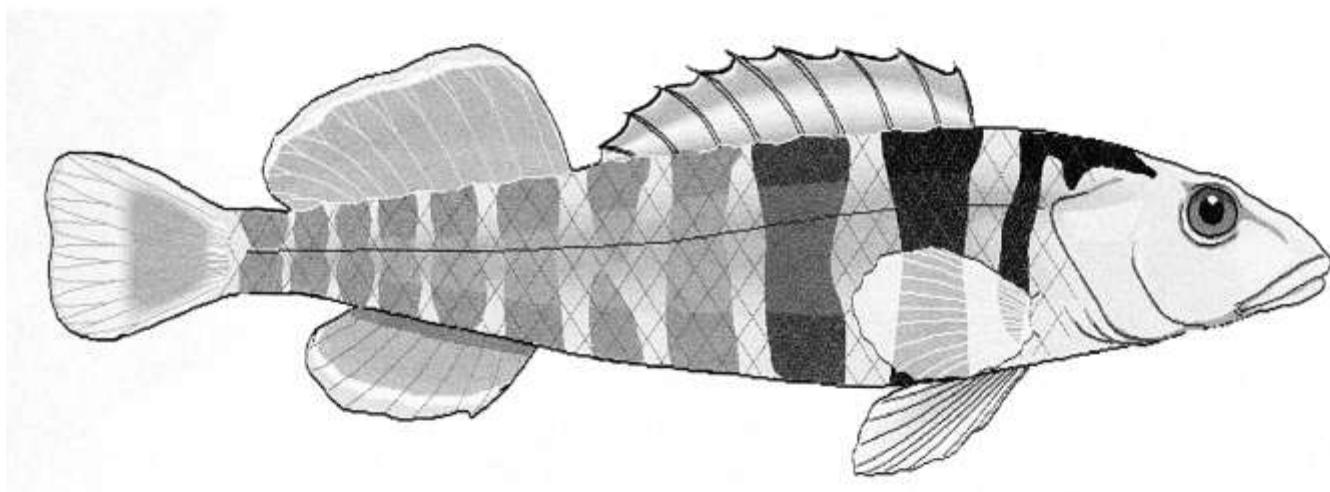


The Darter

January - February 2011



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St. Louis, Missouri

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MASI's official web page: www.missouriaquariumsociety.com
 Join the all-new MASI FishHeads Forum. See web page for instructions.

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Places to Be / Things to See

THURSDAY February 17, 2011

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

SUNDAY February 20, 2011

Auction @ Gardenville Masonic Hall

SATURDAY February 26, 2011

Executive Council, 7:30 PM hosted by Dave and Laura Wagner

THURSDAY March 17, 2011

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

SATURDAY April 2, 2011

Executive Council, 7:30 PM hosted by Cory Koch

THURSDAY April 21, 2011

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

SATURDAY April 30, 2011

Workshop @ Gardenville Masonic Hall

SUNDAY May 1, 2011

Auction @ Gardenville Masonic Hall

THURSDAY May 19, 2011

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

SUNDAY August 14, 2011

Auction @ Gardenville Masonic Hall

SUNDAY November 13, 2011

Auction @ Gardenville Masonic Hall

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 Ron Huck, our membership chair.

So Sez the Prez

By Steve Edie

Just a brief Presidential message this time. Overall all, it was a good year for MASi; we had several successful events (show, auctions, picnic, Christmas party etc.) and some very good monthly programs. Our membership numbers and finances remain healthy, something that can't be said for many others clubs. Meeting attendance has been good, indicating that folks still enjoy this. Our last two auctions weren't as successful as some in the recent past, likely influenced by the economy. We've had several changes in leadership and committees, and aside from an expected learning curve, we're coming along. Thanks to those who are currently serving and to those who have served in the past. Remember that we are all volunteers. This year several of our members lost loved ones and had to rebalance some of our priorities.

As we look forward to 2011, I hope we can all enjoy good health, both within our families and our fishtanks. We have a lot of activities planned, and hope that all can participate and enjoy them. And as always, find the time to do a water change; make a fish smile.

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Editor's Notes

Steve Deutsch

We've made it through another year of the Darter. It has been a busy year for me, and sometimes it shows. Some of you have needed to be patient with the errors and I appreciate it. I'll keep trying to make fewer.

Many thanks to all the workers who print, assemble, and mail the Darter. Charles and Gary do a great job as printer and mailman (especially when I get this done late). There are always plenty of hands to collate, staple, and address. I couldn't do this otherwise.

Especially thanks to the members of MASi for continuing to provide the articles that make the Darter what it is. As always, keep them coming.

Once this goes to print my next job is gathering all of last year's articles to send for judging for the Ralph Wilhelm publication award. Past winners include Lawrence Kent, Steve Edie, and Tony McMillan. We will find out who joins them at the annual banquet.

Deadlines for the remainder of the year are February 15, April 5, June 15, August 15, October 15, and December 15

Fish Stories....

By Tony McMillan

The Mosquito fish worth their weight in Gold ... or put the @#\$%^&* fish in the @#\$%^&* pond!

Time is money the old axiom goes. No matter how cheap the materials one buys for any given project are, if things are not accomplished in a timely and efficient manner, the time spent will outweigh the money saved by purchasing things cheaply. This holds true also in the tropical fish hobby. Sometimes you buy a fish on sale, get it home to find it has a sickness that effects the other fish you already own and you have to treat the tank. Or you get a for sale fish home to discover its not the same temperament as the other fish in your community tank and all hell breaks loose. If only the events of this stupefying tale I am about tell could have been that simple.

Let me state unequivocally: The events that are to be portrayed in the following story are absolutely true, some identities have been changed to protect the innocent .

The following account occurred between a friend and I two summers ago, and it is a situation that those of you who worked in the retail side of the aquarium trade are all too familiar. It is of the relationship between the advanced hobbyist and the novice; the novice that doesn't always listen.

The fish in question in this relationship is none other than *Gambusia affinis*, the common Mosquito Fish, which retail for about 20 cents apiece. Or, being they are native fish, can be seined or dipnetted for free. Taking into consideration the time, sweat, toil, effort and gasoline involved, the Mosquito Fish in this story are literally worth their weight in ounces compared to gold. All because as a bartender friend of mine succinctly put it - somebody wouldn't put the @#\$%^&* fish in the @#\$%^&* pond.

It all started back in the spring of '08. Rejoining MASI after a long absence I was getting ready to make a big splash into the world of outdoor tubbing. I was researching which species of plants and fish are good choices for outdoor gardening. I came across *Gambusia affinis*, the common Mosquito fish. They can survive the winter in this area and are good for mosquito control in the tubs and water gardens. I had kept them as a teenager with a Red Eared Slider in my first aquarium. Being livebearers, I looked forward to adding their points to my BAP list.

It is at this point in the story I need to introduce Nick. Nick is not his real name.

As young man, Nick literally left the family farm and traveled out west to L.A. and become involved in the music industry. He became a successful promoter for acts like The Bangles and The Dixie Dregs, and his record label handled the Airplane soundtrack. We will call him Nick because during his stint in L.A. he attended a party at the house of Nick Gilder, the one hit wonder who had the hit Hot Child in the City. Later in life he returned home to take over the family farm, and that is where I came to know him.

