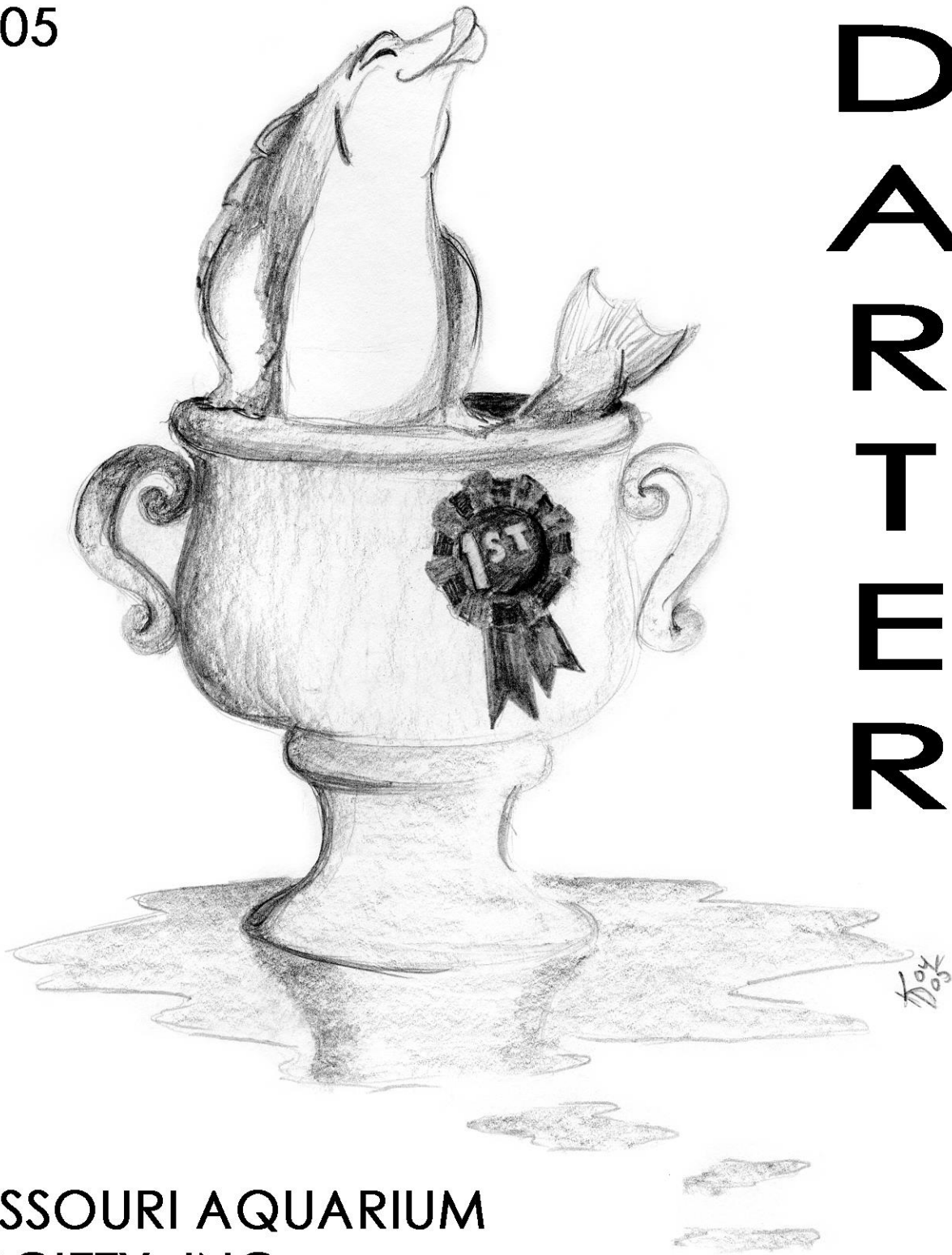


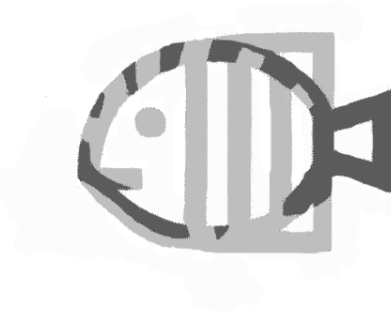
MAY - JUNE  
2005

THE  
**DARTER**



MISSOURI AQUARIUM  
SOCIETY, INC.

# Aquatico



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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., 8927 Valcour, St. Louis, MO 63123. 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.

This Darter has been printed with remanufactured toner cartridges from InkForYourPrinter.com

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# Places to Be Things to See

THURSDAY, June 16, 2005

General Meeting, 7:30 PM @ Dorsett Village Baptist Church

SATURDAY, June 18, 2004 (SATURDAY June 25 in case of rain)

MASI Picnic @ Jim and Brenda Thale's  
Executive Council following Picnic

THURSDAY, July 21, 2005

General Meeting, 7:30 PM @ Dorsett Village Baptist Church

SUNDAY, August 14, 2005

MASI Summer Auction, All Species @ Stratford Inn in Fenton  
Check-In at 10:00, Viewing at 11:00, Auction at noon

THURSDAY, August 18, 2005

General Meeting, 7:30 PM @ Dorsett Village Baptist Church

THURSDAY, September 15, 2005

General Meeting, 7:30 PM @ Dorsett Village Baptist Church

SUNDAY, November 20, 2005

MASI Fall Auction, All Species @ Stratford Inn in Fenton  
Check-In at 10:00, Viewing at 11:00, Auction at noon

## Picnic Time!

It's almost time for the annual picnic. This year it will be June 18<sup>th</sup> weather permitting, or June 25<sup>th</sup> if it is rained out. Picnic will start at 2:00, food between 4:00 and 5:00. Once again Jim and Brenda Thale are hosting this for the club. Come and bring the family; the Thale's always provide a great time for the club. There will be sign-up sheets at the meetings for number attending and what you can bring (meat and drinks are provided). If you don't make a meeting to sign up, call Jim or Brenda at 636-343-8004 and let them know you are coming.

# Presidential Preamble

By Mike Hellweg

## MASI TO DISBAND!!

“The last meeting of the Missouri Aquarium Society, Inc will be held on the third Thursday of next month at the Dorsett Village Baptist Church at 7:30 pm. All interested parties are welcome to attend. Topic of the meeting will be the disposition of all remaining assets of the club...”

With that paragraph, updated to reflect our current meeting location, I began a Presidential Preamble some 12 years ago. My intent then, as now, is to get your attention. I hope it did! Without volunteers, we could be facing the end of the club. Everyone assumes someone else will do it, but no one is stepping up to the plate. Imagine a baseball team without someone willing to bat, or a football team without linemen! It just doesn't work.

Don't be discouraged! Overall the club is healthy and sound. Unlike other clubs around the country, we are fortunate to have a healthy and growing Treasury so we can afford to bring in great speakers, buy things like the new digital projector, etc. We have active members and most all of our committees are running at full steam. We have one of the best club publications in the country (and there are some very good ones out there, so that's saying A LOT!). We have an active and involved board of directors. Members of our club write for our publication, and do so well that many of their articles are reprinted in other club publications around the country. Not many clubs can say that. Several of our members also regularly have work appearing in national hobby magazines. Several of our members are also active on the Boards of Directors of national hobby organizations. About a third of our membership attends every General Meeting, and more than two thirds attend at least some meetings. Our Auctions both in size and assortment of items are the stuff of legends at other club events around the Midwest.

