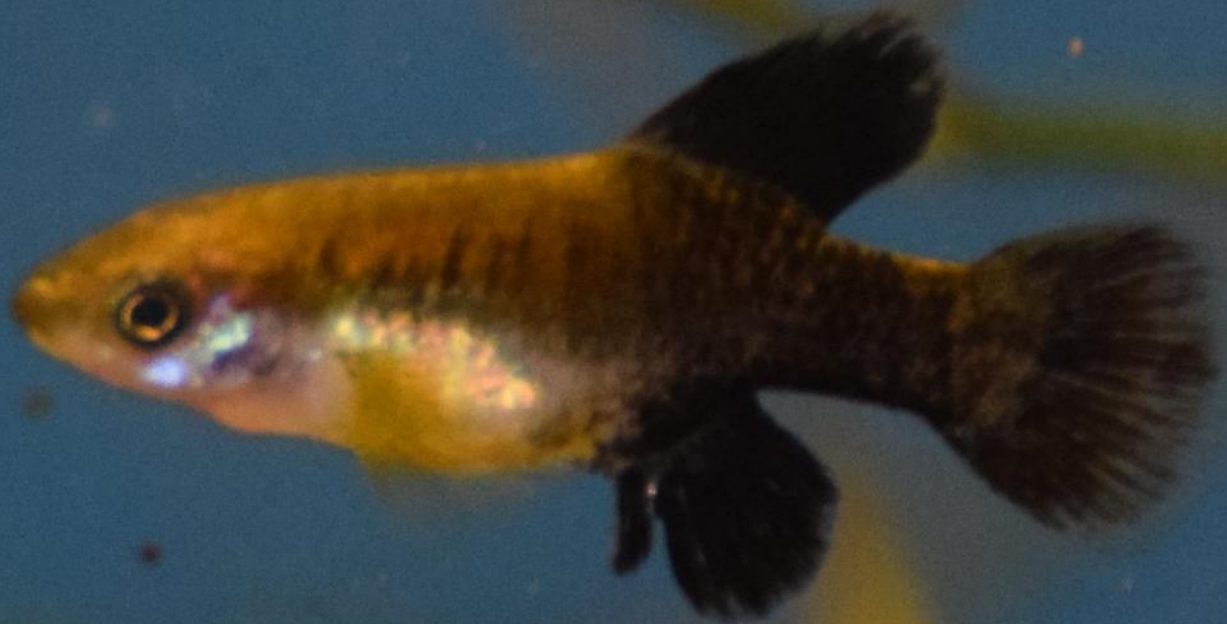


The

DARTER



Skiffia/Neotoca bilineata

NOV/DEC 2014

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THE DARTER (ISSN 0192-78333) is published bi-monthly by the Missouri Aquarium Society, Inc., 1813 Locks Mill Drive, Fenton, MO 63026-2662. Periodicals Postage Rates paid at Fenton, MO. This publication is free to members of the Missouri Aquarium Society, Inc. and other qualified requesters as determined by the publisher. Subscription requests can be sent to: Missouri Aquarium Society, Inc., 1813 Locks Mill Drive, Fenton, MO 63026-2662.

POSTMASTER: Please send all

address changes to Missouri Aquarium Society, Inc., P.O. Box 1682 Maryland Heights, MO 63043-1682. Please allow 6-8 weeks for change of address. Include your old address as well as new - enclosing, if possible, an address label from a recent issue.

Opinions expressed by the contributors are their own and do not necessarily reflect the opinions of the Missouri Aquarium Society, Incorporated. The editor reserves the right to edit any article for length, clarity, or content.

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The Missouri Aquarium Society 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 exchange publications to:
MASI Exchange
P.O. Box 1682
Maryland Heights, MO 63043-1682

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Membership

Annual membership in the Missouri Aquarium Society, Inc. is \$15 and includes an electronic subscription to *The Darter*. A printed subscription is available with membership for \$20. *The Darter* is published six times per year. You can join or renew your membership at any meeting, most club events, or by contacting Ron Huck, membership chair, at 314-481-2915.



NOV 20—GARY LANGE “BUILDING THE BEST FISH ROOM”



Gary has been keeping fish since he was 10 and has been associated with the organized hobby for the last 32 years. He is a member of the Missouri Aquarium Society (MASI) and has held various positions in the club. He is a grand master breeder in MASI, and has won "Best Fish In Show" on four different occasions, twice with rainbowfish.

In the fall of 1987, Gary founded the Rainbowfish

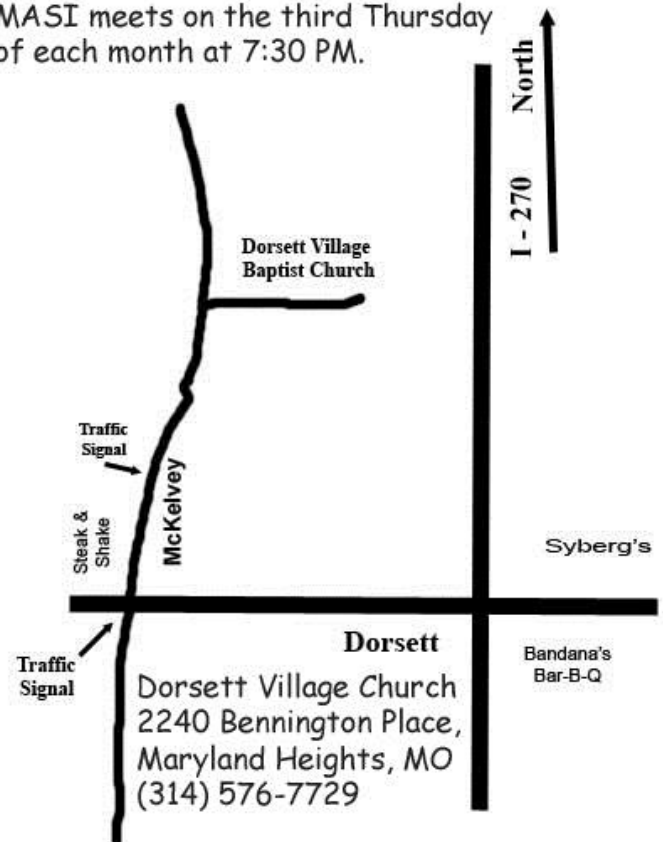
Study Group of North America (RSG). Gary's work has since been published in TFH, FAMA, and AFM. Also an eloquent author, he has had several articles published in TFH and AFM.

In 2002, Gary imported eight new rainbowfish from world explorer, Heiko Bleher, including *Glossolepis pseudoincisus* (millennium rainbow), *Glossolepis dorityi* (zigzag rainbow),

and *Melanotaenia parva* (dwarf parva rainbow). In 2003, he made his second trip to Australia for further collecting. In 2005, he took the rainbowfish collector's dream trip, collecting in Irian Java (New Guinea), and returned again in 2008. One of the fun things about speaking to other clubs is that he gets to see a lot of fish rooms. Fish rooms in the US, Canada, Germany, Belgium and even

Australia. He routinely finds a good idea and then smuggles it back to use in his own fish room. He has made several of the planning mistakes that are common when people make their rooms. Ouch, some you can undo, others you just have to live with them or rebuild. Gary has over 95 tanks and is keeping over 65 species and locations of rainbowfish and blue-eyes.

MASI meets on the third Thursday of each month at 7:30 PM.



DEC 14—MASI HOLIDAY PARTY

The December program is general frivolity. There will be no speaker. There will be a gift exchange—bring an unwrapped “fishy” present or bring an “unfishy” present (wrapped or not). When your name is drawn, you can choose from the gifts available.



It was about 25 years ago when I was at an Indianapolis Aquarium Society show when I saw Jeff and Charley Grimes pouring over a topographical map of Brazil.

They had some check marks on the map where they intended to go plus a scratch list of “Target” fish that they wanted to collect. It was at that moment that I knew that someday I wanted to do the same thing. I know Jeff will give us another interesting talk and perhaps this will be “the one” that gets you chasing a special fish or perhaps even planning for your own exotic collecting trip.

Gary Lange

Jeff Cardwell has been active in the aquarium hobby for more than 40 years. He maintains over 60 aquaria and his interests and expertise extend to catfish, killies, rainbowfishes and cichlids. Jeff has traveled extensively to collect aquarium fishes in Brazil, Peru, Bolivia, Surinam, Uruguay, Mexico, El Salvador, the Bahamas and the U.S. Virgin Islands. An enthusiastic keeper of North America's native fishes, his collecting trips have also taken him to many parts of the United States. Both as a speaker and a judge, Jeff has been a familiar figure at shows throughout the Midwest for more than thirty years. He is an active member of the American Cichlid Association, the American Killifish Association, the American Livebearer Association, and the Circle City Aquarium Society.

