



POST OFFICE BOX 6219 SHIRLINGTON STATION ARLINGTON, VIRGINIA 22206

Delta Tale is published for the benefit of the Potomac Valley Aquarium Society a non-profit orginization, established in 1960 for the purpose of furthering the aquarium hobby by dissemination of information, encouraging friendly competition, soliciting participation in its shows, and promoting good fellowship. Correspondence should be addressed to : PVAS, P.O. Box 6219, Shrilington Station, Arlington, VA 22206. Original articles and drawings may be reprinted by non-profit orginizations if credit is given to the author, Delta Tale. and PVAS. Two copies of the publication in which the reprint appears must be sent to Delta Tale, please put the authors name on one copy to insure that it is given to him/her. Anyone else wishing to reprint items from Delta Tale should contact the author or PVAS for permission. All materials for inclusion in Delta Tale must reach the editor by the 20th of the month prior to publication. PVAS and Delta Tale disclaim any responsibility for content or availability of advertised merchandise or services in these pages. Customer satisfaction is a matter to be worked out exclusivly between the advertiser and the buyer.

### PVAS OFFICERS, 1984

President: Gerry Hoffman

(703) 347-7486

Vice Pres.: John Jessup (703) 534<del>-</del>1704

Treasurer: Maggi Mahoney

(703) 534-0006

Corr. Sec.: Ruth Brewer

(703) 941-6692 Rec. Sec. : Pete Tietjen

(703) 620<del>-</del>0637

### PVAS BOARD OF GOVERNORS, 1984

Jerry Stirman, Darrell Holman, John Mangan, Kenny Warren ex officio member- Pat Mahoney

### PVAS COMMITTEE HEADS. 1984

Auctions:

Pat Mahoney BAP : Alex Cummins Library: Maggi Mahoney

Membership: Kurt Schnepf Spring Show: Darrell Holman Bowl Shows: Frank Angilletta

Programs : John Jessup Ways/Means: Alex Cummins FAAS : Woody Griffin Delta Tale: John Mangan

Printed by TOP CAT PRINTING. 164 Colburn Dr. Manassas Park, VA

### FROM THE PRESIDENT

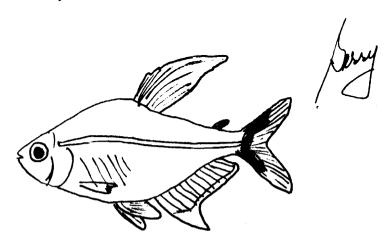
December, and the last of twelve months brings 1984 to a close. The year has had its troubles, like losing our meeting place again and having to find another, and also its highlights, like a successful Show, Auction, monthly mini-auctions and Bowl Shows(could a Goodeid ever win the Super-Bowl Showdown John?). PVAS continues onward, and 1985 should be even bigger and better. Join us for that 25th anniversary year.

The second time around for me as president should also find me more efficient and allow me to do things better the second time. This also means having to collect my thoughts for another dozen messages. The next issue of our wonderful publication will highlight the special

features PVAS will undertake in1985.

A yearly wrap-up must include thanks to everyone who pitched in and helped make PVAS worthwhile for everyone. We all enjoy fish and together we can enjoy it even more. Longtime PVAS members leaving the Board are Maggi Mahoney, Ruth Brewer, and Pete Tietjen. Their efforts this year, as in previous years, are duly noted and my thanks goes to them for their advice and support. The <u>Delta Tale</u> has become a solid, well-balanced publication once again under John Mangan's editorship. Do it again one more year John, but invest your time and money in some real fish, please.

Turn the pages of this issue and find the details for our December Awards/Party meeting. Kids are welcome, non-fishinterested spouses, and friends are invited to come along and meet the rest of the club and possibly even talk about something other than what fish spawned this month or what fish found the tiniest crack to jump through and wind up in the vacuum cleaner. The results of the PVAS Fish of the Year will be announced, and you have just got to be there to find out who won. Ask Santa for some nice fishy items and see what he brings you this year. Everyone have a Happy Holiday and come back with a new excitement next year.



#### FRUM THE EDITORS DESK

First thing I want to do this month is to explain something from last month. At the end of my column I made a remark about Gerry typing upside-down. All of you that noticed this either didn't understand what it referred to or assumed it was an inside joke. Well what it was, was a practical joke that backfired on me. I had inserted Gerrys column into the magazine upside-down. Unfortunately I forget to include a note to the printer letting him know that the page was supposed to be that way. Being a nice guy he decided to "help" the stupid editor by "fixing" the upside- down page. Oh well, I guess that's what I get for trying to be a smart-aleck and playing a dirty trick on Gerry. After all Gerrys a pretty great guy. Just think of all of the other leaders that got re-elected to office unaposed- Hitler, Stalin, Mao, to name only a few, historical figures all. What right does someone like me have to play a joke on someone like this.

This months cover is by Becky Pajak. Thank you Becky for taking the time and trouble to do it. At least there are a few people out

there willing to help.

This months meeting will be the PVAS Christmas dinner, party, awards etc. We're going back to our traditional Christmas dinner, this is a Real dinner. Lots of good food. Everyone is requested to bring some type of food as a contribution to the dinner (contact Barbara Blumberg for details on what is needed) and every person that comes must supply some type of small, wrapped, fish-related gift to be put under the Christmas tree. PVAS will have a few extras for sale in case you forget. Towards the end of the evening they will be passed out to everyone present.DO NOT bring a live gift. Some people don't open their gifts until Christmas morning. More information can be found on the next page.