But we do have some shortcomings that I hope you can help us with. I've been asking for several months now for a volunteer to step in as Advertising Chairman – Scott Brandt has stepped up to the plate to take on this task (Thanks Scott!). However, we have been seeking a Show Chairman since last year's show – Gary only filled in and did double duty as VP and Show Chair for one year – that's a lot to ask of anyone. We can't expect him to do it again, and I'd prefer not to ask anyone to do double duty like that. Normally, we already have someone in training for this position. This time, no one has stepped forward. No one has even asked for further details on what the positions entail.

What does it mean to the club? What does it mean to you? Well, without a Show Chairman we won't have a show next year. It's not going to happen this time. Period. We've already missed the window for getting started planning for next year's show. Gary can't do another year of pulling double duty, and he enjoys being VP. So the Show Committee has decided we won't book a Show for next year due both to the lack of a Show Chair and to declining interest in showing fish over the last several years. Not having a Show Chair step forward has sealed the deal.

We WILL still have an annual event. And we could use someone to co-ordinate that. Preferably someone who is not already doing another job with the club will step forward. We will most likely do a series of seminars on Saturday, a banquet on Saturday evening, and the auction on Sunday. All of these things are enjoyable and “easy” to put together, at least as compared with doing a full-out show. But there will be no show.

Sadly, the current show committee is tired and running out of steam. I've been on it for 15 years or so. Gary has served on and off for most of the last couple of decades, and Klaus and Jack have each served for close to a decade. With the other things coming up this year, Klaus can't make most of the meetings. Jack has his hands full with Daniel, trying to settle into a new home, and planning a fishroom, not to mention the fact that Springtime is his busy season at work. Gary and I both have a lot of other things to do for the club, not to mention things in our own lives that require our attention, and while we'll be glad to help, neither of us can afford to give the Show Committee the time to make it a great show. So there will be no show next year. Maybe in 2008...

I can't put it any more simply. It's time for YOU to step forward and volunteer. There will be plenty of folks to help, but we need someone to step up and volunteer to lead them. We can live without a show, in fact, skipping a year or two might be a good thing.

Sorry to end on such a down note this time, but it's frustrating to keep asking for help and have everyone look the other way, expecting someone else will step forward. We need YOUR help! The club is healthy, membership is growing again, and we have a great meeting place. All we need is YOU.

Volunteer! I've heard that no one volunteers until someone asks them to do so. Well I'm asking. The club needs some volunteers to help out – now more than ever!

...and for now, 'nuff said...

## Editor's Notes

Steve Deutsch

We have a packed Darter this time. We have the results from the annual show, breeding articles from Diane Brown and Cory Koch, three good exchange articles, the club reports, more poetry from Mr. Ed, and the service points so far this year. This is Cory's first Darter article, welcome to our latest author. Next month could be your first article. Every one of you probably knows a good fishroom tip, a good book to point others to, a good aquarium to go look at, a good store to visit, a good breeding success story, a good cautionary tale to save someone else from a pitfall, a good internet resource, a reminiscence of the 'good old days', a good collecting spot, a good snorkeling spot, a good 'fishy' vacation, or a good piece of equipment that some of the rest of us don't know about. Don't hold out on us!

The show auction was too long as it was for us to sell the rest of Ralph Wilhelm's equipment, so we don't know how much money we have for a publication award until after the August auction, but remember there will be a cash prize established for best article this year thanks to his generosity.

As the club gets a little smaller and we all get a little busier, there have been declines in meeting attendance, show entry, etc. as noted elsewhere in this issue. One other decline we have experienced is the attendance at the annual picnic. There is no meeting, no speaker, no auction, and no raffle. So why should you attend? Because there is no meeting, no speaker, no auction, and no raffle. Nothing to keep everyone too busy to talk. If it is hard to really get to know other members at the meetings, this is the cure. It is purely social, with fish talk thrown in. It is a great place for new and old members to relax and talk. Plus Brenda is a great cook and Jim fires a mean grill.

Article Deadlines for upcoming issues:

July-August - June 15

September-October - August 15

November-December - October 15

# The MASI Challenge

By Mike Hellweg

At the March Executive Council meeting, we discussed the importance of following our mission and doing something charitable yet “fishy”. Most years there is no shortage of things. Among other things, we’ve run an auction where 100% of the proceeds went to the Red Cross. We’ve helped the ACA Guy Jordan fund. We’ve donated fish tanks and equipment to classrooms. We’ve donated aquarium magazine subscriptions to school groups. We’ve donated aquarium equipment and fish to the Ronald McDonald House, the St. Louis Zoo, and the Missouri Botanical Garden. We’ve donated aquarium books to the St. Louis Public Library.

As many of you may have heard, I was recently elected to the Board of Directors of the American Livebearer Association. The very day this discussion had come up at our Executive Council meeting, a charitable need had presented itself to me via the ALA BOD. Interestingly, just hours before our Council meeting, ALA Chairman Rit Forcier had sent out a note asking for help.

The ALA maintains a small fund to help give grants to graduate students working with Livebearing fishes. It is called the Vern Parish Fund, or VPF, after one of the great Livebearer hobbyists of the 20<sup>th</sup> Century, Vern Parish. Many of us who have been in the club for a long time had the pleasure of meeting Vern, as he often traveled to our club’s shows. Anyway, when Vern passed away several years ago, the ALA created the fund to honor him and his contributions to the hobby.

Every year, candidates are presented to the VPF committee, and the committee selects one student to support through a small grant. Just this year the ALA BOD voted to increase the funding to \$600. Not that much, but it really does help the student and their project. This year, two candidates had presented such outstanding project proposals that the ALA wanted to award two \$600 dollar awards. But we barely had enough funds for one unless we tapped into the principal of the fund, which we didn’t want to do. So Rit contacted the rest of the BOD to ask for ideas.

I mentioned it at our Council meeting that evening, and, without hesitating, our Executive Council approved a donation to the VPF of \$300, with a challenge to other clubs to step up to the plate and make a donation. And I had been hoping for maybe \$50! Wow! When I got home I sent a message to the rest of the ALA BOD letting them know what MASI had given to the VPF and challenging other clubs to make donations. To say they were grateful would be an understatement!

But, even better, when I presented to the check to the VPF administrator Pat Hartman at the ALA Convention banquet the next weekend, and presented the challenge, other clubs did step forward. Very soon after, I learned that not only did we raise the \$600 we were looking for so we could make the second grant, but we raised nearly the full \$1200 so that all of the interest earned this year could be put back into the fund to earn more money for a grant next year! Because MASI members stepped up to the challenge, we were able to fund two graduate students working with aquarium fish in their projects. I’ll have more details about their projects in the next Darter.

For now, I’d like to pass on the thanks of the American Livebearer Association and the Vern Parish Fund. This note came to me dated April 3, 2005:

Mike,

What an incredibly generous gift from MASI's membership!

I really appreciate the contribution to the VPFund and I thank your group on behalf of the VPF Committee.

Jim Langhammer.



# Spring Show 2005

Gary Lange

Well the show is over. Thanks to all that helped set up the show and entered fish. I really appreciate your efforts, thank-you for taking the time to do so. Unfortunately it was the smallest show that I can remember and I've been going to these since the mid-eighties. We only had 85 entries and only 14 people that entered items. Jim Miller had a heart attack not too many months ago and still put in more tanks and more entries than anybody! Thank-you Jim for your great support for this show and so many others over the years. We were talking during the show this year and we both agreed that we don't enter the show to "win" plaques and bragging rights but rather to put some nice fish out there and perhaps get someone new interested in the hobby. Ok, I do enter rainbowfish so that you will turn from the dark-side (cichlids) and go with good side of the Force! Still we did show some very nice fish that would have placed and won their categories even at a show twice the size. Congrats to Ed Millinger for the best of show award. Winners announced elsewhere in this issue. A special thanks to Kathy Deutsch who spent hours sitting at the show and trying to sign up new members. She put in a lot of hours and also ended up missing some of the talks so that she could help us out.

