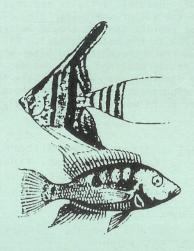
*DELTA TALE *

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ANNUAL FISH SHOW & AUCTION MAY 7-9 COCA-COLA BOTTLING PLANT 5401 Seminary Road Alexandria, Virginia

Delta Tale is published for the benefit of the Potomac Valley Aquarium Society (formerly the Potomac Valley Guppy Club), a non-profit organization, 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: Secretary, P.V.A.S., P.O. Box 6219 Shirlington Station,

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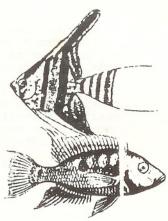
MEMBERS OR NON-MEMBERS HAVING QUESTIONS ABOUT FISH, AQUARIUM KEEPING, AND BREEDING CAN CALL ONE OF THE OFFICERS LISTED ABOVE, WHO WILL BE GLAD TO ASSIST YOU.

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THE POTOMAC VALLEY AQUARIUM SOCIETY

ANNUAL FISH SHOW & AUCTION MAY 7-9
COCA-COLA BOTTLING PLANT
5401 Seminary Road
Alexandria, Virginia



SCHEDULE

Friday, May 7:
6 PM to 9 PM - Registration
)
These times are inclusive
Saturday, May 8:
9 AM to Noon - Registration
)

1 PM to 5 PM - Judging (Only Judges and designated Show Committee personnel will be allowed in the Show area. Members of the lational Aquarium Society will be on hand to arrange special tours of the National Aquarium for others who are interested. Parking will be arranged at the National Aquarium on 14th St.)

b PM to 9:30 PM - Public Viewing

Sunday, May 9:

8:30 AM to 1 PM - Public Viewing (The public is cordially invite; to remain for the presentation of awards and the auction.)

9 AM to 12:30 PM - Registration for the auction

12:30 PM - Presentation of Awards

1 PM - Auction begins

ENTRY FEES

Single Fish - \$1.50 (a female may be added, but will not be judged) Pairs and Family Entries - \$2.00 Plants - \$1.50 Set Tanks (Non-Dealer) - \$1.00 Dealer Tanks - No Charge Slides and Prints - \$1.00 Artwork - \$1.50

BOARD OF GOVERNOR'S Meeting, April 8, 1982

The meeting was held at Chryss Guiler's house. Present were John Jessup, Darrell Holman, Jim Hajdics, Wayne Hilburn, Ruth Brewer, Andy Malenki, Woody and Nancy Griffin, Kenny Warren, and Chryss Guiler. John called the meeting to order at 8:15 p.m.

John brought up the Show Committee meeting at which it was announced that we have the Coke Plant for the weekend of May 7 for the Spring Show. Show flyers will be available at the time of the general meeting for distribution.

Darrell Holman then gave the Show Committee report: several judges have replied to our letters, most of the replies indicating the judges cannot make the Show. The pump will be shipped from Florida and should arrive by May 1st. Everything else is proceeding smoothly.

It was discussed that the Westover Church will be our regular meeting place for some time. We are still pursuing a permanent home at the Fire House.

Treasurer Ruth Brewer then presented the Treasurer's report which was accepted by the Board. Ruth also mentioned that our current FAAS delegate has resigned. John Jessup will approach prospective candidates for the position.

Wayne Hilburn proposed allowing FAAS to hold their convention here next year in conjunction with our Spring Show. The Board tabled the proposal until after this year's Show.

Ruth Brewer moved that our Society join the National Aquarium. The Board voted in favor of Ruth's motion.

The Board has decided to hold the May general meeting on May 17 because of the conflict with the Spring Show.

The meeting was adjourned at 9:30 p.m.

