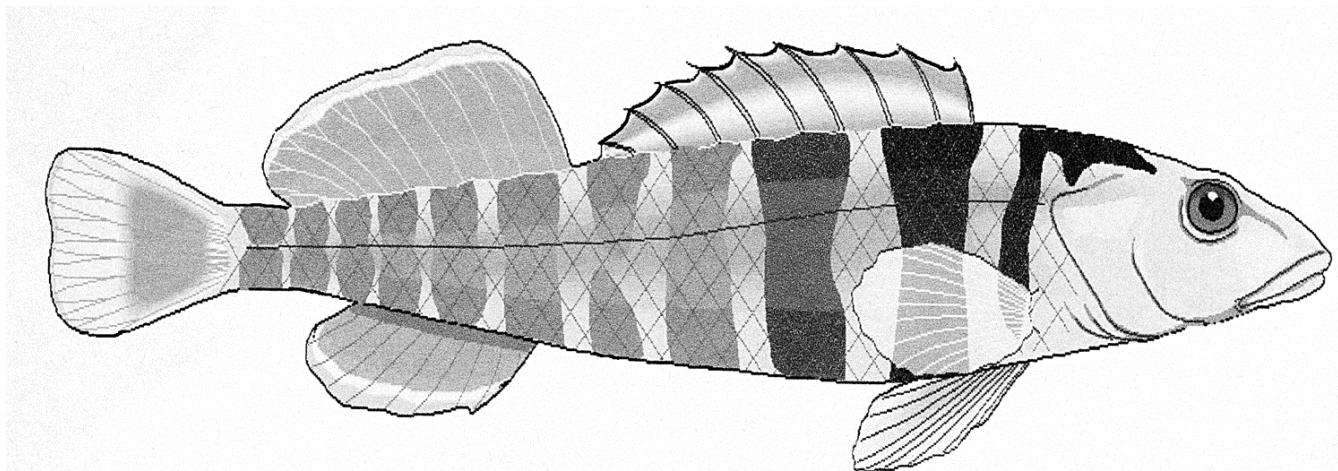


The Darter

September - October 2010



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St. Louis, Missouri

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Places to Be / Things to See

SATURDAY September 25, 2010

Executive Council, 7:30 PM hosted by Andy Walker

SUNDAY October 3, 2010

Swap Meet, Gardenville Masonic Hall

THURSDAY October 21, 2010

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

SATURDAY October 30, 2010

Executive Council, 7:30 PM hosted by Derek Walker

SUNDAY November 14, 2010

Auction, 12:00 Start, Gardenville Masonic Hall

THURSDAY November 18, 2010

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

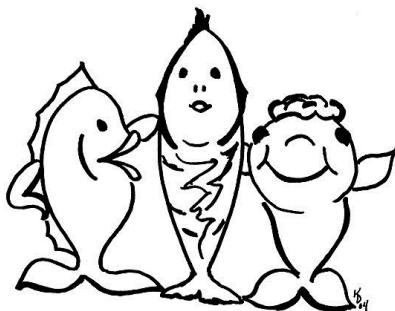
SATURDAY December 4, 2010

Executive Council, 7:30 PM hosted by Charles Herrison

THURSDAY December 16, 2010

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

Membership



Yearly membership in the Missouri Aquarium Society, Inc. is \$20 per calendar year (\$15 for the remainder of 2010). 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.

Fish-o-nomics 101

How Much is that Guppy in the Window?

By Mike Hellweg

Lately I've heard a bit of discussion and even some grumbling about prices of various fish at club auctions and at local fish stores. One recent discussion was about mated pairs of angels. Some folks think they should be able to get \$100 for a mated pair of angels at an auction because that is what they bought them for, or what they've seen them sell them for online. That just isn't a realistic price in a club auction! In more than 20 years of traveling around to fish clubs all over the USA and Canada, and spending hundreds of hours as an auctioneer at hundreds of fish auctions, I've only seen a handful of pairs of angels (or any other fish, for that matter) even come close to that, and all of those were fully mature palm sized angels, often show winners. Most pairs of angels in club auctions sell for less than \$50, and the vast majority sells for between \$20 and \$30. Sometimes an exception comes along, but these are few and far between. Let's take a look at fish pricing and why this is so.

There is an old fish farmer's adage that goes something like this: "If you want to make a million dollars raising fish, start out with two million dollars." In case you don't quite get it, that means within a year, you will have lost a million bucks! Of all of the thousands of hobbyists I've met from all around the world over the past 3 plus decades, I can count on one hand those who have been able to make a living in the hobby without opening a wholesale operation or a retail store. If I add in those I've heard about but not met, it might require two hands. If you want to know how many of them have become rich, well, I haven't met or heard of one yet. You can, if you work VERY hard at it, make enough out of your tanks to pay for your hobby, buy some extra tanks, equipment, etc. and maybe even pay for a trip to a convention or two, but that doesn't cover the household bills, much less make you rich. If you see a shop selling a mated pair of angels for \$100, why can't you expect to sell yours for that much? Let's do a quick reality check at a few ways people can or can't make money in this hobby, and then take a look at what all goes into various forms of pricing.

Get Rich Quick

The aquarium hobby is just that, a hobby. It's not a get rich quick scheme. Some people come into the hobby seeing dollar signs and hoping to strike it rich by breeding something and selling a million of some fish or other. I've seen people wanting to do discus, angels, rare cories or plecos, clown loaches, and more expecting to be able to quit their job and just raise fish. In my nearly 40 years in the hobby, I've known a lot of folks like this. They want to buy their initial stock for next to nothing (or even better, get it for free) then be able to breed them and sell them for a huge profit. Think about it for a minute. Simple economics should tell you that if you get something for nothing, that's about what it is worth. It will NEVER be worth a lot of money. Fish are the same as anything else. If it breeds prolifically and easily, then anyone can breed them and most probably they will do so. There is little value to anything that easy to breed, so fish like this will never be worth much, certainly not enough to quit your day job. Most of these "get rich quick" hobbyists come into the hobby and quickly burn out or fade away. Few of them are here two years after they've popped in. And even fewer of those are still keeping fish. They've moved on to something else that will help them get rich quick.

The Reality Check for Get Rich Quick

If you breed and raise a lot of good quality fish, you can expect to be able to trade them to local shops in exchange for other fish, food, or equipment. Some shops may even buy them outright if you are a regular customer, though that is rare.

Growing Profit! Buy ‘em small and sell ‘em big

Some people think that if you buy a fish for \$20 at two inches, by the time it reaches a foot it should be worth over \$100. With one exception that I can think of, you can’t buy small fish, grow them out, and expect to make money on them. For almost all fish, that cute \$20 baby is about as much as that fish will ever be worth. And for others, the amount you spend on water changes, electricity, heating, food, and chemicals will far outweigh what you could sell them for once they’re grown.

The Reality Check for Growing Profit!

Once most fish reach a foot or so in size, especially if they have more growing to do, no one is going to want it for any amount! You might even have to pay someone to take it. But you certainly won’t get more money for that monster fish. The one exception? The clown loach. If you can keep them alive, you can buy small fish for a buck or two, grow them for about 5 or 6 years until they get to eight inches or so, and then sell them for \$25 to \$30, maybe even a bit more, depending on how good they look. But that ties up a tank for a LONG time. Not really a “get rich quick” scheme.

Buy ‘em cheap at one auction and sell ‘em for big bucks online

A lot of people sell things over the internet these days. Sometimes, if you really know your fish, you can get a bargain at a local auction and then resell them for a profit online. Most of the time, though, the reason they are selling cheap is that everyone who wants them has them, or that there are just so darn many of them either in the auction or in people’s tanks already that the low price they garner at the auction is about what they are really worth.