Those of you that came to the talks got to hear some pretty interesting speakers. I still say that Joe Fleckenstein gives the best live foods talk that I've ever heard. That's to keep other members of this club on their toes and perhaps looking for ways to go one better! I got to hear Joe last year in Indy at their fall show and I knew that you would appreciate him. He also generously gave MASI the money from his mini live-foods auction at the end of his talk. He must have said something that got you going as I heard the bidding was hot and heavy. You also got to hear Mike Schadle give his first ever "digital" livebearers talk. Yeah, it went a little long but I think he was so excited about the digital that he just couldn't cut anything out! It was kind of a small room but it was packed and nobody left. Back in the early eighties Mike kindly showed the new kid from St. Louis what to look for in a good livebearer and why certain fish lost points in the show. Ah that was the time when the Livebearer king, Vern Parish and the livebearer Mafia ruled in Indy. Mike, Pat Hartman and that Grimes character brought some of the neatest livebearers! Just wish I knew how to take pictures back then. I also heard a lot of nice things said about that Canadian fellow Spencer Jack and his talk on collecting in Bolivia. I met Spencer in March 2004 at the Winnipeg show and I knew that he would be a great speaker. Ok others told me that he was good too but he's a fun guy to boot. I'd go collecting with him any day! The banquet was topped off with the one-two punch of Charley Grimes and Spencer. I did see a few of you squirming when Spencer was talking about "You may be a fish addict, if...". If you didn't get to any of the talks then you really did miss the best part of the show weekend, there was a lot of interesting information to be had. The auction on Sunday looked like it was pretty good too. Although there weren't a lot of bidders they certainly bought a lot of items and paid a decent price too. That does help to pay to bring in our speakers and pay for the showroom. We certainly enjoyed Ray Lucas for the weekend too and vendors that he represented. His donations brought a lot of money for the club and the bow front tank for the raffle also brought in a lot of money. Thanks Ray. If you were at the auction you also got to see the "Batman" and Robin dual of Mike & Robin Schadle, two of the best fish auctioneers in the country. I hope that you also got to take a look at the books Mike brought as he certainly had some nice ones.

## Next Year

We don't have a show chair for next year and as a council member I would strongly recommend against having a show after the low number of entries from this year. Unless there was a pledge for at

least 100 entries it's not worth the effort. What I think I would suggest instead is just the workshop part of the show. A lot of the clubs on the east coast went to this format a few years ago and I think it's probably time for us to do so. Perhaps after a year off our members might be willing to put on another show. In the meantime maybe we need to think about putting all of our efforts into getting more members. We should think about setting up a few limited decorated tanks at someplace like the zoo or especially Shaw's park. I'm hoping that we could use the talks and the Aquarium beautiful tanks to draw more people into our club. Without a bigger membership I don't think we'll ever be able to put on a show again. We may have to move it into the summer to avoid the competition of the spring weddings at the botanical gardens but it would be worth it if we could grow our membership. What do you think? Will you help us put something together at the zoo or Shaw's Garden so that we can pick up more members? Please let me know and other members of the council. I'm still going to continue as VP next year and I hope to again introduce you to some new and interesting speakers. We have some pretty interesting ones already lined up and I've got a few others in mind. See you next month when our speaker will be Klaus Schoening speaking on collecting native fishes.

## 2005 Annual Show Winners

85 Entries

Best Fish In Show – sponsored by Pat Tosie  
Ed Millinger - female Sunset variatus

### Judges Award – Sponsored by Gary Lange

Diane Brown – Male Fundulopanchax gardneri nigerianus Misaje

### Reet Thomas Best Livebearer Award - sponsored by Rosetta Saputo

Ed Millinger - female Sunset variatus

### Ralph Wilhelm Outstanding Catfish Award

- sponsored by Distinctive Plumbing/Bruce Mayhew

Jim Miller - Synodontis eupterus

### Best Egglayer – sponsored by R&J Fish Food

Dave Rush Fundulus olivaceus

### People's Choice Award

Ryan Schuessler - Red Cap Oranda

### Best Junior Entry

Ryan Schuessler - Red Cap Oranda

### Name of Entry

### Entrant Name

### Place

### Class #1 Aquascaping

- sponsored by Jerry Jost

(All tanks in show were eligible for this class)

20 high Melanotaenia parva, Diamond Tetras

& Rosy barbs

Gary Lange

1st Place

Nano Cube Endler's Livebearers

& Laetacara dorsigerus

Diane Brown

2nd Place

Featherfin rainbowfish tank

Gary Lange

3rd Place

**Class #2 Domestic & Fancy Finned Egglayers****- sponsored by Jim Miller****4 Entries**

Koi Angelfish	Steve Hoffman	1st
Tanichthys albonubes - Long finned white clouds	Jim Miller	2nd
Long Finned Rosy Barbs - Judge a male	Gary Lange	3 <sup>rd</sup>

**Class #3 Guppies****- sponsored by Neko Pilarcik****6 Entries**

Female Guppy	Jim Miller	1st
Leopard Guppy	Rick Smith	2nd
Leopard Guppy	Rick Smith	3rd

**Class #4 Domestic & Fancy Finned Livebearers****- sponsored by Klaus Bertich****1 Entry**

Sunset Variatus	Ed Millinger	1 <sup>st</sup>
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**Class #5 Betta splendens****- sponsored by Jack Heller****4 Entries**

Red/Blue Male betta	Pat Tosie	1st
Male Betta	Shelly Horvath	2nd
Male Betta	Neko Pilarcik	3rd

**Class #6 Goldfish****- sponsored by Angela Hellweg****4 Entries**

Goldfish	Steve Hoffman	1st
Goldfish	Steve Hoffman	2nd
Red Cap Oranda	Ryan Schuessler	3rd

**Class #7 Wild Livebearers****- sponsored by Dave Rush****14 Entries**

Xiph. montezumae – Montezuma sword	Gary Lange	1st
Xiphophorus (species) Male	Ed Millinger	2nd
Xiphophorus xiphidium Rio Purificacion	Gary Lange	3rd

**Class #8 Cichlids****– New World****4 Entries**

Gymnogeophagus meridionalis	Ed Millinger	1st
Gymnogeophagus meridionalis	Ed Millinger	2nd
Thorichthys species "Blue Mixteco"	Diane Brown	3rd

**Class #9 Cichlids****– Old World - sponsored by Steve Edie****3****Entries**

Pseudotropheus crabro	Jim Miller	1st
Neolamprologus brichardi	Steve Hoffman	2nd
Electric Blue Johanni	Ed Millinger	3rd

