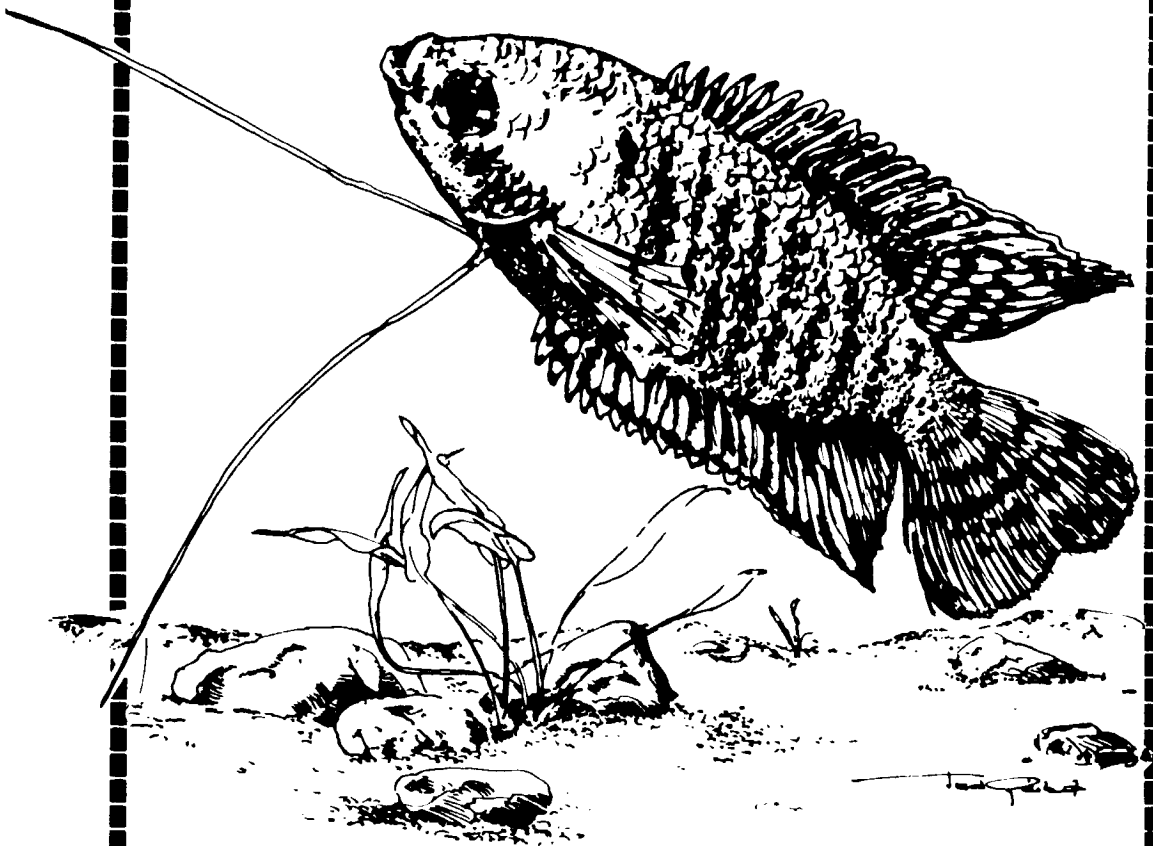


* DELTA TALE *

Sept. 1984
vol. 15 #9
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OFFICIAL PUBLICATION OF

potomac valley aquarium society



POTOMAC VALLEY AQUARIUM SOCIETY



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From The President

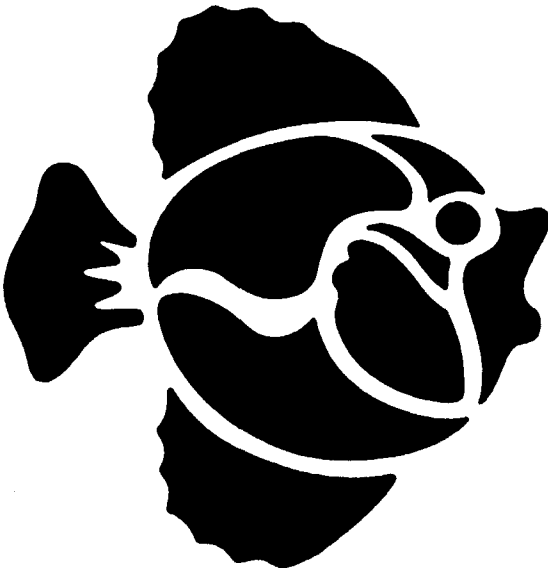
September is back to school month for everyone. The younger generation dutifully learns their ABC's and each year acquires new knowledge essential to advancing onward. Do we, as adults, still yearn for knowledge every year? Why not make September the month to buy or read one book on any aspect of our hobby, whether it be fish, plants, taxonomy, diseases, or whatever and use it for our own education? There are numerous possibilities to explore and still never be able to master any one area. But why not give it a try?

Now that summer is drawing to a close and most vacations are over and gone, let's get everyone back into the swim of things and get out to the meetings and activities. As of this month, we will be moving to the cafeteria area in the same place; the same location, just a larger room in the other building at the John C. Wood Facility. Our giant Fall Auction in October will be held in the cafeteria area and we will now be able to accommodate any size crowd (the standing room capacity is close to 900 people, 350 seated!). Remember our Saturday evening Banquet too. This year there will be plenty of room for all attending since we have reserved a room at the Army-Navy Country Club in Arlington. There will be no formal sit down meal, rather a two hour open buffet prior to the speaker and slide presentation. See the flyer enclosed in this issue and plan on being there. It is always a good time for PVAS members and friends.

August's picnic/pool party was lots of fun for everyone who attended. The water was great, lots of fun for everyone who was hitting each other in the head with inflatable beach balls, lots of food was devoured, and the company was enjoyable. In fact, the turnout was probably just right for the Mahoney's pool. Pat and Margi deserve a large thanks for allowing us to splash around for several hours. We already have a commitment from Ray Hughes to have the pool party at his place next year. Will this be a tradition?

See you at the meeting

Berry



Well another summer is over. Now it's time to start repairing all of the damage that a long summer of neglect has done to your tanks. Clean the tanks up, get some new fishes and plants, spawn the old ones so you have something to take to the fall auction, you might even sit down and write an article about something.

Starting this month our meetings are moved to a different room (same place- John C. Wood). I don't know the room number but it's the large room on the left end of the building. You can't miss it, one end of the room is full of gym equipment. Bring something for the bowl show. Turnout for it has been very poor the last few months. This is typical of summer. Now that fall is coming and everyone's mind is returning to fish it's time to support it again. I've been guilty myself of not bringing anything but I'm going to start again. Even if you only bring one fish it will help and will make the competition more enjoyable for everyone.