Chryss Luiler Chrys's Guiler

POTOMAC VALLEY AQUARIUM SOCIETY

Treasurer's Report - 3/31/82

2/28/82	BANK BALANCE		\$2,798.91
	Plus Revenues:		
	Memberships	\$ 27.00	
	Refund on Christmas party	6.00	
	Mini-auction receipts	134.09	
	March Raffle	22.00	
			+ 189.09
	Less Expenses:		
	Sellers' portion of auction	55.18	
	Postage March Delta Tale	64.40	
	Show Expenses:		
	Ribbons	189.38	
	Supplies	41.96	
	Club Property:	11.50	
	Projection screen	30.00	
	Slide carrousel	5.98	
	Printing March Delta Tale	33.00	430.00
			- 419.90
3/31/82	BANK BALANCE		\$2,568.10

P.V.A.S. ACTIVITIES

- April Speaker: Our thanks to Ed Taylor from Virginia Beach, Virginia, for an informative talk with his super excelent slide collection.
- April Guests: thanks and welcome to; Allan Sellers, guest of Gerry Hoffman and Scott Whipple, guest of Jim Long. April Bowl Show: Pete Tietjen and Darrell Holman, judges.
- May Speaker: Don Kelso, PhD, Associate Professor of Biology, George Mason University, "Native Fish of the Potomac Basin".
- Gerry Hoffman has been apointed P.V.A.S. Delagate to the Federation of American Aquarium Societies.

Spawning Rasbora borapetensis

by Gerry Hoffman

The fish hobbyist has an abundance of fish to choose from that adapt well to aquarium conditions and can be purchased fo a moderate price. Some of these fish are constantly seen in both the beginner's community tank and the experienced breeder's set-ups, but many of the common ones have yet to be commercially bred in sufficient quantity to supply the hobby. Cardinal and Neon Tetras, Clown Loaches, Glass Catfish, and Rasboras are sought after fish that are almost exclusively imported, and thus are considered difficult to spawn.

When the word Rasbora is heard, everyone usually thinks of the ever popular Rasbora heteramorpha, but there are many other species found in the wild besides this one. Most are fairly dull, ordinary "silver fish" and don't command much attention. My need was for spawning just one more difficult fish for the year, so finding some "Brilliant Rasboras" available in the area, I decided to see what

I could do with them.

"Brilliant Rasbora" is hardly a scientific classification and the best identification corresponded to the photograph and description in Exotic Tropical Fishes under R. borapetensis. A lot of Rasboras look very much alike, and the only distinguishing feature of the shy Brilliant Rasbora is the red coloration in the caudal fin. There is a pale green-gold cast to the body with a silver belly and one black lateral stripe runs the length of the body with a golden stripe just above it. Not very spectacular, but my borapetensis rasboras was the fish I chose to purchase.

Rasboras belong to the largest family of fishes known, the Cyrrindonts, commonly known as earps or minnows. Most are from South East Asia (R. borapetensis is from Thailand), thriving in acid water and much plant cover, usually the broad-leaved Cryptocorynes. In nature they are found in large numbers and are prolific breeders, but not in the aquarium. Innes claims most are bred semi-occasionally and usually by accident. Axelrod states that the Brilliant Rasbora is the easiest to spawn and can be done so with large numbers of fry. Well, I decided to give it a try and find out if they

are easily spawned.

At the time of purchase, all of my fish looked alike. Even after spawning, I wasn't sure about the sexing breakdown. Generally, females get fuller in the abdomen as they fill with eggs. Males may be slightly smaller, slimmer, and possibly have more redorange in the tail fin. Since I had a very small spawning, my fish may have been young and not ready to produce a full load of eggs. Conditioning consisted of being housed in a 20 gallon long tank with six adult corydoras cats. Even with lots of floating plants (water sprite and Salvinia) darkening the tank, the group remained at the far corner hiding. All were avid eaters, whether it was dry flake food or whiteworms. When I caught them to move them to a spawning tank, I thought three males and six females was the best sexing breakdown of the nine fish.

My spawning set-up was a 10 gallon tank which had been prepared about a year earlier. Fifty percent of the water was changed prior to adding the fish. A large clump of Java moss filled half the tank, the remainder being open swimming space. Duckweed covered the water surface and I used a standard corner box filter. Fluorescent lighting directly on top of the aquarium increased the illumination to above what they were accustomed. The temperature remained in the high 70s from the summertime heat and required no

additional regulation.