**Class #10 Anabantoids****- sponsored by Ed Millinger****No Entries****Class #11 Characins****8 Entries**

Emperor Tetra	Ron Huck	1st
Arnoldichthys spilopterus		

African Red-eyed Tetra	Jim Miller	2nd	
Characin species	Jim Miller	3rd	
<b>Class #12 Cyprinids</b>			
- sponsored by Ron Huck			<b>2 Entries</b>
Barbus lateristriga	Jim Miller	1st	
Barbus lateristriga	Jim Miller	2nd	
<b>Class #13 Catfish – Armored Cats (Callichthyids)</b>			
- sponsored by Kathy Deutsch			<b>2 Entries</b>
Pygmy Corydora	Rick Smith	1st	
Corydoras pygmaeus	Gary Lange	2nd	
<b>Class #14 Catfish – All Others</b>			
- sponsored by Scott Bush			<b>7 Entries</b>
Synodontis eupterus	Jim Miller	1st	
Synodontis schoutedeni	Jim Miller	2nd	
Synodontis Species	Jim Miller	3rd	
<b>Class #15 Sharks and Loaches</b>			
- sponsored by Distinctive Plumbing Bruce Mayhew			<b>2 Entries</b>
Kulhi loach	Ed Millinger	1st	
Kulhi loach	Ed Millinger	2nd	
<b>Class #16 All Other Fish</b>			<b>9 Entries</b>
Fundulus olivaceus	Dave Rush	1st	
F. gardneri nigerianus Misaje Male	Diane Brown	2nd	
Iriatherina wernerii – featherfin rainbowfish	Gary Lange	3rd	
<b>Class #17 Aquatic Critters</b>			
- sponsored by Diane Brown			<b>1 Entry</b>
Red Crystal Shrimp Judge large red male	Gary Lange	1st	
<b>Class #18 True Aquatic Plants</b>			
- sponsored by Jerry Tellez			<b>6 Entries</b>
Java Fern Windelov variety	Gary Lange	1st	
Anubias barteri	Diane Brown	2nd	
Echinodorus Tenellus v narrow leaf	Diane Brown	3rd	
<b>Class #19 Photography</b>			
- sponsored by Steve Deutsch			<b>7 Entries</b>
Go-obo Falls Gudgeon			
Allomogurnda nesolepis	Gary Lange	1st	
Killifish	Diane Brown	2nd	
Lamprologus compressiceps	Gary Lange	3rd	
<b>Class #20 Fishy Things</b>			
- sponsored by John Van Asch			<b>2 Entries</b>
Gourd painted with fish	John Van Asch	1st	
"Cichlids" Album	John Van Asch	2nd	
<b>Class #21 White Elephant Collectible</b>			<b>No Entries</b>

# Trouble In River City (or) The Luck Of The Huck

by Ed Millinger

I once knew a man named Huck.  
It seems he had just run out of luck.  
His thirty gallon hex had developed a leak.  
The future of his fishkeeping looked bleak.  
If only it hadn't ruined his new wood floor,  
Maybe his wife wouldn't have shown him the door.

But living in the car wasn't so rough,  
He even squeezed in a 55 although getting  
Past the door handle was tough.  
Elissa, his daughter would occasionally drop by,  
She wanted to know if his emperors had any fry.

He wasn't gone long when his wife Jeanette let him back in,  
She realized that fishkeeping wasn't a sin.  
"Just do me a favor " she told Ron.  
Keep 'em downstairs or you'll really be gone!

# The Magic Tree (or) Kathy Hits The Jackpot

by Ed Millinger

Kathy and Steve, sitting in a tree  
F - I - S - H - I - N - G!  
First came a pleco, then came a cory,  
Then came Kathy with the rest of her story.  
She had this dream you see,  
That they lived in a magic tree.  
There was a river down below  
Where the fishing was never slow.  
It was full of catfish big and small,

You could say that Kathy had it all.  
But Steve began to wonder up in the fresh air.  
Isn't there a livebearer anywhere?  
A guppy, a sword or somewhere a platty,  
Anything but all these cats, they are driving me batty.  
Kathy said "now Steve don't you fret  
Why just the other day I saw a goodeid in the mouth of an egret."  
Steve replied, "That'll have to do for a starter,  
Now I'm going to go work on the Darter."

**R&J  
FISH  
FOOD**

**JIM  
314-638-1134**

# Summer Tubbin'

by John Sipes, GCAS

reprinted from May/June '03 *Fincinnati* of the Greater Cincinnati Aquarium Society

It all began for me in the spring of 1997 when I decided to take my fish room outside. I gathered up several plastic bins of all shapes and sizes tossed in some floating plants, waited a few days, and presto! My back deck was now an addition to my fish room. I had previously dug out a pond and was experimenting with livebearers, plants and various other fish, but the tubs were to be my most dedicated experiment yet. The previous year, the red wag swords and half-black blue guppies had thrived and spawned with little work on my part, so once again they were the first fishes to hit the tubs. A few weeks later I came across a huge pair of Snakeskin Gouramis that I just couldn't resist. So, when I took them home with no indoor tank ready, I decided that outdoors they would go. By this time I had several water hyacinths that were covering the pond, so I scooped a few out and threw them in with the newly purchased Gouramis. With 4 tubs in place, I was certain that my deck would be much more appealing, and I could keep more fish than I could if I only had them indoors.

Later, in late May-early June, I decided to add another 6 tubs to the deck, and why not? The swords and guppies had thousands of fry, and they all needed more room to grow. All the plants and fish were thriving with little to no work at all. I went weeks between feedings, only topping off the evaporated water. What more could you ask for? A 10-tub deck without the hassle of water changes. I think it was late in June when I remembered that pair of Gouramis. I hadn't even checked to see if they were even still alive in some time. I slowly moved a few of the hyacinths to the side, and promptly noticed thousands of little black bug looking things scattering into the roots. Then I caught sight of both Gouramis, and was pleased to see them. But what were the little black bugs? I went inside and found a clear glass jar filled it halfway with water and swiped the net through the tub to gather up some of the bugs to get a better look, and to my surprise they weren't bugs at all, but miniature Gouramis, exact replicas of the parents. I moved as many fry as I could catch into another tub nearby with thoughts of raising as many as I could. Later in July, I added some Zebra Danios to the fry tub, and checked on the Gouramis once again. They had given me another large brood of fry, with no place to move them. I decided they would have to stay with the parents for at least another few weeks. That same week I had sold tons of water hyacinth to other club members, and had no idea that I was supplying them with eggs from my Gouramis. Well two weeks later I decided to bring some of the Gourami fry indoors. While I was netting some, I noticed smaller fry about the size of a micro-worm with black backs mixed in with them. If the sun hadn't been shining into the water directly on them, I don't think I would have noticed them at all, but I in fact had hundreds of Zebra Danio fry swimming about in the tub.

Similar situations occurred with many of the fish in my tubs. If I hadn't have been paying very close attention each time I looked for fry, I think I would have missed seeing many of them. Keep in mind if you ever keep fish outdoors that many of the fish you have kept indoors without spawning success will spawn outside, and if you have never seen their fry you may not notice them unless you look hard, and net out any odd looking small things for closer inspection.

Other benefits to outdoor tubbin' are the quality of fish you raise. Sunlight and the abundance of live foods bring out the best colors and vitality fish. And, as long as you are getting regular rain, which here in Cincy is most of the time, there is little need for maintenance, like water changes. Aeration and filtering the water are best accomplished by stocking a few different types of aquatic plants in your tubs.

As for the selection of tubs to buy, I have found that the thicker taller tubs tend to work best for me in any color, the longer flimsy tubs tend to bow and crack after just a few weeks leading to dry tubs

full of dead plants and fish. The types of plants you should get depends on your taste, but any bog or pond plant will do the trick. If you are keeping egg scatters, then I would suggest some sort of floating plant with long roots like water hyacinth and water lettuce, these roots provide a good catch for the eggs and a safe heaven from the larger adults.