JAN 15—JEFF CARDWELL “BACK TO BRAZIL! – RIO NEGRO 2012”



FROM THE PRESIDENT

Pat Tosie



I am writing this as another FANTASTIC Auction has just completed. I am not sure of the final numbers, but we had over 60 sellers and 100 buyers attend our Fall Auction. We had three rooms with plenty of tables for our items, and the wide center aisle left enough room for people to move about comfortably. Our 3 longtime auctioneers, Mike Hellweg, John VanAsch, and me had some help from a couple auctioneers-in-training Tony McMillan and Kathy Deutsch and they did a wonderful job. I am sure the numbers will show this as another highly successful day. Thank you Mike and everyone who helped out! Our next auction is February 8, 2015

The SWAP Meet we had in October was also a HUGE SUCCESS thanks to the hard work and dedication of our Swap Meet Chairperson, Holly Paoni-Wise and her staff. Holly had about 60 vendors and was able to fill the room with buyers from all over the area. Thank you for a job well done Holly (and all her help-

ers).

Our Annual Super Bowl was a success, with 11 entrants and 42 entries. Emy Jensen won Best Junior with a Green Tiger Barb, Daniell Kinder won Best of Show with a Fantail Goldfish, and Jim Miller won Reserve Best of Show with a *Belontia signata*. Congratulations to all who entered.

So as you can see, MASI has had a very busy fall, at our November meeting, Gary Lange will give us his presentation titled "How to Build the Best Fish Room in the World!" and our December Meeting will be the Annual Christmas Party! So there are still some exciting times to come this year. Invite a friend or two to our meetings, who knows, they may like it and join our group!

Coming in 2015. If you like (or even don't like) what's going on in our club, get active. Think about helping out. Run for an office or a position on the council. Volunteer to help out at a meeting, help with the swap, help

out with the show, write an article, join in the BAP or HAP programs, bring a snack to a meeting for everyone to enjoy, or just help one of the many jobs it takes to run our organization. Nothing we do happens without someone saying "I'll do it!" The very best way to improve the group is by VOLUNTEERING. Over the last few years we have held a couple national conventions and it is only with the help of our members that we can do it. Do we want to have another one? I do! Before we can attempt to bid on a convention, we must make sure we have the people willing to help out and that starts with our own activities. Please join in and help!

Our Annual Show. When Scott stepped down as Show Chairman, it seemed that no one was going to step up. Then along came a new member, Wayne Miller, to step up and say he would. With very little knowledge he started planning what he thought the show would be. Wayne was very enthusiastic

about getting the show going. Then Kathy Deutsch, Gary Lange, and Holly Paoni-Wise volunteered to help out as co-chairs. Due to several communication issues, plus Wayne's wife having a baby, Wayne decided to step down (but he got the ball rolling for the 2015 show). Kathy, Gary, and Holly continued on getting things squared up for our spring show. Due to other reasons, Gary has also stepped down and Kathy & Holly has agreed to take the job as Co-Show Chairs. Wayne, Kathy, Gary, and Holly look to have completed most the work needed to prepare for the show, and they all have done a great job. Kathy & Holly will need help from us all, but as you can see from the success of the Swap Meet, we are in very capable hands. I am looking forward to "Show-Me the Fish 2015" Keep looking below water....

You're an Addict when...

- Your daughter can identify more species of fish than most pet store employees.
- You buy a \$200 water purification system for your fish tank while you're still drinking out of the tap.
- The first thing that moves when you move are your tanks.
- You go into a pet store and the employees ask you what kind of plants or fish they have.
- Your idea of a vacation is going to look for cool new things for your aquarium at pet stores.
- Your idea of going to the lake means looking for new and interesting plants and fish for your tanks.
- You buy fish as an excuse to buy another tank.
- You use the excuse "Ahh come on honey the next tank will be yours I promise" to get another tank.
- You take better care of your tanks than you do your vehicle.
- The refrigerator is bare except for the frozen fish food.
- You make weekly trips to the lumber yard to make more tank stands.
- Your tanks get their own room.
- Touring houses for sale, you look at the garage and automatically start figuring out how many tanks will fit in there.
- Your spouse gives you the option of your tanks going into the garage or you going into the garage, and you decide to put your bed out there instead of your tanks.

See your score below:

0-5 points – You have a problem.

6-10 points – Need to check yourself

11-14 points – You're officially addicted!

From The Fish Room by Ed Millinger

Fishy Headlines

“DIAMOND TETRA- A GIRLS BEST FRIEND”

“BRILLIANT RASBORA- A THINKING MAN’S FISH”

“FLAG TETRAS-PREFERRED FISH OF VETERANS”

“BANJO CATS- THEY MAKE A GREAT PICK”

“WHIPTAIL CATFISH- THE KARATE KIDS FAVORITE”



Recently I was looking through some old Darters and other publications and I came upon my copy of Shipping Tips For Fish Hobbyists by Mike Hellweg. I highly recommend acquiring this if you have a desire to ship fish. I was apprehensive about it, but with Mike's excellent advice I have successfully shipped fish as far away as Brooklyn, New York, New Jersey, Michigan, North Carolina etc. Believe me if I can do it, so can you.

While looking through the old Darters I discovered that our first swap meet was held in October of 2005. Mike ran the first few and then Bob Buckles, Derek Walker and now Holly Paoni Wise. The swap meets have progressively brought in more and more vendors and attendees. We even had one in January of 2007 which I had forgotten. Many thanks to these swap meet chairs for stepping up to help make this such a great event. Holly told me this year the hotel switched the layout on her at the last minute and Mike took care of the problem right away. She

stressed that she had a lot of help from others also. Holly did a great job promoting this event and has taken advantage of social media like no one else. If you sold, bought or won a raffle prize please thank Holly for all her hard work. I also came upon some of my early columns and I had forgotten they were first called “Mr. Ed Speaks.... Or Is It Rambles?” Willlllburrrr! (For the younger readers Mr. Ed was a television show about a talking horse).

The swap meet was followed up with another strong auction. We shouldn't take for granted how successful these are. A lot of members put in a very long day to make these auctions work. Come join us and share in the fun and excitement.

At the auction Leroy McCreary mentioned how interesting some of the descriptive names of items being sold were. I thought I would come up with some of my own, so here goes. Mama Mia Italian Val, Kilimanjaro Yellow Guppies, Rocky Mountain Ice Cap Angels, you get the idea, be

Auction Chairman's Message

Hello all,

Well, the 2014 Auctions are all now in the record book. Wow! The past year has been fantastic. We've had all of our auction records fall, one after the other, some twice or even three times in a row! Thanks to all who have helped make that a reality. The auctions would not be anything at all without all of our volunteers, whether you help for an hour or for the entire day. Well done everyone!

More folks are taking advantage of the silent auction, and it seems to be working well for both the buyers and the sellers, as well as saving us nearly an hour of auction time! And folks seem to enjoy the last minute rush to get their bid in, with a lot of good natured fun involved for all. Think about using this option for the February 2015 auction.

Our next auction is February 8,

2015. As always, we'll need a lot of hands to help out throughout the day, especially to get things setup and running in the morning. Even if you're not selling or buying, come by and spend some time visiting with your fellow club members. Oh, and don't forget to thank Chuck and Mark down at Tropical World Pets for helping us out with a 75 gallon tank, top and light again for the February auction raffle!

Our dates for 2015:

- February 8, 2015
- May 3, 2015
- August 9, 2015
- November 1, 2015

And for now, 'nuff said

Mike

auction@missouriaquariumsociety.com

Electronic Distribution Now Available In Full Color

For those who prefer, the Darter is now available electronically, instead of the paper distribution. To change from paper to electronic distribution, email me at editor@missouriaquariumsociety.com. You will get your Darter sooner and the club will save printing and postage. And, as in 2014, you will save \$5 on your membership.

Show-Me Fish 2015

SHOW TIME IS COMING!

Holly Wise and Kathy Deutsch are co-chairing the Spring Show "Show-Me Fish 2015".

There will be a fish show, vendors, speakers and an auction on Sunday. More details as we iron them out. We are having a betta raising contest, with the fish competing at the show.

See details on rules, classes and the betta contest in other parts of this Darter.

Many thanks to Gary Lange for bringing in the speakers.

There will be 16 classes in the 2015 show .

1. Aquascaping-free entry— Any tank with an entry will also be considered for the Aquascaping award.
2. Best School/Family or Biotope—Entry has a group of one species of fish, a breeding pair/group with fry, or a collection of species that occur together in nature.
3. Novelty/Theme—Tank to be judged on how well a theme is carried out, through the use of fish and decorations. In this class only, fish do not need to be

May 1-3

MAJOR AWARDS

Best Fish in Show

Judge's Award

Best Junior (age 16 and under) entry

Reed Thomas Livebearer Award

Ralph Wilhelm Catfish Award

CLASS AWARDS

1st prize \$10 and certificate

2nd prize \$5

3rd prize \$3

Note: There will be separate rules, and prizes for IFGA Standard Guppies, administered by Gateway Guppy Associates in conjunction with the MASI show.

4. All Other Fish—This class encompasses any fish that does not fall into any other category. This class is also for any fish whose class has

fewer than 3 entrants.