For example, angels go through this cycle constantly. You’ll see one or two auctions in a row where there are only a few dozen bags of angels and the prices go fairly high. Then the next few auctions, there are more than a hundred bags and prices collapse, with fish that would have brought \$20 an auction ago going for \$5 or less. This is the simple law of supply and demand I described above. When everyone’s got angels, prices drop. When no one has them, prices go up. And there is no telling which auction will be which. It depends on who is in the room and paying attention that particular day at the particular time that particular bag goes through the auction.

So what about pricing?

Some of you may have some idea about pricing, but I’ll bet many of you don’t. I’ve been in retail for most of my life, so let me take a few minutes to explain where prices come from. Maybe it will help you understand things a bit better, and realize why something you think should bring you a good selling price may or may not do so.

Retail Price

The price you see in a retail store is called a retail price. It is the price you pay when you walk in the door. Some shops will negotiate if you are a regular customer and if you want to buy a group of fish, others won’t. Some retailers will even become angry if you merely suggest negotiation or ask for a better deal. It all depends on your relationship with that shop owner. The retail price includes the cost of the actual fish you want to buy, the cost of all the fish that died, the cost of air freight to get that fish to the local airport, the cost of sending an employee up to the airport to pick up the fish, the food fed to the fish, water changed to keep it healthy, filtration material, water change chemicals, tank heating, tank

lighting, employee payroll and all associated taxes, insurance, licenses, local taxes, city taxes, state taxes, federal taxes, building upkeep costs, shoplifting, damaged goods, etc. not to mention rent, utilities (heating, cooling, lighting, phone, water, sewer, garbage, internet access, website maintenance costs, etc.), interest on loans, and then, hopefully, a bit of profit to keep the shop going for next year. That's a LOT of things behind a "simple" price!

Wholesale Cost

When you go to sell or trade fish with the store, you will usually get what is known as wholesale cost. That is the price at which the shop can buy the fish from another source. It is the basic price to which all of the other costs I outlined above must be added before the shop can sell the fish and hopefully make a small profit. When you take a fish in to sell it to the store, you're not going to get what the shop sells the fish for. For example, a cardinal tetra that sells for \$3.49 at retail will cost the shop \$1.27 - \$1.50, depending on where it comes from. Then they need to cover all of the other costs above just to stay in business. So if you're going to try and sell them cardinal tetras, don't expect more than a buck a piece. If you trade instead of sell, you might be able to talk them into \$1.50 a fish in trade. At first it might seem like you're getting ripped off, but once you add in all of the other costs outlined above, that \$3.49 fish isn't bringing a huge profit to the store.

What about selling at a club auction?

The price you get at an auction is a bit different, but the idea is the same. At a club auction, your fish is worth EXACTLY what it sells for. If there are two people in the room who really want that fish, expect it to sell for a high price. But if there is only one person in the room who wants it, or if there are a lot of lots of that same fish, then it's worth whatever the top bid is and no more. For example, angels are always in plentiful supply at the auction. A lot of people raise very nice angels. Unfortunately, a lot of people raise angels just to sell as many as they can as quickly as they can. When there are 100 lots of angels at an auction, the lower quality ones drive down the cost of the higher quality ones. It's just simple economics. When there is a large quantity of something, the price goes down. When there is less, the price goes up. Quality doesn't always matter in the overall picture. It should, but in reality it just doesn't. And your entire market is made up of the 100 or so people in the room. There is only so much money in the room, and each lot will only get a small share of that money. In addition, in order to end the auction at a reasonable time, the auctioneers have to move 3 or 4 items a minute. They don't have time to spend on a single item. They try to get as much as they can so both the seller and the club will get a higher price, but at some point (usually after about 15 seconds) it has to be sold and they have to move on to the next item. They're not disrespecting any seller or any one item. They just don't have time to dwell on one item and squeeze out another buck from the room. There are 500 other items that need to be sold.

The Club Split

It seems there has always been grumbling about the club split. Why is the club so greedy? Why is the split so high? Think of the club split like the retail store price described above. The club exists to do many things. The auction is only one of them. The club has to make money to cover its expenses and stay solvent. The auction is the most important way the club makes money. One auction brings in nearly as much money to the club treasury as membership dues for all of the members! That club split goes to support many other things like the cost of the publication, the cost of the meeting room and auction room, the cost of refreshments, raffle prizes, bringing in speakers for meetings and for the annual show weekend, subsidizing the cost of the annual banquet dinner so that more of our members can afford to go than would be if we charged the full price the restaurant charges the club, books and videos for the library, charities that we support, and many other things.

A wise man (Ralph Wilhelm, our late Auction Chairman) once told me that the way to look at taking things to a club auction is this: I'm making a donation to a great club to support them. If I get money back, fine. If not, that's fine, too. I get so much more from the club over the course of the year that the selling price of one item at one auction is not going to make or break my experience with the club. If you are in this solely for the money, see what I had to say earlier about the get rich quick schemes.

Selling online

Many people love to use eBay and Aquabid to sell their fish. That's great! I use them, too. I'm one of the original sellers on Aquabid, and have been using it for 10 years now. When I first started selling on Aquabid back in early 2000, there was only one category. I've sold thousands of lots via Aquabid. I sold fish via mail long before Aquabid came along, too. The great thing about mail order or online auctions is that you can set the price you think is fair, and let buyers from all over the country decide if you are right or not. The drawback is that it takes a lot of work to get fish ready to ship and to pack and ship them properly. If you aren't willing to do the work, you'll have to look to another method to sell fish and essentially pay someone else (the retailer or the club) to sell the fish for you.

There are differences between the online services. eBay has a much wider worldwide audience. Aquabid has a much more direct audience. With eBay, you might get better prices as there is a larger body of bidders. With Aquabid, you'll get a more focused body of bidders who are, for the most part, fish hobbyists. With eBay, you pay them a small price up front plus a percentage. With Aquabid, all Mark asks for is a donation if your item sells. If you take PayPal or accept credit cards online, you have to consider the fees associated with these services in your costs, too. You have to deal with the occasional DOA and sending refunds or replacements.

With either service there is a lot of work to do. You have to create the listing. You have to post the listing to the site and maintain it. You have to collect the payment (and deal with the occasional bounced check or credit card chargeback), you have to prep the fish for shipping, pack up the fish properly to ensure they travel safely and meet the carrier's requirements, take them to the post office, Fed Ex office or UPS office, stand in line to drop them off, deal with the grumpy clerk who thinks you're crazy for shipping fish, pay for the shipping, and then cross your fingers and hope that the carrier does a good job handling and delivering them for you. If you are really wanting to make a profit, this is the way to sell your fish. But it is a LOT of work. Most people burn out on it pretty quickly. Then you're back to using local club auctions, trading with the local store, or trying to get local buyers via Craigslist or something similar.

Selling on Craigslist

More recently hobbyists are starting to sell fish on Craigslist or similar local listing services. The problem with these is that you have to weed out the real buyers from the kids and players who just string you along. There seem to be more and more of these as time goes by. You also have to deal with the whiners who complain about your charging rehoming fees that are actually sale prices for fish you are breeding instead of trying to simply rehome your unwanted pets. I guess they don't have anything better to do. Then you have to make arrangements to get the fish to the buyer. Will you let a complete stranger that you met on the internet come into your house to pick out fish? Not really a good idea. Then will you meet them somewhere? Now you've got to tie up your time and go somewhere, hoping that the person will show up (and hoping that they aren't a mass murderer!). This, too, gets old pretty quickly.