**Outdoor summer tubbin' time is my favorite time of the year, and each year I try to add something different to the mix in hope of spawning another fish that I have had no luck with indoors. Always remember to check the plants, and, if all else fails, move the plants to another empty tub if eggs are suspected to be present. Have a good season this year and I hope everyone is able to enjoy the wonderful addiction known as Summer Tubbin'!**

# HAP Report

Mike Hellweg

Member	Species	Common	Rep	Pts	Total
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## March '05

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

Jerry Jost	<i>Alternanthera reineckii roseaefolia</i>	Copperleaf Alternanthera	IB	20	390
Jerry Jost	<i>Ammania senegalensis</i>	Giant Ammania	IB	20	390
Jerry Jost	<i>Cryptocoryne wendtii Brown</i>		V	15	390
Ed Millinger	<i>Vallisneria spiralis Tiger</i>	Tiger Val	V	5	305

## April '05

Jerry Jost	540 points				
Jerry Jost	<i>Anubias barteri coffeefolia</i>	Coffee Leaf Anubias	V	15	540
Jerry Jost	<i>Blyxa aubertii</i>		IB	20	540
Jerry Jost	<i>Marsilea crenata</i>	Water Clover	V	15	540
Jerry Jost	<i>Myriophyllum matogrossense</i>	Southern Milfoil	V	10	540
Jerry Jost	<i>Nymphaea lotus green</i>	Green Tiger Lotus	V	20	540
Jerry Jost	<i>Proserpinaca palustris</i>	Mermaid Weed	V	15	540
Jerry Jost	<i>Proserpinaca palustris</i>	Mermaid Weed	IB	20	540
Jerry Jost	<i>Rotalla wallichii</i>		V	15	540
Jerry Jost	<i>Rotalla wallichii</i>		IB	20	540



# Mundane Help For the Fish Room

by Rick Borstein, GCCA

reprinted from May '99 *Cichlid Chatter* of the Greater Chicago Cichlid Association

These days, technology has invaded the fish room. Electronic heaters, exotic filtration systems and a wide array of foods and medications are available to the aquarist. However, it is often the more mundane tools that help us the most.

Take for example, the bucket. Could you keep fish without one? I have my own favorite. It's a Rubbermaid bucket that has wide pouring spout, comfortable handle, and holds about 2-1/2 gallons. It's tan, so it looks clean even if it isn't. I have several 5-gallon white buckets, too. They're useful, but they don't fit under the faucet of my utility sink very well and they are just too big to be used as often.

A recent find of mine is new kind of lid for 5-gallon buckets called a Gamma Seal. You snap a lid ring on the bucket, then use the included screw-in top with rubber seal. It's great for transporting fish because it is water tight, but easy to unscrew and net fish out. The screw lids are about six bucks and would be a great way to take fish to a show. I ordered mine from the Sportsman's Guide catalog at 800.888.3006.

Another mundane tool that I use daily is a turkey baster. I use it for feeding brine shrimp, removing eggs and fry from filters and cleaning up fry tanks. It's also fun to use as a "squirt gun" to drive away an over-protective cichlid when you're trying to snatch a slate full of eggs.

I keep a flashlight in my fish room. Most of my tanks are planted, so it can be pretty difficult to see if a spawn has taken place. Recently, I noticed that my *Neolamprologus gracilus* were behaving a bit differently. I couldn't see any activity, but had a hunch that they were getting ready to spawn. The next day I looked again and couldn't detect a thing. Time to grab the flashlight! With the help of the light, I was able to look through the thick forest of *Cryptocryne* to see a thick plaque of eggs deposited at the base of some driftwood. A couple of days later I used the flashlight again to find the wrigglers. Boring tool, but without it I wouldn't have those fry.

I have a 150-gallon tank with a wet/dry system. Wet/dry filters are great, but I was having a hard time keeping the pre-filter clean. Uneaten food (Doromin sticks and floating pellets) quickly clogged the foam pre-filter. My solution was a \$3.85 floating feeding ring. The foam keeps the ring afloat and my *Frontosa* haven't been able to dislodge it yet.

I like planted tanks and that means having adequate lighting. I use standard fluorescent shop lights stocked with Gro-Lite bulbs over each tank. The light is great for the plants, but is also very good at growing algae! I've tried a variety of algae scrapers, algae magnets, algae pads, but I haven't yet found anything as effective as a good old single-edged razor blades. I buy them in a 100-pack from a nearby True Value hardware store for about five bucks. I use a new blade each week when I do my tank maintenance. A minor concession to convenience is that I do keep around a couple of blade holders. These come in fluorescent colors which makes them much easier to find when you drop them in your tank. I always scrape the tank walls before I do my water changes. Once you drop the water level, it seems that the green stuff gets a lot harder to remove.

Old toothbrushes often find their way down to my fishroom. They still perform better than any expensive filter brush I've used, and you can't beat the price. For really small items, try a kid-size toothbrush—we have a lot of these around, too—you can clean some really tight places.

Sometimes little things can save you from having to think a lot. I usually do my water changes on Saturday mornings while trying to take care of a one year old, so I get easily distracted. I usually change about 30-50% water change on every tank. Each tank needs a different amount of dechlorinator and it's hard to remember how much to put in. For under a dollar, I purchased a Garden Measure at a local nursery. This small graduated plastic measure is marked off in both teaspoons and milliliters. You

will also find free graduated measures with kid's cough syrup and products like Nyquil. I used a permanent marker to write the gallon equivalents next to the teaspoons on the Garden Measure. Now that I measure everything exactly, I find that I use less and save money. A gallon of Novaqua is about \$30, so it pays to measure exactly.

I was talking to my wife Sharon the other day, and I remarked to her that I thought I had found every way there was to flood our basement floor when I do my water changes! I had spilled buckets of water, forgot to turn off the Python, left the plug in the sink and had it overflow and a variety of other idiotic methods. To Sharon, the glass is always half full and she was sure that there were lots more ways to turn my fishroom floor into a swimming pool.

Of course, she was right! I came home from a long business trip and looked into my 6-month-old, black-sealed 25-gallon aquarium and noticed that it was only halfway full of water. I was really tired and pulled out the Shopvac, broke down the tank, moved the fish, etc.

Spurred to action, I purchased a water alarm for about fifteen bucks. The tiny box is powered by a 9-volt battery, and when it detects water, it emits a piercing alarm. You will find them in the home improvement centers located near the sump pumps. If your home has a sump pump, believe me, you'll want more than one!

I like to feed my dwarf plecos (*Ancistrus* sp.) some vegetable matter every week or so. I tried a variety of veggie clips without much luck. I guess a dozen plecos and several cichlids attacking a half zucchini was too much to ask these products to withstand. I gave up on the store bought solution. Now, I rubber band the zucchini to a heavy piece of slate and put it that the tank. The fish like it and I now I don't have zucchini islands floating around my tanks.

Recently, I had the unenviable task of trying to remove a large *Geophagus* that was bullying my *Frontosas* in my 150. In my heavily landscaped tank, this was no easy task. After twenty fruitless minutes trying to coax the fish out of the rockwork, I got an idea. I grabbed a 36" piece of rigid one-eight inch plastic tubing, and blew it into cave where the fish was hiding. Success! Scared by the bubbles, he moved right out and I was able to catch him easily. Cost for the tubing? Under a dollar.

Sometimes the simplest solutions are both cheaper and better. So, look around your fish room and try to discover the mundane, but effective solution.

## Club Hopping

Steve Edie

July 21-24 – Ft Worth, TX: American Cichlid Association - 2005 Annual Convention

Sept 18 – Arlington Heights, IL: Greater Chicago Cichlid Association – All-Species Auction

Oct 23 - Arlington Heights, IL: Greater Chicago Cichlid Association – Swap Meet

Dec 4 - Arlington Heights, IL: Greater Chicago Cichlid Association – Swap Meet

## Member Classifieds

MASI Members can place a classified ad in the Darter for free. Ads may be up to 30 words in length. Send your ads to the editor.