Besides conventional farming Nick has devoted much of his time and property to things like solar, wind and alternative power. He also has many art and décor projects going on simultaneously. He has many eco - friendly and green projects going on involving recycling and mulching. He has labeled his farm Critical Research and Plantation, otherwise it goes by the pseudonym of C.R.A.P.

Nick and I both frequent a local pub that has a 2:00 a.m. liquor license. He was recounting to me one late night his interest of all things green and eco - friendly and that he had seen a program on Larry Rice's channel about raising Tilapia and growing vegetables in an enclosed system. He knew I would be interested as he was aware of my life long involvement in the tropical fish hobby. It was thus I explained to him that my current project and next step in the hobby was to cultivate aquatic plants outdoors in tubs and that I was checking the local retailers but was unable to find any Mosquito Fish.

Nicks demeanor perked up after I explained to him the benefits of having Gambusia. He explained to me that on his farm are three bodies of water which we shall refer to here as the "lake", the "pond", and the "swamp". Both the pond and the swamp are temporary bodies of water, and he was worried about these contributing to mosquito problems with all the rain we had in 08.

Nick expressed an interest in breeding mosquito fish, and I explained its like breeding guppies and other poeciliids, since they're livebearers it's a given that they'll reproduce. He then inquired about their price. I told him that, depending on the retailer, between a dime and a quarter a piece. He then handed me a five dollar bill and told me to purchase ten fish for him next time I came across them. An inner voice cautioned me against this "Isn't Nick notorious for not completing projects he starts?" I thought to myself. Reluctantly I accepted the five dollar bill.

It was getting into late May and having crossed the Mother's Day threshold I was becoming anxious about starting my outdoor gardening projects. That and Nicks five dollar bill was burning a hole in my pocket. I checked every retailer in metro-east, St. Louis city and St. Louis county and kept coming up empty handed regarding the availability of Gambusia. So I decided to cast my dragnet wider into St. Charles county.

On an unseasonably hot late May afternoon I found a retailer who had Gambusia in stock. They were outdoors stocked by the hundreds in a 50 gal. wine vat that reeked of ammonia. There were scores of dead floaters fouling the water. I was not happy with what I saw, but I had driven all the way out to St. Charles when gas had just reached over four dollars a gallon. And Nicks five dollars was still burning that hole in my pocket. Against my better judgment I ordered ten for Nick and eight for myself.

The problem was I was overconfident. Even though the fish didn't look that great, I reasoned once I got them out of that ammonia filled vat I could get them into fresh water and nurse them quickly to good health. I thought wrong. One seventy mile trip home with a quick pit stop later disaster struck. Of the original eighteen fish, only three survived the trip home. Two of those died the next day.

Dejected I relayed the bad news to Nick. I would deliver the surviving fish (which was a gravid female) to him if it survived another week. It was not economically feasible to spend another fifteen dollars in gas to get the refund for four dollars and change worth of fish. I told him we would just have to wait to find another source of Mosquito fish. Little did I know that source would almost literally jump into my wading boots in the next few days.

Memorial Day weekend my father and I went fishing at the strip mines in New Athens.

The wading boots I had on came in handy as there was a thicket of Hornwort separating me from a bed of spawning Bass and Bluegill. I waded out knee high into the lake and made several successful casts

when I discovered that several Gambusia were swimming around my legs feeding on microorganisms that I had stirred up wading through the Hornwort! I found a natural source of Mosquito fish!

The next weekend I delivered the surviving Mosquito fish to Nick at the local pub. I also delivered the good news about the natural source of Mosquito fish near my home. When I handed the fish over I showed Nick the gravid spot and explained that since females store sperm they give birth every three to four weeks. I cautioned him against delay in placing her in the pond (or whatever setup he was going to use) as the female Gambusia are very carnivorous and try to devour their own young upon giving birth.

The following week it was once again last call at the local watering hole. I ran into Nick and inquired how the lone surviving St. Charles Gambusia was doing. He explained he had it in a five gallon bucket outside and he was changing half the water every couple of days to counter any build up ammonia. Good, I thought to myself, Nick at least understands the Nitrogen cycle. In the short term he was okay I told him. Long term, I cautioned, if she gives birth the young are going to have nowhere to hide to escape predation from their mother in a bare five gallon bucket. And if he does manage to catch her in time and separate her, a five gallon bucket is not a suitable long term storage place for a growing population of fifteen to thirty juveniles. If he wants to have any fish for release into the pond or the swamp, he is going to have to act soon. Or simply put the fish into the pond.

The following week I ran into Nick again at the local pub. I informed I was preparing to head to New Athens to go dip netting for some Mosquito fish as I had started my first aquatic tub with Water Lettuce and stocked it with Gold Dust Mollies. I asked how his aquatic charge was doing. He explained that she was still doing fine in the five gallon bucket and that he was still doing water changes. The hold up he said was he was designing some sort of breeding net or fish trap for his pond to place either her or the juveniles in. Plus a thousand other green projects he had going on at the farm and other personal issues. If that was the case I urged him to act fast as she would give birth any day now, suggesting he should maybe put the fish in the pond as Mosquito season was upon us.

So I found myself on the day of the Summer Solstice heading to the strip mines near New Athens. It also happened to be the hottest day of '08. I waded out into the Hornwort about 7:30 p.m. but was having trouble finding any fish. It was simply too hot. Finally, at about 8:45 p.m. (45 minutes before the park closed), the sun dipped below the horizon and the Mosquito fish came out hunting all around my legs. I quickly netted seven specimens, hauled my sweat drenched self out the lake, and placed them in my bucket. I was back in business!

When I got home I placed two gravid females in a ten gallon tank loaded with Java Moss. I took the other male and four females to the pub to give to Nick to make up for the ones that had died. I asked how the lone female was doing. He replied she was still in the bucket. I gave him the other five fish to fulfill any financial obligation concerning the five dollars. I gave them with the caution that although he had gotten away with keeping a single fish in a five gallon bucket for several weeks, he would be unable to raise six fish in such a manner. I urged him to move forward with his plans on a breeding system, or simply put the fish in the pond.

I must step back and relate, that when I first told this story to a mutual acquaintance of ours named the Swede, that Swede, who knows Nick all too well, looked at me in dismay when I got to this point and exclaimed, why didn't he just put the @#\$%^&* fish in the @#\$%^&* pond? I wish I had answer for that. Nick just was too busy and had too many irons in the fire. We all have. But time is still money. At which point you simply put the @#\$%^&* fish in the @#\$%^&* pond. It is at this point that the story gets really strange.

Another week went by, and I made another weekend sojourn to the local pub. I ran into Nick and asked how the now six Mosquito fish were doing. Once again I heard the same bad news. They are doing okay in the five gallon bucket. He was still doing partial water changes, which was good, I told him. I again cautioned that he was not going to be able to raise six fish in a five gallon bucket very long. Something would go wrong sooner or later, and from experience I would say sooner. Maybe it was time to put the fish into pond, I suggested.

The Fourth of July holiday was now here, and the owner of the local pub we frequent puts on an impressive fireworks show. I ran into Nick again. "How are the fish?" I asked, fearing the same answer I've heard all last month. He replied they were doing fine in the five gallon bucket still, but he had a question. He had not fed the fish the whole time he had been keeping them up to the current week, and was concerned about that. I told him they had probably been living off Mosquito larvae the whole time. He then told me that to be on the safe side he fed them some cat food, and wondered if that was okay.