5. Old World Cichlid
6. New World Cichlid
7. Rainbowfish/Killifish
8. Livebearers-Wild Type
9. Livebearers-Fancy Aquarium type
10. Egglayers: Cyprinids: Barbs, Danios, Rasboras, Minnows
11. Characins-Tetras and relatives
12. Anabantoids-except Fancy Betta splendens
13. Betta-Fancy Splendens (the bettas from the fish raising contest will also be in this category with separate judging and prizes)
14. Catfish: Corydoras, Scleromystax and relatives
15. Catfish: All other
16. Photography-print on photo paper and Art and Craft

Photographic Image must be made by the entrant from 2012 forward.

Art/Craft item must be made by the entrant from 2012 forward. Must be ready to display on a table. Nothing will be hung.

2015 MASI SHOW RULES

ENTRIES

Open to all.

Entry fees: \$3 first entry, \$1 each additional entry.

Or all you can enter for \$10

FREE ENTRY:

Aquascaping

Each tank will automatically be judged for Aquascaping.

Tanks with multiple entries:

IT IS UP TO THE ENTRANT TO CLEARLY STATE ON THE ENTRY FORM WHICH FISH SHOULD BE JUDGED.

Multiple entries in one tank from different classes are ok as long as they are compatible.

As a matter of ethics, all entries must be the property of the entrant for at least 60 days before show. No deformed, dis-

eased, artificially colored (painted, dyed, or injected) or illegal fish may be shown. Illegal fish are listed at the end of these rules.

The judges and show chairmen reserve the right to pull any entry they deem injured, ill or abused by tank mates.

DISPLAY

All fish are to be entered in flat-sided bowls or tanks a minimum

of 1/2 gallon or larger up to 30 gallons. IF an entrant wants to set up a tank larger than 30 gallons, he must get prior approval from the fish show chairman, AND provide his own stand. Bare tank entries are allowed in all fish classes, though this is not preferred. Consider using gravel or sand, for the comfort of the fish. We encourage the use of a background for the comfort of

(continued)

Raise It Betta! Betta Raising Competition

Don't want to drag you prized discus out to the annual show? Don't want to upset the Synodontis tank to fish out one specimen?

You bet you can still enter the show!

SHOW-ME FISH 2015 wants you to show off your fish raising skills with "Raise it betta!" The betta raising competition.

At the January 2015 General Meeting Kathy Deutsch will take pre-orders on young male Betta splendens. Built into the cost is

the ENTRY FEE to show it at the May 2015 annual show.

The pre-paid bettas will be delivered to the February 2015 general meeting.

Take your fish home and raise it betta than anyone else.

Bring it to the annual show on Friday May 1 to be judged-it's already entered!

Prizes to be announced.

Questions? Call or email Kathy Deutsch kathy@skdeu.com (314) 741-0474.



2015 MASI SHOW RULES (CONTINUED)

the fish and the effectiveness of the display. Consider covering the sides and back of tank with opaque material (black paint, black contact paper, etc.) All entries must be neatly covered to prevent fish jumping out.

There are a limited number of flat sided drum bowls or flat sided "kritter keepers" that can be borrowed if an entrant does not have a bowl. Please contact the show committee early to reserve one.

Lighted entries are encouraged.

Live plants are encouraged. Filtration and aeration are optional, but strongly recommended for the health of the entry. Air and electrical outlets will be supplied. Guppies, Killies, and Betta splendens may all be entered singly or in pairs in covered bare bowls or

tanks of ½ to 1 gallon in size. Naturalistic artificial decorations are allowed in all entries, and a flowerpot or PVC pipe may be used if needed for the comfort of the fish. For Class #10 – Photography – single picture entries must be printed for viewing.

JUDGING

All entries will be sight judged based on appropriate standards for the fish being judged. Decision of Judges and/or Show Chairmen is final. Show Chairmen may disqualify any entry for any reason at any time.

BANNED AND ILLEGAL SPECIES

MO Banned Fish/Aquatic Invertebrate/Plant Species that may not be sold at MASI auctions or displayed in MASI shows:

Fishes

Live fish or viable eggs of Black

Carp (*Mylopharyngodon piceus*)

Snakehead fish of the genera *Channa* or *Parachanna* (or the generic synonyms of *Bostrychoides*, *Ophicephalus*, *Ophiocephalus*, and *Parophiocephalus*)

Walking Catfish of the family *Clariidae*

Invertebrates

New Zealand Mudsail (*Potamopyrgus antipodarum*)

Rusty Crayfish (*Orconectes rusticus*)

Marbled Crayfish (*Procambarus marmoratus*)

Australian Crayfish of the genus *Cherax*

Mitten Crabs of the genus *Eriocher*

Zebra Mussels (*Dreissena polymorpha*)

Quagga Mussels (*Dreissena rostriformis bugensis*)

Mystery Snails of the genus *Cipangopaludina*.

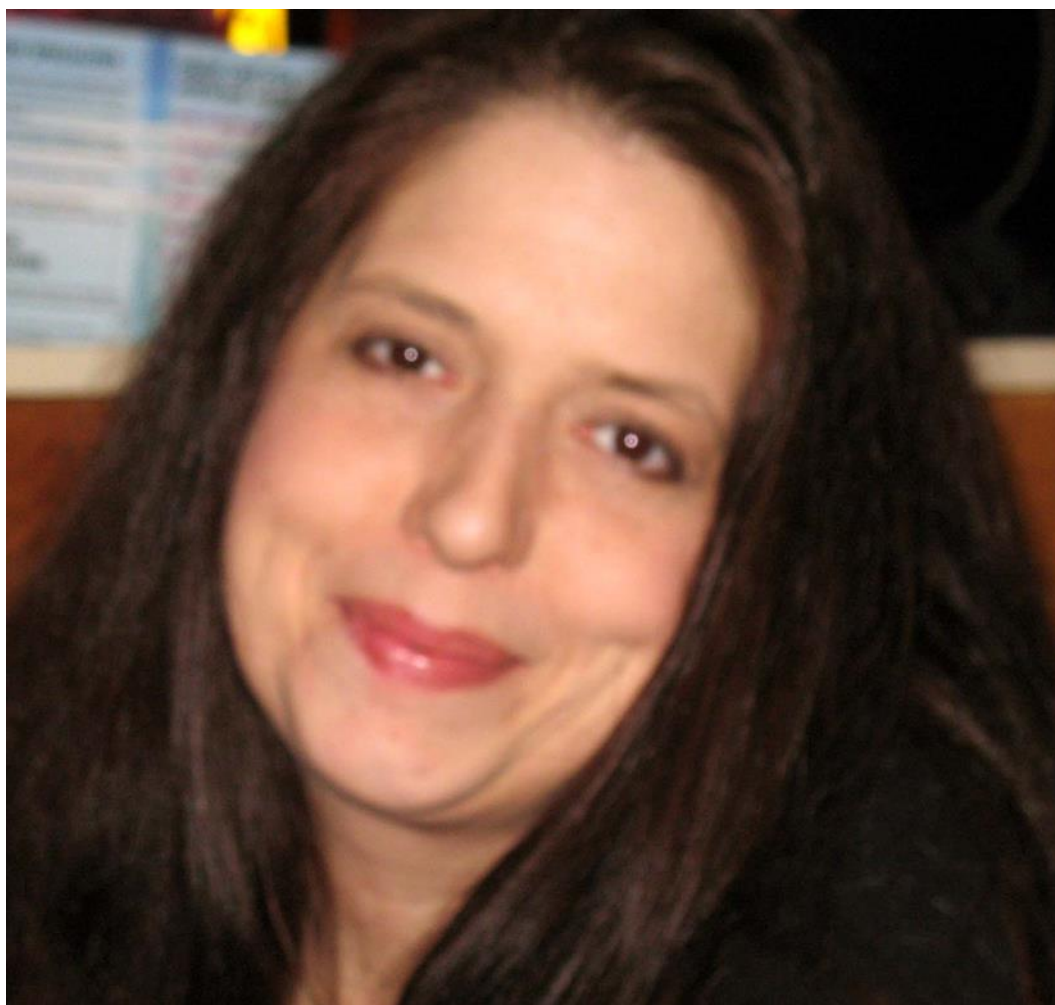
Special notes for snails:

To avoid problems with various state and federal laws, the ONLY snails that may be sold are the following: common mystery snail (*Pomacea bridgesii*) in all of its various color forms, common ramshorn snails (various genera and species, generally called red, ivory, blue, leopard and brown – specifically NOT the Colombian or giant Ramshorn – *Marisa cornuarietis*), Malaysian trumpet snails (*Melanoides* spp.), "Assassin" Snails (*Anatome* (or *Clea*) *helena*), Nerite snails (various genera and species of the family *Neiritidae*).

Note: Spixi snails (*Asolene spixi*) are no longer allowed.