There's one final thing that I would like to clear up before we end the year. Over the last few months there has been a running feud between Gerry Hoffman and myself in our Delta Tale columns. I hope most of you relised that these were all in fun, apparently at least a few people didn't. Gerry and I are still friends, that's why we can write such things about each other. In answer to Gerrys question on the previous page about a goodeid winning the superbowl show- no a goodeid probably couldn't win. Goodeids are not the flashy kind of fish that attract everyones attention. In order to appreciate goodeids they must be observed in their "home tank" . One must spend a lot of time carefully observing them to see the subtle colors and the changes that occur with the different way light hits them. They will never be as popular as african cichlids, tetras, killies etc. People in our society are in too much of a rush to take the time to enjoy the subtle beauty of things. Even what at firstoto be very drab can be very beautiful if one only takes the time to slowly and closely examine it. However, we live in a society where people exercise by running instead of walking, so this is unlikely to happen.

This publication is supposed to be about fish not philosophy so

I'll get down off of my soapbox. That's all until next year. Hope John

to see you all at the Christmas party.

### December Happenings

\*No Bowl Show\*

\*No Mini-Auction\* \*No Baffle\*

\*One Great Door Prize for Someone\*

December Meeting- Annual Awards Dinner

December is our Christmas get-together meeting, with the whole family invited (including children). This is a pot-luck dinner affair, with PVAS supplying the turkeyand dressing, punch, and fun, Everyone coming should bring a side dish(veggies, dessert, bread) which will be coordinated by Barbara Blumberg(L10-262) ) so everyone doesn't bring the same thing.

\*We will be in the gym/cafeteria at John C. Wood where the Auction was \*We should have plenty of tables, but if you have room, bring a card table just in case. Plenty of chairs there.

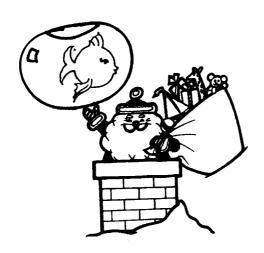
\* EVERYONE coming must bring a wrapped fish gift(\$2.00 or less) to

be exchanged at the end of the meeting

\*No live fish or plants please

\*Awards will be given out. Be there.

ed. note- as a special service to those of you that can't seem to come up with an idea for what type of dish to bring to the dinner I've found a couple of recipes that look good. Feel free to use either of them. Complete details are on the next several pages. J.M.



### CURRY THOSE CAL ICHTHYS by Dan Fromm

Some time ago my wife told me that while on a shopping expedition to New York she had found an Indian grocery store on the lower east side of Mannattan that had a freezer chest full of "Callichthys". On my next bussiness trip to New York I took some time off and strolled down Lexington Avenue to 28th Street, where I found an Indian grocery with a sign advertising "Hassa Fish". This was the place, and it did have a freezer chest full of one kilogram plastic bags of "Callichthys". According to the labels on the bags, the fish, nice fat ones around eight inches long, had been exported frozen from Brazil.

After inquiring how they were prepared, I bought two kilos of Hassa Fish and some spices to cook them with. One specimen went to the Academy of Natural Sciences, Philadelphia, where Jim Boehlke identified it as Hoplosternum littorale until proven different. The rest went into the pot.

I can report at first hand that <u>H. littorale</u> has firm yellow flesh and is easy to prepare and eat. The fishes scutes fall right off when the fish are cooked, and the flesh is easily seperated from the bones. There's a fair amount of meat on them, four filled me up. Unfortunately-I'm not sure whether this is due to the fish themselves or to poor handling between Brazil and the potthey were not particularly tasty, and had a strong musty flavor. I wouldn't on the basis of the ones we ate, recommend them. Since, however, in Trinidad the local <u>Hoplosternum</u>, <u>H. thoracatum</u>, common name Cascadu, is made into a famous and reputedly delicious dish we should probably try again. Should you have large Callichthyids that are surplus to your requirements, curry them.

#### RECIPE

kilo fresh Hassa Fish
salt to taste
tablespoons butter
onion, sliced
cloves garlic, finely chopped
inch piece ginger, finely
chopped

2 teaspoons coriander powder

1 teaspoon cumin powder
1 teaspoon turmeric powder

teaspoon paprika powder

4 tomatoes, chopped

a few bay leaves

Gut the fish, wash them, and wipe with salted water. Heat the butter and fry the onion until golden. Add the spices and fry for two minutes. Put in the fish, tomatoes, and bay leaves and enough water to cover the fish. Cook until the fishes scutes start to come off. Salt to taste. Serve over steamed rice. Feeds two.

This recipe adapted from Jack Santa Maria, Traditional Indian Cookery, Shamabla, Boulder, 1978.

Reprinted from the Oct. 1983 issue of Tropical Topics, Indianapolis Aquarium Society.

### IN CASE YOU ARE HUNGRY

By Tom Cox, SDTFS

Aquarists often forget that the aquarium pets they pay so dearly for are often practical items essential to life in other parts of the world. The delicate Glass rish (Chanda lala) is so common in parts of India that it is used for fertilizer. I have known this for years, but a recent discovery of one of the local gourmet specialties in southern Japan shook even me. It is called Yanagawa Nabe.

This delicacy is -- are you ready for this? -- poached loaches. That's right, loaches -- the Japanese Weatherfish or Dojo, Misgurnis anguillicaudata.