Wow! That came out of left field. Cat food? I told Nick that I had heard of only one instance in my entire twenty years as an aquarist of someone feeding other pet foods to tropical fish. Someone wrote in to TFH asking if it was okay that they were feeding their Oscar 'Ol Roy dog food. The advice from TFH was the same that I was now giving to Nick. The cat food was going to foul the water and kill the fish, so that must be stopped immediately and never repeated. As I matter of fact, I said that the fish should be moved immediately to wherever he planning on keeping them, or maybe he should just put the @#\$%^&* fish in the @#\$%^&* pond.

Now I never really said the F word, those were Swede's words. But I must admit I did think it by this time. So another weekend last call, another inquiry. How are the fish? Still in the five gallon bucket. Another question for me. One of the Mosquito fish has developed white lips all of a sudden, what does that mean? It means the water was fouled from feeding the fish cat food and now they are developing fungus. I strongly recommended separating this fish from all the others and removing all of them from the five gallon bucket. Better yet - put the @#\$%^&* fish in the @#\$%^&* pond!

At this point I thought to myself "why should he start listening to me now, when he hasn't listened to a single word I said up to this point?". What is surprising is Nick actually did listen - well sort of. Another week went by and I learned Nick actually did separate the fish. Only after five of them died. He removed the lone surviving Mosquito fish and placed it in a 100 gallon livestock trough in his barn.

"You mean you had a 100 gallon container filled with water all this time?" I thought to myself. Of course, that's where he has been getting all the water from to do the water changes in the five gallon bucket. OMG! If you're not going to put the @#\$%^&* fish in the @#\$%^&* pond, why not put them in the 100 gallon container instead of the five gallon bucket in the first place!

Of course I am simply too nice to say any of this out loud... until now. Another week went by. How is this lone surviving Mosquito fish doing? She's doing alright, seems happy swimming around the 100 gallon container. What are the plans for the pond? Nick says he's been unable to assemble the breeding trap. Boy, the mosquito's at the pond don't know how lucky they've been this summer.

Another week, this time filled with torrential rain from the remnants of a Gulf Coast hurricane. And another last call at the pub. How's the mosquito fish doing? Bad news - she disappeared. With all the rain we had the trough overflowed and the Gambusia escaped. So she is somewhere in the local watershed. Hell, she may finally be in the @#\$%^&* pond!

So you are beginning to see that with our axiom that time is money, these mosquito fish are very expensive indeed. All this time and effort, and there is nothing to show for it. But hold on to your seats - this story is about to get really strange.

All of this now brings us up to early August. I had two female Mosquito fish I had kept for myself. They finally gave birth! I had some sixteen fry and was looking forward to receiving my BAP points in 90 days. But what about the adults? I recalled the events of the summer up to this point. I felt bad, but if I gave these two fish to Nick would the results be any different? The reality was almost all of my tanks had juvenile fish I didn't want being eaten, so I had to give up the adults. I bagged up the two fish and headed to the pub.

I delivered the fish to Nick and he was very grateful. But since the definition of insanity is doing the same thing over and over again but expecting different results, I must be insane. For this story ends in a way I could of never predicted.

I went down to the pub for my weekly Mosquito fish update. The last two Mosquito fish I gave Nick were doing well in the 100 gallon trough. At least they weren't in a five gallon bucket. Why weren't they in the pond yet? Nick was still working on the trap for the pond to separate the mothers from their fry.

Which brings us up to Labor Day weekend. Another stop at the pub and a conversation with Nick. The fish still were not in the pond, but at least they were not in a five gallon bucket. He was still working on making a trap. That was fine I said but cautioned this is time of the year its starting to get cooler. Even though Mosquito fish are native to this area, this is the northernmost extent of their range. In a way they hibernate I explained, over wintering by burying themselves in mulm till it gets warmer. Because of this, you are still going to need to put @#\$%^&* fish in the @#\$%^&* pond.

Another week went by, despite my protestations no fish in the pond. Yet another week, still no fish in the pond. Too many other projects and irons in the fire. One of these projects involved disassembling a recently salvaged old washing machine. That's fine I said, but we are getting near October, and the Gambusia won't be able to over winter in bare 100 gallon trough. I again recommended putting the @#\$%^&* fish in the @#\$%^&* pond.

Although I didn't know it yet, this next trip for a Gambusia update would be my last.

Made it to the pub for last call. Nick was there as usual, excitedly proclaiming that he had finally put the fish in the pond! And here is how he did it!

Remember the salvaged washing machine? Nick removed the colander like tub from inside of it. This would become the breeding trap in the pond. The parents would be placed inside the tub, and the young would swim out the holes in the tub to freedom.

But the tub was way too heavy to lug out to the pond. So Nick fired up the Bulldozer and put the washing machine tub in the scoop of the bulldozer. But wait -that's too easy, for the bulldozer might get stuck in the muck of the pond. So to solve that problem he put on hip waders, wading out to the middle of the pond to place old wooden pallets as a platform to drive the bulldozer on so it wouldn't get stuck in the mud.

So Nick drove the bulldozer with the washing machine tub in its scoop to the pond. He drove over the pallets he had placed in the pond to prevent the dozer from getting stuck. He then removed the tub from the scoop, hauled it to the middle of the pond, and placed the two, two!, Mosquito fish inside the tub. That is a lot of work for two fish that cost twenty five cents apiece!

I eventually earned my BAP points. I had thirteen fry left, which I donated eight, and sold the other five at auction for five dollars. Five dollars for five Mosquito fish? That's a dollar apiece for a fish

that retails at twenty five cents apiece! But we know now that time is money, and the sweat, toil, work, and gas money spent on these mosquito fish means they were literally worth their weight in gold.

Epiloque: This past summer I made it up to Nicks farm with the intention of dip netting to judge the status of the Mosquito fish in the pond. The pond was drying up and looked horrible. Not only that a neighboring farmer used way too much fertilizer on his crops and the runoff ended up fertilizing the duckweed in the pond. I was only able to dipnet duckweed and tadpoles in various stages of development. No sign of Gambusia. I will say this: this pond had the largest concentration of Bullfrogs I had ever seen in entire life. But alas, no fish.

From The Fish Room

By Ed Millinger

If you have never tried Tetrmin Tropical Crisps I highly recommend them. All my fish, including wild caught love them. The fish attack them as soon as they hit the water. Even though they are not real big even large fish enjoy them and they can be crumbled for the smaller fish.

The idea of using dither fish has always fascinated me. By keeping small fast moving fish with shy fish draws them out from always hiding. I recently tried to buy some altum angels but my source said they were not acclimating well so instead I purchased other fish. Among those were Geophagus albios. They top out at about eight inches, I bought five that were about an inch and a half long. About two weeks later I found someone who had medium sized altums and bought six. I put them in with the new geos and instead of dither fish the geos became competitors. Now all eleven anxiously await feeding time. I hadn't planned it this way but it works well. The altums quickly realized that if they didn't get involved they would be left out.

As Steve mentioned in the last issue we are a volunteer organization. As points tabulator without giving too much away I can tell you that we have the most competitive race for service member of the year ever. We have had close races before but never one with so many vying for the title. We are going to wind up with five people having earned over 100 points! That's really something and is a testament to the great members we have.

Remember : It's a hobby not a job.