Meet Holly Paoni-Wise

- Husband & 2 teens
- Kept fish off and on for almost 30 years.
- First tank was a 10 gal meta frame, with a baby goldfish when I was 8-9 yrs. old.
- I'm running around 100 or so tanks right now.
- Favorite fish as a "pet"- Fancy goldfish. Very interactive. Like a water puppy! LOL
- Dream fish- not sure...
- Dream tank- money no object- Huge pool sized tank, with stingrays, etc.- and go swimming with the fish.
- Realistic dream tank- 125 gal, fully planted, with TONS of schools of 1 - 2 in fish.
- Latest fish accomplishment & Goal- I just enjoy it... trying new species,
- Accomplishments and goals— would make it seem like a JOB....I'm just having fun with it!
- Other pets- 2 dogs. Romeo, a newfoundland mix, and Buddy ,a golden retriever. Both Rescues.
- If I could do it over- I don't think I'd change anything. I've tried new things, made mistakes, and so on, and it all adds up to learning experiences. It's what I like about



the hobby, there is always something NEW to learn, discover, or try.

- If I could tell a beginner anything.... RESEARCH.... Don't be afraid to try something new..... Just because one way works for one person and circumstances, doesn't mean it has to be that way for all. Mistakes happen to all of us.



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.

The Eastern Iowa Aquarium Association Auction

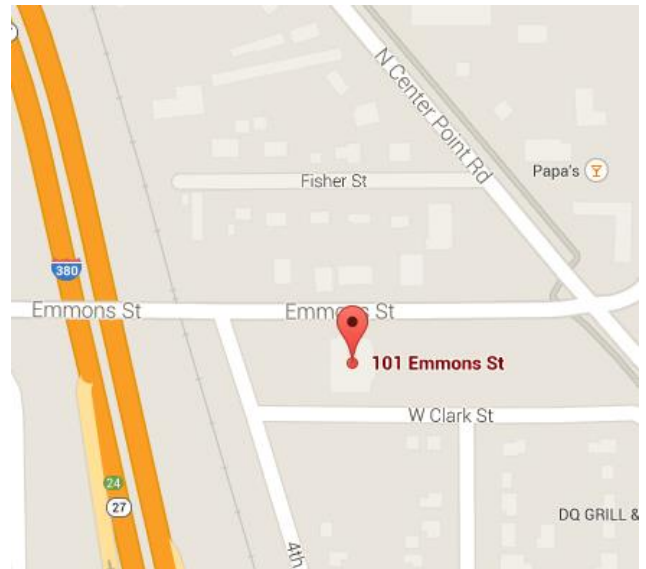
Saturday, March 14, 2015

Hiawatha Community Center

101 Emmons Street, Hiawatha, IA

Easy access from I-380 just north of Cedar Rapids,
Iowa, from Blairsferry Road exit

- Viewing at 9 am
- Bidding starts at 10 am
- Seller registration is available in advance
- More info at www.finflap.com



CLUB HOPPING By Steve Edie

Check with the individual clubs for more details.

Nov 20-23	Cleveland	Ohio Cichlid Association	Extravaganza	www.ohiocichlid.com
Dec 14	St. Louis	Missouri Aquarium Society	Holiday party	www.missouriaquariumsociety.com
Feb 8	St. Louis	Missouri Aquarium Society	Winter Auction	www.missouriaquariumsociety.com
Mar 20-22	Hartford, CT	Northeast Council	Annual Convention	www.northeastcouncil.org
May 1-3	St. Louis	Missouri Aquarium Society	Workshop, Banquet, Auction	www.missouriaquariumsociety.com
May 22-24	Chicago	Greater Chicago Cichlid Association	Cichlid Classic	www.gcca.net
Aug 9	St. Louis	Missouri Aquarium Society	Summer Auction	www.missouriaquariumsociety.com
July 30-Aug 2	Springfield, MA	American Cichlid Association	Annual Convention	www.cichlid.org/
Oct 3	St. Louis	Missouri Aquarium Society	Swap Meet	www.missouriaquariumsociety.com
Nov 1	St. Louis	Missouri Aquarium Society	Fall Auction	www.missouriaquariumsociety.com
Nov 20-22	Cleveland	Ohio Cichlid Association	Extravaganza	www.ohiocichlid.com

THE RARE FIND *SKIFFIA/NEOTOCA BILINEATA*



Dominant male Skiffia showing the half black lack color pattern. Note the thumb-like shape of the anal fin that define the Goodeid family

Story and Photos By
Chuck Bremer

This one kind of snuck up on me. It's one of those classic "don't know what you have till it's over".

I watched guppies for hours as a kid and still use the guppy as a reference for keepable livebearers. Guppies fill that bill well, coexisting with their young easily and reproducing happily. They also don't both-

er most other fish because of their small size. Platies work well, Gambusia work and are very guppy like, but a bit drab and can be aggressive to other species. These are all Poecilids and so the Poecilid has become my standard for livebearers.

Goodeids entered the US aquarium scene a bit later than my experience with guppies

and my standard of measurement had already been established by then. They are usually drab, large for my tastes, and most are a bit aggressive, so are more difficult to keep with other more gentle species. My experience is with such as Ameca splendens- the Butterfly Goodeid, the Tequila splitfin, Xenotoca and some of the Characadons. Although I have

THE RARE FIND SKIFFIA/NEOTOCA BILINEATA

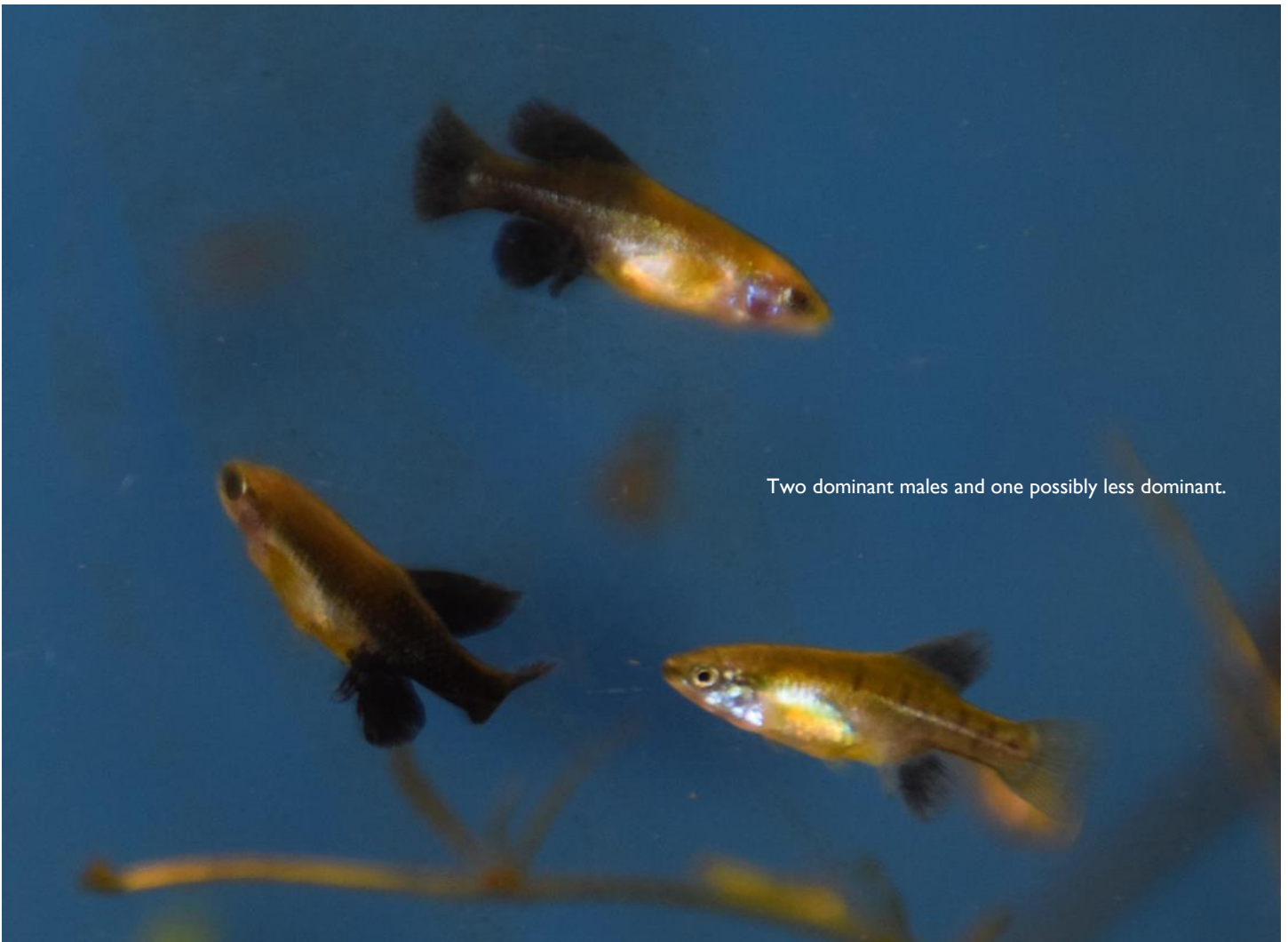
“Skiffia bilineata are small, non-aggressive, vividly colored and...easy to rear and spawn.”

successfully raised most of them, they developed my stereotype for Goodeids as large and often rough with others- a set of characteristics also reinforced in the available literature. Therefore, I avoid most Goodeids but occasionally try one when they come up on auctions where they are usually forgotten till the last as unknown by the runners. Most I got out of quickly or put into my cichlid tank as dither fish where many were tough enough to survive and even reproduce.