Charles Harrison (314) 894-9761, [csharrison@inkmaker.net](mailto:csharrison@inkmaker.net) -

OTO Chlorine test kit, 4 ounces test solution, Detects traces of Chlorine and Chloramine - \$12.50

# The Computer Page

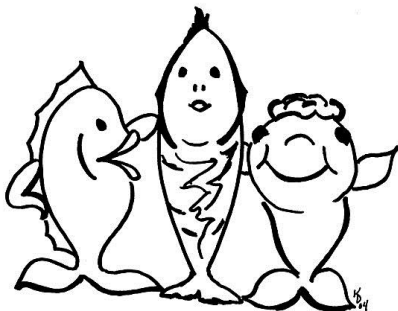
Steve Deutsch

MASI's official web page: [www.missouriaquariumsociety.org](http://www.missouriaquariumsociety.org)

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## Membership

Yearly membership in the Missouri Aquarium Society, Inc. is \$20 per calendar year. Membership includes the Darter subscription for the year, which is currently 6 issues. New memberships and renewals can be submitted at club functions such as meetings and auctions, or by contacting our membership chair, Kathy Deutsch at 314-741-0474, [fishfan@i1.net](mailto:fishfan@i1.net), or 9 Old Jamestown Ct. Florissant MO 63034

# Vieja synspilium - The “Quetzal Cichlid”

By Cory Koch

On the way home from work one afternoon I decided to stop by Beldts to “look” at the fish. When I came to the little cubby dedicated to Central and South American Cichlids something caught my eye. It was a tank of about 12 fish all about 3” in length all but two were rather drab looking with frayed fins and hiding in the upper corners of the tank, but the other two were absolutely gorgeous! They were both about the same size but the way they were colored up, digging in the gravel, and keeping the other fish in the corners I was pretty sure they were a male and female pairing up! The tag on the tank read “cichlasoma synspilium” I had never heard of them but that didn’t mean much, I asked the lady working the shop if she could hold the fish for me until the next day (I needed time for some quick research), she agreed and I went home to search out some info on these fish.

What I found was that the fish were actually *Vieja Synspilium*, a substrate spawner from Southern Mexico. I also learned that these fish were difficult to pair up and it was best to purchase a group and let them sort it out (Hmmm...Belts had already done that part for me!), and that these were going to be pretty big fish with females able to reach 12’ and males 14’!

Taking what I had learned and thinking of the colorful fish waiting for me at the fish store, I decided I could handle them and returned to Beldts the following afternoon to pick them up.

When I got the pair home I put them into a 29 gallon tank by themselves. I had put a couple of flowerpots and a large piece of driftwood into the tank. I had play sand for substrate. From what I had read I knew that these fish preferred temperatures in the low 70’s to 80’s so I set the heater at 74 degrees, the ph was about 8.5 and the tank was filtered using an emperor 280 with a very well established bio-wheel. Lighting was provided by a standard fluorescent bulb on a timer for twelve hours a day.

The pair acclimated well and started to color up by the following day. And what color! Both fish have a very maroon head that fades into a kind of aquamarine background color on the body but with shimmery yellow and red scales mixed in, there are a series of black spots that lead to almost an eye spot on the tail. The dorsal fin has lots of the yellow color with black spangling. It is hard to describe all the colors on these fish; I read that the local people of Belize and Guatemala call this the “Quetzal fish”, after an outlandishly colored local bird.

I fed them a variety of foods, which included New Life Spectrum pellets, live blackworms, and a frozen “homebrew” based on the European shrimp mix recipe for cichlids. The fish accept all of these meaty foods greedily and also enjoy “popped” green peas.

After about two and a half weeks I noticed the female digging in the sand around the base of the driftwood, she excavated down to the slate attached to the bottom of the wood to keep it in place. I also noticed that her ventrals and lower body looked a lot darker, almost black. Once she had the slate exposed and spotless she and the male engaged in some head butting and lip locking (very rough... I was concerned that I may need to separate them), then nothing happened! The Quetzals calmed down and began hiding behind the driftwood. I had given up on eggs altogether when a few days later I noticed the female was moving something from behind the driftwood to one of the over turned flowerpots .... wigglers! About a hundred of them! I was thrilled! The fish seemed happy also. I fed cyclopeze to the fry as soon as they started taking food, they eat like little pigs, and soon they had a distinct black lateral line running the length of the body. The adults were very good parents (attacking the glass whenever I tried to clean it for pictures) and the fry continued to grow well. I eventually moved the first batch (I ended up with about 30) into their own 29 gallon with some young ocellatus gold fry that I was growing out.

I made the mistake of adding the second batch in with the first and lost all of the younger fish. It has been about five months since the first batch of fry and the adults continue to grow, and to spawn about every 3-4 weeks. I have moved them to a larger 40 gallon breeder. The male is now about seven inches and the female is about five inches, and more colorful than ever. They are going into a 75 gallon next.

I have noticed that quetzals can be a bit skittish at times and very brazen others. The original 29 gallon tank I had them in was almost ground level, while the tank they currently reside in is about six feet off the floor. They are much calmer in the higher tank.

I have really enjoyed these fish and would recommend them to anyone looking for lots of personality, and wonderful color in a larger species.

## Service Points Tabulation

Ed Millinger

A points update from your points tabulator Ed Millinger follows. As a measure of what members contribute to the Missouri Aquarium Society points are awarded for service. Show points are awarded for monthly bowl show, the annual show and the super bowl. You may refer to your membership book for a breakdown of the specifics. Listed below are members with at least three points earned. Thanks for your service, your contributions make the club what it is.

	Service	Show		Service	Show
Katherine Armev	15		Mike Hellweg	55	
Mary Bates	3		Ron Huck	16	15
Jack Berhorst	34		Jerry Jost	15	
Michele Berhorst	8		Lawerence Kent	9	
Anna Marie Bertich	5		Gary Lange	61	75
Klaus Bertich	54		Micky Lee	10	
Roy Brandhorst	21		Jim Miller	11	88
Diane Brown	32	40	Ed Millinger	34	105
Bob Buckles	20		Dave Rush	12	17
Scott Bush	4		Rick Smith	7	32
Kathy Deutsch	35		Sam Storkson	3	
Steve Deutsch	25		Al Storms	3	
Steve Edie	33		Jim Thale	5	
Marlon Felman	9		Pat Tosie	29	15
Thomas Felman	4		John Van Asch	27	25
Maureen Green	5		Derek Walker	5	
Charles Harrison	32		Harold Walker	5	
Sue Harrison	7		Jim Yaekel	8	
Jack Heller	8		Rose Yaekel	21	
Angela Hellweg	21				

If you had a non-placing entry in the show you are due an extra 2 points. When recording this in time for the Darter I did not have all the entries, just those that placed. Only five entries will be credited to you, so if you placed four fish in the show and had three non-placing entries you would only receive credit for one non-placing entry. If you have any questions contact me [amazoneddy@aol.com](mailto:amazoneddy@aol.com).

# 'Spawning' Thorichthys sp. "Blue Mixteco"

by Diane Brown

When I got back into fishkeeping in 2001, I started with Endler's livebearers, who lived up to their nickname of "Endless livebearers." I later acquired some killies, and found that fry of *Fundulopanchax gardneri* appeared at irregular intervals in my planted tanks without any deliberate intervention on my part. While I enjoyed watching their courting behaviors, I decided I wanted to watch some real fish parenting—I wanted to try some cichlids. I started with a group of 8 *Etoplus maculatus*, the orange chromide, but despite my attempts to give them a well-planted brackish tank with plenty of cover and potential spawning sites, these gentle golden fish did nothing except go belly up after a year and a half, after what I suspect was an end-of-tank CO2 dump that barely distressed any of my other fish in tanks on the same CO2 system.