2010 HAP Year End Totals

<u>Participant</u>	<u>Points this year</u>	<u>Submissions</u>	<u>Total Points</u>	<u>Total Species</u>	<u>Indoor Bloom</u>	<u>Outdoor Bloom</u>	<u>Seed</u>	<u>Rank</u>	<u>Award Status</u>
		<u>2010</u>							
Andy Walker	55	5	265	19	7	0	0		
Brian Woodrick	25	2	25	2	0	0	0		
Charles Harrison	10	2	750	60	11	1	3	Grand Master	Needs Articles or Program
Derek Walker	215	23	2980	236	19	16	13	Ultimate Grand Master	Needs 20 points for Exalted Grand Master
Gary Lange	50	3	1215	104	6	8	0	Senior	Needs 1 seed for Master, 2 seed & articles or program for Grand Master
Harold Walker	165	11	1210	95	10	0	5	Grand Master	
Jerry Jost	5	1	1620	103	22	0	2	Advanced Grand Master	
Kurt Zahringer	25	3	45	8	0	0	0		
Marc & Kathy Daly	45	4	330	33	3	6	0	Senior	Need 1 seed for Master
Marlon Felman	45	6	110	15	2	3	1	Advanced	To Be Presented
Mike Hellweg	185	16	3035	221	32	15	14	Ultimate Grand Master	Needs 4 species for Exalted Grand Master
Pat Tosie	15	1	270	31	0	7	0	Senior	
Ryan Bush	110	9	110	9	0	0	0	Advanced	Novice, General & Advanced to be Presented
Tony McMillan	30	5	375	36	0	0	0	Senior	Need 1 seed for Master

91 entries from 14 entrants represent 73 different species from 33 different families

7 Outdoor Blooms, 3 Indoor Blooms, 4 Seed Reproductions, 77 Vegetative Reproductions

The most widely propagated species in 2010 was *Scirpus cernuus*, submitted 4 times

BAP Report

Steve Edie

Member	Species	Common	Pts	Total
<u>Nov 2010</u>				
Marlon Felman	<i>Xenotoca eiseni</i> @	Redtailed Goodeid	30	75
Charles Harrison	<i>Dario dario</i>	Scarlet Badis	15	2320
Jack Heller	<i>Poecilia reticulata</i>	Red Delta Guppy	5	150
Mike Hellweg	<i>Macropodus erythropterus</i> *	Redfin Black Paradisefish	15	4174
Jerry Jost	<i>Allotoca dugesii</i> @	Bumblebee Goodeid	30	965
Jerry Jost	<i>Hemirhamphodon kapuasensis</i>	Redline Halfbeak	10	975
Cory Koch	<i>Badis badis</i>	Chameleon Fish	15	1517
Cory Koch	<i>Cryptoheros nanoluteus</i> @		20	1537
Cory Koch	<i>Fundulopanchax gardneri</i> "nigeratum" *		20	1557
Cory Koch	<i>Xystichromis</i> sp "Dayglow" @		20	1577
Cory Koch	<i>Neolamprologus falcicula</i> "Sibwesa White Tip" *		15	1592
Cory Koch	<i>Psammochromis riponianus</i> "Boyanga, Uganda" * @		25	1617
Cory Koch	<i>Sarotherodon linnellii</i> "Barombi Mbo" ** @		30	1647
Cory Koch	<i>Xystichromis phytophagus</i> # @		10	1657
Gary Lange	<i>Girardinus metallicus</i>	Black Chinned Livebearers	5	1629
Gary Lange	<i>Macropodus erythropterus</i> *	Red Shouldered Paradisefish	15	1644
Gary McIlvaine	<i>Aristogramma cacatuoides</i>	Triple Red Cacatuoides	15	1058
Gary McIlvaine	<i>Chapalichthys peraticus</i> "La Manzita" @		30	1088
Gary McIlvaine	<i>Xenotoca eiseni</i> "Rio Compostela" * @		35	1123
Gary McIlvaine	<i>Xiphophorus meyeri</i> @		10	1133
Bill Perkins	<i>Aulonocara</i> sp. "Red Shoulder"		10	10
Bill Perkins	<i>Poecilia reticulata</i>	Blue Metallic Metalhead Guppy	5	15
Bill Perkins	<i>Poecilia reticulata</i> ^	Rainbow Forktail Guppy	1	16
Bill Perkins	<i>Poecilia reticulata</i> ^	Red Guppy	1	17
Bill Perkins	<i>Poecilia wingei</i>	Tiger Endler's Livebearer	5	22
Rick Tinklenberg	<i>Belontia signata</i> @	Combtail Gourami	30	2035
Rick Tinklenberg	<i>Lithochromis xanthopteryx</i> ** @		30	2065

Rick Tinklenberg	<i>Parananochromis longirostris</i> **	25	2090	
Rick Tinklenberg	<i>Pelvicachromis pulcher</i>	10	2100	
Rick Tinklenberg	<i>Steatocranus irvinei</i>	15	2115	
Derek Walker	<i>Characodon lateralis</i> sp. "Los Berros" @	Rainbow Goodeid	30	1619
Derek Walker	<i>Ilyodon furcidens</i> "Comala" *	Goldbreast Ilyodon	20	1639
Derek Walker	<i>Xenotoca eiseni</i> "Rio Tamazula" * @	Redtailed Goodeid	35	1674
Kurt Zahringer	<i>Belonesox belizanus</i>	Pile Livebearer	15	180

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Charles Harrison	<i>Xenotoca eiseni</i> # @	Redtailed Goodeid	15	2335
Mike Hellweg	<i>Trichogaster trichopteris</i>	Gold Gourami	5	4179
Justin Lehman	<i>Corydoras pygmaeus</i>	Pygmy Cory	10	35
Jim Miller	<i>Betta channoides</i> @		30	2369
Kurt Zahringer	<i>Betta albinarginata</i> * @	Whiteseam Fighter	35	215
Kurt Zahringer	<i>Nothobranchius guentheri</i> "Zanzibar" *	Redtail Notho	20	235

* = First MASI species spawn (5 point bonus)

** = First MASI species and genus spawn (10 point bonus)

*** = First MASI species, genus and family spawn (15 point bonus)

@ = C.A.R.E.S Species at Risk (Double base points)

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

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

Sources:

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

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



An expanded line of MASI Logo merchandise is now available from Café Press. Derek Walker has picked up management of the site and added many new items. Pick from T-shirts, jerseys, caps, tote bags, coffee cups, and more.

Go to www.cafepress.com/MissouriAquariumSociety to view and order the merchandise.

HAP Report November - December 2010

Mike Hellweg

Member	Species	Common	Rep	Pts	Total
Ryan Bush	<i>Cryptocoryne lutea</i>		V	15	110
Gary Lange	<i>Ranunculus aquatilis</i> *	White Water Crowfoot	V	10	1215
Marlon Felman	<i>Scirpus cernuus</i>	Fiber Optic Rush	OB	10	100
Marlon Felman	<i>Scirpus cernuus</i>	Fiber Optic Rush	S	10	110
Mike Hellweg	<i>Hemianthus callitrichoides</i>	Dwarf Baby's Tears	V	15	3010
Mike Hellweg	<i>Nymphoides sp. taiwan</i>		V	20	3030
Derek Walker	<i>Cryptocoryne aponogetafolia</i>		V	15	2905
Derek Walker	<i>Cryptocoryne crispatua flaccidifolia</i> *		V	15	2920
Derek Walker	<i>Chaetomorpha crassa</i>	Spaghetti Algae	V	10	2930
Derek Walker	<i>Cladophora aegagropila</i>	Moss Ball	V	5	2935
Derek Walker	<i>Cryptocoryne retrospiralis</i>	Retro Crypt	V	15	2950
Derek Walker	<i>Gracilaria sp. Red Agar</i> *	Agar Weed	V	5	2955
Derek Walker	<i>Halimeda copiosa</i> *	Large-leaf Hanging Vine	V	5	2960
Derek Walker	<i>Stylopodium zonale</i> *	Leafy Flat Blade Algae	V	5	2965
Derek Walker	<i>Udotea flabellum</i> *	Mermaid Fan	V	15	2980

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

* = MASI First

Member Classifieds

Turn your old Lionel and American Flyer trains into fish money. Call Marcus Daly 962-5260 or call Kathy Daly.