At the March auction in East-

ern Iowa this year, a bag of ten 3/4" livebearer fry was labeled *Skiffia bilineata*- no other information. It was going to come up late in the auction and I quickly looked it up on my phone. Mostly I looked at the photos but also size. The species is touted as small and supposedly had some vivid black coloring instead of just drab grey. The seller was someone who also liked small fish, raising killis and other egg layers that need some care, so that was encouraging. No one else even knew that much about them so I could snag the bag for \$5, or \$.50 per fish!

I was moving at the time and so my fish room was spread over two states, so I placed them in a 5 gallon tank to further grow and mostly forgot them. They were getting Tetra Min flake food as a staple and not a lot of care beyond that. The *Skiffias* grew a bit to just over one inch by the time I had a more permanent tank available- a newly set up 40 gallon breeder with few plants, but lots of space. By that time the females looked more like guppies and the males were showing good color. The sexes were split nearly 50:50 and there were a couple of the



Two dominant males and one possibly less dominant.

THE RARE FIND SKIFFIA/NEOTOCA BILINEATA

males that were showing a lot of black. All males had black anal, dorsal and caudal fins and some also had half black bodies in the half black guppy style. I could not see from whence they got the name Two Lined Skiffia, and still can't.

An attempt has recently been made to reclassify *Skiffia bilineata* as the only species in a new

worms and frozen brine shrimp. The bloodworms were a bit large but the pieces of brine shrimp were eaten with relish. The feeding regimen was for other fish in the room to get them to spawn and not necessarily for the *Skiffia*.

Unlike most other livebearers (Poeciliids) the *Skiffia* were

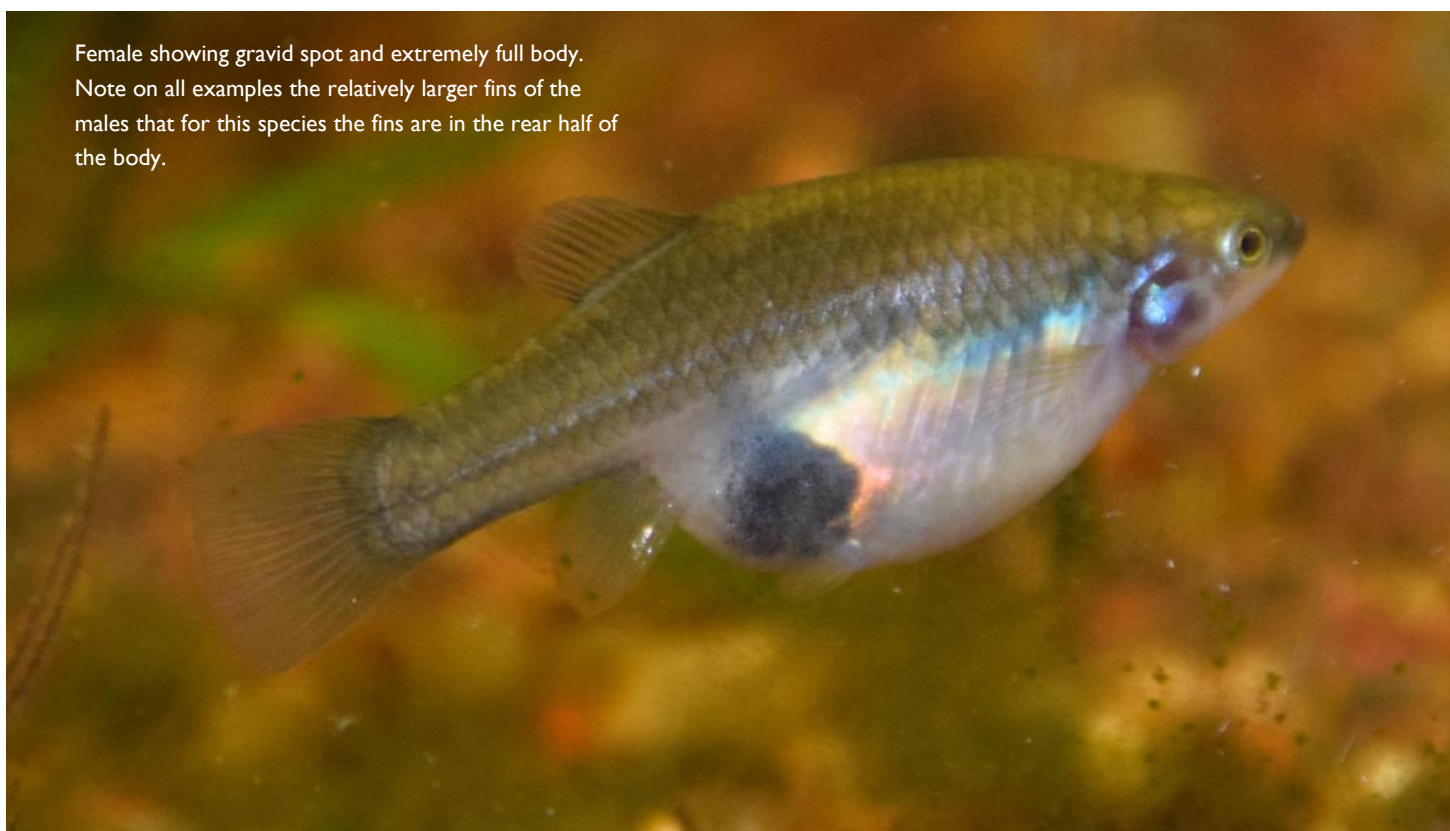
heavy that they often go unnoticed and uncollected which is one reason they may have been overlooked and are not well classified as to species endangerment. Some consider them to be one of the species least abundant and most at risk but unreported as such.

It was obvious the half black males were the most aggres-

tricted dropsy or bacterial septicemia instead of pregnancy.

The pregnancy continued much longer than Poeciliid pregnancies, lasting upwards of two months—a long time for such a small fish. I was only seeing them on weekends, but one weekend all the females had slimmed and there were fry in

Female showing gravid spot and extremely full body. Note on all examples the relatively larger fins of the males that for this species the fins are in the rear half of the body.



genus, *Neotoca*, more closely related to the *Girardinichthys* and by the ALA Convention in early May they had impressed me enough that I looked for other species like them and did buy some *Girardinichthys*- but that is a future story.

In late May I was also around more and began to feed some frozen foods on alternate days consisting of a mix of blood-

keeping to the bottom 4 inches of the tank leaving a lot of the upper water unexplored even though there was hornwort floating above them. Some days flake food would float above them all day uneaten. The literature reports that in their native habitat they are usually found in the shallows and rarely found in water more than 10 cm/4 inches deep. The cover there is also usually so

sive with the females, constantly on the chase. The dark finned males with less black on the body were often elsewhere in the tank so it was difficult to tell if the color might be genetically controlled or triggered by dominance. The females began to fill out a bit more, beginning to look like a long bodied guppy and became very rotund. So much so that I was fearful for a time they had all con-

the tank. From 4 females I got about 25 fry so these are not highly prolific, but it was their first spawn and care could be somewhat suspect when I was gone through the week.

The fry were large in proportion to the adults, being nearly 1/2" in length when I first saw them. In not too long they also were large enough to sex using the body shape. The dorsal

THE RARE FIND

SKIFFIA/NEOTOCA BILINEATA



Male and female just prior to attempted mating.

and ventral fins are set well back along the body, all fins except the pectorals being on the posterior half of the body, the wedge shaped male is readily distinguished from the rounder shape of the female even at a young age and before the shape of the anal fin is readily discernable. They were easy to raise but grew slowly, upon feeding the fry would also pick food at the surface, unlike the adults.

There have since been other spawns. For some reason the females all seem to be synchro-

nized and spawn within a couple of days of one another. I cannot tell if that is a response to one another or if they were just the same age when they got started and were synchronized that way. Just some mornings all seem to have slimmed overnight and there are new fry in the tank. Total size has not increased in the adults much, with females being about 30 mm (1 ¼ inch) even now and males about 25 mm (1 inch). The smallest fry I have seen are about 10 mm or just under ½ inch long.

As far as I can tell there has been no predation of the adults on the fry. This would be difficult as the adults seem to be primarily bottom feeders with a small mouth more suited to picking at algae and other bits from the substrate and the fry are relatively large being nearly 1/3 the length of the adult females even when first spawned. Reproduction is relatively slow because of the long gestation period and the relatively small number of fry in each cycle. After about four months from the first spawn it would appear

that the first generation females are ready to begin spawning themselves. The original purchase has spawned about twice since then.

Skiffia bilineata are small, non-aggressive, vividly colored and, at least for me, easy to rear and spawn. They do not fit the standard stereotype of most of the Goodeid family. This opinion differs from other's experience as the BAP point system still considers them to be a difficulty of 20 points. They are also a CARES fish so worth keeping around to help protect

THE RARE FIND

SKIFFIA/NEOTOCA BILINEATA

Female and less dominant male.



the species long term survival.