I wanted to try again, with small, mild-mannered strictly freshwater fish this time, and obtained a group of *Laetacara dorsigerus* fry. While they were still in a quarantine tank in the fall of 2003, Rusty Wessel came to a MASI meeting to talk about collecting Central American cichlids. I was attracted by the *Thorichthys* sp. "Blue mixteco", and after verifying that they did not grow larger than four inches, were relatively mild-mannered, and could be kept with plants, I bid on a bag of six fry...thinking all the while that I was nuts to get more cichlids when I had just gotten the dorsigers. But while the dorsigers have thrived, indeed, gotten quite large and plump, they have never attempted to spawn. The *Thorichthys*, on the other hand, have proven quite eager to spawn.

When I brought them home, the *Thorichthys* fry were about an inch long and very lively. They made themselves right at home in a 29G heavily planted tank and grew quickly. (Tank parameters: (T 78 degrees and up to mid-80s in the summer, pH neutral, CO2 injected, soft St. Louis tap water dechlorinated with thiosulfate alone.) Within 3 months of generous feeding with a variety of dried, frozen, and live food twice daily, one was about three times the size of the rest of them, and Big Fish remained the largest, most dominant fish in the tank thereafter.

One evening that next summer, when Big Fish was four inches long and the rest were about 3 inches long, I spotted Big Fish and one other paired up and guarding a patch of dozens to a couple of hundred translucent 1-2 mm eggs. The eggs were attached to the sheet of cork bulletin board material covering the back wall of the tank. (put there as a support for plants, to increase the plantable surface area of the tank, and happily appropriated as a spawning substrate by the *thorichthys*). The eggs gradually disappeared over the next 48hrs and no wigglers or fry were seen, despite faithful guarding of the spawning site by both parents, and frequent chases of the other fish in the tank (the other *thorichthys*, six zebra loaches, and a pair of *fundulopanchax gardneri*). I suspected the snails and loaches were getting at them at night. The loaches were evicted, but the snails remained. No further paired behavior was seen, and Big Fish seemed to chase the others around equally.

A month of two later, more eggs appeared, this time guarded only by Big Fish. I left the lights on 24/7 and the egg patch remained intact, but over the next three days they turned white and disappeared. After another pair of infertile spawns, I was suspected I might have only females. The females of this species all have black spots in their dorsal fins, and I saw those in all the *thorichthys* in the tank. I was depressed enough to calculate the odds of 6/6 fry being female: assuming a 50:50 sex distribution, you have 50:50 shot of a pair with two fry, 75:25 with three, 87.5:12.5 for four, 93.75:6.25 for five, and 96.875:3.125 for six. And I heard rumors that other people raising these fish were seeing male-skewed sex ratios, making the odds further stacked against getting a batch of six females.

However, when trimming and cleaning the tank for the MASI fish room tour in September, I saw that the smallest fish in the tank didn't seem to have the dorsal spots. His fins were shredded, he had one damaged eye, and I could hardly blame him for staying so well hidden I'd not realized he was there.

Any time he came out he was chased mercilessly by whichever female was nearest. I removed him to an empty 29G tank where his only companions were a pair of Endlers, and he grew and his fins filled out rapidly. After a few months, he was as big as Big Fish, and I was ready to reintroduce him to the girls.

I first put a divider in his tank and put Big Fish on the other side. There was little flaring of gills or rushing at the divider, so I planned to remove it the next evening when I did my water changes—so I could watch closely and return it in case of trouble. But they didn't wait for me; the next day there were a batch of eggs laid on the cork wall right next to the divider, Big Fish was guarding, and the male was digging troughs all over his side of the tank. These eggs were again infertile, however, and were gone by the fourth day. I waited a couple of days, removed the barrier, and watched carefully. Within an hour they'd figured out the barrier was gone, and the male was chasing Big Fish aggressively around the tank.

I did not want to return the big female to her original tank, leaving the male alone again—he'd shown he was ready to spawn with somebody--so I put him back in the other tank instead, with the four smaller females. I hoped that forcing him to be the newcomer to an established tank, and having four others in that tank, would dilute his aggression towards any one fish.

By the next morning, he had already paired off with the smallest female in the tank. Emboldened by having the male at her back she proceeded to establish herself as the boss. The pair injured one of the others badly enough that I removed her to a hospital tank for a few days, and over the next two days I moved the remaining females out to share the second tank with the big female (they since found a new home, where Big Fish has continued to lay infertile spawns).

The pair were displaying to each other, swimming parallel with gills flaring, bright red throats flashing, black vertical stripes darkened, and their blue spots and fin stripes were sparkingly brilliant. They'd also do the same thing when head to tail, but never head to head in an aggressive way, and never chasing one after the other. And after there were no other fish left to chase (they essentially ignore the pair of *fundulopanchax gardneri* who share the tank, who are smart enough to stay away from the bigger cichlids without prompting), the pair spent most of their time together. About four days after they paired up, I came home to find the female guarding eggs.

She'd laid as many or more eggs than the much larger female had a week before. The female positioned herself head down in front of them and fanned them almost continuously for the next two days. The male spent most of his time watching from the middle of a big clump of java fern, and chasing the *gardneri* on the rare occasions when they ventured out of their clump of java fern. Again, I left the lights on 24/7.

The day after spawning the eggs looked a little different--they were developing. After so many batches of infertile, unchanging eggs (well, at least until they turned white and fungused!) even this little difference was exciting. The next morning I was looking closely at the tank while feeding and saw a tiny fish swimming, but then I looked again at the unhatched eggs, and realized I was looking at a little *gardneri* that had managed to hatch and grow up while the tank was nearly empty and the larger fish were otherwise preoccupied.

On the evening of the third day I found wigglers, which had been moved a few inches over into a clump of java fern rootlets. They still looked more like eggs than fish, with bodies like ghostly tails on the eggs. The female seemed to spend a lot of time going from the gravel to the rootlets, perhaps picking up fallen fry and moving them back up to the roots. The male took turns guarding while the female fed, and rearranged the aquascaping when she was on duty—digging pits, uprooting plants, and resisting my occasional attempts to replant and restore order.

By day four after hatching they were genuine wigglers--wriggling like crazy on their strands of roots. And the male began to take a more active role--no longer hiding out in the shadows of the java fern or digging puts, but spending more time with the female and the wigglers. And he came up to the

glass—gills flaring and bright red throat puffed out--to challenge me when I first walked into the room. That evening there were fewer wigglers visible, and the next day there were none.

The female continued to guard the site for another day before giving up. She and the male continued to display to each other, however, and 10 days after the first spawn there was a new batch of eggs at the original site, and the female was back on guard. The male would greedily eat when I fed the *gardneri* at the other end of the tank. The female, however, was so determined not to eat that a wiggly piece of fresh redworm dropped carefully right in front her of was not eaten, but instead picked up and spit out a distance away, presumably to keep a potential threat from her eggs. That's dedication!

The wigglers hatched again on the third day after laying. By the third day after hatching they looked about equal parts fish and yolk sac. The female was now back to eating; she and the male took turn foraging on the other side of the tank where I am dropped bloodworms and grindals. The parents' cooperation seemed much smoother this time around, and this time the group of wigglers wasn't visibly shrinking each day. I placed a sponge over the filter intake and kept it there until the fry were about 1 cm long.

I was taking pictures of the brood daily, and just after one photo session, when I went back to admire the wigglers again, they were GONE. Every last one was missing. The female was still brooding in the same place, the male was hiding behind the java fern, the *gardneri* were nowhere to be seen. I looked closely at the gravel pit in front of the female, no wigglers. Then I saw a collection of mulm just at the base of the tank wall, right below the spot where they'd been hung in the roots, and realized the mulm was moving and had eyes--it was the wigglers. The female had moved them off the cork wall. And they remained there for the next two days.