All methods of selling fish have costs involved. Selling to a retailer you'll get wholesale or less. Selling online means you have to do all of the work posting, handling payments, prepping, packing and

shipping. Selling via Craigslist means you have to do all of the work posting, prepping, packing and delivering (or hoping the stranger you let into your home is not the next Charles Manson). With all of these considerations, I think that having the club sell your fish for a 20, 30 or 40 percent cut is a bargain! All you have to do is pack them up and drop them off, sit down and enjoy the auction, then in a week or so you get a check. How easy is that? Don't forget that there is SO MUCH more that this money does for so many people. Don't look at the club's cut as the club "ripping you off" but rather as your donation to help keep our awesome club running for another 50 years.

If you want to breed fish to help cover your fishroom costs, some of the best, most reliable choices that have been consistent sellers over the past 50 or so years are angelfish, fancy guppies, Corydoras (any species), and Bristle nose catfish. But if you want to get rich quick, go for one of the late night infomercials and follow one of those crazy schemes. It's got just as much (if not more) potential for success as getting rich out of a few tanks in your basement.

Beyond the Breeders Award Program Conservation Goals for the Aquarium Hobbyist

By Lenny Llambi

Reprinted from the September / October 2010 *Fincinnati* of the Greater Cincinnati Aquarium Society

Instead of writing my usual column concerning all things BAP, this month I wanted to take this opportunity to write about conservation, which was a theme throughout this year's American Cichlid Association (ACA) convention. Conservation has become an important goal of the ACA in recent years. Numerous ACA programs benefit conservation efforts from building fish labs in equatorial third world countries, to purchasing net busting devices that save aquarium species from aggressive fishermen. With all of the efforts abroad it is easy to forget that we can conduct our very own conservation efforts in our fish rooms.

Most tropical fish species are endangered due to habitat loss caused by three main pressures. First is deforestation. The forests that line waterways help control water temperatures and erosion. Trees also provide hiding places and spawning sites for fish amongst the roots and shed leaves. Naked shorelines allow for temperatures to skyrocket, and offer no shelter for fish to hide from predators.

The next pressure on natural fish habitats is farm and mine run off. Fertilizers used on farms can wash into waterways after heavy rains. Just think of all the ammonia and nitrates used in fertilizers. What would happen in your tank if you dumped in a bag of ammonium nitrate? I don't think I need to explain any further. Mines can also produce chemical runoff, but more importantly, they produce a lot of loose earth that ends up being washed into waterways, choking out plants and algae. Lakes Tanganyika and Malawi are much murkier than they were just ten or twenty years ago. Imagine what would happen to the fish populations there if algae could no longer grow on the rocks due to the lack of sun penetration.

Finally, humans can directly alter bodies of water, and irreparably change the habitat of aquatic animals. Here in Cincinnati, the Mill Creek used to be teaming with invertebrates, fish, and plants. Now the channelized waterway is about as alive as a cinderblock, north of Mount Airy Forest. The Brazilian government is planning the construction of several dams along the Xingu drainage system that will change the fast flowing waterway into several, large reservoirs connected by small stretches of river. Will

the dozens of rheophilic (river loving) Loracariid species appreciate their new, tranquil habitat? Only time will tell.

During the ACA award banquet, Dr. Paul Loiselle gave a very inspirational speech regarding the state of affairs of cichlid conservation. Dr. Loiselle presented several examples of fish species that are completely extinct in the wild, because of the pressures I listed before. However, thanks to a few dedicated hobbyists, populations of these fishes still exist in captivity. If any of these species' habitats are ever restored, specimens from captivity could be used to replenish wild populations. Doctor Loiselle encouraged everyone to maintain at least one endangered species in their fish room. I'm paraphrasing here, but Dr. Loiselle came up with the catchphrase, "We can't save them all, but we can each save one."

Later that evening, Dr. Anton Lamboj gave a talk about the fishes of Lake Barombi Mbo. At the end of his talk, Dr. Lamboj expounded upon Dr Loiselle's call to action. He said that in addition to the number one (endangered species that each aquarist should maintain), aquarists need to remember two more numbers: 3 and 7.

The number 3 represents the number of aquariums we should dedicate to one endangered species. Two aquariums should house two separate breeding groups, while the third aquarium is used to raise the offspring. The number 7 represents a group of aquarists who are all maintaining the same species. These seven aquarists can exchange offspring from their broods to enhance variation within the captive gene pool.

After the talk, I asked Dr. Lamboj if European aquarists have a resource for seeking out fellow aquarists who maintain the same species. He said that he is currently working with other hobbyists to build a database that would track who is keeping what fish throughout the European Union. Small databases like this exist in the U.S. For instance, the West African Maintenance Program (<http://www.jmtrops.com/wacmp.html>) specializes in tracking breeders of West African cichlids. Hopefully, sometime in the near future there will be a website where individual aquarists can register and let the world know what species they are keeping.

So what does this have to do with BAP? Sometimes it seems like we get into this mode where we pour all of our efforts into breeding a particular fish in order to bring us one species closer to a new BAP award. Once we get the points, we dump the fry and parents into the next auction, and clear tank space for our new project. I understand that if you have a fish room of less than thirty tanks, this is par for the course. You just can't keep every fish indefinitely. However, three tanks is a manageable commitment to make toward saving one species from disappearing from the planet forever. Leif Demason, owner of Old World Aquatics, not only runs a successful fish farm in Florida, he dedicates enough room on his farm to keep about a dozen different species of cichlids from Madagascar. You may think to yourself, "well he has an entire fish farm that's not a big deal." I'm sure Leif is giving up a good deal of revenue by raising fish that are not necessarily the most popular sellers in pet stores.

If dedicating part of your fish room to an endangered species is too much of a commitment to make toward conservation, there is something so much more basic we can all do, without having to cordon off a section of our tank rack. It is absolutely crucial that you know your fish's current scientific name, location of original collection, and it wouldn't hurt to have a general idea of what generation of fish you have in your possession (e.g. wild versus fourth generation from wild). Not only should you sell your fish with all pertinent information, you should also try to obtain all pertinent information for fish

that you purchase. If you do buy a fish whose origin is uncertain, do not mix it with other fish for which you have the specific locations of origin.

or example, in June of 2009 I bred a fish that had been known for about 6 years as *Pelvicachromis* sp. “Blue Fin” and *Pelvicachromis* sp. “Guinea Blue”. By the time I was ready to turn the fish in for BAP in August, not only had the species been described and given a proper scientific name: *Enigmatochromis lucanusi*; it was placed into a genus of its own! Just imagine if I didn’t know any better, and had just started calling it a blue kribensis. Maybe I sold this fish to dozens of other aquarists, and they didn’t know any better. Maybe a couple of them thought they would try and add some fresh blood into their breeding group. So they buy some *Pelvicachromis pulcher* (the real kribensis), and they hybridize with the *E. lucanusi*! Now they start selling the offspring to other people, and maybe someone down the road looks at their fish, and says, “Oh this is actually an *E. lucanusi*!” That person might reintroduce tainted genes into captive bred populations of this endangered West African cichlid. It just goes to show you, today it might be a local variant of a species, but tomorrow it could be placed into a whole new genus.