If you are tired of yours uprooting the plants in your aquarium, show him the following recipe and maybe he will be good:

Take several <u>live</u> Dojos. Combine them with slided burdock root and break an egg over them. Sweeten with sugar mixed in soy sause. Put in a covered crockery pot and place in a hot oven. After a few minutes, remove your Yanagawa Nabe from the oven and eat it.

In Fukuoka I have seen restaurants with tubs <u>full</u> of pojos awaiting just such a fate. I never have really <u>liked</u> the critters, but I look on them with a good bit more sympathy now than ever before. I may even add a few to my aquarium when I return to California—but they had better be good, or else!

Reprinted from Tropical Breeze, San Diego Tropical Fish Soc.

ed. note- well I've decided what I'm going to bring as my contribution to the Christmas dinner. Make sure you bring a fork... or on second thought better make that a net. J.M.



### SOME NOTES ON GOLDFISH KEEPING

Over the past several months, I have been pleasantly surprised by the number of questions I have received concerning goldfish keeping, both from within PVAs and from others referred to me by PVAS members. Perhaps interest is rising again for this old aquarium friend, and I won't be feeling quite so alone at future monthly meetings. Even the quality of goldfish in the local shops has been improving lately. Anyway, since the esteemed editor of the Delta Tail is always begging for articles, and has rashly stated that even non-ciclid/goodeid articles would be considered, I thought I might summarize for the Tail my own experiences with Carassius auratus.

TANK SIZE - Tanks of twenty inches height or lower are best. Pancy goldfish varieties may have trouble maneuvering in a deeper tank because of their less-effective swim bladders. Long, low tanks are best. A standard 30 gallon (36x12x16) is the minimum tank size if you have more than two or three fish and plan on keeping them to maturity. Remember that an adult goldfish may have a body length of four inches or more, and an overall length exceeding seven inches.

WATER QUALITY - Although a pH of around 7.0 is ideal, goldfish are tolerant of a wide pH range. Let them adjust to the pH of your tap water. A water conditioner such as Novaqua helps torn fins to heal quickly. Adding a tablespoon of non-iodized salt to each ten gallons of water will stimulate the growth of your fish and will reduce the chance of fin infections. Change at least 20% of the tank's water at least every two weeks, and use a large-diameter gravel cleaner when removing the water.

FILTRATION - Goldfish are enthusiastic, messy eaters, and good tank filtration is essential. Undergravel filters (unless they are reverse-flow) can be quickly overwhelmed by the waste load, and are often affected by the digging activities of goldfish. Use a power filter, but match its flow rate to the size of the tank. There is nothing worse than a tank too small for its filter's output and looking like fish being kept in a front-loading washing machine permanently on rinse! If your filter does not have appreciable biological filtration capability, supplement it with sponge filters.

TEMPERATURE - Fancy goldfish are temperate fish, not tropical fish. They will do best at temperatures of 65 to 75 degrees. Heaters are necessary only in the winter, and only to insure the tank temperature will remain stable in the 65 - 68 degree range. Below 65 degrees, the fish begin to slow down their activity, their food requirements lessen (and are hard to judge), and little growth will take place. Goldfish will tolerate temperatures above 80 degrees, but you must be sure of adequate oxygen levels to meet their increased metabolism. Add aeration at higher temperatures if your fish seem to be congregating in the upper levels of their tank, and keep their tank as clean as you can, even reducing the amount and frequency of feedings, if necessary. Above 85 degrees or so, do whatever you can to reduce the temperature of the tank - even using small amounts of ice made from declorinated water - or move the tank (or at least your fish) to a cooler location.

FOOD - Other than for very small goldfish, do not use flake foods. Goldfish have the habit of swimming eagerly into floating food, taking a mouthful, and turning quickly away, which scatters the remaining flakes everywhere. Fancy goldfish are also susceptible to digestive problems from prepared dry foods. Use pellet food, and pre-soak it if necessary. Be sure to buy high quality food - many goldfish foods are still little more than bulk fillers. A Japanese pellet food of very high quality (Hikari) has recently become available in the PVAS area. Contrary to common wisdom, do not feed the largest pellet your fish are capable of swallowing. Smaller pellets allow your fish to take their food more easily - would you like to gulp your Big Mac whole? Frozen spinach, baby peas, cooked grains of rice, and chopped earthworms can be fed as a "natural" diet supplement, although the Hikari pellet foods have greatly reduced the need for such supplements, in my experience. I am having great success feeding freeze-dried ocean plankton (after reconstituting and adding liquid vitamins) instead of live foods. Once-daily feeding of goldfish over two inches in body length is sufficient for steady growth, and keeps tank pollution down.

INJURY/ILINESS - Before using any medication for physical injury or illness (other than parasite infestation), try moving the affected goldfish to a hospital tank with a tablespoon of non-iodized salt per two gallons of water, and do not feed for three to four days. This treatment alone often does wonders, especially for digestive problems and fin congestion. Fin congestion (inflamed red streaks in the caudal fins) is one of the most common goldfish maladies, and is usually caused by tank pollution due to overcrowding and/or overfeeding.

PLANTS AND DECORATIONS - Despite what the goldfish books say, I have never been able to keep any live plants in my goldfish tanks. They will either disappear overnight (if the fish like the taste) or will be constantly uprooted and partially chewed (if they don't). Ignore the scorn of other aquarists, and use plastic. Insure rocks and driftwood have no sharp edges or projections which can snag caudal fins.

