful but a sense of accomplishment and the satisfaction of creating something unique will drive you each year.

AGA competitions are lots of fun and you may even walk away with a prize!



I hope to see some of your creations in the AGA International Aquascaping Contest. Check out previous year's entries or submit to this year's contest by following these links:

OVERVIEW

RULES AND GUIDELINES

FAQ's

2017 SHOWCASE



MASI 2018 Activities

MASI 2018 Calendar

Jul 19	General Meeting RARE FISH SALE	7:30 PM
Jul 28	Summer Picnic @ Jokerst's	2:00 PM
Jul 28	Council Meeting	6:00 PM
Aug 12	Auction	9:00 AM
Aug 16	General Meeting	7:30 PM
Aug 18	Council Meeting - Hellweg Home	7:30 PM
S ep 20	General Meeting	7:30 PM
Sept 22	Council Meeting - Holmes Home	7:30 PM
S ep 30	SWAP ***	10:00 AM
Oct 18	General Meeting/ SuperBowl	7:30 PM
Oct 20	Council Meeting - Bremer Home	7:30 PM
Nov II	Auction 🙉	9:00 AM
Nov 15	General Meeting	7:30 PM
Dec 20	Christmas Party	7:30 PM





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* Excludes Sale items.

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Freshwater, Salt Water, Reptiles, Dry Goods





Meet MASI Fishy Folk: Tim Baxa - New Member

- Family members? 4
- Years keeping fish? 17 years
- What was in your first tank? Mollie's and guppies
- How many tanks do you have set up right now and what is in them? 10 tanks total.
 Everything from guppies to African cichlids
- Favorite fish as a pet? Blood parrot
- Your dream fish? Discus
- Your dream tank? 500gallon
- Your realistic dream tank? 225 gallon.
- Your latest fish related accomplishment? Finished my first stage of my fish room
- Your latest goal? Scored a 90 gallon show tank
- Other pets? Two rabbits and one dog.







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Meet MASI Fishy Folk: Melanie Holmes

New Member



I am honored to answer your questions.

Family members? I was born and raised in Germany. I am married and have three boys.

Year keeping fish? Started with a small tank (guppies and goldfish) as a child in Germany which I completely emptied and cleaned about once a week. Yickes! How did my fish survive?? I have always been fascinated with keeping fish and still remember the smell of the aquarium store I used to go to!

I have been keeping fish seriously for about 10 -12 years now.

How many tanks do you have set up right now? I currently have 7 tanks. Two of them

are in transition at the moment. One will be a bigger

(55 gallon) native/ Coldwater tank and the other (65 gallon) an Amazon blackwater set up. I also have a CO2 injected heavily planted (loose) Asian biotope, a native tank and three Goodeid tanks.

Favorite fish as a pet? My favorite fish was my Archer fish. Really thinking about getting some again.





Dream fish? Don't really have a dream fish right now.

Dream tank? Not sure I have a dream tank but would love to set up more biotopes, and would really like to set up another brackish tank as well.

Your latest fish related accomplishment? Setting up my native Missouri tank, breeding Goodeids and catching a video of my *Betta Ocellata* spawn.

Your latest goal? Getting more involved in the club and winning BAP points.

Other pets? Dogs, cats, a ferret and any critter that needs help.

I am really into setting up biotopes. Creating an environment that is as close as possible to the natural environment the fish lives in. I also love true blackwater set ups. It all requires a lot of research and careful collection of materials, fish and plants.

I'm actually planning on going home to Germany in October!
Really looking forward to visiting a few fish stores!



The Darter

The Skyler Method!

Missouri Natives Collecting trip with our Grandson

By Lora & Bob Watson

HE RECENT COLLECTING trip of MASI to the St Francis River area was awesome.

We took our grandson on his- and his Grandma's, first native fish collecting trip as a surprise from us because we knew he would love it.

Skyler, our grandson, slept over the night before but we told him we had to get up early for an adventure. It was a secret "surprise" for him and Bob was reliving his childhood when he kept darters as a kid in many fish tanks so already had the little equipment needed.

Early the next morning, before 6:00 AM, Skyler bounced out of bed and proudly announced "I'm awake! Now what's the surprise?" When we told him we were going on a fishing trip he immediately started for his rod and reel, still unaware of the type of "fishing trip" we had intended.

The excitement quickly set in even though he didn't fully understand what kind of a day he was in for. Skyler's excitement only increased when we met the larger group at Walmart and headed to the first collecting site on the St Francis River near the Silver Mines recreation area.



Like two alpha males establishing territory, Gary, teased Skylor that his purpose for being there was to be used as bait...not to be outdone, Skyler shot back, "No, we going to use YOU as bait!" after that formality they got along famously the rest of the day and neither got actually used as bait, although both caught a lot of fish.

Near the parking lot Skyler was already excited and getting ready to go into the water as we walked to the bridge where we would do a lot of the collecting and observation at the first site.

As soon as Skyler caught his first fish he was having a blast. Skyler's initial net was a \$1 butterfly



net bought from the home store, but he soon traded that to Bob for one a bit more substantial on loan from Gary. Grandpa Bob spent the day collecting with the \$1 butterfly net and reports that it worked quite well all day.

Jack Heller and Skyler began their search together using a net to catch fish swimming around the larger rocks of the stream. The net would barely fit between the rocks and the fish were often diving under them to hide so productivity was low.

It wasn't long before Skyler developed his own "Sklyer Method"



of fishing. It consisted of sitting in the water and using his net to dip blindly in the rushing liquid around him. Again productivity was low but it did produce some fish which he would immediately scramble up and run over



to Bob Hrabik to request an ID and explanation. He caught some of the earliest fish this way, one of which was a brook silversides, and also some of the most scarce fish so with that in mind this collecting method has to be considered a success.

Early in the trip Bob Hrabik showed us how to collect darters and other fish in the riffles of a stream. The technique was to place the net on the stream bottom downstream of a

rock or riffle then splash and turn over the rocks above the net. The fleeing fish would frequently head downstream with the current and directly into the waiting net.