This is probably the most important part of conservation within our hobby. Know your fish’s name, and never mix species or species variants! For newer aquarists, it’s probably the most daunting task of the hobby. I remember walking into my first auction, where even green cory cats are called by their scientific name. Come to think of it, it wasn’t just the scientific names, it was all the exotic locations like “Ndonga”, “Mpibwe”, and “Xingu”. I was a bit overwhelmed, to say the least. But I implore everyone to learn your fish’s scientific name. If all this conservation talk doesn’t pull at your heart strings, then think about your pocket book. How much are people going to trust buying your fish, when they can’t trust the identity of the fish. I know if I see a location spelled wrong on a bag, I immediately start to question the identity of the fish.

I hope I have inspired a couple of people to try their hand at conserving an endangered species or two. In fact, I think that the more conservation-minded we are, the more we can fight some of the political pressures on the ornamental fish hobby. It seems like everyday I read about a new animal rights group trying to take away our ability to keep fish at home. You would think that anyone calling him or herself an animal rights activist would educate themselves about how the aquarium hobby and ichthyology are so closely linked. Unfortunately, that is not the case. That is why making conservation a declared goal of the aquarium hobby is so important. We need to make legislation that limits the aquarium hobby synonymous with eliminating captive stocks of endangered and extinct species. Now that is a poison pill that not many politicians will want to swallow.

As for the general public, Dr. Loiselle brought up a very good point about human nature and conservation during his speech. The average citizen is drawn to the “cuter and cuddlier” victims of habitat destruction. Panda and tiger cubs pull at your heart strings much more than a slimy fish, or scaly reptile. While it may be impossible to recruit the general public to contribute toward fish conservation, fish are at a decided advantage over their fuzzier and feathery neighbors in one regard. Those of us in the aquarium hobby can help maintain populations of endangered species alive and well in captivity. If each of us dedicates three aquariums to one species, and exchanges offspring with six other aquarists, perhaps we can protect all of the fish species on Earth in our very own fish rooms

The Kale Trick

by Kathy Deutsch

Kale is a type of cabbage; probably a wild-type precursor to the modern head of cabbage. It has the same nutrients and anti-oxidant properties of other cole crops. Kale also can have a lighter flavor and is better tolerated by people who are sensitive to brassicas (the cabbage family). By accident I learned a nifty trick, using kale, that: feeds fish, eliminates snails, and clears hair algae.

My 45 gallon bowfront tank has a peaceful mix of fish, some great plants, too many snails and periodic crops of hair algae. The hair algae is especially annoying since it tangles the the leaves and roots of the floating plants.

A few months ago I bought some kale to eat. These raw leaves have a sturdy stem and are very curly-edged. Since I am always trying to get rid of the snails, I weighted down a big kale leaf with a lead strip and tossed it in the bowfront.

The next day, the kale was covered in snails. However, the farlowella was also working at it. I removed the leaf, put in a new one, and watched as the farlowella AND the pygmy corydoras converged and nibbled on the raw leaf. They liked it!

Daily I removed a snail-covered kale leaf, and put in a fresh leaf. A few weeks ago, as I was removing the snail-covered leaf, I brushed the kale against a hair-algae covered plant. Some strands pulled off. I got a bright idea and took a fresh kale leaf to the tank. As I pulled it through the water and combed it over the plants, the curly edges of the leaf snagged and pulled off wisps of hair algae. The kale actually caught bits of hair algae I could not easily get with my fingers. I twirled the leaf and wrapped it in algae. Then I dropped it to the bottom of the tank. Next day I removed the algae-wrapped leaf, which had been nibbled by the bottom feeders and was covered in snails.

Regular water changes and good filtration are important to keep a tank clean. But for stubborn hair algae and snails, I really like the kale trick.

RECIPE FOR FLASH-FRIED KALE FOR HUMANS AND FISH

The fish eat the raw kale, but they do enjoy when I cook some. I put a 1 teaspoon of light oil (olive, canola, etc.) in a fry pan, then heat over medium heat until a drop of water pops when dropped into the pan. I add washed raw kale (with the tough stems removed), and stir it around until it goes limp but is still brightly-colored. This takes about 3-6 minutes. I take it off the heat and eat it with a bit of salt. For the fish, I wash off the oil and toss a piece in the tank. Curiously, they like it warm.

A Fish by Any Other Name: Deciphering Scientific Names

By Robin Engelking

Reprinted from March/April 2003 Aqua News Of the Minnesota Aquarium Society

Nothing seems to scare and confuse fish keepers more than the long Latin name attached to that wonderful little fish they would give an eye tooth to acquire. In reality the scientific name can often tell you something about the fish; where it comes from or something about one of its features. For instance, *Xiphophorus* (sword bearer) *maculatus* (spotted) tells you it has a sword tail and spots.

The most useful thing about scientific names is that they are precise. Each kind of plant or animal on the planet has a name that is specific to them alone. The great thing about that is that you can e-mail someone in Germany and talk about *Papiliochromis* (colored breast) *ramirezi* (named for Sr. Manuel Vicente Ramirez) and not have to worry if they call this fish a "Butterfly Cichlid" or a "German Ram".

Animals are described starting with a wide set of characteristics that gradually become narrower until only one creature fits the definition of that name.

Kingdom	Animalia
Phylum	Chordata (animals with a dorsal nerve chord)
Subphylum	Vertebrata (animals with backbones)
Class	Actinopterygii
Order	Cyprinodontiformes
Sub-Order	Cyprinodontoidei (Toothcarps)
Family	Rivulidae (Egg Laying toothcarps)
Sub-Family	Rivulinae
Genus	<i>Rivulus</i> (Rivulus = brook or stream)
Species	<i>xanthonotus</i> (yellow back)

Whew! Aren't you glad you don't have to deal with ALL those names? But from the genus and species name we have learned that the fish probably comes from a brook or stream and that it has a yellow back. Pretty cool.

Groups of one or more similar fish species are combined into a genus (plural, genera). The genus is like your last name and the species would be your given name. It is like saying Jane Doe's name as Doe Jane. You need both names to identify your fish or plant. The name pulcher means beautiful and is the specific name for a number of fish. It works out good because a species can only have one name and that name can only be used for that species. If two organisms are given the same name accidentally, the oldest (first fish given the name) keeps the name and the younger organism is renamed. If you're really interested in all the rules that apply to names you can find them in the International Rules of Zoological Nomenclature and the International Rules of Botanical Nomenclature.

Sometimes when you see a name printed it has other cryptic marks included in or tacked onto the name; for instance, in *Loricaria* sp. aff. *simillima*, the sp. aff means the fish seems to be *Loricaria* (coat of mail) *simillima* (like lima), but the person isn't positive it is the same fish. Another abbreviation that is very common is "var." as in *Cryptocoryne* (hidden seed) *wendtii* (named after Wendt) var. *jahnelli*. Var. stands for variety and is used when the plant you have has characteristics that make it distinct, but not different enough to be a species. Sometimes fish have the var. omitted, but the same thing applies.

You can have *Aphyosemion* (small fish with banner like tail) *australe* (southern) "orange", "gold" or "chocolate". They are all the same fish, but have been bred for different colors.

Sometimes fish are more different than a variety, but not different enough to be a new species. These are designated subspecies. Subspecies can be abbreviated as subsp. or ssp. But, usually a third name is assumed to be a subspecies and isn't marked. Subspecies names are often correlated with different geographic locations. If you are unfortunate enough, like me, to like killifish, you will discover that names can get really complicated.

Many species are identified by genus, species and subspecies. For instance, *Aphyosemion gabunense marginatum* (with an edge). Other fish have location codes tacked on like *Epiplatys* (flat above) *dageti* (named after Daget) Monrovia or *Rivulus tenuis* (thin or slight) Taco Talpa Park. If you're really lucky you get a location and a subspecies. How about *Aphyosemion ogoense ottogartneri* (named after Otto Gartner) RPC 169. Holy cow!