COMPATIBLE VARIETIES - Do not keep the fancier twin-tail varieties of goldfish (ryukin, oranda, moor/demekin, lionhead) with the single-tail ones (common/wakin, shubunkin, comet), unless you are sure that all your fish are the same sex. A slower swimming female oranda will be badly harassed by a faster swimming male shubunkin with romance on his mind, and severely damaged caudal fins will be the result. Keep bubble-eyes and celestials in tanks by themselves to avoid injury and insure that they have a chance to find their food without unfair competition.

COMPATTBLE TANKMATES - Goldfish are gentle creatures, and several varieties of smaller fish can be kept with them in your tank, provided their temperature requirements and disposition are similiar to those of your goldfish. I keep white clouds, black ruby barbs, and Chinese barbs in my large tank for interest and contrast, and have had no problems. Remember to add the appropriate food for these tank inhabitants.

### NANNAETHTOPS UNITAENIATUS

Gerry Hoffman, PVAS

The Characins found on the African continent are a group of fish that are infrequently imported into this country, and are often a bit larger than one would want to keep in a 10 or 20 gallon tank. The most popular of all of these is the Congo Tetra, a somewhat large but absolutely splendid fish. The smaller, easier to spawn fish of the renus Neolebias are almost never seen these days, but would make a most welcome addition to any Tetra-lover's aquarium. Another genus of smaller fish is Nannaethiops, not so colrful, but attractive in their own way.

I was fortunate to come across a tank of N. unitaeniatus, labeled African Line Tetras. Being intrigued by the fact that that these were not South American Tetras, but their rarely seen African counterparts, I selected 5 young specimens tryin to sex them based on the advice of the shop owner. As luck would have it we were right, getting 2 females and three males. Feeding was no problem, as they devoured everything from flake foods to to live blackworms. Within a few months, the females were greatly distended in the abdomen, whereas the males stayed slim with a tinge of red in the dorsal and cauldal fins.

A 20 gallon long tank was prepared for spawning the group of Tetras by using fresh aged tap water mixed with 20% older water from a 125 gallon tank. A thin layer of gravel was spread over the bottom, and  $\frac{1}{2}$  of the tank was filled with clean Java Moss. Only an airstone bubbled slowly next to the heater which kept the temperature at 28 F. Just prior to placing the fish in the tank I added one gallon of water from the peat-diving killie tank. This had a deep amber tint to it as it was water that had been in contact with long fibered sphagnum moss for some time. Thus always seems to help getting the Tetras to spawn and to possibly control the fungus from infertile eggs.

The adult spawning group was placed in the tank and the lights were kept off directly above the set-up. Early in the morning of the second day together the results of spawning were noticed. Eggs were everywhere on the Java Moss. A flashlight is essential to detect the extremely tiny eggs, since the light will pick up the eggs as an amber reflection. Infertile eggs turn milky white very rapidly. As big as these females were, ther should have been plenty of eggs, and there were.

After finding eggs in the Java Moss, further inspection with the flashlight revealed the females hiding under the tangled web of green. Apparently spawning was finished since there was little activity from the fish and the females appeared noticeably thinner. Now came the hard part, trying to catch the spawners without disturbing the eggs in the Java Moss. After a few careful attempts to corner the fish and finding them diving back into the moss, I gave up and pulled out the Java Moss, and swiped back and forth until the quintet was captured. Needless to say, eggs were flying all over thetank and I hoped they weren't damaged. I replaced the green stuff, kept the light off and waited for the tiny fry to appear.

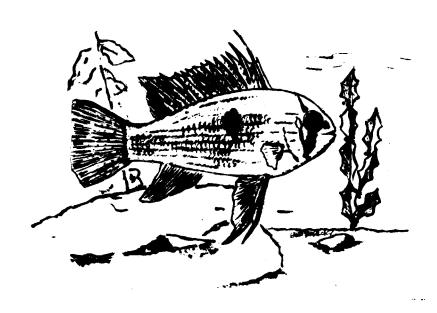
Allow me to talk about these uncommon Tetras from the Congo region of Africa for a moment. N. uniteniatus is a very shy and timid fish. Whereas Cardinals, Neons, and most other South American Characins like to school and swim in the open spaces of an aquarium, these fish tend to remain in the plant cover and shy away from unprotected areas. Under normal condition the African Line Tetra is not an eye catching

species, but when attempting to spawn, the males undergo a drastic color metamorphosis. The posterior 2/3 of each fish turns cardinal red and nondescript male becomes a stunning sight. Only in breeding does the fish become a thing of beauty.

Equally interesting was the fact that upon placing the breeding group back into a community tank, they continued to spawn some more within the hour. Eggs were to be seen among the roots of the crypts and in the Java Moss of their new home. Assuredly everyone else had a feast of fresh eggs for dinner. The males retained their redness for a few days as they chased the females without any further spawning successes. Back to their old state of affairs, plain colored and shy.

Early the next day the eggs in the breeding tank had deweloped into colorless balls plus tails without any hint of eyes. That evening the tiny slivers were hopping all about the tank. Two more days and they were swimming in a jerky fashion about the aquarium. As small as Tetra fry are, initial foods must be very tiny. For this purpose, my cultures of Philodina prove invaluable for feeding. I cannot stress the importance of these rotifers as a food for small fry. Anyone who can keep microworms alive can keep Philodina in good supply for use in feeding. After a few days of feeding rotifers, the diet of these African Tetras was supplemented with newly hatched brine shrimp. Later on powdered flake foods were accepted.