My records show that I had purchased a smaller number of the species from the same aquarist earlier and did not have success with them. I don't remember that incident and my assumption is that I treated them like other Goodeids and placed them to grow with tank mates that were too aggressive and they did not survive. The second time I was lucky and kept them in a tank by themselves till I knew what I had and how they should be handled.

The Skiffia was a successful purchase and a fish that will become a staple in my fish room. Now I plan to build a community tank around them with Corys, Bristlenose and some smaller egg layers such as small tetras or danios. The

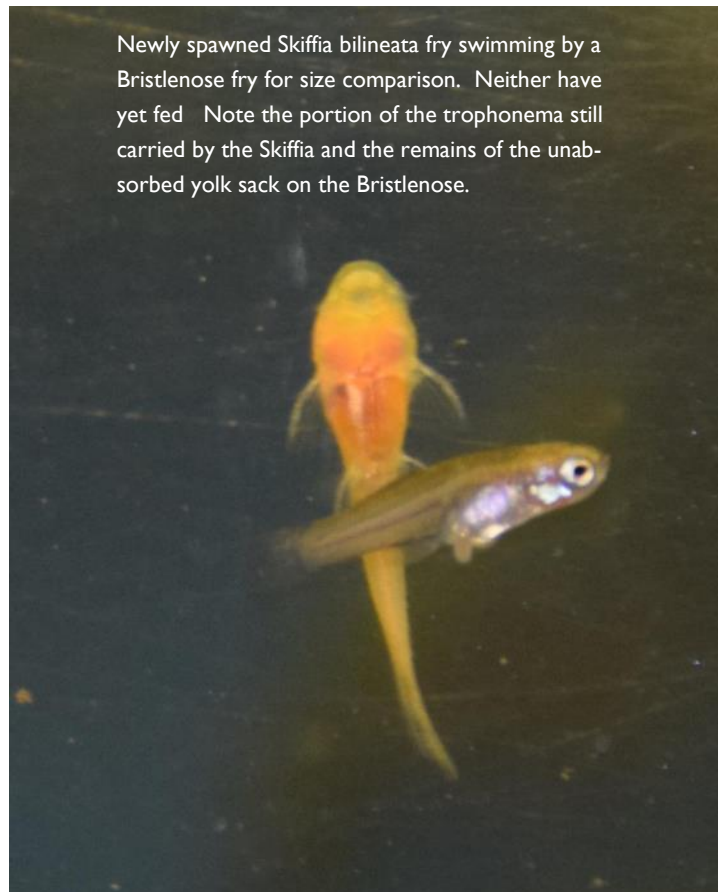
tank will be built carefully as I now consider these to be some of the most valuable fish I have.

If you have a small tank or are a small Poeciliid livebearer keeper, such as Guppies, give Skiffia bilineata a try as a way to diversify into another family. I think they will surprise you by breaking stereotypes you may have about the Goodeid family.

...and I keep wondering just how difficult it would be for a Guppy breeder to develop a completely black strain...



Newly spawned Skiffia bilineata fry swimming by a Bristlenose fry for size comparison. Neither have yet fed. Note the portion of the trophonema still carried by the Skiffia and the remains of the unabsorbed yolk sack on the Bristlenose.



HOW TO RESCUE A BADLY NEGLECTED TANK

By Mike Hellweg

“A method that really works!”

We've all seen those horribly calcified tanks at auctions, garage sales, and even in our own fish rooms. You know the ones – the ones that are so white that you can't see through the glass. Mineral deposits built up as the water evaporated, leaving a thick layer of rock hard minerals behind on the glass. Before you reach for the heavy duty chemicals, read this. I was tinkering around and came up with a method that really works!

This past summer a long time Betta breeder passed away. Those of you who frequented shops in Northwest St. Louis County in the 1960s and 1970s into the early 1980s might

remember him. He worked for a couple of them, and sold his beautiful Bettas to shops all over the metro area. After he passed, his family did not want his tanks, and had no idea what to do with them. The tanks had not been used in several years – or in some cases in decades. The family contacted me through the auction link on the MASI website and asked if I thought anyone would want them – for free. I put out a call to MASI members, but only one other person seemed at all interested. I at least wanted to help the family to know if anything he had was worth saving, or if it should all just go into the dumpster.

When I arrived, the family was looking over a pile of tanks, about 20 or so in all, sitting on the porch. They were filthy. Many had an accumulation of more than 40 years of cigarette smoke on the outside, and for almost all the local well water had just been allowed to evaporate on the inside, leaving a thick layer of minerals behind, all covered with a layer of cigarette residue to boot. There were pieces of duckweed and water sprite mixed in with those mineral layers, and in some the gravel wouldn't budge! We dumped the gravel we could get out and tossed most of the filters and plastic tops as they were too far gone. I took what was likely to be salvageable. Many of you have bought these tanks AFTER they



HOW TO RESCUE A BADLY NEGLECTED TANK

were refurbished and have no idea what they looked like before they were cleaned! Everyone has commented on how clean they are, so I thought I'd share how I did it.

When I first brought them home, all of them reeked of cigarettes and were covered with a thick, greasy brownish layer of cigarette residue. There was no way those were going into the house! I removed them from my truck and gave them a good, heavy rinse with the hose on full pressure. It took off the cigarette residue, the plant remains and the hardened on gravel, but not the thick mineral layer below (see photo 1). This is one of the better looking tanks! The tanks then went to the back yard to be cleaned more thoroughly as I got time.

As I got around to each one, brought them inside or, for the larger tanks, to the driveway. They got a good rinse again (photo 2), and then I added about a quarter ounce of Ultra Dawn Dishwashing liquid. (see photo 3) I don't know if other brands would work, but Ultra Dawn sure did. The tools are pretty simple (see photo 4) – two single edge razor blades and a razor blade holder, a heavy duty scrub brush, Ultra Dawn, and water.

I then filled the tank about halfway with lukewarm water and let it soak with the soapy mix for 10 minutes or so, splashing it regularly up the sides so the entire tank got a good soak (photo 5). After that, I first scrubbed the entire

tank with the scrub brush and soapy water; then went to work with the razor blade. I went over the entire inside and, with these tanks, I also had to do the outside. After scraping the entire tank with soapy water and the razor blade, I threw that blade away and went over it again with a second. Both times I held the blade at about a 45 to nearly 90 degree angle to the glass as that seemed to give me the best leverage. I could actually feel the mineral residue coming off with the scraper.

I finished the initial treatment with a final scrubbing with the brush to get the corners very well, then dumped out the water and rinsed the tank clean. Once the soapy bubbles were gone, it was easy to see there were a few more spots that I had missed that easily came off by rewetting that area with soapy water and scraping with the razor blade again. When these were gone, I gave the entire tank another rinse with clean water. Finally, I dried it inside and out with a thick towel or chamois. What you see in photo number 4 is the final product. All in all, about 10 minutes of soaking, 10 minutes of scrubbing and rinsing, and a minute or so to dry it off. Almost as good as new! (photo 6) This method won't save a tank that's been scratched up, but on one with a thick layer of mineral deposits on good glass, it works wonders. Give it a try before selling or tossing that old tank!



PARAMECIUM—THE SMALL FRY FOOD

Reprinted from the July 2014 Fish Talk of the Atlanta Area Aquarium Association

By David Ramsey

What kinds of foods do you feed to small fry? This is a common conversation that takes place any time a bunch of aquarist get together and start talking about the fish they are breeding. At some point someone brings up how do you feed the fry? All kinds of answers will come in, usually starting with baby brine shrimp. Then an adventurous person will say microworms, or vinegar eels. And then from the old guy over in the corner will come the scary words from the dark arts—paramecium. Not green water. Not infusoria. Paramecium.

Most of us have tried Paramecium at one time or another. We always start with the knowledge (fallacy) that one must first purchase a pure culture. I've purchased or been given a pure culture several times. And each time I've had the same results. Within a few weeks I have a large container with a 'not pure' culture. All kinds of disgusting things will present themselves. Usually I have a lot of some kind of worm that seems to make a cocoon on the side of the glass. Or the little wiggly worms that spend their time wiggling up and down in the tank. Probably looking for Paramecium to eat.

Why does this always happen? Probably because I do not sterilize everything with bleach, then hydrogen peroxide and then autoclave the containers. I never boil my culture water. But all is not lost. I finally found a way to grow a huge quantity of Paramecium along with the other little friends (rotifers, stentors, and similar critters) that go along with them. Now I want to relate that to you.

We all have an outside filter that has been way too long since it was last changed. It



needs to be from a tank that you have not put any medications in. Obviously, the slow creepy crawly things you want to grow will not have done well with antibiotics, sulfurs or copper drugs. I usually find a hard water African tank a good place to start because it will maintain a good pH. If you only

have filters from soft water add some calcium of some sort to help buffer the water. Just use an outside filter that is moving slow because it has so much stuff clogging up the filter material.