No matter how annoying it is to remember all those extra things, it is very important. As scientists learn more about fish and their genetics they are very likely to break the genus up and give the fish a new name (AAARRGHHH!). When you write out the new name you should say: new genus (old genus) species.

E.G.: *Fundulopanchax* (*Aphyosemion*) *scheeli*. (named after Jorgan Scheel). (*Fundulopanchax* = bottom *Panchax*)

Fish that are named after a person are said to have a patronymic name. They are usually named to honor someone in the scientific community or the fish keeping hobby who has contributed significantly to the understanding of fish. Men's names usually have "i" or "ii" added. Women's names have "ae" or "iae" added.

Now that we have all that out of the way, there are a couple of rules you should know about writing using scientific names. The genus name should always be capitalized. The species name and subspecies name are never capitalized. The names should also either be underlined or put in *italics*. As people become more aware of the genetic diversity of populations of fish, it is becoming increasing popular to include location names along with the scientific name. Location names are usually capitalized, but they are not underlined or put in italics; often they are put in "quotes".

If you are writing an article about *Pseudotropheus* (false tropheus) *macrophthalmus* (big eye) the first time the fishes name appears in the article you should write out the full scientific name. After that the genus is understood to be *Pseudotropheus* and you can use *P. macrophthalmus* instead of typing the entire name. Notice that the *P.* is still italicized.

As far as pronunciation goes, a general rule I've found is that every vowel is pronounced and that the stress usually falls on the second to the last syllable. Therefore... *Nannobrycon* (nanno = dwarf like; brycon = to gnaw or eat noisily) *unifasciatus* (one-striped) would be pronounced nanno BRI con uni fas ee AH tus.

If you want to really get into the pronunciation you can visit <http://www.saltsping.com/capewest/pron.htm>
They have five pages of rules.

The ScotCat website lists most of the names of catfish and their meanings. Visit www.scotcat.com/scientific_names/eiyymology.htm

Here are some more common name components and their meanings.

acantho = spiny
acuti = pointed
alba = white
altus = high, deep
ambly = blunt

amoena = pleasant
ancistrus = with barbed
apio = single (simple)
audax = bold
aureus = gold

australe = southern
bi = two
bicolor = two colors
brachy = short
brevis = short, small

buno = mound	hexa = six	pilus = hair
calvus = bald	hypo = under	pimelodus = fat tooth
carpus = seed	leuco = white	pinnis = fin
cephalus = head	limno = pond	plecostomas = folded mouth
cheilus = lip	lineatus = lined	plicata = to fold, overlapping
chromis = color	litho = stone	pod = foot
chryso = golden	longi = long	poecilia = mottled
cichlasoma = perch shaped	lutea = yellow	poly = many
body	lyrata = lyre	praecox = premature
coeruleum = blue	macro = large	pseudo = false
con = together	maculatus = spotted	pterus = fin
cordi = heart	mega = large	pugnax = combative
corydoras = helmeted leather	melas = black	rostri = snout, beak
skin	micro = small	rubens = to be red
coryne = seed	mono = one	rubra = red
crispus = curlley	morph = form or shape	semi = half or part
crypto = hidden	multi = many	soma = body
cteno = comb	nigra = black	speciosa = showy form
deci = ten	neo = new	sperma = seeds
decorus = beautiful, graceful	noturus = back tail	stellata = covered with stars
difficil = hard, difficult	notus = back	stoma = mouth
dolicho = long	ocell = little eye	sub = under
elassoma = tiny body	ocellatus = eye spot	tenellus = soft
erythro = red	octo = eight	tenuis = thin, slight
exilis = thin, slender	oligo = many	tetra = four
faciatus = stripe	ophthalmus = eye	thorichthys = leaping fish
falax = deceptive	osteo = bone	tri = three
formis (forma) = shape	ovata = egg shaped	troph = food hooks
formosa = beautiful	papillio = breast	uni = one
geo = earth	parvus = small, little	vulgaris = common or
gnathus = jaw	penta = five	ordinary
gymno = naked	petro = rock, stone	xantho = yellow
haplo = single	phago = eat	xeno = strange, different
hetero = different	phila = loving	xenocara = strange head
hemi = half	phylla = leaf	
hetero = different	pilosus = hairy	

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An Unusual and Different Mouthbrooder: *Betta falx*

By Alexander A. Priest

Reprinted from Feb 2004 **Modern Aquarium** Of the Greater City Aquarium Society

Scientific Name: *Betta falx*

Native habitat: Malaysia (Jambi and Medan in Sumatra)

Adult length: 1 1/2"

Water Chemistry: soft, acidic

Water temperature: 72* to 76* F

Reproduction: Paternal mouthbrooder

Nutrition: Omnivorous (live foods for breeding)

Temperament: Generally peaceful (males become territorial when spawning)

The fish now called *Betta falx* is native to the Jambi Province of Sumatra, in the center of that island (which is the westernmost island of Indonesia, adjacent to the Malaysian peninsula), and it has also been found in the north of the island, in an area called Medan. It has just recently been recognized as a species (previously, it was considered to be a regional variant of *Betta picta*).

Description:

Betta falx is a small fish. Adults barely reach 1 1/2' in length (less than 4cm). The species name "falx" is Latin for "scythe." This refers to the continuous curved shape of the broad anal and caudal distal margins of a male in display. But, except for a male in spawning display, the fish is relatively drab in appearance. *Betta falx* is considered to be in the "Picta Complex," which consists of *B. Picta*, *B. taeniata*, *B. simplex*, and *B. falx*. Members of the "Picta Complex" share certain common characteristics, in that they all have dark pigmentation on the extreme edge of the caudal and anal fins, iridescent gill covers, and they are all relatively small as adults.

The body of the *Betta falx* is relatively thinner, with a narrower profile of the head, than that of *Betta picta*. It also has fewer lateral scales than that of *Betta picta* (27 vs. 27 to 30), and adult males lack a median caudal fin extension. *Betta falx* has blue bands in its anal and caudal fins, while *Betta picta* has red bands. In addition, *Betta picta* is found in hill streams, while *Betta falx* is found in lowland swamp forests.

Water and Tank Condition:

Betta falx is found in nature among submerged bank vegetation, in nearly stagnant waters having acidic pH between 4.7 and 6.8, and at a temperature between 22* and 31.5* C. In the home aquarium, slightly soft water, with a pH ranging between 6 to 6.5, and a general hardness (GH) of ten or less, and a temperature between 72* and 76* F (22*-24* C) is sufficient. I usually add blackwater extract to the soft, neutral tapwater of New York City to lower the pH in my *Betta falx* tank, and the fish seem to do quite well with that.

While you can use gravel, I have never had success with breeding mouthbrooding *bettas* in tanks with a gravel substrate. However, a tank for *Betta falx* should have caves, and lots of plants, as the fish like to hide (and spawn) among them.

As this is a member of the genus *Betta*, you probably know that it has a labyrinth organ in its head that allows it to store and utilize atmospheric air, instead of solely relying on its gills for respiration. This means it does not require highly oxygenated water, and so filtration that creates agitation at the water's surface to facilitate aeration is not a requirement for these fish. However, the

labyrinth organ of mouthbrooders, such as *Betta falx*, differs from those of the bubblenesters, in that in mouthbrooders, the organ is more compact, and is used less frequently. The reason is that bubblenesters inhabit warmer water that is more oxygen-poor. Because of this, bubblenesters must make more frequent trips to the surface (thus, making more use of their labyrinth organ) than do mouthbrooders, such as *Betta falx*.