The Rasboras remained basically shy in their new set-up, especially if anyone approached the tank. In order to observe their prespawning rituals, I was forced to take a seat across the room. Nothing happened the first day, although the fish became more active in the early evening hours. Each evening I added about one pint of peat water which was removed from the tanks of my peat spawning killies. This seemed to heighten their dancing activity each time. Finally, after three to four days of watching and waiting the spawning occurred.

The Rasboras spawned in the manner of Barbs, scattering adhesive eggs among bushy plants or finely divided leaves. I was fortunate enough to witness the spawning, but from across the room.

The males became aroused first and chased the females around the tank and into the thicket of Java moss. At the appropriate time, a pair of fish embraced side by side, quivered and quickly separated. Only with keen eyes could one see some tiny eggs fall downward. This continued sporadically for about one hour, and I wasn't sure if only one female was involved or several. I wasn't even sure if they were finished, but it seemed like the bystanders were looking for eggs in the plants so I moved in and

thrashed around with the net to remove everyone.

Even careful searching with a flashlight failed to show many eggs, which were clear and very small. The tank was darkened by placing newspaper over the top to block out most of the lighting. After 24 hours I noticed the fry had hatched and I could see tiny clear slivers of motion in the plants. Out came the box filter and in its place I put a sponge filter. Three days later the fry were free swimming. I had been culturing a small rotifer, Philodina, and I added a baster full to the tank. Smaller than baby brine shrimp and microworms, rotifers can live in the water almost indefinitely and serve as an ideal food source for such small fish. A few days later, the fry eagerly took baby brine shrimp and microworms. Growth improved rapidly once they were taking "Kordon's Baby Fry Diet".

At 60 days I had only twenty youngsters. These were the same twenty I had observed from the start. Either they did not produce a lot in the first spawn, or I removed the parents too early. Half of the fry were small and runted in comparison to their faster growing siblings. Everyone got equal care in feeding, and nobody was netted or removed until 60 days; I wanted to be sure enough survived to give me Breeder's Award Program credit. Chance had it that I had gotten an easier Rasbora to play with and they performed beautifully, yet with limited success. There are still some Brilliant Rasboras in the area and anyone who has successfully bred Barbs or Tetras may be just as successful breeding these little fish. Good luck to those who try.

NATIONAL AQUARIUM THE SALT WATER AQUARIUM

Only after a hobbyist has successfully maintained freshwater aquaria should he attempt to maintain a saltwater tank. The fish are much more expensive and harder to maintain. Saltwater fish, however, have the most striking colors and body forms.

The first consideration the hobbyist must make is the tank size. Saltwater fish cannot be crowded as heavily as freshwater fish-one of the reasons being that saltwater cannot hold as much oxygen as fresh water. There is no general rule that can be applied to all tanks but usually each medium sized fish (3-4") should have about 4-5 gallons of water. If ever in doubt, buy fewer fish. The tank itself must be made of glass or plexiglass with no metal exposed to the water. The metal will react with salt water and cause toxic chemicals to be released.

Some sort of filtration system is a must in order to oxygenate the water, keep the water clear and remove ammonia which fish excrete. A high output motor filter. will keep the water crystal clear and aerate the water, however it is not as efficient in breaking down ammonia as an undergravel filter which uses aerobic bacteria for this process. If you decide to use an undergravel filter one with charcoal cartridges on the air lifts will help remove toxic chemicals. A protein skimmer is optional and may be used to remove any slime caused by protein wastes. This is not necessary in most tanks and is an added expense. If you plan on keeping tropical salt water fishes a heater is a must. The temperature should be kept between 75 and 80 degrees F. If you are keeping temperate zone fishes, a heater is not necessary; cold water fishes require the use of a refrigeration unit which is a costly enterprise. Most of the salt water fish available from pet stores are tropicals as they have brighter colors. They are usually preferred by hobbyists.

Gravel that does not contain metals may be used in the aquarium. Some hobbyists prefer crushed coral or crushed oyster shells. When using an under-gravel filter, between one and three inches of gravel should be used for maximum effectiveness.

Non-metal decorations may be placed in the tank. Most salt water tropicals are coral reef fishes and do well with coral decorations. A large piece of coral makes a beautiful centerpiece and gives the fish a place to hide when threatened.