I have bloodworms and brine shrimp. Brine Shrimp eggs \$32 for 16 oz. can. I am looking for a 200 gallon tank. Jim Miller, 314-638-1134.

Charles Harrison (314) 894-9761, csharrison@inkmaker.net -

Thiosulfate crystals (Chlorine Remover) \$3.00 a half pound
 OTO double strength Chlorine/Chloroamine test kits - 4 ounce - \$12.50
 Flubendazole, 5% powder 10 grams \$5.00, 25 grams - \$20.00
 Lavamisole HCl Powder - 5 grams treats 100 gallons \$10.00
 Methylene Blue 5% solution (2 ounces) \$12.75
 Acriflavine Concentrate (4%) solution, 2 ounces \$12.70
 Bromthymol Blue pH test solution, 4 ounces \$7

Wanted: Small Styro shipping boxes - 12 x 12 x 12 or a little bit smaller. If your company uses them and throws them away, save them! Bring to the meeting or I'll come pick them up. Mike 636-240-2443

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. The ad will run for one issue unless you specify how long to run it, in which case it will run as requested.

Controlling Insect Pests in the Fish Room

by Kevin Kelley

Reprinted from the July/August 2010 Cichlidae communiqué of the Pacific Coast Cichlid Association

When you enter your fishroom and turn on your lights does the floor seem to writhe? Does your spine crawl as you sense the weight of a thousand pairs of compound eyes waiting patiently for you to doze off? As you reach for the fish food do you see antennae waiving at you? Are you afraid to stick your hand behind that tank to get the net? Or perhaps you have the ubiquitous black line running from that small crack to your fish food? If so - You got bugs! Yes! Those small, six-legged unfurry creatures - ants and cockroaches.

But what can you do about them??

First, one tends to think of pesticides. However, the use of pesticides is an ill advised strategy, mostly because they often are more toxic to the fish themselves than they are to the insect pests. If, however, you wish to kill fish, many will work quite well, almost as good as a modern washday detergent. In fact, the pesticide Rotenone is used almost solely for killing fish (sick, sick, sick).

A second strategy is the use of cultural methods of insect control. While many methods are available for use, most require the expenditure of copious amounts of time for successful insect control. (A general unhingedness about the mind is also needed.) For instance, success often requires that one assume the mien of "Vlad the Impaler". Running amok through your fishroom shrieking and impaling helpless bugs with sharp objects, and then pinning their carcasses to walls (for deterrence effect), while fun, may have deleterious effects on personal relationships. Or, you could pretend you're M.C. and hammer 'em (can't rap that!). Or, perhaps that you're Cap'n Morgan "Aye matey, ye'll walk the plank fer sure." This last suggestion can be most satisfying, as you can, while drinking rum and wearing an eye patch, make a roach walk the plank into the appetite infested aquarium below. Once in the tank, they vainly try to swim, all six legs pumping furiously, as an appetite fins over to ...Yes, cultural methods of pest control can provide hours of vicarious enjoyment, inspirational delusions of grandeur, and ensure that pinnacles are reached in the development of personal eccentricity.

However, there is a rational answer (and you thought that it wouldn't be found in this article). A new product, which has recently become available, will afford you the ability to control unwanted (and wanted) insect pests for mere pennies a day, and without a threat to one's sanity. Furthermore, this product is non-toxic and 100% organic, ideal for uses around the home. This product is Geckos®; A product information sheet is presented below. (To put this into perspective, go to the store and read a bunch of pesticide labels!)

GECKOS®

Self Propelled, **100 % ORGANIC** Cockroach Control

For Safe and Effective, Economic and Organic Control of Roaches and other Household Insect Pests

ACTIVE INGREDIENT: THE HOUSE GECKO,
Hemidactylus frenatus **100 %**

CAUTION:

Health Hazards:

Disgusting if swallowed or inhaled. Application to skin, eyes or hair may cause Syncope or Ululation in the "Faint of Heart."

Keep out of the reach of children, cats and dogs.

Practical Treatment:

If Inhaled: Lightly grasp gecko by the tail and gently remove from nose. If Swallowed: Do not induce vomiting. Offer patient beer, and regale patient with stories of goldfish swallowing contests.

If on Skin or Hair: Pick up gecko, and gently place on hard surface.

If Seen: Ignore.

Do not apply Geckos® to lakes, streams, or running waters. Do not apply Geckos® directly to aquarium waters. Drift of Geckos® to neighboring areas may be hazardous to the "Faint of Heart." Keep windows closed or screened to prevent gecko runoff.

Storage and Disposal:

Do not contaminate water, food or feed by storage or disposal.

To dispose of Geckos®, flush gecko down toilet or dispose of in garbage. Geckos® are non-toxic to the environment and , if dead, will decompose readily into carbon, hydrogen, nitrogen and oxygen, and various trace elements.

Store in a warm, moist environment, in a manner which will prevent cross fertilization with other gecko species. Keep away from flame and extreme heat.

In case of intense reproduction and overpopulation, or for disposal of live Geckos®, call:

The Gecko Decontamination and Disposal Team:

(916) 457-1343

Directions for Use:

Keep Geckos® and all pesticides Out of the Reach of Children. Application rates for Geckos® are 1 gecko per 800 cubic feet, **6** geckos per 1 bedroom apartment. Apply when the insect populations become disgusting. To apply, release Geckos® in various areas of the house, and allow them to roam. Selfpropelled Geckos® will search out and destroy roaches, spiders, silverfish and other insect pests where they hide. Geckos® works best if relative humidity exceeds 70% and the temperature is between 75" and 90°F. Geckos® is recommended for households with aquaria, children and other pesticide sensitive species.

Application rates exceeding those recommended may result in gecko overpopulation. If overpopulation occurs, call:

The Gecko Decontamination and Disposal Team: (916) 457-1343

Environmental Hazards:

Do not apply Geckos® in a manner as to directly or through drift expose to the "Faint of Heart." Do not allow the "Faint of Heart" to enter areas treated with Geckos®, without warning.

Do not graze tilapia in areas treated with Geckos®.

Do not apply Geckos® to fans, air conditioners or machinery with moving parts.

Application of Geckos® to aquarium waters will result in poor insect control.

Use of Geckos® in a manner inconsistent with label instructions is a violation of federal law.

Warning:

Excessive applications of Geckos® near '*Cichlasoma*' tanks will result in '*Cichlasoma*' obesity.

Geckos® is a registered trademark of Ecology In Action, a subsidiary of Voodoo Science International.