This method of fishing was also quickly adopted by Skyler (it involved splashing, after all!) and he and Grandpa Bob used it to good effect most of the rest of the day, dubbing it



the "Skyler Shuffel".

One of their first fish caught using this method caused a bit of excitement. When Skyler took the fish to Bob Hrabik for identification it seemed similar to a species rarely found, especially on the St Francis River, the Mountain Madtom. However, Skyler was a bit disappointed that, seeming rare and endangered this particular Mystery Fish #1 was relegated to Bob Hrabik's care for future identification.

A madtom is a small stream dwelling catfish ranging up to about 4+ inches in length and nice to keep in an aquarium but the loss of this fish didn't dampen Skyler's spirits as where there



is one rare fish there may be another and he remained on the hunt.

At this location most of the collectors went down stream from the bridge to seine as a group. The initial technique was to seine a quiet area of water with no outlet by surrounding it

including darters, various species of sunfish, etc.

Several people had brought their own seines but used mostly the small, medium and large seines that Bob Hrabik had brought. The poles were manned by Tom Keevin, Claire and Kyle Wyckoff and any others available at the time with all diving in to pick the fish out of the net at the end of each haul. After each success at capturing a new species Gary Lange and Amy Bennett rushed to record the catch with their cameras and photo tank.

Some looked for specific species to round out their own personal



with the seine as Bob H acted as a driver to direct the fish deeper into the seine. In such a blind hole with no escape there were many killis to be collected using this method. After perfecting the technique the group then moved to deeper, faster flowing water.

Mike Bowman and Guy Tinker continued for a bit in the calmer areas and Mike became a good fisherman able to produce many catches by hand with no additional equipment.

To quote Bop H's comments of the seining success they "Caught lots of stuff" as you can see in the photos. The first seine contained lots of shiners but throughout the day a wide variety of fish was caught using this method collection used their own techniques to obtain them, such as Mike Hellweg for the *Fundulus notatus* (Blackstriped topminnow) and Jack Heller also after various species of guess what... other native Killies in the area. Both were successful and each contributed to the total catch list of the day.



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Guy Tinker caught a late stage tadpole for Skyler that he wanted to keep but in the end it too was released back to the wild. Melanie contributed a small toad, also released before moving on.

Bob Hrabik was wonderful and always available to explain what had been caught, sometimes multiple times, and was very good for discussing their habits and habitat with the catcher. Everyone appreciated his approach and willingness to teach or discuss as the need arose. He made the trip a great success.

Bob H practiced a collection technique of his own by placing a net near submerged tree roots at the bank and stomping to drive critters out. Few others were using this method as it didn't produce many fish but Bob may have been looking for something specific to add to the collection.

The Silver Mines location was successfully surveyed with an accumulated species count of 37 species.

The group then ate the lunches they had packed or bought on the way to the site that morning. Skyler had to make do with the lunch his Grandma Lora had packed instead of the McDonalds he would usually have preferred but didn't seem to mind with all the excitement of catching fish.

About half the group left after the first collecting location, truly a

great experience within itself. A core group of Melanie Holmes, Amy Bennett, Mike Huber, Gary Lange, Skyler, ourselves and of course Bob Hrabik continued on to the Marble Creek recreation area after the lunch break.

Marble Creek was characterized by larger stones making it difficult to seine effectively so there was a lot of hand collecting in the shallow riffles. When not catching fish there were always pools for Skyler to swim or sit in to his heart's content.

At the new location, he again used the now perfected, self developed, lazy, sitting, wet "Slyler Method" and practiced the "Skyler Shuffle" in the riffles with his Grandpa. Together they were again able to net a seemingly that fish "*skyleri*" the rest of the trip. Bob again took this mystery fish to further ID and photograph.

But eventually the collecting was over. What did Skyler do on the way home? Why, crash, of course. After being on the road since 6:00 AM and playing in the water he took advantage of the pillow Grandma had thoughtfully provided to sleep most of the way home.

All day the water was crystal clear, at both locations and made for an enjoyable expedition. The flora and fauna in the area was amazing, as is the scenery. Surrounded by all those rocks, I'm sure some made it home with someone to eventually end up in their own fish tank at home as a remembrance of the trip.



unknown rainbow darter type fish and again he rushed to Bob H for identification. The ID of this Mystery Fish #2 was initially in question and it remained a potential new species with Skyler for the rest of the day. After his discussion of naming of new found fish with Bob H, Skyler insisted on calling

Aguatic insects and crustaceans

such as Hellgrammites (Dobson fly larvae), mayflys and crayfish were captured in the water. Pipevine swallowtail and other butterflies were abundant on the beach as were mussel shells. We even encountered a fairly large diamond back water snake and young of the same species. This gave everyone a thrill and all those brave enough got to hold the smaller ones before they were released back into the wild.

Setting the mood of the day for us were the heart shaped leaves of the common morninglory on the bank. Not all the denizens of the area are natives, we encountered the non-native Mimosa tree so far from its native Asia but still beautiful and in full bloom.

It was amazing that with all the flora and fauna we encountered few of the "bad guys". No leeches, no/few mosquitoes or other critters one would





expect around the water. The only injuries of the day were a few turned ankles on the algae covered stones of the bank and riverbed.

Has Skyler been quiet about his trip? Of course not! He took time on the way home to call his mom and dad to fill them in on the excitement and has talked about it continually for the next two days. He's been quick to tell everyone about the two rare fish he caught and how much fun he had fishing for them using the Skyler

Editor's note: This article was about the excitement of the trip. It still leaves the question of the two unidentified fish mentioned open. If really a rare madtom and a heretofore unknown darter, these fish have the potential of already rewriting the Book on Missouri fish being readied for press by Bob Hrabik, the trip guide. He has promised an update on these fish in a future edition of the Darter after he finishes preparing the book for press and concurrent with the Journal of NANFA (North American Native Fish Association), American Currents.

Stay tuned here for at least one more edition of this story!!

method and the Skyler shuffel. Not a rod and reel was used all day. Everyone from friends and family in Fayettville, AR to the local church now knows about the wonderful day he and his Grandparents had collecting in Missouri.