Naturally they waited until I left town for the weekend before becoming free-swimming. My caretaker fed the adults but the fry were left to graze on infusoria until I returned. The parents traveled the perimeter of the cloud of fry to grab the stray fry, often with a mouthful of gravel and debris, carry it back to the main group, and spit out the fry where they belong. They were kept quite busy doing this, and seemed to have thoroughly intimidated the *gardneri* that shared the tank--I didn't see them stray below the top inch of the tank on the far side from where the fry were headquartered. The fry, now about 5mm long, eagerly accepted freeze-dried cyclop-eeze or tetra fry bites powder each morning and brine shrimp nauplii and microworms each evening. A month after spawning, the 1 cm fry were taking small grindal worms, crushed flake food, and Hikari micro pellets in addition to the cyclop-eeze and brine nauplii.

About six weeks after spawning, the adults gradually stopped overtly guarding the fry, and spent more time in hiding. I don't know whether they were spawning again (but not in the usual place) or just trying to find some peace and quiet, but they were still displaying to each other when they did come out. And after a week or ten days of that, the male began to chase the female aggressively—no more parallel displays—and I removed her from the tank to prevent injury. He seemed to ignore the fry, but I suspected that the problem may have been overcrowding, as the fry, now 1 1/2-2 1/2 cm long, quite filled the tank. They were still a little small, yet, to sex out clearly, as only a few of the largest were starting to show a shadow of a possible female dorsal marking.

I will reintroduce the female after the fry are removed for BAP and auction, and hope for another round of lively and entertaining parenting from these eager parents. I highly recommend these lovely fish to anyone who wants to enjoy typical cichlid spawning behavior without committing to a large tank. And unlike the chromides and dorsigers, who seemed to prefer hiding to spawning, these fish were so eager to spawn they'd do it repeatedly without a partner. While I did have to mix and match their groups a few times, I was able to watch them spawn and raise the fry in plain sight, in my living room, allowing me and any guests to track every step of the process. What more could a beginning cichlidist ask for?

(a blow-by-blow account with photos is at <http://www.well.com/user/debunix/fish/fishIndex.html>, under "Thorichthys spawning" and following pages.)



# Breeding the Beckford Pencilfish

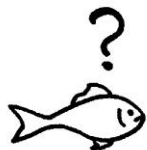
by Bill Flowers

reprinted from April '03 *Fancy Fins* of the Circle City Aquarium Club

I have always been fascinated with the smaller fish in the aquarium trade. This includes the tetras, barbs, and *Rasboras*. I especially like the pencilfish. There are nine different species of pencilfish and they only show up sporadically in the pet shops. Probably the most common is the Beckford Pencilfish (*Nannostomus beckfordi*). The Beckford hails from the Amazon River basin and likes soft, slightly acid water. Their temperature range is normally 74-80 degrees Fahrenheit. The fish can tolerate a wider range of temperature, hardness, and acidity but show their best colors if they are kept within their normal range.

I have tried to breed these fish in the past with very little success. If I got any fry they were usually dead in a day or two. This time I decided to try a different approach. I normally would have put the parents in a 5-gallon tank and keep them well fed hoping they wouldn't eat their eggs or fry. This time I decided to separate the sexes and feed them twice a day with frozen brine shrimp, frozen bloodworms, and live daphnia.

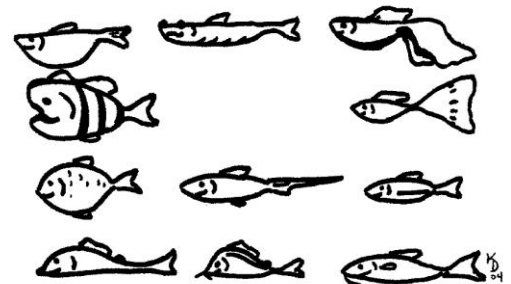
I setup a 5-gallon tank with rainwater and about 1/2 cup of well water. My rainwater is normally 6.4-6.8 but with no buffering capacity. By adding the well water I have given it some buffering capacity. I divided the tank in half with a piece of glass and put one male on one side and two females on the other. The temperature was kept at 76 degrees and the tank covered. I did 20% water changes every other day. I also had a clump of Java moss on either side of the divider. After two weeks I noticed the female were getting fatter and the male was starting to color up. On a Thursday night I decided to put them together after the lights were out. I removed the divider from the tank and left the fish alone. I figured that they might spawn in the early morning and I could watch them. Well they weren't ready in the morning; either that or they didn't like an audience, I left them in the tank for the next three days with no sign of any courtship. I couldn't figure out what was wrong. I had done the water changes and raised the temperature to 80 degrees with no apparent effect. I decided to leave them alone and see what happens, besides that I had fry from my Albino Kribensis again. Every day I would check their tank with no change seen. One morning I came home and noticed that the females were thinner. I immediately removed the parents and decided to wait. I hoped they hadn't eaten all the eggs. After three days I still could not see any fry, but figured that they could be hiding in the Java moss. After six days I shined a bright light into the tank and noticed movement in the bottom of the tank. I counted six fry. This is where I would normally lose the fry. I decided that wasn't going to happen this time. I lowered the water level to only half the tank and started to load the tank with vinegar eels. Apparently this worked because after a week I could see the fry swimming in the middle of the tank. I now counted twelve fry swimming. After two weeks I started to add some microworms to the tank for the ones that were growing a little faster. I felt that I finally had a successful breeding.



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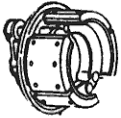
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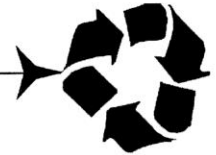
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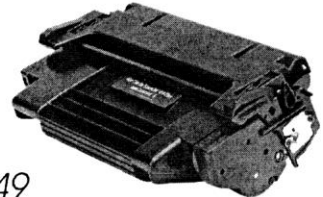
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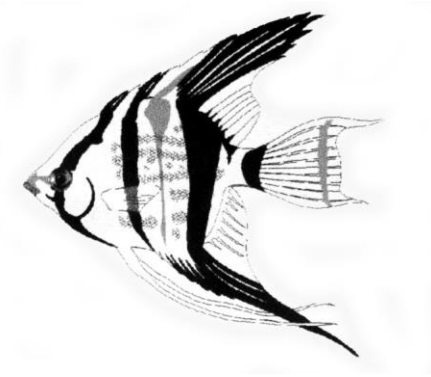
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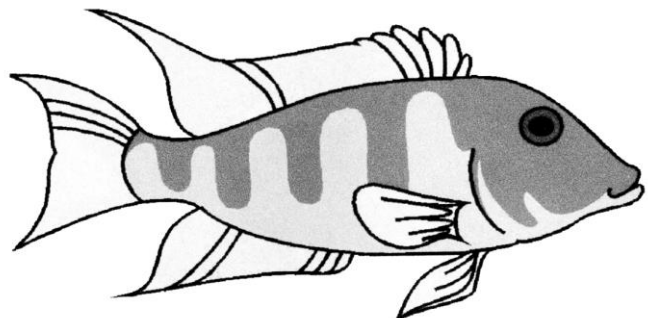
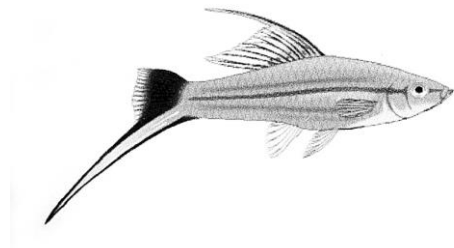
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