You can turn a filter off and let it sit for a while. Then pull out the filter material. I let the filter



material drip into a plastic shoe box. You can use whatever you want. The shoe box is an easy way to catch the water from the filter material. You want to let the water from the filter material drain into the plastic shoebox. After most of the water has drained, you can lightly squeeze some more of the water out. Do not squeeze too hard, the little paramecium are very fragile little critters.

Now pour this water into a large-mouth glass or plastic container. I like a glass jar but if all you have is plastic, use plastic. The plastic orange juice container jars are pretty good. Pour the water in only as far as where the wide area starts to narrow. You need air circulation. If you need more water than what you have so far, then pour in some water from the filter or some regular water out of the aquarium. I try to start two or three of these jars at the same time because they may not all take. This encourages me to clean the filter. You can also use sponge filters or the water in a canister filter. You just need dirty water from an area that is slow moving. The paramecium would be swept away in a fast running filter.

Now you have your jars filled with water and the goop that came out of your filter. We need some food for the stuff that we hope is going to grow. You can use most anything that hasn't been sprayed or any pesticide put on it. Dried grass, little bits of dried hay or the Timothy hay that rabbit and small animal keepers use works very well.

On a trip down to the killifish show in Florida some of the killifish members in Tampa told me that what they like to use most of all was little dried half-

PARAMECIUM—THE SMALL FRY FOOD



inch pieces of turnip or rutabaga. That is pretty easy to make. You buy a turnip root or a rutabaga and you cut it into half-inch squares. Careful—these roots are hard to cut. Blood from cut fingers does not enhance the growth of paramecium. Spread the pieces out on some paper towels and put in an uncovered plastic container. Leave it out in the air to dry. This may take a week or longer. Shake them up every couple of days to get the wetter undersides facing upward. You will end up with dried out Turnip or Rutabaga little nuggets. I can usually find a box of them already cut up in the produce section the grocery store. Usually they are in 1" size pieces but that's all right. If you have a dehydrator you can have it all dried out overnight. One rutabaga or turnip cut up in the little half-inch nuggets and dried will probably give you enough food for Paramecium for at least six months. So do not go overboard in getting a bunch of rutabaga or turnips.

Just one small root will do.

Put one or two of the little dried food pellets into each container you want to use. Then you take a folded up paper towel or piece of cloth and rubber band it over the top of each jug. You need air to move in and out of the containers. You do not want to

allow any gases to get trapped inside container and you don't want the bugs laying eggs inside. Put the jars in a spot out of the sun at room temperature. You do not want to grow algae. You also do not want total darkness either because you will forget it's there. And in total darkness you will grow mold. I know from experience. Nothing worse than finding a jar growing some kind of disgusting stuff forgotten for a long period time.

Check the paramecium jugs every two or three days or once a week. What you looking for first is the water will get very, very cloudy. That's the bacteria growing from the food and the other goop that you have in the container. This is a good sign. The Paramecium will eat this bacteria.

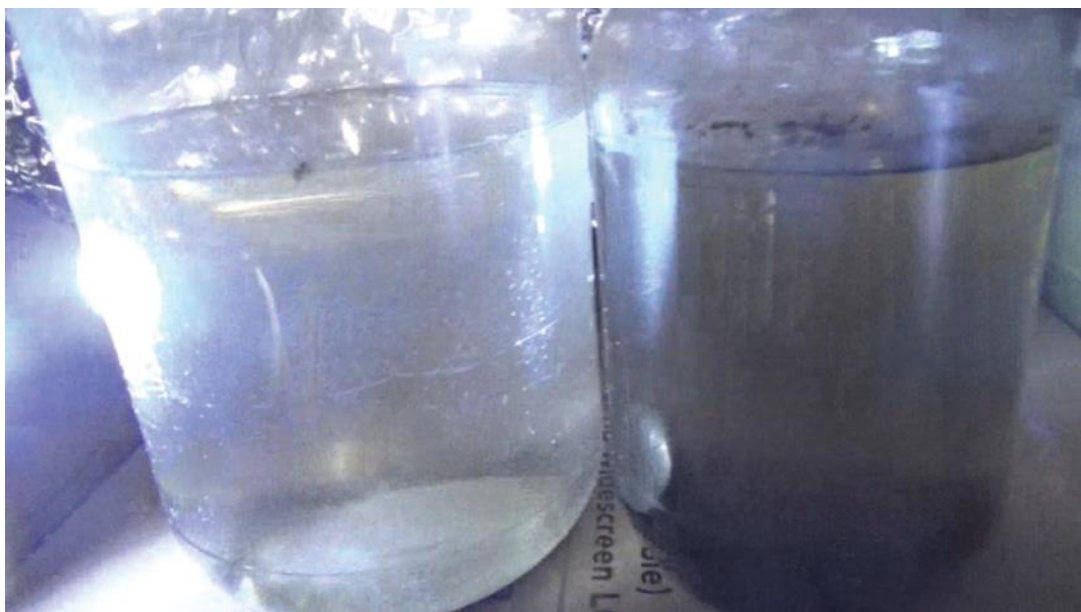
So roughly 2 weeks after starting your culture, you will find you have a bacteria bloom. In another week at room temperature, you'll start to notice that the water is clearing. This clearing water means something is eating all that bacteria. Using a pencil point type flashlight shining from the backside into the glass, you'll be able to see how your Paramecium

cultures doing. If you cultures going really well they'll be so thick that it's amazing that you can see through the water!

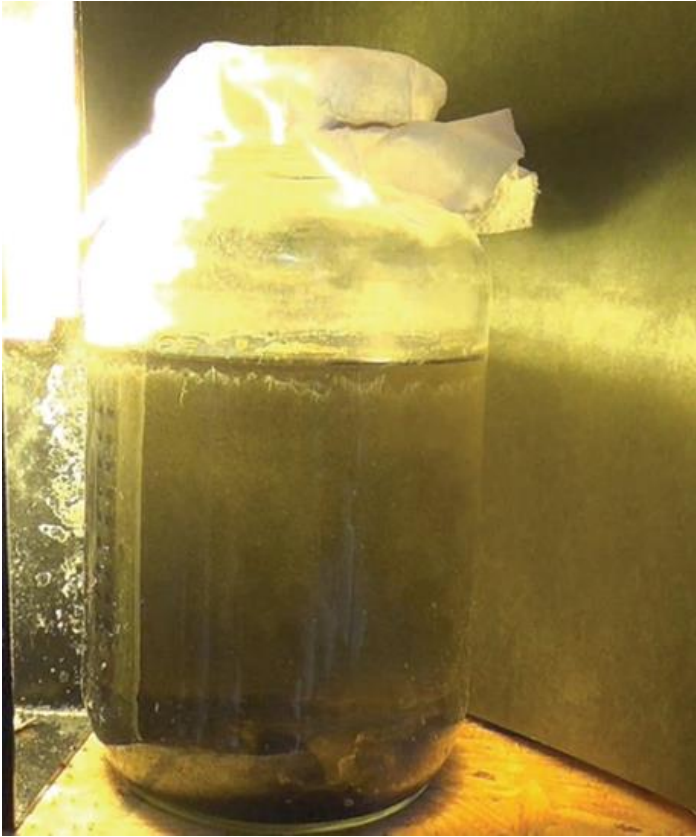
In another couple of days you want to add another pellet or whatever your food source is. You've got to keep the bacteria going so the Paramecium continue to have something to eat.

Now that you have this culture going you need to know how you are going to feed them to your fish. You really do not want to be putting a whole lot of this water in your tank because it does have an odor. But there is not really anything in it that is unhealthy. Remember the Paramecium eat the bacteria you are afraid of getting in your tank. So the Paramecium are actually going to clean up your water when you put them in your aquarium.

You can buy 5μ filter material used for saltwater plankton collecting. But it is very expensive. What I found is that the Paramecium are just like brine shrimp. They are attracted to light. So I will put the container in the dark and shine a light on just like you do for your brine shrimp. Over a 15 to 30 minute period of time the majority of the Paramecium will come over to the side of the jar



PARAMECIUM—THE SMALL FRY FOOD



the bottom of the tank and the fry will still end up dying from the disease or fungus or whatever it is they pick up from the slime. The Paramecium culture pretty much keeps all that cleaned up. Plus the Paramecium will live in your water so you do not have them dying all over the place.

I start out with Paramecium. Then in a few days add some microworms. Only after the fry are a couple weeks old will I start feeding the baby brine shrimp. When I start feeding baby brine shrimp I put some snails in the tank to help keep things clean.

This is how easy it is to start a Paramecium culture. The hard part is that you have start one about three weeks before you're going to need it. When you start conditioning your pairs for breeding, you should start your paramecium culture. If you expect a lot of fry then start a couple of jars every week. That way you will have a continuous stream of Paramecium

coming for whenever you need them. Nothing is worse than having a great Paramecium culture that for some reason crashes and three days later 1000 gourami or 50 wild betta fry hatch and you have nothing to feed them. By starting one or two new jugs every week, you will find that whenever you need the food you'll have it ready.