Temperament:

This is a very shy fish, that spends most of its time in seclusion, except when engaged in courtship, spawning, or eating. Except for males defending their territories, there is very little observed aggression among the fish, even in relatively small tanks.

For breeding purposes, *Betta falx* probably should be kept in a species tank that has caves and plants. They can easily also be a part of a peaceful regional biotope aquarium with tankmates such as Licorice Gouramis (*Parosphromenus* sp.), or Croaking Gouramis (*Trichopsis vittata*). These gouramis generally occupy the upper part of the tank (while *Betta falx* usually stays at, or near, the bottom), and all of these fish have somewhat similar water requirements. However, care must be taken to provide sufficient space and hiding places for each species in such a community setting.

Breeding:

This fish is paternal mouthbrooder (this means the male holds the fertilized eggs in his buccal pouch until they hatch and are able to swim). As is typical of mouthbrooding bettas, the female is the one that initiates the spawning. She selects the male to mate with, and the pair (after some courting dances that can last several hours) will embrace, and eggs are released. The female then picks up the eggs and "tosses" them to the male, who puts them in his mouth for incubation.

Although this is a fairly small fish, the eggs are relatively large. So, the number of eggs the male can hold in his mouth at one time (and thus, the number of fry from each spawning) is small. Once all the eggs that the male can hold are transferred to his buccal pouch (you might see some "leftovers" on the bottom of the tank), the female often stays around the brooding site, and seems to protect her mate until the fry are released. The eggs hatch in about three days, and free-swimming fry are released from the male's mouth about a week or so after that.

Once the fry are released, the parents provide no parental care. As long as the parents are well-fed, they will not harm the fry. While the fry can be raised in the same tank as the adults, it is prudent to remove the female right after spawning has occurred, and to remove the male (and separate him from the female) once he releases the fry. First of all, without the waste produced by the parents, it is easier to maintain high water quality. Second, the parents should be separated from each other for a while because the female will usually attempt to spawn with the male again. This should not be allowed to happen, as the male needs a week or two of rest after his brooding duties are over. Remember, the male was not able to eat for over a week while his mouth was full of eggs and fry. There are breeders' reports of males apparently dying of exhaustion and malnutrition caused by repeated and uninterrupted spawnings.

Once released by the male, the fry are miniature replicas of the adults, and sufficiently large enough to accept baby brine shrimp and microworms. The male will make no further attempts to shelter the fry within his mouth after they are free-swimming.

While this is generally a shy and peaceful fish, adult males can become territorial at spawning time; so the number of adult males you can safely keep in one tank depends upon the size of the tank, and whether it has sufficient vegetation, rocks, or other ornamentation to provide distinct territories for each male to defend. I always provide numerous caves in tanks for betta mouthbrooders, as the males seem to prefer to use them while they are incubating the eggs. *Betta falx* spawns at, or near, the bottom of the tank.

There is a school of thought which holds that brooding is an evolutionary reaction to the fish moving into (or finding itself in) faster moving waters, where bubblenesting is not feasible, and so faster moving water is more appropriate for the home aquarium. Another school holds that mouthbrooding is a reaction to predation, and, except for riverine species, more gentle water movement can be used. I have always had better success with *betta* mouthbrooders using sponge and box filters (i.e., fairly slow water movement), but I know other aquarists who have experienced exactly opposite results. The bottom line appears to be: try both, and once one method works with a particular batch of fish, then stick with it.

Health and Nutrition:

Betta falx is also a relatively hardy and generally disease-free fish. However, it is prone to the parasitic infestations that can cause *Ichthyophthirius multifilis* ("Ick" or "White Spot Disease") and *Oodinium limneticum* ("Velvet" or "Rust Disease"), if water conditions deteriorate.

These fish will usually accept any food (live or prepared), darting out to grab it, and darting back into hiding to eat. But, if you want to induce spawning, then live foods are almost a requirement. I feed my *B falx* live adult brine shrimp and blackworms to condition them for spawning. While they will eat the frozen variety, it is with considerably less "gusto," and with a lot more uneaten food for me to clean up later.

Historical Perspective:

Before 1998, *Betta picta* (one of the earliest *Betta* species to have been scientifically described) was thought to have two primary regional variants: *Betta picta* "Java," and *Betta picta* "Sumatra" (sometimes called *Betta picta* "Jambi"). In 1998, Heok Hui Tan and Maurice Kottelat published an article in **Revue Suisse de Zoologie** (Swiss Review of Zoology) titled, "Redescription of *Betta picta* (Teleostei: Osphronemidae) and description of *B falx* sp. N. From central Sumatra." That article established *Betta picta* "Sumatra" (or "Jambi") as the separate species *Betta falx* (and so *Betta picta* "Java" became just plain *Betta picta*.)

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Electronic Exchanges

More societies are going to an electronic-only exchange to save on printing and postage. We exchange with several clubs this way. Many of the articles I reprint are received this way. The major drawback is I don't have a paper copy to pass around at the meetings when I'm done with it. So, I will start listing on the forum when I receive a new exchange, and people who are interested in seeing a copy can contact me to make arrangements. This will let you know when something is received, and it will make me visit the forum a little more often. -- Steve

Spawning Peckoltia sp. L134

Leopard Frog Plecostomus or Gold Banded Peckoltia

Eric Bodrock

Reprinted from the September 2010 Bulletin of the Hamilton & District Aquarium Society

Like many hobbyist, a few years ago when the Pleco craze hit the hobby, I too was hooked and started a “wish list” of all the species I would like to get and work with. Even today, I am still adding to the list. Unfortunately, my space restriction has put a hold on obtaining new suckermouths. The L46, L263, L134 and “Calico” Bristlenose are the species I am currently maintaining. I have had pretty good success for many years with the L46, and just in the past year, have had success with my L134s. This is their story.

I got hold of a group of eight wild fish, about four years ago; they were approximately two inches in total length when I got them. Over time, I lost one of them but the others have grown nicely and have reached their max adult size of three and half inches (9cm). I never took the time to try to sex them, thinking that with a group of that size I should have both sexes. For the last two years, they have been housed in a thirty gallon “breeder” tank along with several groups of Corydoras catfish.

In May of 2008, I found my first spawn, or should say I saw my first fry. You don't see the adults much, other than at feeding time. Normally you will just see their tails sticking out the end of caves! I never saw any eggs or noticed any spawning activity. I just found five of the little buggers sticking to the side of the tank. Knowing that they were starting to spawning, I started to pay closer attention to them. About two weeks later, I saw an adult wedged tightly in the back of a narrow ceramic cave. After several attempts of sneaking up on the cave with a flashlight, I was able to see that there were eggs in the back of the cave. I removed the entire cave and placed it in to a two gallon tank. Several days later, the male (who guards the eggs) in the cave “kicked out” the cluster of eggs. The eggs are rather large, measuring 3/16” (5mm) in diameter and yellow in color. I figure the male knew the eggs were bad and gave up on them. I tried artificially hatching them by placing them on a clump of Java Moss with an airstone under them with a gentle stream of bubbles rising up around them. Within several days, some of the eggs began to turn white and the cluster began to fall a part. On the tenth day, a single egg hatched, but the fry died by the following morning. I have had several spawns since I found that egg cluster and I don't believe that the eggs normally take that long to hatch. I have found clutches of eggs that I knew were only a few days old that had already hatched. I assume that when the male is guarding them, he is also mouthing and cleaning them, and that action causes the eggs to hatch.