While all of you were enjoying yourselves at the PVAS picnic, at least I hope you were, I was at a trade show in Baltimore. If you enjoy being lost Baltimore is the perfect place to go. I was up and down every street in the city, some several times, before I got lucky and stumbled upon the convention center. If any of you happen to run into the mayor of Baltimore tell him to put up a few more signs pointing the way to the convention center, the building could use a more noticeable one also. Even though I didn't get to the picnic I still saw another PVAS member. I had the pleasure of coming across Vince and Barbara Edmundson. I hadn't seen Vince in quite awhile and enjoyed talking with him. I also came across Ed and Kathy Taylor. Since the convention center is only about a block from the Baltimore Aquarium I decided I might as well walk over. If you've never been to the Baltimore Aquarium it's worth seeing once. (There are plenty of signs pointing to the Aquarium, just come into town via rt. 95 and you can't miss it). Be warned though- on a weekend you can expect to stand in line to get in (I waited for 45 minutes), pay \$5.75 for adults (I didn't notice the child's price) to get in, and once inside it is rather crowded. And, as I said above it's worth seeing once. Even though it's been about a year since I'd been there I was somewhat bored. The only difference I noticed was more birds in the rain forest level. If I had a choice between going back to Baltimore or Belle Island (see Aug. Delta Tale) I'd chose Belle Island with no hesitation. Even though it's much smaller (at least the building is) there is a much better variety of fishes. Also, while I'm complaining, I don't like the name- THE National Aquarium is in Washington, D.C. I'D better change the subject before someone from Baltimore comes down and breaks my typewriter.

This months open fish room will be at John Mangans house. Hey! wait a minute, that's me! I'd better make a note to go out and rent a bulldozer to clear a path around the room. I've got about 30 tanks (once you get past 20 it's best to stop counting) and a large indoor pool run off of a central air system. I specialize in livebearers (but have lots of other stuff too) with 16 species of Goodeids, including one that is extinct in the wild and one that is found only in one small spring. I'm easy to get to, see the map elsewhere in this issue, and there is plenty of free parking (I figured it wouldn't hurt to throw that in). I'm running out of page so that will have to be all for this month. See you all at the Sept. meeting and the open fish room the following Sunday.

WHAT'S HAPPENING
in September

Meeting: John C. Wood facility, rt. 237 (Old Lee Hgwy), Fairfax City
meeting begins at 8:00 pm. Everyone is welcome.

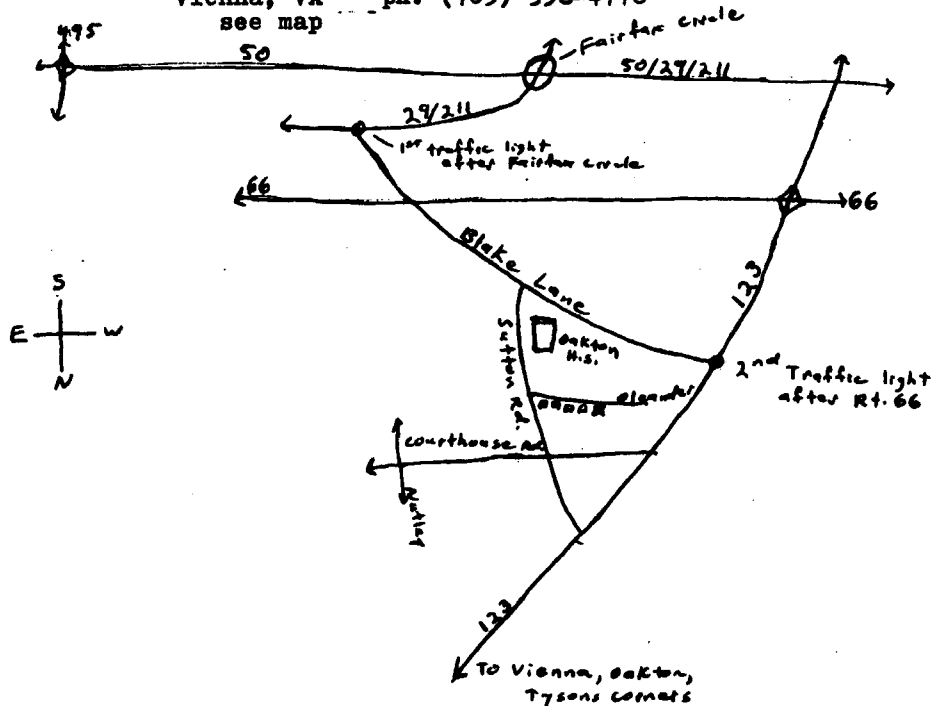
Program: not known at press time.

Mini- Auctions: back again. Any PVAS member may bring up to 3 items
to be auctioned. Same basic rules as the big auctions.
Anyone may buy.

Door Prize and Raffle: Lots of Good stuff, as usual.

Open Fish Room: Sunday September 16, 1984

12:00 - 3:30 pm
at John Mangan's
9770 Oleander Ave.
Vienna, VA ph. (703) 938-4778



(Not Drawn to Scale)

SKINDIVING IN THE CARIBBEAN

or,

"I'VE ONLY SEEN TWELVE SHARKS IN TWENTY YEARS"

by

Peter D. Tietjen, PVAS

This will not be the usual type of article that you are familiar with reading in the Delta Tale. There will be no mentions of BAP points or the pH of the water. Instead it will be a report on the snorkling that I did on a week's vacation in the British Virgin Islands (BVI) this March. It is not designed to gloat over how I had temperatures in the mid-80's while Washington was in the cold and sleet, but if I sound a little smug, well. . .

I left Washington on a Monday morning and flew to Puerto Rico (and boy were my arms tired), and then on to Roadtown, Tortola, BVI, where I boarded the good ship Flying Cloud, a 200 foot schooner that would be my home for a week. I'll skip over the rum swizzles, the girls in bikinis, and the other delights of the trip and get right to the point of this article, the snorkling, or if you prefer, the skin-diving.

There is a basic difference between skin-diving and SCUBA. In skin-diving you only use a snorkle, fins and a mask and never get away from the surface of the water. SCUBA involves tanks, regulators and descending beneath the surface. While I have qualified as a SCUBA diver, I did not dive due to a severe cold I suffered just before leaving that affected my inner ear. So if anyone is expecting a rerun of "Sea Hunt" they had better move onto the usual articles on breeding some strange new livebearer from El Salvador.

The ship set sail from Roadtown around noon on an overcast day with a good wind. Our first destination was Salt Island, a small, uninhabited island across Sir Francis Drake Channel from Roadtown. We anchored at Salt Island around 4:00. It was quite windy and a little cool, although temperatures were still in the high seventies. We were taken to shore in a launch. Prior to our departure we were given a lecture on the dangers of the coral reef, mainly fire coral, and sea urchins. There was the inevitable talk of sharks which led to the immortal

quote which serves as the subtitle of this article. Then we set off into the world's largest salt water aquarium.

The surf had raised quite a cloud of silt and fine coral sand that reduced the visibility of the usually crystal clear Caribbean waters, but the sun was hot and the water warm. I set off into water that was about eight feet deep with a sand bottom that supported a fine growth of eel grass. Almost immediately I saw a large ray about 4 feet in diameter with a stinger tail that was at least two feet long. It was covered with brownish circles and was later identified as a leopard ray. The ray lazily flew through the water, and paid no attention to me looking at it from the surface of the water. I followed the ray into deeper water, and then floated with the current down stream and over the reef.