We very much appreciated the friendship and camaraderie of

everyone on the trip who helped us teach Skyler about nature and how the wonders really are in the World around us. Especially Bob Hrabik patiently spending time with Skyler as the teacher of the moment.

The day was enjoyable for being able to get out with MASI members, seeing and getting to know them outside of the usual auction or meeting setting. It was fun watching "kids" both big and small being kids and enjoying the day.

A local collecting trip is indeed good training for collecting in the rest of the world. The techniques we learned on the streams of Central Missouri are the same techniques used around the world by professional collectors and hobbyists alike. It was good experience and a great alternative for those on a budget who may not feel they can afford an exotic trip to collect wild fish.

The club needs to do it again, perhaps regularly, providing good experiences to get the next generation of Aquatic Hobbyists going, such as Skyler.







MASI Collecting Trip Critter ID's







10





















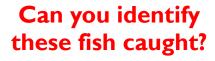




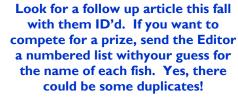
















Bob Hrabik, Gary Lange and Amy Bennett may be able to shed light on these in future articles.



MASI Collecting Trip People D's







Photos by Tom Keevin & Lora Watson





















Amy Bennett



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C.A.R.E.S. Convention **ACA 2018** Houston **Texas By Pat Tosie**

MERICAN CICHLID CONVEN-TION 2018 is now history and the Missouri Aquarium Society was well represented by Steve Edie, Pat Tosie and John Van Asch.

This year the theme of the convention was C.A.R.E.S. The purpose of the CARES Preservation Program is to create a base stock of conservation priority species through encouraging hobbyists worldwide to devote tank space to one or more species at risk and distribute offspring to fellow qualified hobbyists, and forming an information network between aquarists, scientists, and conservationists.

The 2018 Convention was hosted by the Houston Aquarium Society and the Houston Cichlid Club at the Hilton NASA Clear Lake. The hotel sat right in the water and across the street was the Johnson Space Center. I did not go on any of the tours that were offered but I heard a lot of great things about them.



C.A.R.E.S. has four major goals:

- 1) To bring awareness to the critical situation of fish in nature, while educating the public and stressing the importance of our roles as responsible aquarists;
- 2) To recognize, encourage, and offer support to hobbyists who maintain species at risk;
- To share fish as well as data and experiences through notes and manuscripts so that others may learn to maintain those identical and similar species; and
- 4) To preserve species at risk for future generations.

Speakers at the convention included:

 Dr. Michael Kidd: our first speaker on his keeping and research of endangered cichlids. He is currently at TAMI where he has built and maintains a 5,000 gallon cichlid research facility housing about 30-40 species, primarily from Africa.

Greg Steeves: C.A.R.E.S. -**Haplochromine Cichlids.** Greg is a Texas native on why you should

keep these diverse and beautiful cichlids.

- **Dave Schumacher: Speciation** Through Hybridization. Owner of "Dave's Rare Aquarium Fish". He has one of the largest selections of African cichlids in North America, and quite a few catfish (mostly Loracariid and Synodontid species) as well as other oddball fish.
- Marvin and Kathy England: It's a hobby, not a business! Marvin and Kathy are current Texas people and keep numerous cichlids in their 30+ tanks.
- Dr. Paul Loiselle: Aquarists and Conservation. His vast knowledge is mesmerizing and he keeps us all up to date on the latest news of the fish of Madagascar and other endangered cichlids.



- Ad Konings: Threatened Cichlids from Lakes Malawi and **Tanganyika.** I never realized how many of the rift lake cichlids are endangered!
- Jose Gonzalez: Reflections of a **Fishmonger.** In addition to fish from Mexico and central America,



he studies and has many Madagascar cichlids!

All the talks kept my attention (I did not fall asleep in any of them!) and were informative. I learned a few new things and saw fish that I may want to get in the future.



The first night a group of about 30 of us went to the Aquarium Restaurant and in addition to some good food enjoyed their numerous LARGE aquariums while eating! Very nice place. How amazing it was to see all the biotope aquariums in one place and relax to a nice dinner while enjoying the underwater views.

During the convention I saw many longtime friends and fellow fish keepers, told and listened to a lot of stories and just got reacquainted with my fishy friends, plus met a few new people that I am sure I will see again at future conventions.



One of my highlights of the convention was going fish shop hopping with Steve Edie.



Seen at Aquarium Design Group



I think we made it to five or six shops and they all were fantastic! When you hear it is bigger in Texas, you can believe it! These shops had some gigantic display tanks! I could not believe the size of some of the aquariums set up in the stores!!

One store in particular that stood out was the Aquarium Design Group. WOW, WOW, WOW!!! It was described to me as the Apple Store of Aquarium shops, and I couldn't have described it better! Each and every tank was better than the next. If you are ever in Houston, this is a MUST SEE place to go.

When people see the tanks displayed like these were, you can understand why they would be interested in them, they were pieces of art that anyone would be proud of having in their home or office. There was Houston Manzanita that specialized in natural looking agariums, The Aqua Zoo, T and T Fish and Reef and The Fish Gallery-



Houston which I would rank as my #2. This picture of Steve Edie is standing in front of their main show tank. Plus a few more that I cannot remember the names.

In two of the shops, and at the convention, there were some Rainbowfish that were identified as "Rainbowfish: Gary Lange" that did come from Gary's stock! Whatever they were, it was nice to see them being recognized.

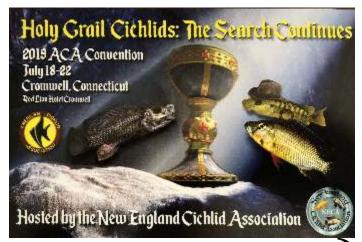
This years convention was smaller than most ACA's but it was still a great time. I was able to pick up a few fish that I have not had before:

Paretroplus kieneri; Paratilapia sp.
"Marolambo" Nosivoli River Madagascar;
Danakilia sp. "Shukoray"; Paretroplus
nourissati; Apistogramma caucatoides;
Apistogramma megaptera; Emerald Eye
Rasbora; L 168 pleco



Going to the shows and conventions wherever they may be and for whatever kinds of fish you enjoy, Cichlids, Catfish, Livebearers, Killifish, All Species or some other type, you will enjoy yourself, meet all types of wonderful people who share the same passion and love for these beautiful and interesting creatures we adore and you will meet people who turn into friends that you will enjoy seeing and meeting up with year after year. We are active participants in a fantastic hobby, get involved and have a passion for life.