As coral is often bleached with chlorine before being sold, it should be boiled in water to remove any chlorine that is left. If you collect your own coral, bleach it and then soak it in fresh water for a week to remove any animal matter that is left. Rocks that do not contain metals may also be used for decoration. Any decoration should be thoroughly cleaned using no soap or detergent. Scrubbing with tap water and granular salt is most efficient.

Different artificial sea salt mixtures are available in pet stores. We have noticed no real difference, except for their price. It will take about a day or so for the salt to go into solution. Use a hydrometer to check the specific gravity. It should be about 1.025. You should wait about two weeks with the filter running before the introduction of fish. This time will allow for a complete mixing of salt. It will also allow you time to stabilize the water temperature. During this time the pH should be checked using a salt water pH test kit available at most pet stores. The pH should be kept somewhere around 8.3. If it is much lower, chances are that you have not thoroughly cleaned your decorations. You will have to clean your decorations again and put in a new mixture of salt water. During the time you maintain your tank you may notice the pH gradually getting lower or higher. It can be corrected using sodium bicarbonate (baking soda) to raise the pH and sodium biphosphate (available at most pet stores) to lower the pH. Generally if you have a healthy tank and do weekly water changes, your pH should be close to 8.3. Also remember that most pH test kits have an accuracy of + .5 so it is not necessary to constantly be worrying about small changes in pH. If a change in pH is to be made, it should be done gradually over a period of days so the fish aren't shocked.

The tank is now ready for the introduction of fish. If you do not collect these yourself they should be obtained from a reliable dealer. Take the time to look at each fish and make sure it is healthy. Are there any white spots on its fins or body? These may be parasites called oodinium. Oodinium can easily wipe out a healthy tank. Good color in your salt water fish is another healthy sign. Also make sure the fish are not breathing eratically. Most of all observe all the fish in the tank—if there is one that looks diseased, don't buy any others in the tank. Invertebrates are interesting additions to any tank. Remember these also use up oxygen and should not be overcrowded.

Start with a single inexpensive fish. If it survives you may add others. First it is wise to quaranteen any new fish for 10 days. A styrofoam cooler makes a good holding tank as it is inexpensive and will not react with salt water.

Some interesting, easy to keep and inexpensive salt water fish are percula clownfish, blue devils and dominos. Two percula clownfish and a sea anemone make an interesting display for a 20 gallon tank. The clownfish may be fed flake food; the anemone bits of chopped fish.

When you get the fish home float the bag in your tank for 15 minutes to equalize the water temperature. Place the bag in a small pail and open it. Over a one hour period add water from your tank until the pail is almost full. This will give the fish a chance to get acclimated to the new water. Now you may put the fish and the water from the pail into the tank. Every week 10% of the water should be changed to remove toxic chemicals that build up. The specific gravity and pH should be checked every week using a hydrometer and pH test kit respectively. Any corrections should be made slowly.

Fish may die in an overcrowded tank due to suffocation and over feeding. The hobbyist can easily prevent this. Occasionally fish are attacked by parasites. Some of these are readily curable. Oodinium is a protozoan that attaches to a fish and receives its nourishment from the fish's body. After a short period of time a fish's entire body may be covered by these parasites. At this stage it may look like a silvery sheen. It is easy to cure this parasite by use of copper sulfate. If you have charcoal in your filtration system, remove it before treatment. The copper sulfate solution and instructions for use is available at most pet stores. If you wish to make it yourself, dissolve 35 grams of copper sulfate and 37.5 grams of citric acid in one liter of water. Add 2 drops of this stock solution for each gallon of water. Do not count gravel and decorations in the number of gallons. For instance, a 20 gallon tank with gravel and decorations may only hold 15 gallons of water. After 4 days treatment should be repeated. It is advisable to place invertebrates in a separate tank without treatment. They are not susceptable to oodinium and copper sulfate is extremely toxic to them.

Before invertebrates can be reintroduced into the tank the copper level must be brought down to under 0.01 parts per million. This can be accomplished by several 10% water changes. Use a copper test kit to determine the copper concentration. Salt water fish are sometimes attacked by a leech called <u>Benedenia mellini</u>. Treatment is the same as for oodinium.