Swimming over the reef was like swimming inside a perfectly maintained tank. Staghorn, elkhorn, brain and rampart coral abounded, growing from the rocks of the bottom. The brain coral ranged in size from that of a cauliflower to four feet in diameter. The elkhorn grew to a height of about six feet, and the wavy rampart coral was equally large. Many of the coral heads had tube worms growing on them, most of which exposed the the fan-shaped head of the worm from the top of the tube until they were disturbed, at which point they instantly withdrew into the tube. In and around the coral were the reef fishes; damsels, sergeant majors, beau gregorys, and others of this type; green and blue wrasses and cleaner wrasses; naso tangs, blue tangs and other surgeonfishes; some Atlantic butterflyfishes and finally three big parrotfish, each crunching on the coral with their big teeth. The crunching could be clearly heard through the water. They would slowly cruise through the coral looking for a tasty bite to eat and then would stop to munch. All the fish were large and healthy with bright colors. They were not friendly, but did not dive into the coral until a swimmer got too close. The current swept out towards a point of rock, and we had been warned not to go beyond the point for the next stop would be St. John's Island, a distance of about thirty miles across open ocean. At the end of the point where the current would bring all the fish to him, swam a five foot long barracuda. The barracuda just kept station at the end of the point and all the other fish must have known that it wasn't hungry for they ignored him. Fortunately for me, the barracuda ignored swimmers as well. I observed him from a distance of about six feet for several minutes before

I decided that the current would sweep me out to sea if I wasn't careful and so I swam back. Going against the current was tough and I didn't spend much time looking at the fish, but I did sight a second, somewhat smaller ray. This ray had a remora attached to his wing and had several pilot fish around. I felt like I had really explored the deep as I reached the beach and walked out to get the launch back to the ship.

The next port-of-call for the Flying Cloud was an island called Virgin Gorda, or the Fat Virgin. The main attraction of Virgin Gorda was an area called the Baths. These were a group of huge granite boulders that are piled on top of each other creating grottos and caves both above and below water. The snorkling around the Baths was supposed to be wonderful, but was spoiled due to high surf. Also, this is a popular area for the yachtsmen in the area to drive around in their Zodiac boats and it was somewhat dangerous from a standpoint of being hit with a propeller. Sharks or barracuda are one thing, but to be hit by a propeller would ruin your whole day. It is also an area with many urchins.

Long-spined urchins are more of a danger to swimmers and divers in the entire Caribbean than are the more well-publicized forms of sea life. The only remedy for being stung by a urchin spine was to urinate on the wound. A chemical in the urine neutralizes some of the poison in the wound. In spite of all these "hazards", the highlight of the Baths was the seafans. These coral forms grew to heights of about four feet and spread across an equal area. The fishes were the same as at Salt Island, only more numerous. There were no rays or barracudas, but many more tangs and damselfish. The surf threatened to throw me against the rocks several times and when I spotted urchins lurking amidst the rocks, I reluctantly decided to swim back to the beach and buy a beer at the Poor Man's Bar, a grass thatched hut that served as the refreshment center for the Bath's beach.

The next morning we left the area of the Baths and sailed to the other end of Virgin Gorda. This was a much less developed area that had once served as an anchorage for Sir Francis Drake's ships as they plundered the Spanish Main. In order to get to the prime snorkling areas we had to walk about a half-mile across a black-top road in temperatures of about 90 degrees. The snorkling was worth the walk, for here I saw the turtle. Everyone has read about the travails of the sea turtle. Here I met one in the water and had a good opportunity to examine it at close

quarters. The turtle was a small green turtle, about two feet in size. I saw him in water about five feet deep over a coral bottom. The coral was all elkhorn or staghorn with many hiding places in it. My companion was swimming serenely along when I spotted him. I got within about two feet of the beast, but his sharply hooked beak and what looked to be sharp claws kept me from getting any closer. Instead I just watched him swim along until finally, he got frightened and he swam off into deeper water. It was a sight that I will never forget.

The next several days did not give me an opportunity to snorkle again. Instead I lay in the sun and had a wonderfully relaxing time. The last full day of the cruise was the last chance to see beneath the sea. We were anchored in a bay of an island that was partly owned by the Amway Corp., but the public could use one end of the island. The water was about seven feet deep over the reef, but the bottom was mostly sand rather than the usual coral. The colorful reef fish were there again, but in addition were huge schools of small fish. The length of these fish was no more than three inches but there were uncoun- table numbers of them. I have no idea what species of fish they were, but to swim into a school of innumerable fish and have them close around you as if you were one of the school is an eerie feeling. It also gives a very vivid impression of the total bounty of the sea, or at least the warm waters of the Caribbean.

I have now snorkled in Hawaii at Hanalei Bay and in the British Virgin Islands. Hanalei Bay was a wildlife sanctuary while all areas in the BVI are totally open. Each has its own varieties of life and comparing them is impossible. There is something to be said to not protecting all areas of the ocean so that nature can evolve on its own. However, next winter, I hope to be somewhere where it is warm and I can again dive into that big aquarium and watch the fish.



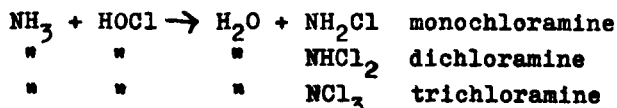
CHLORAMINE

by John Mangan, PVAS

On Nov. 29, 1979 the Environmental Protection Agency established a safety standard of 100 parts per billion (ppb) of trihalomethane in U.S. drinking water. Trihalomethane is a result of chlorine, which is chemically unstable, reacting with organic materials in water, such as tanins and lignins leached from plants, and naturally occurring fluvic and humic acids. The trihalomethane thus formed, which includes chloroform and related compounds, are believed to be carcinogens (cause cancer).

The new regulations required that, starting in Nov. of 1980, each water district take 4 trihalomethane readings per year and that the average reading must be below 100ppb. If this level was exceeded then an alternative method of disinfection must be used (in place of chlorination). The most economical alternative in most cases is chloramine.

Chloramines are formed by adding a specific amount of ammonia to water then adding chlorine to the mixture. The chlorine reacts with the water to form hypochlorous acid then combines with the ammonia to form chloramine. Three types of chloramine may be formed:



The type used depends on pH and ammonia concentration. The mono and di types are the ones used by municipal water companies. The tri type is undesirable since in low concentrations it gives water a bad taste and smell, and can irritate mucous membranes. In high concentrations it is toxic to humans.

Chloramine will disinfect but is much less reactive than chlorine. It will not easily combine with organic substances in the water to form trihalomethanes, therefore no cancer risk is present. Chloramine also, supposedly, improves the taste of water and reduces the chlorine odor. Chloramines do have a negative side however. They "foul up" kidney dialysis machines, and, more important to most of you reading this, they kill fish.

While chloramine is a new term to most people it has actually been used for water treatment for quite some time. It was first used in Ontario, Canada in 1916 and the first U.S. use was in 1917 in Denver, Colorado (Blasiola, 1984a). Chloramine was first brought to national attention in Nov. of 1981 by massive fish kills in Florida and Texas. In Florida hobbyists, pet shops, and fish farms, were experiencing deaths of fish, turtles, other reptiles, and amphibians. This has been repeated in other areas after addition of chloramines to the water supply (Blasiola, 1984b).

Chloramine is extremely toxic to aquatic organisms. As little as

chloramine cont.-

.05 ppm (and less) has been found to be lethal to some types of fishes (McKee and Wolf, 1963. Merkins, 1958). The toxicity depends on the species involved, pH, temperature, exposure period, chloramine conc., etc.