Like other Tetras, growth depends on an ample supply of food, good water quality, and room to grow. It is hard to feed a large school of tiny mouths constantly, and consequently my initial spawn diminished slowly. Several larger specimens grew rapidly and possibly devoured their weak and slow growing sibling. I eventually wound up with a healthy group of about 25 youngsters, enough to start another generation and continue thhe species.



### ON THE ROAD AGAIN

**Pat Mahoney** 

One year after the successful ALL CICHLID FACE-OFF held by the North Jersey Aquarium Society, those shy and retiring aquarists decided to try something a little bit different. On Saturday and Sunday (3-4 November) they put on a Tropical Fish Weekend - again at the VFW Hall in Ridgefield, New Jersey. The first day was devoted to an Aquatic Flea Market in which everything but the kitchen sink was flogged by the members. There were tanks, tank lights, filters, heaters, stands and air systems available at reasonable prices. The equipment was both new and used so there was something for every pocketbpok.

At the same time, fish being auctioned the next day had to be registered on Saturday and displayed overnight for the benefit of prospective bidders. The NJAS auction operates on a 50/50 basis - half for the seller and half for the Society.

On Friday morning I drove to Harrisburg, PA and picked up Gene Aldridge before heading East to Jersey. This time we managed to avoid the Cockroach Hilton as Chuck Davis made our reservations at a hostelry with the gradiose name of Chateau Renaissance. An old building with a new facade, the CR was quite adequate and at \$59 per night, it was more than a bargain for this area. One nice thing, we were located only a couple of miles South of the VFW Hall - less than ten minutes in traffic.

Friday evening we picked up Mike and Terry Sheridan at their home in North Bergen and drove to Jersey City to see Chuck Davis' (and Fran) new fish store. A recent venture in the retail market, the store is a well-stocked enterprise with many varieties on not-easy-to-come-by fish. Of course many varieties of Bread and Butter fish (don't knok it - it pays the rent) was responisible for a constant parade of "two Zebra Danios and a pair of Platties" buyers. Chuck also had a number of unusual cichlid and catfish for sale. His prices are lower than ours in the Washington area, but then everyones prices are lower than ours.

When the shop closed Chuck led us to a small, family-type restaurant. The outstanding food was Italian but the room temperature was pure Antartic. Ever eat in a Wind Tunnel? It seems there was a crack in the wall next to our table and the cold wind was strong enough to move the venetian blinds. Never realized Mike Sheridan had a blue complexion.

Chuck and Mike picked us up at the hotel on Saturday morning and after breakfast, the feur of us opened the VFW Hall. My initial contribution to the weekend was making the coffee - without which, nothing could be accomplished. Helped set up the Flea Market tables, too, while Aldridge manned the Door Prize Ticket table. As all fish for the auction had to be displayed commencing Saturday afternoon, the setting up of the display racks, water system and tanks occupied alot of people until mid-afternoon.

Saturday evening featured a Pot-Luck Dinner at the Hall. All NJAS members brought in the food. Out -of-towners (like Messrs Aldridge and Mahoney) were exempt from bringing anything except our hearty appetites. In addition, members brought in slides for a Show and Tell session after the dinner.

The auction got underway at 1:30 on Sunday afternoon. I thought the prices quite reasonable. Only a 7" Synadontis angelicus with a minimum bid of \$75 went bidless. I can remember when a specimen that size couldn't be had for \$300.

As ususal, I went overboard on Tanganyikans and a couple of Killes. Alright Maggiw, so what if we are a little late on next month's house payment?

The auction was completed and the Hall cleaned by 7:00 PM. The Exksteins, Wayne Libel and the two of us ate dinner at Fort Lee, RJ at the Western approach to the G.W. Bridge. I have never seen portions as large as that Diner put out and it was good too. Wayne left us after eating to return home to Easton, PA. Gene and I followed the Ecksteins across the bridge, thru Manhattan to Long Island via the Throggs Neck Bridge. It must have been 11:00 PM by the time we reached Casa Eckstein in Sayville.

The E's felt sorry for the PVAS orphans and took us in for the night. Nothing like amposing on your friends. Hope I can return the favor some day.

Before leaving for home the next day, Gene held the gun while I helped Charlie bag some of Ginny's fish for their new home in Virginia. Won't say what I borrowed but you can bet you will be seeing them in our Spring Show next May.

You know, if I should ever win the lottery, I would like to get Charlie down here to duplicate the air and water changing system he made for Ginny's Fish Room. It is truly outstanding and the contents of the tanks is what you would expect from this talented lady. She really has the fish. She is also the only person I know who would buy a

220 gallon tank for a dammed catfish. That is singular, folks. One critter in all that tank - not exactly a Betta Barracks, is it?

For all the beautiful specimens in her Fish Room, the current center of attraction involves an adult Cichlasoma spectabile - Tootsie. This critter used to be a male and played devoted pape to a number of spawns. When his mate left these mortal climes, shades of Christine Jorgensen, the critter decided it wanted to become BOTH parents. It now lays the eggs AND fertilizes same. You read correctly! Verification of this MOST unusual behavior has been made by no less than Doctors Paul Loiselle and Wayne Liebel. Think of the possiblities - one fish could be entered in a pairs competition. I also saw an entire twenty-gallon tank full of his/hers/its fry.