Speaking of the male guarding the eggs, the best way I have found to determine if they have spawned in your tank is to look for individuals that are “glued” to the back of a cave. If it appears they haven't moved for a couple of days, good chance that is a male sitting on eggs. With a flashlight and a little luck, you just might be able to see eggs if the male moves a little. Forget trying to shake them out: you would have to break the cave apart to remove him or the eggs! I normally remove the entire cave and place it into a plastic shoebox or smaller tank (as mentioned above) which contains water from the spawning tank. Add an airstone, cover it and wait. Once the eggs hatch, the fry are sized at about 13mm (TL) and it is easier to spot their tails wiggle inside the cave. Fry only days old already have a developed sucker mouth and are able to hang on to the sides of the photo container for a short while! Growth of fry is very obvious for the first few weeks, and then the growth rate slows tremendously. The first batch of young I found in May of 2008, are now just two and a quarter inches long...at about one

year old! That is about the size that my breeders were when I got them. So that gives me an estimate that my group started to spawn at about three years of age. The fact that spawns occurred in early spring for the last two years may also be an indicator that they maybe seasonal spawners.

Water parameters at the times I have found spawns do vary a little, but average the following: pH 6.7-6.9, TDS around 270 ppm and the temperature around 76°F. Weekly water changes of 40% are done with treated tap water. Tank bottom is covered with a very thin layer of natural creek sand and water is filtered with a sponge filter. Java moss and Java fern provide some overhead cover from the fluorescent light. The tank is also filled with extensive rockwork and ceramic caves of various sizes and diameter to provide hiding places and breeding sites. They can get a bit feisty with each other, especially around feeding time when they are the most active. They don't bother with the Corydoras, or with a couple of their own young that are present.

Diet of the adults consist of live blackworms, frozen plankton, bloodworms and daphnia, freeze-dried tubifex worms and assorted sinking pellets...they go crazy for sera® Catfish Chips. The young, once their eggs sacs are absorbed, get microworms and live baby brine shrimp, in addition to the same diet as the adults as they grow out.

L134 are from Brazil, and are not currently listed as one of the many species of Plecostomus that are banned to export, but the legislation and development of that country are continuously changing, so who knows where they will be in the future. If you have any, hang on to them and put a little effort and time into spawning them. I hope this article gives a few pointers. Best of luck in your attempts with them.

Club Hopping 2010

Steve Edie

Oct 3 - St Louis: Missouri Aquarium Society – Swap Meet

Oct 14-19 – Ash Meadows, NV – North American Native Fishes Association – Annual Convention

Oct 16 – East Peoria: Tri-County Tropical Fish Society - Auction

Oct 21-24 – Baltimore: All Aquarium Catfish Convention

Nov 14 - St Louis: Missouri Aquarium Society - Auction

Nov 19-21 – Cleveland: Ohio Cichlid Association – Extravaganza

Jan 14, 2011 – Urbana, IL: Champaign Area Fish Exchange - Auction

July 14, 2011 - Urbana, IL: Champaign Area Fish Exchange - Auction

Note: The 2010 Chicago Cichlid Classic will not be held on Memorial Day Weekend this year. They will be helping with the ACA Convention.

West African Cichlid Maintenance Program

By Jim Cormier

Reprinted from the June 2010 Underwater News of the Pioneer Valley Aquarium Society

When we hear someone say West African cichlids most people think of the Krib or Kribensis. When they were first imported that's what they were called but like most other cichlids the name changed and is now Pelvicachromis pulcher, Krib stuck as its common name. They were in fact the first cichlid I spawned back in the early 80's. Now there have been 4 or 5 others that you would find available from other hobbyist or your local pet store. Buffalo heads, jewls and kribes were common but after that they were hard to find and you had to get them from specialty importers and it seemed no one was spawning many of these. Over the years this hadn't changed much but in the last 10 years there has been an increased interest in them but it seemed to come and go from year to year. A couple of years ago at the ACA convention I was talking to Ted Judy about this and I mentioned that we really need to start a program to keep track of what species people are keeping and spawning. So he agreed and with his help I started the West African Cichlid Maintenance Program.

Basically the program is just a web site that I list who is keeping what species. We also try to make sure all the species are correctly identified and I am trying to have pictures up for all of the species to help with the identifications. Of course it is organized into family groups or tribes as they are called. The web site can be found at www.jmtrops.com.

If anyone is keeping any of these please consider entering the program. I don't require you to do much, just keep working with the species and keep me updated on any changes, it's real easy. Now you don't have to have wild caught fish but we don't include aquarium strain fish since we can't verify any of its lineage.

OK so if anyone wants to participate then talk to me about what you have but if you don't have any of these I have 2 types available. I have one of the wild type kribes, F1 pairs Pelvicachromis pulcher Red from the Lagos Nigeria location. These are adult pairs ready to spawn and are a good one to start with. The second one I have is rarely seen Pelvicachromis signatus and I have F1.5 pairs available but these are a little harder to spawn. I call them F1.5 because their father was a F0 and their mother was a F1. If both parents are F0 then the babies would be F1 and spawning F1's gets you F2's but they don't have a method for unequal pairs.

Right now we only have 21 hobbyists in the program, that is not much considering there are about 270 species and growing. We need more people to work with these cichlids so if your thinking about it talk to me at the next meeting.

From The Fish Room

By Ed Millinger

Recently a friends five year old was in my fish room and he was very surprised to see a toothbrush. I use it to clean tight spots in my corner filters. I started thinking about how many typical household items I have in the fish room that to some might seem out of place. Here's what I came up with, Q-tips for cleaning even smaller crevices than the toothbrush can reach, scissors for cutting air line tubing, a turkey baster to harvest live baby brine shrimp, a towel rack to hang wet towels on to dry, a

nail to remove sludge that builds up in the opening of my sponge filters air outlet and a kitchen knife to help separate the bubble attachment to my sponge filter to help clean it and improve air flow.

If you could eliminate one thing from the fish room what would it be? My vote goes to hair algae.

Many years ago Webster Pet owner Jim Shola asked me to test a new food from Wardley called Total Tropical. I took it home and tested it and filled out a form suggesting one thing they could do was make the flakes larger. You could feed the large flakes to big fish and crumble it to feed to smaller fish, I was reminded of this recently when I purchased a name brand flake food and was disappointed to find the flakes were small and it seems like a lot of work for the larger fish to consume this food. Maybe I'm just picky but the flakes Mike sells at our meetings are the larger variety and the ones I prefer.

It's funny how you think your fish room is set and then you change it. I didn't envision adding tanks but when I came home from the Midwest Cichlid Association I looked at the tall 29 gallon show tank and noticed that there was just enough room to squeeze it between two 125's. The next question was what to set it on. My construction skills being what they are (very poor) I remembered Laura and Dave Wagner telling me how they used cement blocks and after a trip to the hardware store I was in business. I then wondered if I could squeeze in another one somewhere and found a spot directly across from from the tall 29. I went on the MASI website and asked about 40 gallon breeders and two people responded telling me that Tropical World on Watson Rd. had a special on them. So now I've added two new aquariums, what's next (?) a rack of smaller tanks down the middle as Charles Harrison suggested?

Remember it's a hobby not a job.

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.