Unlike chlorine, which destroys the cells of the gills by oxidation, chloramine crosses the gill epithelium with little damage to the cells. Once in the bloodstream it chemically binds to the iron in the hemoglobin of the red blood cells. This causes the red blood cells to be unable to bind oxygen and disperse it through the body. According to Blasiola (1984a) the clinical signs of chloramine toxicity are: change in normal behavior, most notably swimming and feeding. The fish will also appear lethargic, remain motionless, or show slow side-to-side body movements. Affected fish may also cease normal feeding. In later stages fish will have difficulty maintaining their position in the water and will either remain motionless near the surface or rest on the bottom for extended periods. Mortality tends to be staggered, with a few fish dying every day when there is a low concentration, but is rapid at high concentrations (within 24 hrs.). Affected fish tend to show abnormal body coloration and produce excess mucus on the body. Inflammation at the base of the fins is also usually apparent.

My introduction to the effects of chloramine occurred in September of 1980. Up until that time I had been making water changes of 5 to 20% per week (depending on the tank involved) with water straight from the tap. I didn't use any type of water conditioner and never had any problem. About a day after making my water changes my Xenotoca eiseni fry began dying rapidly- starting with the youngest and working up. The same thing began happening to my Ameba splendens a short time later. The X. eiseni were in a 20L and the A. splendens in a 15 gallon tank. Each of these tanks had been given a one gallon water change. I noticed that the fishes were breathing very rapidly and added very strong aeration to the two tanks. This stopped the deaths but every time I thought things were back to normal and stopped the extra aeration fish began dying again. This continued for about two weeks. I ended up losing the whole tank of A. splendens and all but a few of the X. eiseni.

In addition to the direct effects of chloramine fish exposed to it seem to be much more susceptible to bacterial and fungal diseases.

Luckily chloramine can be removed from your water fairly easily. First treat your water with a dechlorinating product using about four times as much as the label says to. After this a residual amount of ammonia will still be present in the water so you will also have to treat it with an ammonia remover. The common type available is made of zeolite (aka clinoptilolite) a natural mineral. This is usually placed inside of your filter. If you have a good biological filter its nitrifying bacteria will reduce the ammonia within a short time.

If your pH is below 7.0 the residual ammonia will be converted to its nontoxic ionized form (NH_4^+).

chloramine cont.

Chloramine can also be removed by aging your water but this will take much longer than it does with chlorine. Monochloramine requires 15 days to completely dissipate from standing water, 7 days if aerated. I have been aging my water in 30 gallon plastic trash cans for a week prior to use. While aging it is aerated and filtered through Marineland carbon and Ammo Chips (zeolite). Carbon alone is supposed to be able to remove chlorine and ammonia but I still use the zeolite to be safe (Goodeids are especially sensitive to ammonia). If you use this method of treating your water I would suggest filling the new plastic cans with water and letting them set for a week. This will allow any toxins in the plastic to leach out. Now refill it and let the water age as you will be normally doing. Test this water with an expendable fish to make sure the first aging has gotten rid of any toxins from the plastic. If the fish survives 24 hrs. you can begin using the can for water changes.

While chloramine can do a lot of harm to your fish the problem can be overcome if you treat your water properly prior to use. There are a number of options and the one you use will depend on your individual fish room and needs.

At least one manufacturer now has a chloramine test kit on the market. Even if your water does not now contain chloramine it would be a good idea to test it or treat it as if it did. Water districts often purchase water from each other if they are having a shortage. Often there would not be enough time to notify aquarists in the area of the change. Don't wait until you find out the hard way, as I did, that your water now has chloramine in it.

references

- * Bishop, Warren. Chemicals and Life As I See It.
- Blasiola, George. 1984a. Chloramines. Pet Age. July 1984 pg 25
- Blasiola, G. 1984b. Protecting Aquarium and Pond Fish From the danger of Chloramine. Freshwater and Marine Aquarium. April 1984 pg10
- Kowalaki, Dave. 1984. Chloramines and Wet Pets Don't Mix. Pets Supplies Marketing. June 1984 pg 46.
- McKee, J.E. and H.W. Wolf. 1963. Water Quality Criterion, 2nd ed. Resources Agency of California, State Water Quality Board. Sacramento CA.
- Merkins, J.C. 1958. Studies on the Toxicity of Chlorine and Chloramines to the Rainbow Trout. Water and Waste Treatment Jour. 7:150
- * Pader, F. Nassau County's Drinking Water: Unique, Plentiful but Vulnerable to Pollution. NCMC Proceedings. vol 6 #4 pg 135
- * Speirs, D. The Chloramine Threat. Calaquarium, Calgory Aq. Soc.
- * I'd like to thank Ginny Eckstein for sending these three papers to me.



POTOMAC VALLEY AQUARIUM SOCIETY ANNUAL FALL AUCTION & BANQUET - 1984

SCHEDULE OF EVENTS

Saturday, October 20 — Banquet

TIME: 6:30 to 8:30 pm cocktails (Pay Bar) and Buffet Dinner

8:30 Banquet Speaker - David Herlong

See Details & Map Inside, Page 2

Sunday, October 21 - Auction

TIME: 9 am to 12:30 pm — Registration of Items for Auction.

12:30 PM - Auction Begins

PLACE: John C. Wood Facility, Rt. 237, Fairfax, Virginia

See Details Inside on Page 3, Map on Page 4

★ EXCITING RAFFLE PRIZES ★ WIN A 55 GAL. SET UP ★



POTOMAC VALLEY AQUARIUM SOCIETY 1984 FALL BANQUET

Saturday, October 20, 1984 at The Army -Navy Country Club, 2400 S. 18th Street, Arlington, Virginia.

COCKTAILS & BUFFET DINNER: 6:30 to 8:30 pm (Cash bar)

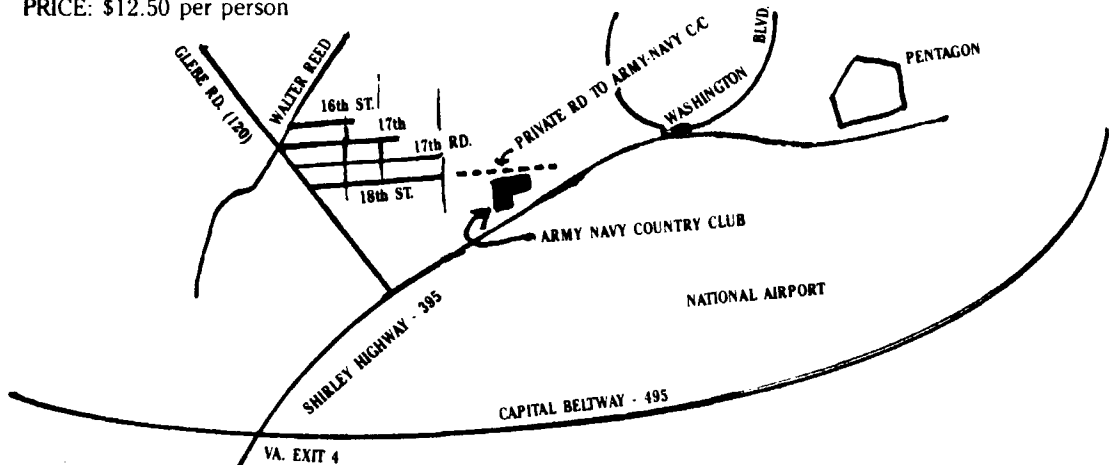
MENU: A Buffet of assorted hot and cold dishes, including steamship round of beef. Enjoy all you can eat, coffee (only) included.