Further information may be obtained by writing:
Ecology in Action
Attn: Kevin Kelly
6201 Second Avenue Sacramento, CA 95817

Reprinted from Cichlidae Communiqué #70 January/February 1992

Oh, is for Oscar

The Trials and Tribulations of an Oscar Breeder

By Dave Ayres

Reprinted from the November/December 2010 Youngstown Aquarist of the Youngstown Area Tropical Fish Society

Everyone knows what an Oscar is; they are one of the perennial favorites found in every tropical fish store along with Angelfish, Goldfish and Guppies. People refer to them as "cute" and "adorable" and say that they have personalities. What isn't so obvious in the pet store is that the little tail wagging cutie begging to be taken home with you (actually he's begging to be fed) can also be a heart-breaker, hence the ' Oh ' in the title of this piece. I speak from experience having kept many Oscars over the years and suffered countless frustrations and disappointments in my quest to get them to procreate, but let's start at the beginning.

Where do Oscars come from? Well the short answer is the northern part of South America where they naturally occur in the upper reaches of the Amazon basin in Brazil, Peru and Colombia. A look at a map of non indigenous species published by the U.S. Geological Survey shows that the Oscar is well established in the Florida panhandle. There is no evidence however of populations north of the Florida State Line, nor in any of the other Southern States that one would think would be able to support wild populations. This suggests to me that the Florida fish farms have a lot to do with wild Oscars in Florida. There are also reports all over the Web of feral populations in both China and Australia but I could find no hard evidence to prove that this was true.

There are several different color varieties of Oscars available that have been developed by breeders using selective breeding techniques. The wild type or common Oscar is an olive green fish covered to varying degrees with patches of black with a few orange scales scattered here and there. On the caudal peduncle there is a black spot surrounded by bright orange scales known as an oculus or eye-spot. From this wild type fish have been developed showing greater quantities and intensities of red coloration. Oscars with a predominance of red scales on the sides of the body are known as Red Oscars whereas a fish exhibiting marbled patches of red on the body (my personal favorite) are known as Red Tiger Oscars. Twenty years ago a long finned variety showed up but it never seemed to gain any popularity --- thank goodness. The Albino types can be very showy fish but beware of fish offered for sale that are unnaturally colored. These are nothing more than albinos that have been injected with dyes or kept in water containing heavy concentrations of dye. Needless to say these practices are not healthy for the fish and they should be avoided.

The number one decision that you have to make when you decide to keep Oscars is where you are going to keep them. Inadequate housing is the number one cause of all the potential problems that you will run into, aggression, disease, bad water conditions etcetera. Too small a tank and you are doomed to failure. Given the right sized aquarium however Oscars grow fast so give some thought to the fact that although those inch and a quarter fish might look good in your fifteen, they won't look that good for long and will soon need moving to larger quarters. If you are serious about raising Oscars to adulthood you will need large tanks. A fifty-five gallon is probably the smallest tank that you could get away with and even then I would not be happy with that because of the relatively small footprint, 70's and 125's are much more suitable. Now having said all that let me tell you that I once maintained a twelve inch Oscar in a twenty-nine. The fish had been savagely attacked by another adult Oscar and needed a lot of T.L.C. to get it back to good health. It was a lot of work changing water every other day for the four months needed for recovery. So when the day comes, and it will, that one of your Oscars decides for whatever reason to beat one of its tank-mates to near death then remember that a twenty-nine

makes a wonderful hospital tank. Just one more reason why Oscars are not for the faint of heart or tiny aquariums.

Oscars have large appetites and getting a healthy one to eat is not a problem but a word of caution here about what you offer your Oscar as food. Raw meat such as ground beef is a no-no (too much fat). Likewise feeder goldfish are best avoided because they carry nasty parasites and diseases that, believe me, you do not want in your tank. I lost one of my best females through feeding goldfish. Flake foods just don't curb their hunger so look for pelletized foods, there are tons of good ones available and Oscars just love them. Are you on a budget? Go with Trout Chow. Also, check out the deli counter at the supermarket where you'll find shrimp, mussels, fish, clams etc. - with some Knox gelatin, a blender and some spare time you can prepare your own home-made food. Frozen or freeze dried krill is another excellent food although somewhat pricey. Oscars are messy feeders and have extremely bad table manners. They chomp on their food and then more often than not spit it back out as though searching for only the tastiest morsels. This behavior means that you are going to require a good filtration system in order to maintain good water conditions. That excess organic matter has to be removed before it builds up and causes problems. Mr. and Mrs. Oscar just love to move gravel around so under-gravel filters are out, a good power filter is what you need to filter out the debris caused by the fish. This type of filter has the added advantage of causing a current and also oxygenating the water, both beneficial to the general well-being of the inhabitants. Of course even the best filter doesn't mean that you can give up on water changes -- in my quest to breed the Oscar I changed LOTS of water.

Oscars show no sexual dimorphism which is a fancy way of saying that you can't tell the boys from the girls just by looking at them. The only reliable indicator of gender is the breeding tube, thick and blunt in the female and pointed in the male. I've heard it said that you can tell the sex of an Oscar by size, finagle, behavior etc. etc. but for me the odds are no better than fifty-fifty using these methods. Of course you could pull the fish out of the water, turn them over and examine the vent....that never worked for me either!

If you are going to attempt to breed Oscars you obviously are going to need a male and a female so how do you go about getting a pair? There are three options. Option number one is to buy half a dozen young fish and grow them up to maturity which will take you a couple of years. Now the law of probability says that you will end up with a pair but suppose that Murphy's Law kicks in and you don't -- that's a lot of time and effort wasted. The second option is to purchase a "breeding pair". Naturally you would want to see the pair and some fry just to make sure that what you are buying is a proven breeding pair. Be forewarned however that during the move from the seller's aquarium to yours the pair bond may be broken and that if this happens one fish will more than likely try to kill the other. This option to my way of thinking is just way too chancy and way too expensive. The final option, option number three is to acquire large mature fish and try to pair them up. Where do you find such fish? They show up at tropical fish auctions every now and then and hardly anybody wants them so they go for a song. One thing that you can try is to go to your local pet store and make it known to the employees that you are willing to adopt large unwanted Oscars. With any luck you will start getting calls from Oscar owners begging you to take their oversized, tank polluting, goldfish gulping pet off their hands ---- for free .

Having acquired some adult fish you can now experiment by putting them together to see if they are compatible, you'll soon know if they aren't! A little jaw-locking and playful tail slapping is OK but as soon as one fish gets another into a corner and starts descaling it you'd better separate them, and quick. When you find two fish that seem to like each other, remove the rest and pray that the two would be lovers aren't both female .

From this point forward I am going to assume that you have a pair of Oscars, have them housed in a suitable sized tank and are feeding them nutritious foods. Here's how you get them to spawn. First, bump up the temperature to 84*F. Double check that you have a thermometer that reads the right temperature, some don't. My breeding tank was bare except for a hefty piece of slate that measured ten

by twelve inches sitting flat on the bottom. A couple of large pieces of driftwood and a ton of gravel would have looked nice but I didn't use any.