2019 ACA is in Cromwell,
Connecticut, hosted by the
New England Cichlid
Association. The title of the
2019 Convention is: Holy Grail
Cichlids: The Search
Continues. I hope to see you
there!



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The Darter

Spawning Bob & Mathilda #2

Astronotus ocellatus

The Oscar cichlids

By Mike Huber

was FORTUNATE ENOUGH to have a mated pair of Oscars given to me to spawn—the same pair spawned previously and reported here at least twice. (Debbie Sultan called them Bob and Mathilda, Vol 42 #6, Pat Tosie called them Oscar and Olive, Vol 42 #1)

When I brought them home from the MASI meeting Bob had a



large gash on the back right behind his head from thrashing when being netted. When I put him in the 4'x2' tank he would call home and he rushed around and charged at everything. When I put Mathilda in the tank they charged each other only once. He went went to a corner where he stayed for about a week till his head healed.

When they started to circle the tank together they both had a hardy appetites. Like Debbie I feed them Hikari cichlid gold medium floating pellets. They were also feed live black worms purchased at the MASI meetings, earthworms, and frozen foods. They got feed 5 or 6 times a day and as a treat they got wax worms.

The tank temperature was kept at 80 F the ph was 8.2. The

tank had a piece of slate, pieces of drift wood and some large rocks. After about 2 weeks I came home one evening and both of them were hovering over the piece of slate that was filled with eggs. After 3 days the eggs were gone just like I had read of other attempts in Darter. But unlike others who got viable eggs after four spawnings, it took me 9 tries till they had eggs that turned brown and hatched. After 30 days the babys started to disappear so I removed all the fry and put in a ten gallon tank. Removing the fry was no small task!

They spawned again and produced fry so after 21 days I removed Mathilda and left Bob to raise them. A week later at the

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I think different water
parameters may have caused the
eggs not to be fertile. However, it
could have been from the stress of
being moved. I don't think it was
my tank size as they had been
spawned in smaller tanks and I had
the same size they had recently
become used too. Perhaps a
different tank set up may of thrown
them off or it could be the pairs'
age.

I could not get Bob and Matilda to tell me- Or maybe they did and I just did not understand cichlid. LOL

monthly meeting Matilda was returned.

Bob stayed with the fry till the next monthly meeting so these younger fry were a lot bigger than the 40+ I had siphoned out from the earlier batch. I put the new batch into a hang on 2 L trap. Bob did not like that as he watched.

Over the next few days after I would catch some from the 2 L trap and put them in a 30 long. Did not want to mix the larger number and larger fry with the smaller earlier hatch because I was afraid younger but bigger fry would kill the older but smaller fry.

When I received Bob and Mathilda we did not treat them any differently than the rest of the fish, even when they had eggs and fry. Like all of the egg laying fish I left a night light on for them till they became free swimming so the parents could see to tend to them.

If I fed them when they had eggs or fry they ate fast and went back to tending them. If Irene tried to feed them they would charge the glass and hit it hard enough i thought they would break it. And if any guest tried to look they charged the glass. Its like they knew who was supposed to be there and who was not.

When I did a water change between spawns the Oscars just slowly swam behind the big rocks at the other end of the tank. But when I siphoned out the fry all hell broke loose till the fry went behind a rock that the pair could not get behind because Bob moved it a few days earlier with the first spawn. The second spawn was to big to siphon out easily so it took a few days to move it.





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Spawning the Buccochromis spectabilis

By Mike Huber

good sized fish just like their cousins the *B heterotaenia*, and the *B nototaennia*

They were spawned using the same tank size and water parameters as for the other two species. Water temperature of 81 F, a ph of about 8.2, and a large area for them to zoom around in. All three *Buccochromis* a large area to play in. And like the *B. heterotaenia* the *B. spectabilis* liked the prepared food I found on line and they ate live food.

They seemed to like the water changes more than the other species and 30% twice a week really made them zoom around. Like the other 2 species when the females where holding young they where put in a 2 L hang on trap till they spit the fry.

These fish of this family are good sized, very colorful and like to show off while swimming.

Enjoy the beauty and the graceful zooming as I did!

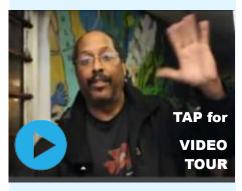


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Back to Basics:

Tank Maintenance & Water Quality

By Holly Paoni

how the Nitrogen Cycle works in your aquarium.

Now I want to explain how to maintain that. Basic routine tank maintenance will keep the water quality high and your fish happy and thriving, not just surviving.

The goal is to keep Ammonia at 0, Nitrites at 0, and Nitrates <20 mg/liter. Nitrates need to be even lower for some species but less than 20 covers the most popular ones.

There are only two ways of lowering Nitrates to within safe parameters.

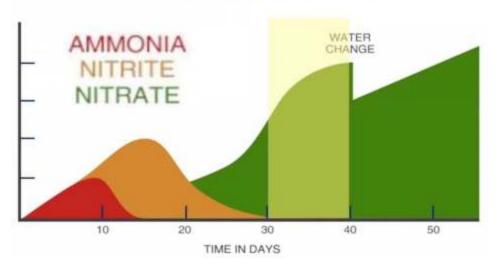
- 1. The first is water changes.
- 2. The second is adding live fast growing plants.

Plants help, but do not completely replace the need for water changes and maintenance. So I'll come back to plants later.

You will need a few items for routine tank maintenance. Store these all together to make it easy.

• A bucket which you can keep the rest of the items in.

TIMELINE FOR CYCLING AN AQUARIUM



- A water changer like a python or a gravel vacuum,
- A clean soap free sponge,
- A liquid pH test kit,
- Your preferred dechlorinater,
- A syringe for accurate dosing,
- and a net.