Got a late start for home on Monday arriving in Harrisburg about sundown. As I was not very perky I was happy to accept Gene's invitation to stay the night. You know I was pooped when I was only able to stay awake for the first half of the Redskins-Falcons game on the tube. It is hell to be thirty-nine; \*

Once again I would like to thank all of those North Jersey people for a fine weekend. Am already looking forward to going again for their show and auction in the Spring. You ought to try it - I can guarantee a great weekend.

Finally, I would like to extend a special thanks to the Ecksteins. I am sure Ginny and Charlie will remember the night that the Virginie Fish Bandit raided their fish room.

\* ed. note- Pat should know, he's been 39 several times.
J.M.

#### DID YOU KNOW?

Accorning to the October 1984 WET PET GAZETTE, there is another fish society whose publication sounds a bit familiar - <u>DELTA TALES</u> (plural). It is the publication of the Heartland Guppy Club, 2029 West 84th Terrace, Leawood, Kansas 66206. As many of our older members know, PVAS started out in 1960 as the Potomac Valley Guppy Club.

## MAKING USE OF YOUR LIBRARY by John Mangan, CAL (PVAS)

As collectors of aquarium litereture most of us find that we eventually have huge amounts of information setting in our libraries. I currently have about 180 books of various sizes and over 3000 magazines. Some collectors have much more than this and others have less. No matter how much you have the problem is once you have all of this information available to you how do you get at it? For example; Suppose that you aquire a fish that you aren't familiar with. You could spend months leafing through magazines trying to find out what conditions it needs. By the time you stumble across the article, hidden in the back of a 1916 Aquatic Life, that tells you everything you needed to know the fish would probably be dead.

There is a much faster and easier way to find information that will make your library much more useful to you. This is to keep a master index for your whole library. With it you can find all of the information you want on a fish in a matter of minutes.

The materials needed to make an index are: 3 x 5 index cards, alphabetical dividers, and something to keep them in. I use 5 x 10 shoeboxes (they're free!) but there are a variety of other choices such as plastic file boxes and even metal file cabinets if you want to get that elaborate.

Once you've collected the materials the next step is for each book and/or magazine that you wish to index to be assigned code letters. For example: Tropical Fish Hobbyist magazine can be assigned TFH, Aquarium Journal AJ, etc. In most cases this is rather simple, as in the above examples. Occasionaly though you may have to use a little imagination. For example, When I obtained the book Exotic Tropical Fishes it was assigned the code ETF. I found that when I was ready to Index Encyclopedia of Tropical Fishes I had a problem, ETF had already been used. This problem was solved simply by assigning the letters AV. These letters stand for Axelrod and Vorderwinkler, the books authors. The reason for giving everything a code rather than just using its title is that the code takes up much less room on the index card. Codes are also much simpler and faster to write than an entire title.

As you assign codes to things write them down on an index card that will be kept at the front of your index box as a key. This serves several purposes. If you come across a card with an obscure reference, such as ZBQ, you won't have to stand there scratching your head and mumbling "what the \*'#! does that stand for". You can look in the key. Also the key will allow you index to be easily used by other people.

Now the actual indexing can start. As an example of how this is done I will use the July 1983 issue of Tropical Fish Hobbyist. As you start through the magazine the first article you come to is on red-tail black sharks, Labeo bicolor. Find the index card for Labeo bicolor, or if you don't already have one, make one by writing Labeo bicolor - red-tail black shark across the top. Across the top of a second card write red-tail black shark. Across the middle of this card write see Labeo bicolor. The reason for this will be discussed below. Now that you have the card write TFH july 1983 pg 8 on the first empty line (of the first card). As you move through the magazine the next fish you come to is Chrysichthys ornatus. On its card write TFH July 1983 pg 17.

Library cont.

Continue like this through the rest of the magazine.

For books you do not have to go through them page by page, simply use the books index if it has one. You don't have to put page numbers on the index card since once you know which book to look in it only takes a few seconds to look in the books index. An exception to this is the looseleaf edition of Exotic Tropical Fishes. This book is the reason I originally started my index. Since new pages are added to it each month the index in the book soon becomes useless.

Now I will explain the reason for indexing things by their current scientific name. You will find that many fishes have several common names and no single one of these can be said to be THE correct one. You will also find many fishes listed in older literature under invalid scientific names. You could very easily end up with six or more cards for the same fish. This soon becomes hopelessly complicated and confusing. Therefore everything should be cross referenced to one card—the one with the current scientific name. You should now be able to look up a fish under any of its common or scientific names and be refered to one card that will contain all of the information that you need.

In conclusion, the system described above is not "the one best". This is the one that works best for me. You can modify it to fit your individual information needs.

Reprinted from CAL. Any person interested in the Collectors of Aquarium Literature should contact Dave Hopp, Editor, 3604 Agate Drive, Modesto, CA 95356.

ed. note- while this article was originally written for an audience with mostly large personal libraries it can also be used for small ones. When I first started using this system my library consisted of 4 or5 books and a few years worth of TFH magazines. Even then it was very usefull, now it is invaluable. Give it a try. J.M.

### Trading Post

All ads for the Trading Post should be sent to Delta Tale c/o John Mangan, 9770 Oleander Ave. Vienna, VA 22180, by the 20th of the month prior to publication.

FOR SALE: Fluval 302 canister filter. 220 GPH. Twin intakes and exhausts. With Kordon BioMech and two sponge filter blocks. Excellent condition. Asking \$45. Pete Thrift, 971-0594

A friend

On behalf of the membership of the American Cichlid Association, I wish to express my appreciation for your contribution to the Guy Jordan Endowment Fund.