XXX

EASY SHRIMP

By: Bob Weatherell

This is for people who want to feed baby brine shrimp to their fish but don't want to raise it.

I was telling Ed Wickenheiser from Downriver Aquarium Society about a jar of brine shrimp eggs that I had been given that wouldn't hatch; they were old and carelessly kept. Ed told me to try his "topless method" and not try to hatch them at all. Just remove the outer shell and feed them to your fish.

- 1) Add 1 tsp. of brine shrimp eggs to 3 oz. of water.
- Let soak for 1 hr., using aeration or stirring occasionally.
- 3) At the end of 1 hr. add 2 oz. liquid chlorine (any bleach). Stir for 3-5 minutes. The color will change from brown to orange and the eggs will be shell-less. Don't leave the eggs in the mixture more than 10 minutes.
- 4) At the end of 5 minutes, pour the mixture through a brine shrimp net. Rinse contents with fresh water, then dip net and eggs into a cup of fresh water with 1 tsp. of vinegar added. 1 minute in this solution neutralizes the chlorine. Then rinse again under water.
- 5) Since the outer shell has now been removed, you can hatch these eggs and feed all hatched and unhatched eggs to your fish. Or as Ed said, just feed the eggs to your fish and don't worry about hatching them. Keep all extra eggs in the refrigerator and feed as needed.

(Reprinted from April 1982 <u>Tropiquarium</u>, the bulletin of the Motor City Aquarium Society, Detroit, MI)

MACROPODUS OPERCULARIS

By Pat Mahoney

One of the oldest species in the hobby, <u>Macropodus</u>

<u>opercularis</u>, the Paradise Fish, has been around the hobby

since the nineteenth century. A native of China and points

South, the Paradise is a regal looking bubble nest builder.

As with other members of the Family Anabantidae, the Paradise enjoys the special feature of this family, an accessory respiratory organ that enables the fish to obtain atmospheric oxygen. This organ, the Labyrinth, is composed of lamellae, covered with a highly vascular layer of skin and many times folded and convoluted. It lies on either side of the gill chamber and evolves in fry several weeks after hatching. Use of the Labyrinth enables the Paradise to live in oxygen-poor waters caused by rotting vegetation or pollution.

Ruth Brewer had given me a pair of Paradise last year when she was cutting back on fish. Both proved to be females. During last summer's ACA Convention in Indianapolis, a few of us had the opportunity to visit a couple of fish shops in nearby Speedway - home of the famous Indy 500.

In a shop less than fifty yards from the track entrance,
I spotted a male Paradise in a tank of thirty or so of the
same species. This particular male caught my eye since his

caudal fin was nearly twice the length of his tank mates. I bought him and promptly named him A.J.FOYT after the four time winner of the Indy.

Returning home I placed him in a thirty gallon community tank with tetras, rasboras, corydoras and the adult pair of Paradise females. He seemed aware of the females but he just wasn't interested. It was three months later before he started building a bubble nest among the roots of floating duckweed.

I removed both fish and duckweed and set them up in a clean five-and-a-half gallon tank. This delayed the nest building for a couple of months. When they resumed building she helped as well, and I observed no evidence of the aggressive male behavior reported by other breeders.

The actual spawning was not observed, however, when I noticed that the female was considerably slimmer, I checked the bubble nest and sure enough, the darker eggs were visible.

Realizing that the fine duckweed roots offered few hiding places for the young fry, I added several handfulls of small water sprite to the top of the tank. While I am sure this effort saved some fry it prevented me from seeing the fry. By the time I saw them they were an eighthof an inch in length. That would make them about a month old as Paradise fish are notoriously small at hatching. I began feeding the fry before I actually saw them - generous amounts of Liquifry and later switching to Kordon Fry Diet. Still later I used finely ground

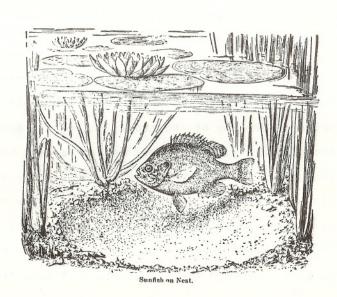
Aquarian flake food and brine shrimp.