That covers the basics.

There are a few other items I've found very handy that you may want to consider adding to your kit. A bottle cleaning brush, a long but old screwdriver, an old used gift card, a flashlight, a turkey baster and bottle of hydrogen peroxide.

No I haven't lost my fishy mind. This odd list of secondary items come in very handy. Other items might work better for you.

 Long bottle type cleaning brushes work great for cleaning most of a hang over the back filter, including the intake tube and are also good



- for cleaning sponge filter and matten filter tubes.
- That old worn out long reach screwdriver, is PERFECT to dislodge a snail from any tight place it may have gotten into, like an impeller or crevice in a strainer.



 Old gift cards are great for cleaning off hard spot algae, collecting Corydoras catfish eggs, and several other tight spot things that need done. They can be held tight against the glass and won't scratch it.



- Turkey basters fill many roles by being a back up syringe, collecting small fry and loose eggs, spot dosing algae and even making sure everyone eats.
- Flashlights do just as much. Want to find those microscopic new fry or see what's clogging up something or peek into a cave? Use a flashlight. The new little LED flashlights are wonderful.

Routine maintenance should include:

- Vacuuming up all debris,
- Cleaning filter media as needed,
- Cleaning at least the front glass and glass tops,
- Checking on heaters, impellers, intakes and silicone seals.
- Especially water Changes

Some things might need done every time, others may only need cleaned monthly. Equipment checks I believe should be done constantly. At least a quick visual inspection as preventative maintenance. The equipment needs to run well to do its job. A clogged intake or a worn out impeller means your filter is not operating correctly. A hairline crack in a heater will eventually lead to fish soup. Checking these things regularly prevent most disasters.

As part of your weekly maintenance, do your water changes. So how much water to change isn't an easy question to answer. There are tons of variables. Which species, size, stocking levels, filtration method, live plants, and so on. In my opinion do at least enough to keep the water parameters in line at 0,0,<20. But in my experience the bigger and more frequent, the better! Fresh water is beneficial to the ecosystem created in your aquarium. There are things in water we do not test

for. Fish release hormones and other substances, some for breeding, others as a response to stress. I like to keep these diluted as much as possible and I perform 30 -75% weekly water changes as a minimum. Shrimp get less, fry, breeders and dirty fish get more and 50% weekly on community tanks.

I believe in changing a lot of water as clean fresh water is a fish keepers first line of defense to prevent diseases and other problems.

If you use tap or well water in your tanks, replace it with the same water when making your water changes. If you use RO water in them realize that it has most nutrients removed so also replenish any trace minerals that your plants or fish may need.

Please remember to replace with similar, dechlorinated, water that is the same temperature or within a couple degrees. It is a good idea to use that test kit to check that water parameters are similar and the water company hasn't changed something- it happens.

There are exceptions, but we are just coving basics right now.

After the tank has been refilled recheck it to make sure all equipment is running smoothly.

Please DO NOT leave your tank unattended while draining or refilling. Large tanks may seem like they take too long to drain or fill. Its kind'a like that watched pot that never boils- You step away and blink twice and you've drained 90% or have overflowed the tank. ...Its happened to us all!

Next time III be going over stocking levels and compatibility. Until then, keep your hands wet!



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The Darter

Breeding Panaqolus sp. L169

By Derek Walker

Panaqolus genus. There are a number species that carry the same pattern and color as the L169 but don't be fooled by the name. The L169 also goes by LDA001 the Gold Stripe Panaque.

Planet Catfish reports that the LDA001/L169 come from the middle of the Rio Negro. If that is the case this species could come from two different waters. At the middle you have the Rio Negro and Rio Solimões rivers that come together and create the "Meeting of the Waters" phenomenon.

This meeting brings two different water parameters. The Rio Negro is a blackwater river caused by humic acid from the breakdown of organic matter that flows into the river. The Rio Negro has an average temperature of 82 degrees Fahrenheit. The Rio Solimões has a cream coffee





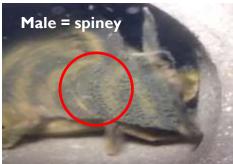
appearance to it. Which this river is known for its rich sediment that flows down from the Andes Mountain. The Rio Solimões has a much faster flow rate and creates the separation of the river when they join together. The Solimões, from the mountains, has a cooler temperature of 70 degrees Fahrenheit.

I was able to get a group of four fish from Andrew White, another MASI member. These fish were already 3 inches long. About a week later I lost one for no reason aand I was down to three- all appearing to be males. I was able to locate more but it would take time to get them.

However by looking around I found one for sale and after picking it up I knew it was a female. Now I had a pair for sure. Sexing these fish is easy once they reach maturity. Males have large interopercular odontodes (spines) on the caudal peduncle. Females have short interopercular odontodes (smooth).

I placed the group in a bottom rack 20 gallon long with just a sponge filter, root wood, and a few caves. They were fed all kinds of food but they seemed to enjoy the soft root wood rather than Pleco wafers. I kept them in this tank for a while but didn't see any breeding activity what so ever.

In cold weather my bottom tanks start cool to the upper 60's to lower 70's. I knew it was time to either place a heater in the tank or move them. I decided to move them because





I had some Cory cats that needed the cooler temperature so moved the L169's to a top tank. At this time the bottom tank temperature was 71F and the TDS was 280 with a PH around 7.4. After a couple of days the newly located tank on top and the temperature was 82F with a TDS of 240 and a PH of 7.5. Everything was the same except for the temperature which was much higher.

After about one week I saw that one of the plecos no longer emerged from the cave and after looking noticed that there were two in the cave. In the pleco world this is called "trapping" - when the male traps the



female in the cave for a while until the eggs are deposited. This can take up to a week in some species. It took the LDA001 about three days.

The male then lets the female out and takes over guarding the eggs. After about 12 days the eggs start to hatch. Within four days of the eggs beginning to hatch, the male kicked all the eggs out of the cave. I found he had spawned again with a female which I had thought was a male. The eggs that were kicked out were placed into a breeder box. After a week with the other eggs the male didn't kick them out and was still guarding them.