Your kind donation, made in the memory of the late Mildred Aldridge, wife of Gene Aldridge, Chairman of the ACA's Slide Program Committee, will help reward Endowment recipients in their study of the Family Cichlidae.

I know Gene will appreciate your contribution to this worthy cause.

Sincerely,

Steve Sommermeyer

Chairman,

American Cichlid Association

\*\*\*

### HOTTICULTURALIST AWARD PROGRAM

Standings-John Mangan 130 points \*\* Alex Cummins 75 points \*



### Q and A

Any questions on fish, plants, live foods, or anything else dealing with aquariums can be sent to Delta Tale, c/o John Mangan, 9770 Oleander Ave., Vienna, VA 22180. Questions must be received by the 20th of the month prior to publication.

- Q. How do you get points for your fish?
- A. PVAS has two different programs in which points are received for fish. Briefly they are the Monthly Bowl Show in this program fish compete against each other at the monthly meetings. Points are awarded for entering the competition and for the 1st, 2nd, and 3rd place winners in each class. The classes for the month are listed in each issue of Delta Tale. The other program is the Breeders Award Program. In this program points are awarded for successfully breeding fish and raising the fry. Complete details on each of these programs is in every January issue of Delta Tale. If you don't have last Januaries issue the information will be in next months issue.
- Q. My main "baby" is an Oscar- a red one who is about 7". How long til he's full grown? When can I show him? How do you show "gigantic" fish?
- A. I've seen Oscars up to 16" but most get up to about 10-12" in home aquariums. The ultimate size depends on size of tank, amount and quality of food, water changes etc. These things will also determine how fast he grows. For best growth give lots of room, lots of food, and lots of water changes (20% weekly is good for oscars since they tend to be somewhat messy). An oscar should be big enough to show at close to 12". He must also have good fins, no scars etc. Regular water changes will prevent development of hole-in-the-head "disease" which is a problem in many large oscars which keeps them from being show quality. A full grown oscar will need a 10 gallon tank to be shown in. Carry him to the show in either a large plastic bag or bucket. See the article on Showing Large Catfish in the May 1984 issue of Delta Tale. You can use the same methods with bag cichlids.
- Q. How are microworms cultured and how may I obtain a starter culture?
- A. Microworms can be cultured in a variety of containers ranging from small bowls (margarin tubs work well) to plastic shoe or sweater boxes. Gerber dry baby cereal and/or cornmeal can be used as a culture medium. Add about a half inch of cereal and/or meal into the bottom of your container. Add enough water to make this very moist, but not soupy. Add a tiny pinch of yeast. This is often not needed as some yeast will be transfered from your starter culture. Now add a small amount of worms and media from a starter culture (spontaenious generation hasn't worked since the middle ages). Within a few days to a week worms will start to appear on the sides of the container. They can be wiped off and fed to your fish. Start a new culture every couple of weeks so that you will always have at least one good one going. Several PVAS members have microworms and could probably supply you with a start or check the ads in TFH and FAMA magazines.

### THE MIRROR

PAT MAHONEY

Million of the Control of the Contro

### REPRINTS

PHILODINA, THE PERFECT FIRST FOOD, Gerry Hoffman, THE WET PET GAZETTE, Norwalk Aquarium Society, CT, September 1984.

### **REVIEWS**

CONVENTIONALLY SPEAKING, Pat Mahoney, <u>CICHLID CHATTER</u>, Greater Chicago Cichlid Association, Chicago, IL, September/October 1984.

PHILODINA, THE PERFECT FIRST FOOD, Gerry Hoffman, THE VALLEY STREAM, Edgewood Valley Aquarist Society, Brookfield, IL, September 1984.

PHILODINA, THE PERFECT FIRST FOOD, Gerry Hoffman, TROPIQUARIUM, Motor City Aquarium Society, Rosenville, MI, November 1984.

SPAWNING MALPULUTTA KRETSERI; AN UNCOMMON ANABANTOID, Gerry Hoffman:

- THE TROPICAL BREEZE, San Diego Tropical Fish Society, San Diego, CA, October 1984.
- FISH TALES, Aqua Land Aquatic Society, Bristol, CT, October 1984.
- ARVAS AQUATIC DIGEST, Allegheny River Valley Aquarium Society, Olean, NY, Fall 1984.
- TROPICAL JOURNAL, South Florida Aquarium Society, Miami, FL, November 1984.

### FINAL BREEDER'S AWARD STANDINGS FOR 1984

GRAND MASTER BREEDER:	John Jessup	585 pts
MASTER BREEDER:	Garland Neese Gerry Hoffman Pat and Maggi Mahoney Darrell Holman Woody Griffin Vince Edmondson	1,040 pts 830 pts 735 pts 640 pts 610 pts 500 pts
ADVANCED BREEDER:	Ruth Brewer	305 pts
INTERMEDIATE BREEDER:	Jim Hajdies Art Lembke Wagner Family	275 pts 165 pts 165 pts
BREEDER:	Roser Family Frank Angilletta Alex Cumins Nathan Manwaring Amy Stirman	140 pts 140 pts 125 pts 75 pts 50 pts

### NOTICE TO ALL BAP PARTICIPANTS:

After a six months histus, the records of the BAP have been recovered. A scrutiny of these records indicate spawning reports for 1984 were never recorded. Further, spawning reports and breeding articles for this year were not included in the records recovered.