PRICE: \$12.50 Per Person

SPEAKER: Dave Herlong, PVAS Corresponding Member and long time friend.

SUBJECT: His recent trip to Lake Malawi in Africa and his collecting trips there. Dave has been a friend and member of PVAS for several years now. He makes his home in Cary, North Carolina. Dave is a past chairman of the American Cichlid Association and is currently on their Board of Trustees. He is a member and past president of the Raleigh Aquarium Society and was a judge at our spring show this year. Dave really knows his African fish and has had the rare opportunity to see them in their native environment.

PRICE: \$12.50 per person



— RESERVATION BLANK —

All reservations must be received by Monday, October 15. Please forward the reservation blank below (with check) to: P.V.A.S. Banquet, c/o Maggi Mahoney, Treasurer
3011 Aspen Lane, Falls Church, VA 22042

Name: _____

Number in Party: _____ Phone No. _____

(Please Enclose your check, payable to PVAS, for \$12.50 per person, including children.)

P.V.A.S. AUCTION - SUNDAY, OCTOBER 21

RULES FOR THE SELLER:

1. You do not have to be a club member to participate and/or buy or sell fish, aquatic plants, or aquarium equipment and supplies.
2. Registration will begin at 9 am and end promptly at 12:30. If you are in line at 12:30 your items will be registered.
3. Auction will start immediately after registration.
4. All items MUST be labeled with identity of contents, number in bag, sex (if possible) and any other pertinent information. Use permanent ink marker and/or self-sticking tags to label bags.
 - a. Fish: "Pair" means one of each sex. "Mated Pair" means the two fish have spawned WITH EACH OTHER. "Trio" refers to one male and two females. "Reverse Trio" means two males and one female. "Mixed sexes" means AT LEAST ONE OF EACH SEX. If uncertain, label as "Unsexed".
 - b. Supplies: All aquarium equipment MUST be labeled as to working condition. (i.e. it must be stated if a tank leaks or is broken).
 - c. Labels will be available at the registration desk if needed.
5. Proper fish bags MUST be used. Live items must be bagged properly with ample air and water. Baggies or similar sandwich bags are NOT acceptable. If fish is in a bowl or tank, that must also be for sale at the same time.
6. Limited to 15 bags per person: fish, plants or hobby related items. (No exceptions.)
7. A limit of 5 bags per species and/or color form/variety (i.e. gold angels, marble angels) per seller will be observed unless you have prior approval from the auction chairman.
8. For every 5 items placed in the auction, 1 colored sticker will be given to the seller to place on an item of his choice. All such marked items will be offered for bidding at the beginning of the auction.
9. Bags will be offered "as is". Contents may not be split into two or more transactions.
10. Each item carries a \$1 minimum, unless seller wishes to assign a higher minimum. Seller may lower the minimum on an item that does not move during the auction.
11. No payment will be made to seller on the day of the auction. Payment will be forwarded by mail within 10 days after the auction date. It is the responsibility of the SELLER to be sure P.V.A.S. has their proper name and address for mailing their payment. Envelopes for this purpose will be filled out at the registration desk.
12. $\frac{2}{3}$ of the selling prices goes to the seller, $\frac{1}{3}$ is retained by P.V.A.S.
13. All items not sold during the auction must be claimed by the owner (seller) immediately upon conclusion of the auction; otherwise they will be disposed of at the club's discretion.
14. Auctioneer retains the right to set aside improperly bagged, sick or otherwise unsaleable merchandise.

RULES FOR THE BIDDER:

1. All persons wishing to participate will be required to sign in with their full name and address. They will receive a bidding card, whose use will be explained before the auction starts.
2. Bags may be inspected before the auction begins and during intermissions only.
3. All bidding raises will be in 50¢ increments up to \$5. After \$5 is reached, minimum raises of \$1 will be accepted. (Auctioneer has the right to alter this at his discretion.)
4. Successful bidders will have their items brought to them, at which time they may pay. If bidders wish to "run a tab" or pay by check, please see the Treasurer before the auction begins. Proper identification will be required for payments by check.
5. In all instances the decision of the auctioneer is final.

SEE MAP ON BACK

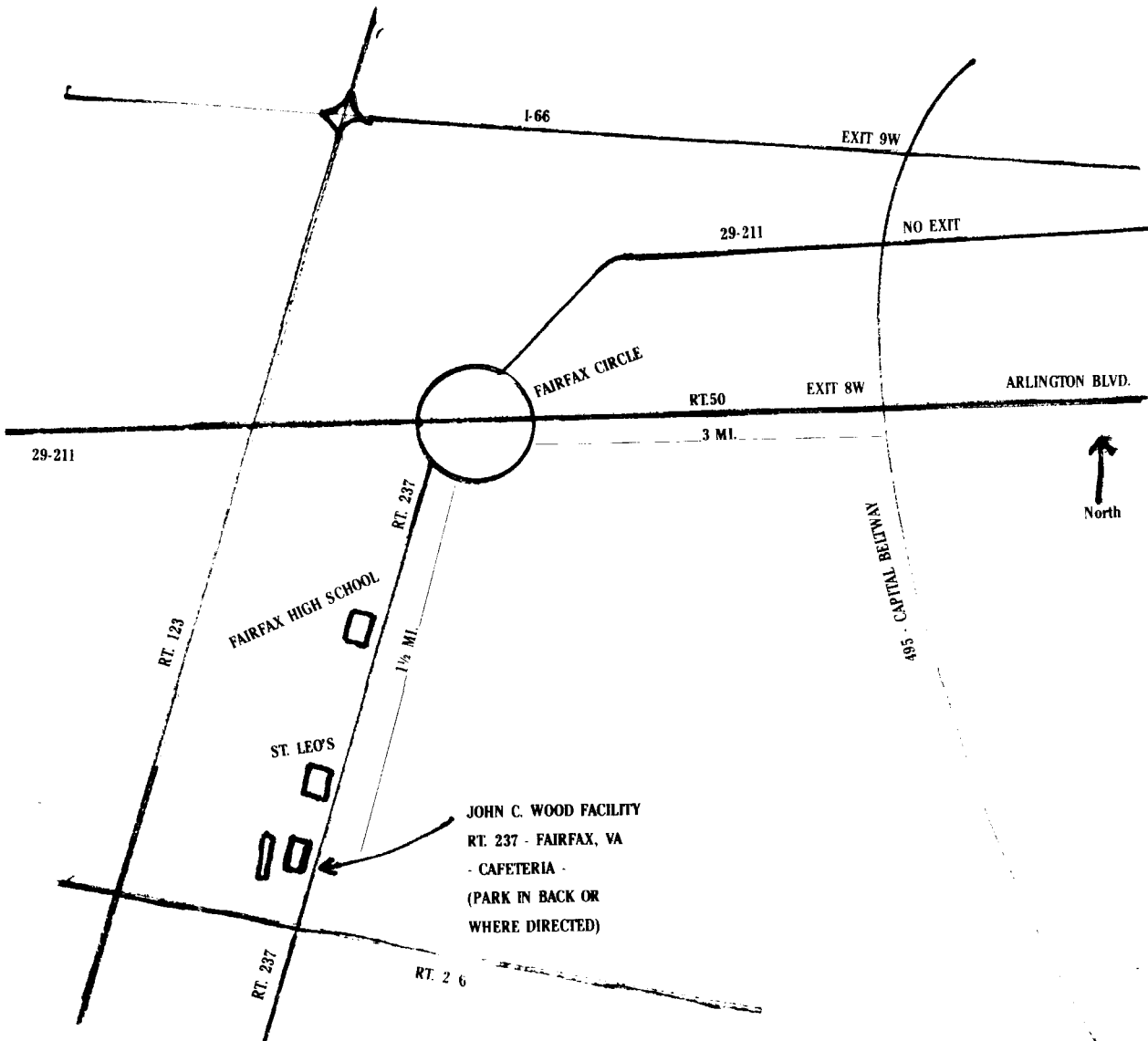
— RAFFLE PRIZES — RAFFLE PRIZES — RAFFLE PRIZES —

Aquarium related items will be raffled off at intervals during the auction. You must be present to win. As a Grand Finale, a 55-gallon tank set up will be raffled at the end of the auction. You do NOT have to be present to win this.