The first batch of eggs all hatched for a total of 8 fry while the second batch was still in the cave with







the father. Not sure on how many survived out of that batch. The father kept the fry up in the cave, so it was very hard to even see any of them.

After a month, the fry started to look like the adults and began to develop their tiger pattern. With their yolk sac completely absorbed, I started to feed the fry. The first thing I tried was Hikari carnivore wafers. The fry didn't even touch it and I had to take it out of the breeder box. The second thing was Marineland shrimp wafer- that wasn't touched either. So I decided to give them what the parents liked, just a piece of soft wood. I took a piece of root wood and placed it in the breeder box and the fry started to hang on it. The next day the breeder box was full of waste and needed a water change. Now every day the box gets a water change. After two months the

bellies are nice and fat and the fry are looking more and more like the adults.

My conclusion of LDA001 is that, since they could be from the middle of the rivers, they can take a wide range of water parameters and I believe the move from cold water to the hot water caused the fish to spawn. Maybe in the wild the meeting of the waters has something to do with it.

References:

http://www.iflscience.com/environme nt/what-causes-brazil%E2%80%99sbizarre-meeting-waters

https://www.planetcatfish.com/com mon/species.php?species_id=158





Minifins

Pyrrhulina eleanorae

The Tetra that thinks it's a Cichlid

Mike Hellweg, CFN (Certifiable Fish Nut)

favorite groups of fish.
There are so many different types of Characins out there, and their behavior and spawning habits are fascinating.

One of the Characin families, the Lebiasinidae, consists of about five dozen species placed into about 7 or 8 genera of elongated *Characins*. We know some as Pencilfish and others as splash tetras. One of the less common genera in the trade is *Pyrrhulina*, which is the largest genera in the family with about 17 species currently recognized. In the trade, they are often sold as "splash tetras" even though none of the *Pyrrhulinas* are known to "splash" or lay their eggs above the water line. But they do something just as cool.

The male Pyrrhulina will choose a spot on a large leaf or similar surface near the upper part of the water column, usually about 3 inches from the surface of the water. He will clean the area and then go out and start courting females by dancing in front of them and twisting and turning his body to show his coloration, size and strength. He may even release some pheromones in the water in front



of the female to let her know he is ready to spawn. As in other groups of fish, the pheromones may even stimulate the female to ovulate.

This is just speculation on my part, but after watching this and similar spawning behavior over and over again in many different species and having it proven scientifically in other genera, it makes sense that this is what they are doing, too. Anyway, after his dance, if the female finds him acceptable and she is ready to spawn, she will follow him to his leaf and quickly proceed to lay eggs on the surface of the leaf - in some Pyrrhulina it is reported they lay their eggs on the bottom of the leaf, but most species, including *P. eleanorae*, choose the upper surface of the leaf.

Just like in many cichlids, the female will lay her eggs and the male will follow behind and fertilize them. As soon as she is finished, the male will drive the female away and take up a position above the eggs, fanning them and guarding them.

This instinctual behavior is hardwired and very strong. A couple of years ago in one of my 125 gallon community tanks I had a male Pyrrhulina spilota chase a pair of angels from their spawn on an Anubias leaf and take over fanning their eggs! Sadly, the eggs were infertile. It would have been interesting to see how long he continued to care for them.

Once the eggs hatch, the male will guard the newly hatched fry for a couple more days until they are free swimming, then they are on their own. The fry move to the surface of the water and remain there among the leaves of floating plants, hunting for microscopic food as they grow. Growth is rapid, and in just 6 weeks the fry are nearly two thirds of an inch long and look exactly like miniature copies of their parents! At this point they will









move a bit deeper in the water column, but continue to remain near cover.

My experience

I'm always looking for the odd and unusual, and several years ago a now defunct mail order company had "splash tetras" on their list, so I ordered a dozen of them. When they arrived it was immediately clear that they were not THE splash tetra, Copella arnoldi, but rather one of their stockier bodied cousins in the genus Purrhulina.

There is very little information out there about the *Pyrrhulinas* other than pictures. A quick look at the internet brings up a lot of misidentified fish in those pictures, so it is of little use. I have a library of older books that serve as a much more accurate guide and I was finally able to identify them as a species described in 1940 - *Pyrrhulina eleanorae*. Even today, most of the fish pictures I have found on the internet labeled as *P. eleanorae* are actually of different species.

As my fish grew the biggest male did what passes for "coloring

up" in this species - a faint tinge of orange in the unpaired fins, a bit of white on the edge of the bottom lobe of the caudal fin, and an elongated dorsal fin with a bright red-orange leading edge that almost looks like a tiny flame on his back as he moved around the tank courting females and chasing off rival males.

I placed the entire group in a 50 flat - basically the same footprint as a 75, but only 12 inches deep. They shared this tank with a dozen black phantom tetras, a pair of *Ancistrus*, and a group of *Corydoras sterbai*. The tank was full of assorted Crypts potted in shallow Azalea pots, a couple of large Anubias barteri attached to driftwood, and some floating frogbit.

I also added a few handfuls of water logged oak leaves that sank to the bottom. This was before my first book and long before the current craze to add leaves to the tank. Most folks thought I was crazy to do this, but it was turning out some very positive results with many different species. I was experimenting to see how different fish reacted to having leaves breaking down in the tank. More on that in a later article!

I didn't do anything special with the water; I just ran it through a carbon filter and then added it to the tanks. The pH was about 6.6 to 6.8, the total hardness was around 125 ppm and carbonate hardness was less than 60 ppm. It stayed at room temperature in my fishroom, around 76 degrees Fahrenheit. The tank was filtered with two Hydrosponge Vs and a large box filter filled with gravel. I followed the water change regimen that I still use-fifty percent once a week. But since I was experimenting with the leaves, I left the detritus on the bottom alone.

I fed the fish live mosquito larvae, live white worms, frozen bloodworms, and flake food. They seemed to eat anything. About two months after adding them to the tank, they had settled in nicely and the males picked their favorite spawning sites and started courting.