It is just as easy to feed the paramecium to your fish. If your fry are up in the water column, then that is where to squirt your paramecium. If your fry are down in the leaves or hiding in mops, then that is where to squirt the culture. Take your turkey baster and slide the point right down into where you know the fry are and slowly squeeze the paramecium out there. They will stay in that area because there will be bacteria there for the paramecium to eat. And then they will also be very easy for your fry to find.

where the light is. Now I can take a turkey baster and suck out a small amount of water and a whole lot of the Paramecium. I will squirt that into a smaller container that is used to feed the rest of my fry.

Paramecium are always a subject when the discussion gets down to breeding the tetras, danios, and barbs. The betta and gourami people will perk up their ears and listen also. People will tell you that your Apistogramma and Blue Ram fry are big enough to eat brine shrimp right from the beginning. I find they get off to an even better start if I also feed them the Paramecium. This stuff makes a particularly good food for baby corydoras. The biggest problem I find in raising corydoras is that after three or four days, the tank water gets very foul. Even when I do giant water changes each day on the small tanks with the baby corys, a slime will develop on



Super Bowl 2014

Best Junior Entry – Emy Jensen with a Green Tiger Barb
Reserve best of Show – Jim Miller with a Belontia signata
Best in Show – Daniell Kinder with a Fantail Goldfish

Junior Exhibitor (under age 16) any species – 2 Entries		
1 st :	Emy Jensen	Green Tiger Barb
2 nd :	Katie Jensen	Gold Gourami
Old World Cichlid – 4 Entries		
1st:	Pat Tosie	Pundamilia nyererei "Makobe Island"
2nd:	Pat Tosie	Haplochromis sp. "Fire Red Uganda"
3rd:	Gary Lange	Pelvicachromis pulcher
New World Cichlid – 5 Entries		
1st:	Pat Tosie	Amatitlania siquia "Rio Cabayo"
2nd:	Holly & Kevin Wise	Honduran red Point
3rd:	Ed Millinger	Ram
Rainbowfish – 4 Entries		
1st:	Jim Miller	Melanotaenia praecox
2nd:	Gary Lange	Melanotaenia flavipinnis
3rd:	Jim Miller	Iriatherina wernerii
Killifish – 1 Entry		
1st:	Pat Tosie	Pachypanchax sakaramyi
Livebearer: Fancy Finnage – 6 Entries		
1st:	Pat Tosie	Hi-fin Variatus
2nd:	Dwayne Peters	Albino Red Sailfin
3rd:	Pat Tosie	Hi-fin Variatus
Livebearer: Normal or Wild-type Finnage – 6 Entries		
1st:	Pat Tosie	Poecilia velifera "Isla Los Mujures"
2nd:	Gary Lange	Xiphophorus helleri
3rd:	Pat Tosie	Xenotoca sp. "San Marcos"
Egglayers: Cyprinids: Barbs, Danios, Rasboras, Minnows, Goldfish Characins: Tetras, Pencilfish, Piranhas, Pacu, Silver Dollars, etc. – 8 Entries		
1st:	Daniell Kinder	Fantail Goldfish
2nd:	Holly & Kevin Wise	Emperor Tetra
3rd:	Dwayne Peters	Emperor Tetra
Egglayers: Any other type – 10 Entries		
1st:	Jim Miller	Belontia signata
2nd:	Jim Miller	Belontia signata
3rd:	Gary Lange	Betta rubro
Catfish: Corydoras, Aspidoras, Brochis, Scleromystax and relatives – 3 Entries		
1st:	Kathy Deutsch	Corydoras similis "Violet"
2nd:	Jim Miller	Long Fin Cory
3rd:	Jim Miller	Long Fin Cory
Catfish: All other – 2 Entries		
1st:	Ed Millinger	Striped Raphael
2nd:	Dwayne Peters	Striped Raphael

FISHES AS DISHES

PATRICK A. TOSIE, SR.

Fish Cakes

Ingredients:

1 pound chopped salmon
1/2 pound chopped haddock
2 bell peppers, any color that are hot or not from a local garden
1 cup stale bread, which has been soaked in enough cream to make it a thick paste
1/4 cup chopped dill, or any fresh herb that you enjoy
1/4 cup chopped scallions
2 tablespoons freshly chopped ginger
1 teaspoon chili flakes
2 lemons, finely zested
1/4 cup thinly sliced red onions
1/4 cup thinly sliced young and tender celery stalk
Salt and freshly ground black pepper
Semolina or fine bread crumbs, for coating
Olive oil, for frying



Directions:

Combine the above ingredients, except the bread crumbs and olive oil, in a bowl and form patties that are 1-inch thick and 4 inches in diameter. Lightly coat in semolina or fine bread crumbs and fry in butter or olive oil on medium heat for four minutes on each side. It is extremely important to take any liberties that you deem necessary or that will please your friends and family. We were serving ours with a ginger and beet puree and some beautiful watercress dressed in lemon oil. You may do as you please. A green salad and sweet corn salsa, French fries and green olive tartar, rose or beer.

Total Time: 25 minutes (Preparation: 16 minutes, Cook: 9 minutes) Yields 4 servings



September/October HAP Report by Mike Hellweg

Chuck Bremer	175 points					
	Hydrocotyle	leucocephala		Brazilian Pennywort	V	10
	Lemna	valdiviana		Valdivia Dwarf Duckweed	V	5
	Lomariopsis	lineata		Susswassertang	V	5
	Ludwigia	repens		Red Ludwigia	V	10
	Myriophyllum	mattogrossense		Southern Milfoil	V	10
	Myriophyllum	hippuroides		Red Parrot's Feather	V	10
	Rotala	indica			V	15
	Taxiphyllum	barbieri		Java Moss	V	5
	Zosterella	dubia		Willow Grass	V	10
	Anubias	barteri	nana	Dwarf Anubias	V	15
	Echinodoras	bleheri		Bleher's Amazon Sword	V	15
	Microsorium	pteropus		Java Fern	V	10
Holly Paoni Wise/Kevin Wise	745 points					
	Anubias	afzelli			V	15
	Anubias	barteri	round leaf	Roundleaf Anubias	V	15
	Bacopa	caroliniana		Common Bacopa	V	10
	Cryptocoryne	crispatula	balansae	Waffle Leaf Crypt	V	15
	Hygrophila	sp.	Tiger	Tiger Hygro	V	5
	Ludwigia	sp.	red		V	10
	Micranthemum	micranthemoides		Baby Tears	V	15
	Nymphaea	rubra		Miniature Water Lily	V	20
	Proserpinaca	palustris		Mermaid Weed	V	15
	Vallisneria	nana		Australian Val	V	5
	Echinodoras	sp.	Kleiner Prinz	Kleiner Prinz Sword	V	15
	Nymphoides	hydrophylla	Taiwan		V	20
Mike Hellweg	3410 points					
	Vallisneria	americana	rubra serpenta	Red Corkscrew Val	V	5 MASI First!
	Vallisneria	natans		Chinese Val	V	5
Mike Huber	270 Points					
	Bacopa	caroliniana		Common Bacopa	V	10
	Blyxa	japonica			V	15
	Cryptocoryne	wendtii			V	15
	Echinodoras	sp.	compacta	Compact Sword	V	15
	Microsorium	pteropus		Java Fern	V	10
	Nymphoides	hydrophylla	taiwan		V	20
	Vallisneria	rubra		Red Val	V	5
	Vallisneria	asiatica		Jungle Val	V	5
	Anubias	barteri	nana "petite"	Petite Anubias	V	15
	Egeria	najas		Curly Leaf Anacharis	V	5
John Van Asch	780 Points					
	Hydrocotyle	leucocephala		Brazilian Pennywort	V	10
	Limnobium	laevigatum		Brazilian Frogbit	V	5
Gary Lange	1610 points					
	Cryptocoryne	usteriana			IB	20
Tony McMillan	425 points					
	Blyxa	japonica			V	15
	Hydrocotyle	leucocephala		Brazilian Pennywort	V	10

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) - half pound	\$3.00	
		OTO double strength Chlorine/Chloramine test kits - 4 ounce	\$12.50	(314) 894-9761
		Flubendazole, 10% powder 25 grams	\$20.00	charles@inkmkr.com
		Lavamisole HCl Powder - 5 grams treats 100 gallons	\$10.00	
		Methylene Blue 5% solution (4 ounces)	\$12.75	
		Acridine Concentrate (4%) solution, 2 ounces	\$12.70	
		Bromthymol Blue pH test solution, 4 ounces	\$7.00	
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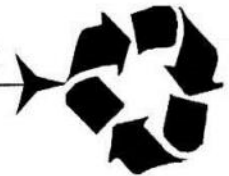
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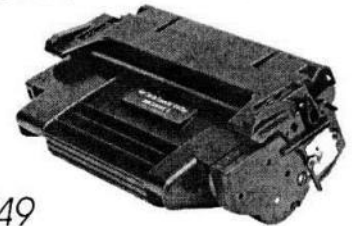


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