BAP Report

Steve Edie

Member	Species	Common	Pts	Total
<u>July 2010</u>				
Charles Harrison	<i>Protomelas taeniolatus</i> #	Red Empress	0	2295
Steven Hoffman	<i>Poecilia prolifica</i>		5	60
Steven Hoffman	<i>Pterophyllum scalare</i>	Gold Angelfish	10	70
Steven Hoffman	<i>Xiphophorus</i> sp. "Domestic Swordtail"	Neon Swordtail	5	75
Cory Koch	<i>Pundamilia nyererei</i> "Makobe Island" *@		25	1372
Andy Walker	<i>Poecilia reticulata</i>	Black Guppy	5	20
Derek Walker	<i>Allotoca dugesii</i> "Rancho El Molino" (Dibble 00) *@		35	1374
Derek Walker	<i>Psammochromis riponianus</i> @		20	1394
Derek Walker	<i>Skiffia lermiae</i> @	Olive Skiffia	40	1434
Derek Walker	<i>Xenotoca variata</i> "Jesus Maria"	Jeweled Splitfin	15	1449
<u>Aug 2010</u>				
Marc & Kathy Daly	<i>Cyprinus carpio</i>	Nishikigoi Koi	10	629
Charles Harrison	<i>Puntius titteya</i>	Cherry Barb	10	2305
Mike Hellweg	<i>Akysis prashadi</i> ***	Prashad Wasp Catfish	35	3954
Mike Hellweg	<i>Goodea gracilis</i> @		30	3984
Mike Hellweg	<i>Hyphessobrycon amandae</i> *	Ember Tetra	20	4004
Mike Hellweg	<i>Hypsophrys nematopus</i>	Neet	15	4019
Mike Hellweg	<i>Neolamprologus modestus</i>		10	4029
Mike Hellweg	<i>Limia</i> sp. "Tiger" *	Tiger Limia	10	4039
Mike Hellweg	<i>Poecilia</i> sp. "Para" *	Two Spot Guppy	10	4049
Mike Hellweg	<i>Pterophyllum scalare</i>	Koi Angel	10	4059
Mike Hellweg	<i>Puntius vittatus</i> *		15	4074
Jerry Jost	<i>Aphyosemion georgiae</i> *		20	820
Jerry Jost	<i>Aphyosemion passaroii</i> (GEB 94/5) * (Geb was a Clampett)		20	840
Jerry Jost	<i>Fundulopanchax gardneri</i> "Lafia"		15	855
Jerry Jost	<i>Skiffia multipunctata</i> @		40	895
Cory Koch	<i>Ancistrus</i> sp. "Calico" *	Calico Bristlenose	15	1387

Cory Koch	<i>Lamprologus ornatipinnis</i>		10	1397
Gary Lange	<i>Limia</i> sp. "Tiger" *	Tiger Limia	10	1564
Gary Lange	<i>Melanotaenia kamaka</i> *	Kamaka Rainbowfish	15	1579
Gary Lange	<i>Melanotaenia misoolensis</i> *	Misool Island Rainbowfish	15	1594
Gary Lange	<i>Melanotaenia praecox</i> (Pagai 08) *	Neon Rainbowfish	15	1609
Gary Lange	<i>Puntius vittatus</i> *		15	1624
Tony McMillan	<i>Macropodus opercularis</i>	Paradise Fish	5	119
Jim Miller	<i>Ilyodon cortesae</i> @*		35	2324
Derek Walker	<i>Aphyosemion hera</i>		15	1464
Derek Walker	<i>Characodon</i> sp. "Amado Nervo" *		20	1484
Derek Walker	<i>Goodea atripinnis</i>	Black Fin Goodeid	15	1499
Derek Walker	<i>Haplochromis aeneocolor</i> @	Yellow Belly Albert	20	1519
Kurt Zahringer	<i>Nothobranchius rachovii</i> (Beira 98) *		20	110
Kurt Zahringer	<i>Nothobranchius rubripinnis</i> "Mbezi River" (TZ 83-5) *		20	130
Kurt Zahringer	<i>Tetraodon suvattii</i> **	Arrowhead Puffer	30	160

* = First MASI species spawn (5 point bonus)

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

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

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

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

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

Sources:

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

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

As you may have noticed, Mike Hellweg has been on a BAP binge lately, even resorting to breeding (gasp) Cichlids! He says it's for some contest, but I think he's just showing off.

Editor's Notes

We have original articles in this issue from Mike Hellweg (who seems to have a little more time to write now), Ed Millinger, and Kathy Deutsch. We also have 5 exchange articles, some new and some not so new. I did not check the internet references from 2003 for rust, but I've been meaning to publish the fish names article for a few years since Steve Edie sent it to me as the previous exchange editor. We also have two breeding articles and two conservation articles. I particularly liked the focus on location information in one of the articles since most of us who don't keep killies don't think about this. One more issue this year, one more chance for you to win this year's publication award; deadline is October 15th.

HAP Report March April 2010

Mike Hellweg

Member	Species	Common	Rep	Pts	Total
Andy Walker	Echinodoras sp. Compacata*	Compact Sword	V	15	455
Mike Hellweg	Cyperus involucratus	Baby Tut Umbrella Grass	V	10	2945
Mike Hellweg	Echinodoras berteroii	Cellophane Burhead	S	15	2960
Mike Hellweg	Juncus effusus spiralis	Soft Corkscrew Rush	V	10	2970
Mike Hellweg	Scirpus cernuus*	Fiber Optic Rush	V	10	2980
Mike Hellweg	Scirpus cernuus	Fiber Optic Rush	OB	10	2990
Mike Hellweg	Vallisneria nana	Australian Val	V	5	2995
Gary Lange	Hydrostemma longifolium*	Barclaya	V	20	1185
Gary Lange	Hydrostemma longifolium	Barclaya	IB	20	1205
Harold Walker	Crinum calamistratum*	Waffle Leaf Bog Lily	V	20	1190
Harold Walker	Nymphaea micrantha*	Gabon Water Lily	V	20	1210
Kurt Zahringer	Vallisneria spiralis leopard*	Leopard Val	V	5	40
Kathy & Marc Daly	Cyperus involucratus	Baby Tut Umbrella Grass	OB	10	305
Marlon Felman	Eichhornia crassipes	Water Hyacinth	V	5	70
Marlon Felman	Pistia stratiotes	Water Lettuce	V	5	75
Marlon Felman	Pistia stratiotes	Water Lettuce	OB	5	80
Marlon Felman	Pontederia cordata	Pickerel Weed	OB	10	90

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

* = MASI First



MASI Logo merchandise is now available from Café Press. Thanks to Bart Kraeger for creating the site and Michelle Berhorst for creating a high-resolution digital version of the logo, you can now purchase logo merchandise on-line. Pick from T-shirts, jerseys, caps, tote bags, coffee cups, and more.

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

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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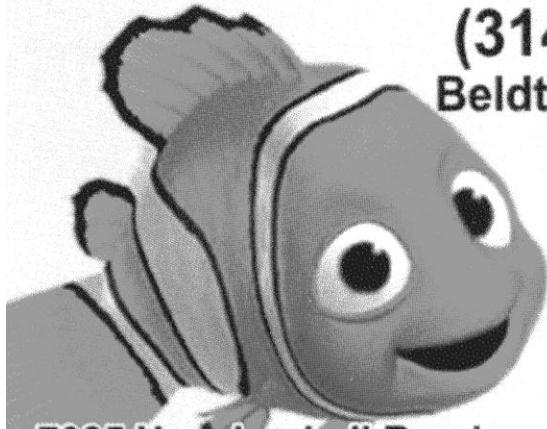
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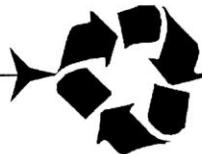
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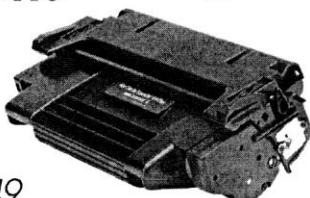
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