Each male had chosen a large and relatively flat Anubias leaf about 3" from the surface. Within a week both dominant males were guarding eggs/fry. About 10 days later I started seeing small black fry moving among the frogbit leaves at the surface. I was able to dip about 20 or so fry into a small catch cup, but many more got away.

I moved those 20 fry to a 2-1/2 gallon tank filled with water from the main tank. I added a mature sponge filter and some of the floating frogbit from the main tank, too. I started adding APR along with vinegar eels as both foods stay at the surface, just like the fry were doing. A few days later I started adding freeze dried Cyclopeeze as that floats, too. By the end of their first week, they were taking baby brine without any problems.

I should mention that I was also adding the same foods to the main tank. Growth of the fry in the main tank was much quicker than that in the 2-1/2. In spite of fry predation in the main tank, I was able to harvest more than 100 young *Pyrrhulina* from that tank over the course of a year or so. That was more *Pyrrhulina* than anyone wanted!

If you get a chance to work with an oddball fish, don't hesitate to give them a try. Start with a group of them and see what happens.

You may be surprised!







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2018 BREEDER'S AWARD PROGRAM - Steve Edie

May 2018



Member	Genus	Species	Common Name	Points	Bonus	CARES	Total
Steve Edie	Ameca	splendens #@	Butterfly Goodeid	0		15	265
Steven Hoffman	Julidochromis	regani		10			200
NATION 11	A						2000
Mike Huber	Astronotus	ocellatus		20			2008
	Epiplatys	annulatus		15			2023
	Geophagus	brasiliensis	Pearl Cichlid	5			2028
	Hyphessobrycon	columbianus	Columbian Red Blue Tetra	15			2043
	Melanotaenia	fluviatillis		10			2053
	Pseudotropheus	crabro	Bumble Bee Cichlid	10			2063
	Nimbochromis	polystigma *		15	5		2083
	Parachromis	managuensis	Jaguar Cichlid	15			2098
Chris Mohrle	Corydoras	schultzei	Peru Gold Stripe Cory	10			341
Dan Rios	Gambusia	holbrooki	Eastern Mosquitofish	5			225
	Julidochromis	transcriptus "Pemba"		10			235
	Limia	melanogaster	Black Bellied Limia	5			240
	Neolamprologus	caudopunctatus		10			250
	Poecilia	wingei	Blond Endler	5			255
Pat Tosie	Crenicichla	regani	Regan's Pike	15			5646
i at 10sic							
	Poecilia	wingei ^	Red Tiger Endlers	0	ı		5647





CORALIFE















2018 BREEDER'S AWARD PROGRAM - continued

June 2018

Member	Genus	Species	Common Name	Points	Bonus	CARES	Total
Mike Hellweg	Brachyrhaphis	holdridgei "Lago Isabel"		10			7005
	Julidochromis	marlieri "Katili" *		10	5		7020
Mike Huber	Buccochromis	spectabilis *		15	5		2118
	Gambusia	holbrooki		5			2123
	Paralabidochromis	sauvagei @		10		10	2143
	Trichromis	salvini		10			2153
	Xenoplallus	umbratilis	Golden Teddy	15			2168
	Xiphophorus	alvarezi		10			2178

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



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Page: 39

HORTICULTURE AWARD PROGRAM - Mike Hellweg May & June 2018



Genus & Species	Common Name	Туре	Points
930 Points			
Canna indica Tropicanna Black	Tropicanna Black Canna Lily	ОВ	10*
Vallisneria spiralis	Italian Val	IB	10
440 Points			
Anubias barteri nana "petite"	Petite Anubias	٧	15
1850 points			
Pistia stratiotes Rosette	Rosette Water Lettuce	٧	5
Pistia stratiotes	Water Lettuce	V	5
Pistia stratiotes	Water Lettuce	ОВ	5
	930 Points Canna indica Tropicanna Black Vallisneria spiralis 440 Points Anubias barteri nana "petite" 1850 points Pistia stratiotes Rosette Pistia stratiotes	930 Points Canna indica Tropicanna Black Vallisneria spiralis Italian Val 440 Points Anubias barteri nana "petite" Petite Anubias I 850 points Pistia stratiotes Rosette Rosette Water Lettuce Pistia stratiotes Water Lettuce	930 Points Canna indica Tropicanna Black Vallisneria spiralis Italian Val IB 440 Points Anubias barteri nana "petite" Petite Anubias V I 850 points Pistia stratiotes Rosette Rosette Water Lettuce V Pistia stratiotes Water Lettuce V

HAP Key: Reproduction Key: V = Vegetative, OB = Outdoor Bloom, IB = Indoor Bloom, S = Seedling; * MASI First!







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those
Outdoor
"Tanks"
now!



The Darter

CLUB HOPPING - Steve Edie

2018 - Enjoy the Activities!

Aug II - Kansas City, MO - HAAS Swap

Aug 12 - St Louis: MASI - Summer Auction

Sep 14-16 - St Louis, MO - SLWGS Koi Show

Sep 15 - Peoria, IL - TCTFS Auction

Sep 16 - Indianapolis, IN - CCAC Auction

Sep 30 - St Louis: MASI - SWAP

Oct 4-7 - Herndon, VA - CatCon 2018

Oct 7 - Hoffman Estates, IL - GCCA Swap

Oct 12-14 - St Louis, MO - GGA Guppie Show

Oct 13 - Cedar Rapids, IA - EIAA Auction

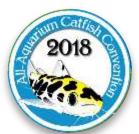
Oct 13-14 - San Antonio, TX - FOTAS Convention

Nov 4 - Davenport, IA - QC Fish Swap

Nov II - St Louis: MASI - Fall Auction

Nov 16-18 - Strongsville, OH - OCA Convention

Dec 2 - Hoffman Estates, IL - GCCA Swap





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Other links are on the MASI

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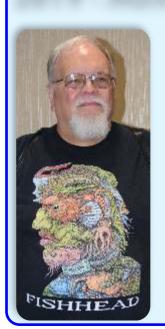
Convention LogosHotlinked!





FOTAS

2019 - Mark your Calendars!