Tickets for both raffles may be purchased before and during the auction at the concession stand.

Soft drinks, snacks and souvenirs will be on sale.

AUCTION WILL BE HELD AT JOHN C. WOOD FACILITY, LOCATION ON MAP BELOW:



Colisa chuna

by Nathan Manwaring

Colisa Chuna, also known as the Honey Dwarf Gourami, comes from Western India and Bangladesh. It reaches 2½ inches.

Even before I started breeding fishes and only had two community tanks, I'd wanted to get a pair when I saw them in Exotic Tropical Fishes. I looked for them in pet shops for about six months, but then I kind of gave up after I couldn't find them.

Then last November, when I was shopping for Christmas presents, I went into a Docket Pet shop. Out of curiosity I looked into the tanks and in the tank labeled Dwarf Gouramis and along with the Colisa lalia, I saw six 1½ inch Colisa chuna. I asked how much the Honey Dwarf Gouramis were. The person I asked looked confused and said, "Do you mean the Dwarf Gouramis?" Since he seemed not to know what they were, I said, "Yes."

I was unable to distinguish a pair because the fish were in fright coloration and so I bought all six. I took them home and put them in a ten gallon aquarium with some albino Corydoras aeneus. The tank was planted with java moss, crypts and riccia.

After about two weeks, the Colisa Chuna had reached their full coloration, and I found out I had three pair. The temperature fluctuated between 80° F and 84° F. The fish were fed flake food, daphnia, blackworms and mosquito larvae and frozen brine shrimp. They started to fatten up and the males staked out territories and one day, I was doing water changes and I noticed a fry swimming on the surface in an aquarium. I thought the parents had eaten the rest of the spawn. The next day, I found a bubble nest about the size of a half dollar filled with from thirty to seventy fry that looked like little tadpoles.

I fished out the nest with a baby food jar. While I was doing this, I saw that another pair had built a nest and it had eggs in it. I put the fry in an a-1 glass 1½ gallon tank with ½ an inch of water in it. When they became freeswimming, I fed them philodina for the first month and then fed them brine shrimp naupli and later flake food. I did the same with the next brood and within a week, the original pair had spawned again.

At two months, the fry were ½ inch to ¾ inch. My fish were moved and have not spawned since. But I haven't really tried.

This fish is an excellent one for a person who has been breeding guppies or easy egg layers and would like to try something a little tougher.

I bought a good sized pair of pearl gouramis at the May auction and immediately set them up in a 10 gallon tank with a gravel bottom. I had never bred a fish of this size though I had bred several other anabantoids.

The water in the tank was about seven inches deep with a few floating plants to anchor the bubble nest. A water softener packette was placed in the tank and a jar with a heater. A sponge filter was placed in one corner (unconnected). Blackwater spawning extract was added.

The breeding pair were extremely shy, hiding under the sponge filter most of the time. They seemed to ignore the brine shrimp I fed them - while I was watching anyway. They were also fed special breeding conditioner flake food.

The water temperature was gradually raised from 78° to 86°. A bubble nest anchored along the edge of the glass was built but very little action was noticed between the fish. The betta splendens and honey gouramis I had bred had noticeable eggs in their nests. The pearl gouramis' nest did not show any eggs that I could see and the nest did not seem complete; perhaps I didn't look hard enough, but the incomplete nest and lack of interest of the breeding pair made me think nothing had happened.

About ten days after the tank was set up, I was making a routine check of how things were going and noticed a virtual cloud of fry. There must have been 3-400. They were about twice the size of the dwarf gourami fry. I immediately removed the parents.

the fry spent most of their time around and under the sponge filter which now was turned on. They were also fed liquifry and tetra egglayer flake food. Within a week they were taking both live and frozen baby brine shrimp. Partial water changes were made at least every other day to avoid fouling the water from the liquifry. I always siphon the water into a white plastic cup and then put any fry who are sucked up back into the tank with an eye dropper. The baby pearl gouramis were pretty feisty and harder to catch with the eye dropper compared to other fish I've raised.

Growth was rapid with some fish growing much faster than others. Some fry have been lost, but there is still a large number of survivors, at least 100. Expect to see pearl gouramis in future auctions cause I've got a bunch!!

Trading Post

Send ads to Delta Tale c/o John Mangan, 9770 Oleander Ave. Vienna VA, 22180 by the 20th of the month prior to publication.

Want: Male Allotoca dugesi, Female Notho. guentheri, back issues of Delta Tale and other fish magazines. Contact John Mangan address above.

SEXING THE GENUS JULIDOCROMIS

In particular Julidochromis regani, J. regani affinis and
J. marlieri

by Martha Barnes, GDAS

A common problem facing aquarists is that of sexing their fish. To assure a pair (male and female) we are at times forced to purchase a group of 6 or more specimens. This method may be practical with many inexpensive species, but may prove quite costly with others.

In sexing cichlids we usually rely on differences in size, color, finnage such as anal and dorsal extentions in males. But none of the above can be conclusive in sexing fishes of the genus Julidochromis. Males as well as females carry the same color intensity, the same pattern with slight differences from specimen to specimen. In larger and older groups males and females may even be the same size.

Julies may be sexed on behavior, the same as many other cichlids, but for this sexually mature specimens, large tanks, and many hours of observations on part of the aquarist are needed. In most literatures it is said that the larger and more aggressive is the female. From my own observations over the past years I have found that size and aggressions are also not conclusive in sex determination. But don't despair, sexing julies is easier than you may expect as you can see from the drawings below.

In the drawings you will see the lateral view of the belly region of both male and female in breeding and non-breeding fish. To complete the drawings the head would be on the left. The drawings are not greatly enlarged and sexing these fish can be accomplished by viewing the fish in the aquaria without the help of magnification. (ed. note - due to the way Delta Tale is printed the drawings are about 1/3 smaller than they were in the original publication. J.M.) Also the specimens do not have to be larger than 4-5 cm (1½- 1¾"). One thing I may add, I noticed that after a water change the tube on the male is so close to the body that observations were slightly more difficult.

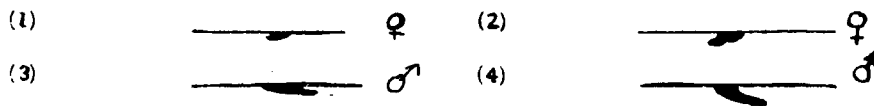


Fig. 1 Breeding tube of non-breeding female is visible as a short hook pointing forward, length about 1-2mm.