As the pair came into breeding condition, evidenced by their brighter colors and the female filling with roe they began paying attention to the slate, mouthing and fanning it in preparation for the eggs. As soon as I saw the breeding tubes begin to drop I would give the tank a fifty percent water change just before lights out the next morning the slate would be covered with eggs, thousands of them! The pair acted like model parents, the female dutifully fanning the eggs whilst the male patrolled his territory, however by the third day the eggs would be gone, eaten by the parents. The pair was spawning like clockwork every fourteen days and I wasn't sure how long they would keep this up so after the third unsuccessful spawn I decided to try and hatch the eggs artificially. The piece of slate that they were spawning on was quite heavy and I didn't think much of my chances of removing it with one hand whilst fending off two very angry full grown Oscars with a net in the other, so I came up with what I thought was a brilliant plan. I took a two inch wide strip of thin roofing slate and placed it across the spawning site. When next the pair spawned it was relatively easy to remove the narrow piece of slate and place it into a one gallon glass jar for hatching. Just like hatching Angelfish eggs I stood the slate upright and let a stream of bubbles from an airstone play over the eggs. As a fungicide I used Acriflavine which I like better than Methylene Blue.

The eggs developed nicely and on the eighth day the fry were free swimming. I had about one hundred strong healthy fry which is a lot easier to handle than the fifteen hundred or so I would have had if I had taken the whole spawn. I poured the fry into a well seasoned fifteen gallon tank and from then on it was plain sailing. Feeding the youngsters presented no problems, they eagerly accepted micro worms, baby brine shrimp and crushed flake. At four weeks of age the young Oscars really put on a growth spurt and began begging for food every time that I went anywhere near their tank. And so the cycle begins again; start looking for a bigger aquarium!

Keeping & Breeding *Brachyrhaphis* sp. “Costa Rica”

By Wayne Toven

Reprinted from the December 2010/January 2011 Tank Topics of the Greater Akron Aquarium Society

I have been keeping and breeding livebearers a lot more in the past few years, one genus that I have been working with lately is *Brachyrhaphis*. The name comes from the Greek language not Latin, brachy means short and rhapsis means needle, this refers to the male's gonopodium, which is a modified anal fin used for copulation (sex). Several species of the genus have a black spot at the base of the anal fin that sometimes extends out into the fin of the female and onto the male's gonopodium. The fish in this genus are sometimes referred to as olimina, which is a Spanish word that means small livebearer, and is the equivalent of the English word minnow. The genus *Brachyrhaphis* was established by Regan in 1913, there are currently 12 described species, all of which are endemic to Central America ranging from southern Mexico south down into Panama. The fish come from a variety of habitats under various water conditions, mostly in the upper to mid water of creeks and streams with slow to moderate currents. Aquarium conditions should be clean water with a gentle filtration, a Ph of 7 – 7.5, hardness of 10 – 20 dGH, with temperature range of 75 – 85 degrees F. Fish are omnivorous, but prefer live foods.

One of the two problems that I have had in keeping species from the genus was size differential between the sexes, at least in the stock that I have been able to obtain. The females usually tend to grow larger and more robust, and can be very aggressive toward the smaller, slimmer males. With that in mind it is best to obtain a group of individuals whenever possible, to spread out the aggression. The second problem is fry predation; the adults tend to see the newborn fry as an open buffet, so there is a need for

an abundance of cover such as live plants, or as in my case a breeder trap was sometimes used. When some livebearers are born they rest on the bottom for a short period of time, I do not know if this is so for *Brachyrhaphis* species, but if it is the adults could very easily pick off the fry. Speaking of fry, the gestation period is around 28 days; the fry are small when born only about 7mm in size. Spawns can range from 10 to 40 fry.

I got the current species list from Wikispecies so I am not sure if it is 100% accurate, but they are: *cascajalensis*, *episcopi*, *hartwegeri*, *hessfeldi*, *holdridgei*, *olimina*, *parismina*, *punctifer*, *rhabdophora*, *roseni*, *rosewithae*, and *terrabensis*. I will share some of the basic information that I was able to obtain on some of the species.

B. cascajalensis has a range that extends from the Atlantic slopes of southern Costa Rica to San Blas in eastern Panama. The species name comes from the Rio Cascajal in Panama. The body is elongated with a small head; the females can grow up to 7.5 cm and the males to 6 cm. Body color of both sexes is olivegray; belly is white, anal area is black; a dark reticular pattern runs along the upper rows of scales which are a pale yellow. The fins are clear, and the dorsal fin is banded with yellow and black.

B. episcopi was originally described by Steindachner in 1878, from the Atlantic and Pacific waters of El Valle in central Panama. The adults grow up to 3.5 cm for the males and 5 cm for the females. The body ground color is olive-gray with yellow markings, belly is white, and a midline is formed from 10 – 16 brownblack spots or diagonal bands. The scales exhibit a dark reticular pattern depending on the fish's mood, upper body has 2-3 reddish lines between the rows of scales. The fins have a pale orange tint to them; the dorsal has some black markings near the base, an orange sub marginal band and a thin blue-white margin.

B. hartwegeri was first described in 1963 by Rosen & Bailey, and was named in honor of Dr. Norman Hartweg. Species range is the Pacific slope from Chiapas, Mexico south to Guatemala. The body of this small species is elongated, males grow to 3.5cm and females to about 5 cm. Body coloration is yellow to olive, with a white belly. There are 10-15 faint bands that form a dark diagonal row along the flanks. All the fins are a dull yellow, and rounded except for the anal which is pointed. Brood size is rarely more than 10-20 fry.

B. holdridgei was first described by Bussing in 1967; they come from the Atlantic slope of Costa Rica, in marshes and flowing waters of the Rio Madre del Dios, Rio Sarapiqui, and the Rio Arenal. Maximum size of 5cm for the females and males slightly smaller. The profile from the pointed snout to the dorsal fin is straight or slightly curved. The fish have an olive gray body, with a light gray belly; there are 10-12 dark vertical bars on the sides. All the fins are a light yellow, the upper third of the dorsal is red – orange with black stripes on the base. The caudal fin has a dark margin and also has dark streaks near the base.

B. olimina is known to come only from the Pacific side of Costa Rica, in the Rio Tempisque drainage to the Rio Grande de Tarcoles, and on the Atlantic side at a few sites between the Rio Sapoa and the Rio Reventazon and Parismina. The predorsal profile is slightly curved; body ground color is tan with a slight pinkish tint. The body has 8 – 10 dark vertical bars on the sides, these bars are absent on specimens that come from the headwaters of Rio Virilla. Females can grow to 6 cm and as usual the males smaller. The base of the dorsal fin and the rays are black, upper half of the fin is yellow – orange with a black margin in both sexes. Anal fin is yellow or yellow – orange with the typical black streak from the base to the tip, and the caudal fin has a yellow margin.

B. parismina's natural habitat is Parismina in Costa Rica from the Rio San Juan drainage to the rivers north of the Rio Sixaola. *B. parismina* is similar to *B. cascajalensis* but has a large black blotch on the caudal peduncle. The fins are clear; the dorsal and caudal fins have black rays, and a dark band near the margin and the base. Females only attain a maximum size of 4 cm.

B. punctifer is found on the Atlantic side of western Panama where they live in the shallow and marshy tributaries of the Rio Cricamola. The species has a moderately elongated body with a pointy

head; females grow to 5 cm, and the males to 3cm. The body is a uniform gray with bands of dots on the sides, hence the name punctifer, which means dotted. The dorsal fin is marked with dark patches and the caudal fin is all black.

B. rhabdophora is endemic to Costa Rica and is found on the Pacific side between the Rio Parrita drainage and the Rio Grande de Terraba, and was originally described in 1908 by Regan. The profile from the pointed head to the dorsal is straight or slightly curved. This species is considered to be the most colorful of the genus; females can grow to 6.5 cm and the males to 4cm. The ground color of both sexes is grayish brown, almost the entire body is covered with a dark reticular pattern, and the rows of scales have a metallic sheen. The dorsal and caudal fins have a marginal band of yellow – orange and have a sub marginal dark band.