Feb 10 - MASI Winter Auction

Apr 27 - MASI Spring Swap and Awards

Apr 28 - Spring Auction

May 23-26 - ALA Convention, Louisville, KY

July 18-22 - ACA Convention, Cromwell, CT

Aug 4 - MASI Summer Auction

Sep 29 - MASI Fall Swap

Nov 10 - MASI Fall Auction



FISHES AS DISHES

PATRICK A.TOSIE, SR.

We all love our fish! This column is dedicated to using fish for something tasty to enjoy. Try it, you may like it. If you have leftovers, bring them to a monthly meeting for others to enjoy!

Fish and White Bean Tostadas

Ingredients:

- 1 lime, zested and juiced, plus lime wedges for garnish
- 2 cloves garlic, minced
- 2 tablespoons extra-virgin olive oil, plus extra for baking sheet
- Kosher salt and freshly ground black pepper
- 1 pound white fish fillets, like tilapia, flounder, sole, skin discarded and cut into finger-sized pieces
- 1/4 cup vegetable oil
- 8 (6-inch) corn tortillas
- Sauteed White Beans, recipe follows
- 1/2 cup shredded purple cabbage
- Pineapple and Avocado Salsa, recipe follows
- Sour cream, for garnish

Directions:

In a small bowl, combine the lime juice, zest, garlic and olive oil. Season with salt and pepper, to taste. Put the fish in a baking dish and pour the marinade on top. Marinate for no more than 15 to 30 minutes. Meanwhile, preheat the broiler or grill. Lightly coat a baking sheet with olive oil. Remove the fish from the marinade and arrange on the baking sheet, making sure to leave space between the pieces. Broil until just cooked through, about 4 to 5 minutes.

Meanwhile, in a medium saute pan, heat the vegetable oil over medium heat. Fry the corn tortillas, 1 at a time, just until crisp, flipping halfway through to brown both sides. Drain on paper towels and salt while still hot.

To assemble the tostadas: Layer each tostada first with Sauteed White Beans, then the fish. Top with the shredded cabbage and Pineapple and Avocado Salsa. Garnish with a dollop of sour cream and a squeeze of a lime wedge.

Sauteed White Beans

Ingredients:

- 2 tablespoons extra-virgin olive oil
- 1/2 white or yellow onion, finely chopped
- Kosher salt
- 1 clove garlic, minced
- 1 teaspoon ground cumin
- 1/2 cup white wine
- 11/2 cups cooked navy beans
- 2 tablespoons chopped fresh oregano leaves (or 2 teaspoons dried)
- Freshly ground black pepper



Directions:

In a small pan, over medium heat, add the oil. When the oil is hot add the onion with a pinch of salt and saute until soft, about 5 minutes. Add the garlic and cumin and cook until fragrant, about 2 minutes. Raise the heat and add the white wine. Cook until the wine has reduced by half. Stir in the beans and oregano and season with salt and pepper, to taste. Cook gently for 15 minutes. Transfer to a serving bowl and serve.

Pineapple and Avocado Salsa:

Ingredients:

- 1 (14-ounce) can sliced pineapple in juice, drained and juices reserved
- 1 tablespoon lime juice
- 1 tablespoon honey
- 1 tablespoon extra-virgin olive oil
- 1 small jalapeno, seeds removed and diced
- Kosher salt and freshly ground black pepper
- 1/2 red onion, finely chopped
- 1 medium avocado, halved, pitted and flesh cubed
- 2 tablespoons minced cilantro leaves

Directions:

In a medium bowl, make the dressing by mixing 2 tablespoons of pineapple juice with the lime juice, honey, oil and jalapeno. Season with salt and pepper, to taste. Add the pineapple and onion. Gently fold in the avocado and cilantro. Let the flavors blend for at least 15 minutes before serving.





Total Time: I Hour, serves 4



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	OTO double strength Chlorine/Chloramine test kits - 4 ounce	\$12.50	charles@inkmkr.com
	Flubendazole, 10% powder 25 grams	\$20.00	
	Lavamisole HCI 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	
Charles Hoppe	Several 10 and 15 gallon tanks, including wooden rack. Makes a nice small fishroom. Extras, contact me if interested.		(314) 846-4648 charliehoppe@me.com
Klaus Bertich	I - 55 gal with light, filter	Make Offer	(314) 363-3376
	l - 70 gal with light,filter	Make Offer	after I:00 PM
	4 - 20 gal high	Make Offer	
	2 - 20 gal low	Make Offer	
	4 - 30 gal high.	Make Offer	
	l - 15 gal	Make Offer	
	Air pump other misc fish room items.	Make Offer	
Chuck Bremer	# and Tank Sizes	Price ea	Bremercd01@gmail.com
	10 - 10 Gallon	\$5.00	
	2 - 55 Gallon	\$30.00	
	I - Double 55 gallon Wrought Iron stand		
	1 - 90 Gallon (needs lower seam repaired)	\$40.00	
	2 - ALL Glass (German made - no plastic!!) Aquascaping tanks like Takishi Amano used. I20cm (4 ft) x 50 cm High x 40 cm in wooden boxes for protected shipping. Approximately 63 gallon. SWEET Tanks!!	\$40.00	

Got \$\$\$\$ swimming in those Tanks?

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. 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.

WANT ADS

	Member	Looking For:	Bid/Asked	Contact
Buy	Mike Hellweg	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
Want	Mike Huber	Alfaro cultratus, Xiphophorus mayae, Xiphophorus clemencae, Neotoca bilineata		314-737-6759
Want	Jim Wetzel	Neolamprologus brichardi/pulcher, Neolamprologus multifacisatus or other Shell Dwellers, Julidochromis marleri adult female, Tropheus duboisi male		pirateperch@rock etmail.com
Want	Chuck Bremer	Nymphaea micrantha, Neotoca bilineata		BremerCD01@gm ail.com



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Monthly Bowl Show Entry Form

Entrant Name	
Month/Year	Monthly Class
	and place in front of bowl(s) with Entrant name hidden ——

Line	Species: Latin or Common Name	SEX	Monthly	Open
I		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		

July Livebearers

August
Anabantoids:
Bettas,
Gouramis,
Ctenopomas,
etc.