Fig. 2 Tube of breeding female. Tube slightly enlarged to about 2-4mm depending on the length of the female. Tube usually extends to this size one day prior to actual spawning.

Julidochromis cont.-

Fig. 3 Breeding tube of non-breeding male. Depending on size of male may reach a length of 5mm.

Fig. 4 Breeding tube of breeding male does not change in length but during spawning the tube will swell slightly and is extended from the body at a downward angle.

That concludes my observations on sexing these fish, I wish I could say the same for the smaller julies such as J. ornatus, J. transcriptus and J. dickfeldi but I can't. The smaller julies are sexed differently from the larger species and more observations and studies have to take place before I can write an article on this subject.

Even though you are now able to pick a pair from a group, don't think that this will ensure you of a breeding pair. Julies, like most cichlids, like to chose their own mate. A wrong selection on your part may end in a non-compatable pair in which one could get killed. It is, if possible, always better to obtain 4 or more specimens and to let them pair off naturally.

reprinted from Tropic Tank Talk, Greater Detroit Aquarium Society,
P.O. Box C, Royal Oak MI 48068

Q and A

Have a question on fish, plants, live foods, or anything else to do with aquariums? Send it to Delta Tale c/o John Mangan, 9770 oleander Ave. Vienna, VA 22180.

Q. Someone told me that blue-green algae is not really algae. Is this right?

A. Yes. Blue-green algae are now known to be bacteria not algae. They should now be refered to as blue-green bacteria or cyanobacteria if you want to sound more technical. They have been found to be prokaryotes rather than eukaryotes as previously thought and have been placed in the Division Cyanophyta. Rather than trying to explain the terms above I'll just say that anyone that is really interested should go to the library and look in a general biology text book. Cyannbacteria are not all blue-green, they may also be blue, green, yellow, red, or black.

Q. What is symbiosis?

A. Symbiosis is the type of relationship two (or more) species have to each other. There are three basic types. 1) mutualism- in this type of relationship both species receive some type of benefit from the relationship, 2) commensalism- one species benefits and the other is not affected, 3) in this type one species benefits and the other is harmed. This is broken into 3 subgroups: parasitism- in this type the "victim" species is not killed, predation- in this type the "victim" is killed, disease- this is basicly an unsuccessful parasite, ie it kills its host.

THE CLEAR BOTTOM PHOBIA

By Lou Sandberg, GDAS

Sometimes when new fish are received or your own established stock is moved to another container, the fish seem very ill-at-ease and frightened. I have noted this from time to time and never really gave a lot of thought as to why. Normally I'll throw in some floating or sunken type of moss or mop and hope they will feel more comfortable. I should preface the foregoing by saying that most of my tanks are bare with the exception of floating or sunken plants and some tanks have a potted plant. Gallon jars, jugs, and 2½ gallon tanks are basically bare.

I am of the opinion that a container with a clear bottom can cause considerable panic of a fish which is accustomed to a container/tank with a bottom of gravel, slate, or painted glass. I can recall a number of instances where this was demonstrated. The first I remember was when some fish were put into a new all-glass 10 gallon tank I'd set up. The fish acted disoriented and tried to swim "down" through the clear glass bottom. This was remedied by painting the bottom of the tank (outside, of course). A more recent incident involved some young Roloffia I had received. These fish had been in a 30 gallon tank with a gravel bottom and appeared to be comfortable in that tank. I took the fish and put them in a bare 2½ gallon tank. The fish were easily frightened, hid in the corners, and ate poorly. Next I added some floating and sunken moss. This didn't make much change to the fish behavior, only giving them a better place to hide. I then put 4 tablespoons of gravel in the tank. Within two minutes the new arrivals were swimming about calm as could be.

It is an acknowledged fact that fish show better in a tank with some gravel, vs a bare bowl or tank. Can this be in part because the fish "feels" better? How often have we put a pair of fish into a gallon container with only a mop and gotten meager egg production; the pair never seem to settle in, always nervous. If we obtain a new pair of fish and can talk to the previous owner we may ask about food and water conditions, but rarely about the tank environment. The type of bottom the tank had which the fish were removed from would never cross our minds.

I think my observation offers food for thought. Some experiments on fish behaviour, egg production and eating habits could be made, taking established breeders accustomed to a solid bottom tank and placing them in a clear bottom container. Obviously the experiment is more appropriate for mop spawners than peat spawners. Also, I'm sure that some species will make the transition easier than others, so this too must be taken into account.

editors note: the author is a breeder of killifish. The use of bare containers is more commonly practiced with killifish. GDAS

Reprinted from Tropic Tank Talk, Greater Detroit Aquarium Society.

ed. note- I use bare bottom tanks for most of my goodeids and since painting the bottoms black last summer have found that the fish have much better color, are much less shy, and just generally doing better. One species, Gbodea gracilis, which had been a disappointing mucky brown color is now one of my favorites. J.M..

WHAT TO DO WHEN THE EDITOR IS HOUNDING YOU

by Pat Mussatto, GCCA

Editors of aquarium society publications have tried everything (short of bodily harm) to get members to write articles about their experiences in the hobby. Some will offer money, some have an "article of the year" competition, and almost all clubs will bribe members for articles through the BAP (Breeders Award Program) by offering extra bowl show points for fishes in some categories... if they were bred and raised by the owner and a BAP report turned in to the editor of the club bulletin.

So what do you do when the editor is hounding you? I mean those awful, terrifying moments when he/she approached you face to face and says, "I heard you talking about your whatcha makallit. That would make a great article for the club bulletin! And we could really use the article!"

What a dirty trick! There you were, innocently telling a fellow member about some silly little nothing that happened in your fish room, and now your stuck! (I mean who can say no when you're cornered like that?)

Well help has arrived. Tell yourself, "I think I can, I think I can", and sit yourself down at a comfortable table (with a decent light) and think.

INSTANT ARTICLE

If you're really being pressed and need the article for the next issue, then do not set your goals too high. Getting too involved in a rushed situation does nothing more than frustrate you (especially with a first effort). The "masterpiece" type article will be discussed later under the heading "Writing an Article".

Now what you need is a "quickie article". This kind of writing, done in a hurry, does not necessarily mean a short article. It simply means something that can be easily written from memory with no preparation. Here are just some of the subjects that would be good for "quickie articles" :

1. Set-ups: Do you set up your tanks in a certain way to better accommodate a community situation? How do you set up a spawning tank for various fishes you have had? Have you ever had a bad result from keeping certain species together? Which ones?
2. Fish room: How do you have your fish room set up? Is there anything you feel is unique about your fishroom, wiring, heating, your method of exchanging water, or maybe some home-made racks you designed yourself?

what to do, cont.-

3. Foods: Do you mix your own paste food? Do you culture your own live foods? Have you ever collected live food? What is the frequency of feeding for your fish and why?
4. Diseases and Cures: Did you recently have a sick fish and cure it? Did you have something contagious in your tanks you could warn about? Have you ever removed parasites from your fish and how?
5. Shows: How do you get ready for a show? How do you condition your fish for shows? Have you seen any shows put on by other clubs lately that you could tell about? Do you have ideas for a new class or any suggestions for improving your own club's shows?