We made calls to the active BAP participants in an attempt to reconstruct this year's records. The above tabulation reflects all known spawnings for the year. If you know of additional spawnings by any member, please contact Pat Mahoney. If you can, would those of you who submitted breeding forms and/or articles this year provide duplicates for the Master Record.

It is unfortunate that this sort of thing can happen, but it has and we will have to make the best of it and go on from here.

Send all duplicates and future spawning reports to the PVAS Breeders Award Committee, P.O.Box 6219, Shirlington Station, Arlington, VA 22206.

### Rowl Show Results Lon November Expanded Show

Standings

34

32

28

14

7

#### CICHLIDS

EGGLAVERS/LIVEBEARERS

Ange	lfish/Discus	
1st.	Andy Hill	
2nd.	Jim Long	
3rd.	Andy Hill	

Livebearers 1st. Pat Gore 2nd. John Mangan 3rd. Pat Gore

### Mbuna Tst. Andu Hill

Characins Tst. Gerry Hoffman 2nd. Doug Mann

### New World (all others) No Enteries

Cathish Tst. Nathan Manwarina 2nd. Gerry Hoffman 3rd. Nathan Manwaring

### Haplocromis 1st. Kenny Warren

Sharks/Loaches Tst. Andy Hill 2nd, Gerry Hoffman 3rd. Doug Mann

## Riftlake (Non Mouthbrooder) No Enteries

Anabantoids 1st. Gerry Hoffman 2nd. John Mangan 3rd. Jason Kooken

Open Tat. Kenny Warren 2nd. Kenny Warren 3rd. Andy Hill

Open

### Judges Choice Kenny Warren

Andy Hill

Kenny Warren

Mark Steel

Ray Krouse

Doug Mann

Alex Cummins

John Mangan

Jim Lona

Open 1st. Pete Thrift 2nd. Gerry Hoffman 3rd. Jason Kooken

EGGLAYERS/LIVEBEARERS

Super Bowl Champion 999999999999999999 OH ROV

Nathan Manwaring 0

Rob Roser & Son

Mike Rininger .

CICHLIDS Month Quarter Year 'n Frank Angilletta 0 28

32

0

£

0 2

0

0 0

0

28

32

0

0

0 0

0

0

.1

6

	Month	Quarter year	
Gerry Hoffman	- 54	66	146
Nathan Manwaring	18	18	148
Pete Thrist	22	22	56
Doug Mann	24	36	48
John Mangan	32	38	45
Frank Angilletta	0	. 0	41
Rob Roser & Son	0	0	34
Pat Gore	30	30	30
Andy Hill	22	22	22
Jim Long	2	2	18
Mike Rinniger	2	8	16
Taxon Kooken	12	12	13

Ò

0

0

0 0 6

3

Alex Cummins Kenny Warren

Robert Pallansch

### MINUTES OF THE MEETING OF THE BOARD OF GOVERNORS OF THE POTOMAC VALLEY AQUARIUM SOCIETY

The November meeting was held on Sunday, November 4th at the home of Ruth Brewer. Attending were John Mangan, Maggi Mahoney, Jerry Stirman, Kenny Warren, John Jessup, Ruth Brewer, Peter Tietjen and Gerry Hoffman who attended late due to problems finding Ruth's house. The meeting was called to order at approximately 10:30 am.

Maggi reported that we made approximately \$800 profit on the Fall Auction and Dinner and that our current balance is around \$2200. We sold about 300 bags of fish in the auction.

It was reported that numerous persons were disappointed that the dinner was not a sit-down affair. In general it was felt that everyone had a good time at the dinner and in the future there will be a better effort to educate members to the differences between a reception and a dinner.

The Christmas party will be a sit-down dinner this year. Barbara Blumberg has volunteered to be the chairperson and will be calling all members to coordinate food. The Club will obtain a turkey and a ham to serve. John Jessup will be responsible for the liquid refreshment, as always. Due to limited table space, it is requested that everyone bring a card table to eat at. Also, do not forget that there will be a gift exchange.

Pat Mahoney and Gerry Hoffman will get the BAP material from Woody Griffin and prepare the necessary awards for the year. The prize for the Super Bowl Show will be a 10-gallon tank.

Work will begin on a special series to run in the  $\underline{Delta}$   $\underline{Tale}$  next year on the 25 year history of PVAS. More information on this will be forthcoming.

The meeting was adjourned at 11:45 am.

Respectfully submitted Peter D. Tietjen Recording Secretary

# DOTOMAC VALLEY AQUARIUM SOCIETY



POST OFFICE BOX 6219 SHIRLINGTON STATION ARLINGTON, VIRGINIA 22206

#### APPLICATION FOR MEMBERSHIP

DATE19
NAME
STREET
CITYSTATEZIP
TELEPHONE CONTACTS BB
Number of tanksTime in hobby
Fish you have spawned
What can this club do for you
What do you want to do for the club
Which sub-groups of fish interest you
How long do you plan to be in this area?
Occupation
Membership dues for the Potomac Valley Aquarium Society are:
Family \$12.00 Corresponding \$7.00 Individual \$10.00 Junior (under 18) \$5.00
Please send application and check for dues to address above.

Potomac valley Aquarium Sosiety P.O. Box 6219 Shirlington Station Arlington, Virginia 22206

Potomac Valley Aquarium Society Meets on the Following Dates in 1984;

December 10

mmetious by 3 to the dear 3. Joed facility, it. 237 (01d Lee Hewy), Sairfax Sirr, in the restrof the militaing. Françoire is welcome.