B. roseni was described in 1988 by Bussing and named in honor of Dr. Donn Rosen. The species is found in the Rio Coto basin in Costa Rica and south to the headwaters of the Rio Santa Maria drainage in Panama. Females only grow to 4.5 cm and the males smaller. Body ground color is grayish yellow and the scales are edged with black forming a reticular pattern on the upper half of the body. There are also 10 – 12 dark vertical bars on the sides of both sexes, but are most prominent on the males. The middle of the dorsal has a row of dark blotches, while the outer portion is orange with a thin black margin. The anal fin is yellowish orange with the typical black streak. The caudal fin of the male is bordered with yellowish orange; both sexes have a dark intermittent bar in the middle.

B. terrabensis were described by Regan in 1907, founds on the Pacific slopes of the Rio Terraba in southern Costa Rica and in the Rio Chiriqui in western Panama. The base body color is olive blue with a white belly; there is a reticular pattern on the flanks, and a line of short dark vertical bars mid body. All of the fins are tinted a dull orange color. The base of the dorsal fin is very long; it is marked with a black band pattern, and has a yellow or orange margin. Caudal fin is bluish white in color, and both sexes have the black anal fin marking. Females can grow to 6 cm and males to 5 cm. Brood size are 10-30 fry.

B. species Costa Rica was collected by Rusty Wessel in the Rio Ciruelo in of course Costa Rica. Base body color is olive tan, white belly, with the reticular pattern on the upper half of the body; there is a row of 10-12 dark vertical blotches mid body. There is a bluish sheen on the lower half of the body from the belly to the tail, black anal spot into the anal fin of female and into the male's gonopodium. The male's caudal fin is bluish white at the base then a clear band, then a dark band, then a yellow band with a thin black margin. The male's dorsal fin's lower half is black with white rays, then a wide yellow band with black rays, and a thin black margin. The female's dorsal fin is a paler version of the males. My 4 males were all around 1 ½" and the 2 females around 2 ¼", they were all housed in a 20 gallon high tank with a sand substrate, a few rocks, a few potted plants, lots of floating plants mostly najas grass, and a sponge filter. Even then the females terrorized the smaller males, I was almost to the point of removing the females except for spawning, but I didn't and they killed off two of the males. Then they settled down, I guess too many males cause problems. I fed them flake food, tiny floating pellets, frozen blood worms, black worms, and daphnia when available. I didn't trust the parents with the fry even though they were not that big. When a female was obviously getting fat she was moved to a bare bottom 10 gallon breeder tank with a homemade breeder trap that gave her lots of swimming space, floating plants, and a sponge filter. There the broods were 10-12 fry each time, they were fed crushed flake 2-3 times a day. Even the fry were hard on each other, but enough survived. They have since moved on from my fish room, I have some good pictures though.

Resources:

Freshwater Fishes of Costa Rica – William Bussing
Atlas of Livebearers – Lothar Wischnath

What does the future hold for the local club?

By Carol Sindelar

Reprinted from the August 2010 Fin Flap of the Eastern Iowa Aquarium Association

I was just reading the Cichliidae Communiqué article by Chuck Rambo, The First 30 Years of PCCA . Chuck sounded, and duly so, concerned for the clubs in the hobby that have for years, 30 in their case, been a big supplier of information on, and distribution of, cichlids. And he points out the internet has really taken over that part of the hobby. Anyone can go on line and find anything about the fish they are keeping. And you can also find 6 dozen people who can get you more of that rare species you just bought for a pretty penny.. Point, click. It is all there. So what does that leave for the local club to be doing? This is where I think the founders of the EIAA were very wise. On page one you will see what EIAA is all about. The EIAA mission statement:

EIAA is a nonprofit organization to promote the Tropical Fish Hobby, With emphasis on education and fellowship

There is was from the get go, EIAA has been about the people and the fun you can have in the hobby..... Fellowship..... it's the people !!!!!

Elsewhere in the communiqué there is an article about the fun had on a road trip to a fish event. They stopped at places along the way. They met new people and visited old friends. They visited people and their fish rooms. They joked and laughed and learned and were in fellowship. And it was special. You can't take a road trip on the internet highway like that. It is an adventure. It is fun. Fun with fish friends.

So later in Chuck's article he is wondering who will lead the club. The usual suspects have been in charge a long time. We need some new blood he is saying. Where does it come from he is asking?

That new blood is probably right there. Have you taken that new hobbyist on a road trip? Have you shared the sites, the friends, the fun? Have you shared the people side of the hobby? Have you let them in? Have you showed them what you found years ago in a club about Cichlids.

Reality, people need people. Even fish people need people to share their hobby with. To tell their tales. To find understanding. To go on silly road trips. There will always be a need for the local club. People getting together, face to face, to share their common experiences. How does the local club plan to address that need? Can a fish club be about people too? Just food for thought as we all move into a time to do fish club in new ways.

The Computer Page

Steve Deutsch

MASI's official web page: www.missouriaquariumsociety.com

MASI's email group: MASIFishHeads Yahoo Group - see web site for joining instructions

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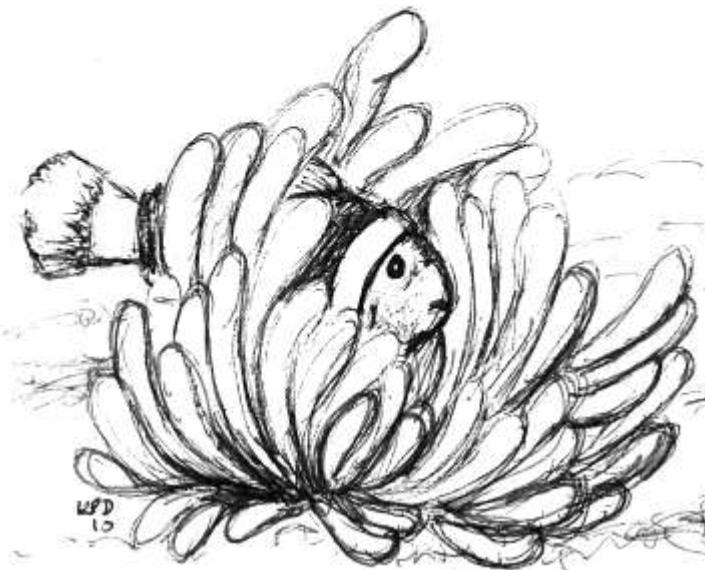
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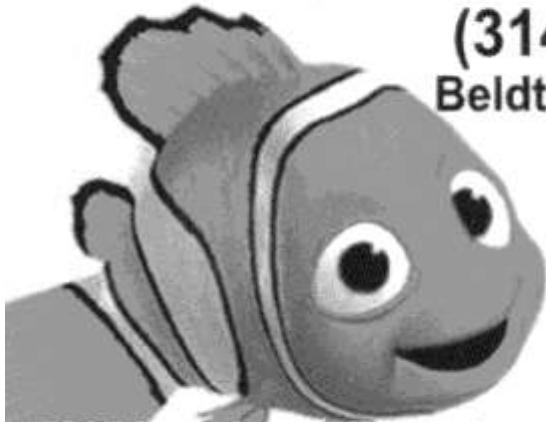
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