Needless to say, there are hundreds of other topics. For "quickies" anything you can write from memory can be a good subject. Just write as though you were talking to someone.

WRITING AN ARTICLE

Let's assume you've turned in your "quickie article". Your editor is delighted! But NOW is the time to start a regular, full-fledged article. NOW begin taking notes! Start marking your breeding tanks with dates, frequency and amounts of water changes, spawns, foods offered and notes on acceptance, growth of fry, etc. (If your the type of hobbyist who had done this kind of thing all along, then you wouldn't even have to worry about "quickie articles").

STEP ONE: Choose a subject. Stick with something specific and cover it well. Too often writers will try to cover too much in one article and valuable details are often lost in generalities.

STEP TWO: Introduce your subject briefly. If your writing about a fish, tell its Latin name, where it's from (and I don't mean where you bought it), and describe its coloration and size at maturity. That's ALL for the introduction! I've found that it is at this point that many writers begin telling things that (for sake of organization) are best left until later. Gather your notes together, copy your tank markings on a separate sheet of paper and lay everything out in front of you.

STEP THREE: Tell about the fish you purchased. (This cannot be included in the introduction because fish are individuals too and perhaps the ones you have will not fit into a general description of "most" of the same species). Write about the NEXT thing that happened to your fish or the sequence of events during your experience with them. As you're writing (and thinking), eliminate those activities that you know are totally unnecessary, e.g. floating the bag in the tank before releasing the fish into it (unless you're writing an article aimed at the neophyte). If your initial purchase was adult fish, tell (in sequence) of your experiences with them. Could you determine their gender right away? If so, describe the differences between male and female at this point and for the

what to do, cont.-

remainder of the article you can refer to each fish as he or she with no fear of causing a non sequitur further on in the article. If you bought fry, your sequence would remain basically the same as with adults, but would include the details of raising them to maturity. Either way, write of tank set up and why you set it up that way, water temperatures and conditions, foods offered and frequency of feedings, any losses and why they occurred if you know, etc. This is also the time to tell of any special info about your subject. Are they jumpers? Are they aggressive eaters and do they eat or tear up plants? Anything that you found interesting about this fish should be included in the article here.

STEP FOUR: Relate breeding information, if any. If you have bred these fish, this is the time to tell about the success or failure you experienced. However, don't include information about the care of the eggs or fry now. That is (as spawning info) a subject in itself and deserves a separate portion of the article all by itself. Here in step four, just explain how you conditioned the pair for spawning, whether or not you used a separate tank, if their behavior toward each other changed in any way, etc. (Here again, put the series of events in chronological order.) When your description finally arrives to the actual spawning, you can easily run right into...

STEP FIVE: The care of the eggs and fry. Report on all details of the care of the eggs. Did you leave them with the parents? If you hatched them artificially, what method did you use? You can bring the subject of the adults back in this case to tell of their part in caring for the eggs and perhaps their attitude toward each other after spawning. If you did allow them to raise the fry, how soon was it before they showed signs of wanting to spawn again? Did they become hostile towards the first spawn as the second spawning approached?

STEP SIX: Think up a quick closing. It could be anything. Perhaps you could say you did (or did not) enjoy the experience of working with this species. Or maybe you really like this fish, but you find they are almost impossible to get rid of...you can't even give them away. For the closing, even a sentence is alright. Putting a closing sentence or paragraph at the end of the article is as important as using a period after a sentence. But do not feel it has to be some fantastic, original, witty bead of wisdom.

EPILOG

After you feel comfortable doing articles in chronological or diary form, branch out and try something different. But for now, I hope you can feel reasonably secure in turning in articles to your frantic editor by following some of the suggestions listed above.

One last tip... to really put the frosting on the cake, include black and white photos or drawings (whenever possible) to go with your article! Your editor will love you!

reprinted from Cichlid Chatter, Greater Chicago Cichlid Association.
ed. note- this is a subtle hint that I NEED ARTICLES once again.

J.M.

Board of Governors

Due to numerous reasons a regular board meeting was not held in August. An informal board meeting was held prior to the Aug. general meeting. Items discussed included:

- 1) a \$25 check has been sent to Linda Brensike for memorial trust.
- 2) \$50 will be donated to the ACA Guy Jordan Fund.
- 3) the fall auction will be held at John C. Wood, in the cafeteria.
- 4) several changes will be made in the fall auction guidelines. The updated guidelines appear elsewhere in this issue.
- 5) a nominating committee needs to be selected for Sept. If you are interested in being on the committee or running for an office make yourself known to Gerry or one of the other current officers.

submitted by John Mangan, self-appointed, unofficial, acting recording secretary.

THE MIRROR

PAT MAHONEY

REVIEWS

GEOPHAGUS BRASILIENSIS, Frank Angilletta, WATERLOG, Greater Dayton Aquarium Society, June 1984.

THE NEW GUINEA PEACOCK GUDGEON, Gerry Hoffman, WATERLOG, Greater Dayton Aquarium Society, June 1984.

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

GEOPHAGUS BRASILIENSIS, Frank Angilletta, ALL CICHLIDS, Michigan Cichlid Association, August 1984.

DELTA TALE, May 1984, favorable reviewed by Jack Kallmeyer, WATERLOG, Greater Dayton Aquarium Society, August 1984.

AUGUST BOWL SHOW RESULTS

Killies

1st Nathan Manwaring, Aphyosemion bivatatem hollyi
 2nd Gerry Hoffman, Aphyosemion cinnamoneum

Catfish

1st Nathan Manwaring, striped loach

Open

1st Nathan Manwaring, Tetraodon sphongsi

Members choice

Gerry Hoffman, Aphyosemion cinnamoneum

Judges Choice (judge- John Mangan)

Nathan Manwaring, striped loach



STANDINGS

Cichlids

	month	quarter	year
Frank Angilletta	0	0	39
Mark Steele	0	0	16
Ray Krause	0	0	7
Jim Long	0	0	6
Nathan Manwaring	0	0	6
Rob Roser & son	0	0	5
Alex Cummins	0	0	6
Mike Rininger	0	6	6

Egglayer/Livebearer

	month	quarter	year
Nathan Manwaring	21	35	119
Gerry Hoffman	5	13	68
Frank Angilletta	0	0	41
Rob Roser & Son	0	14	23
Pete Thrift	0	0	18
Jim Long	0	0	16
Mike Rininger	0	0	8
Robert Pallansch	0	0	6
John Mangan	0	0	5
Alex Cummins	0	0	3
Jason Kooker	0	0	1

editors note-- the bowl show is in need of your support. BRING A FISH!

POTOMAC VALLEY AQUARIUM SOCIETY



POST OFFICE BOX 6219 SHIRLINGTON STATION ARLINGTON, VIRGINIA 22206

APPLICATION FOR MEMBERSHIP

DATE _____ 19__

NAME _____

STREET _____

CITY _____ STATE _____ ZIP _____

TELEPHONE CONTACTS H _____ B _____

Number of tanks _____ Time 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 Society
P.O. Box 6219 Shirlington Station
Arlington, Virginia 22206

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

September 10	October 8
September 12	November 12
September 16	December 10

meetings held at the John C. Wood facility Rt. 237 Fairfax City
. in the rear of the building. Everyone is welcome.

meetings begin at 8:00 p.m.