The ph of the water was 7 - low for my normally alkaline water. I attribute this to the vegetation. I certainly did not use sodium biophosphate to lower the pM as I have done in the past for some of my killies.

At sixty days there was a noticeable variation in the size of the fry suggesting that there may have been two spawns. If not, a dozen or so of the fry had hardier appetites. Some were three-quarters of an inch while others are only a quarter of an inch in length. I have about forty fry surviving - surprising, since neither parent was moved from the spawning tank.

I have an adult trio of the albino form of the Paradise that I will next attempt to spawn.





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Spawning Corydoras Paleatus

by:Darrell Holman

Corydoras paleatus, the Peppered or Mottled Catfish is found throughout most of southern Brazil and northern Argentina. It is among the largest it's genus, attaining 3-31/2 inches when fully grown. The general coloration varies from yellow to gray-green with black mottling. The fins are well developed and clear in color, with several rows of black dots. The dorsal fin of the male is realitively long and pointed, ussually kept in an errect position, making it very easy to determine the sexes.

C. paleatus is quite undemanding and easy to care for. There are no special requirements as to water conditions or feeding, but they do prefer temperatures in the low 70°'s and they rellish live worms, such as tubiflex or black worms.

Breeding C.paleatus presents no problem what so ever. They have long

been reputed as the easiest member of the Corydoras genus to breed.

The breeding setup should consist of a 5-1/2 to a 10 gallon aquarium with the only contents being clean fresh water and a box filter. This setup can also be used as the conditioning tank.

Conditioning is best accomplished by giving them several feedings of tubiflex or black worms daily, for about 2 weeks. As the females ripen with eggs, their abdomen turns pink in color. At this point the feeding should cease and daily water - changes should start. This daily change of fresh water will induce the fish into spawning.

The spawning activities usually start in early morning just as the sun is rising, starting with very active chase from one end of the tank to the other. The fish will then settle to the bottom for a short rest period. The male will then brush against the female, touching her with his barbels, then take a position in front of her, clamping his pectrol fins around her barbels forming a "T"-shaped pattern. At this point the female deposits 1 to 20 rather large eggs (2-3mm in size) into a pouch formed by her ventral fins. Then she imediately swims off looking for safe place to deposit them (ussually on the tank sides up near the top or on the riser tube of the filter). This procedure is continued until she has deposited all of her ripened eggs (up to several hours).

The eggs hatch in 3-5 days depending on the temperature. The fry can imediately be fed on newly hatched brineshrimp or finely crushed flake. They grow very quickly and in 60 days they will be approximately 3/4" long.

My trio of breeders were not quite full grown, so they produced a rather small spawn of about 100 eggs, with 72 fry surviving (an average spawn for C.paleatus 250-300).

MAY BOWL SHOW

Cichlids

New World Mouthbrooder Pseudotropheus Open Egglayer/Livebearers

Goldfish and Koi Characins & Tetras Open

CATCH AS CATCH CAN: SPAWNING CORYDORAS AENEUS

The Wagner Family

The bronze corydoras, Corydoras aeneus, might be considered the standard bearer for the genus and the title is certainly deserved. Few individuals in the aquarium hobby would disagree with the contention that this catfish is one of the most useful in both the community and single-species tank. The fish is not a true scavenger, but by virtue of its physiology and anatomy is a bottom-feeder. (Or is its physiology and anatomy a result of the fact that the fish feeds on the bottom; which came first, the chicken or the egg?) The corydoras avidly engulf live foods, but will also remove left over portions of flake, frozen, or any other form of edible material from the bottom of the tank.

The <u>Corydoras aeneus</u> is hardly the most attractive fish available to the hobbyist, but its unique body shape and its availability at a low cost places it in the "cute" category. For those who are not so aesthetically inclined, this corydoras is certainly efficient. Certain members of our household have corydoras fever and any unacquired species viewed in an aquarium shop is a sure sale. At any rate, it was decided to attempt to breed the bronze corydoras.

After talking to an individual who has frequently bred this species, it was decided to make the attempt in the early spring when temperatures still dropped fairly low. A drop in water temperature to the mid-60s range tends to stimulate breeding among the corydoras. Three pairs of Corydoras aeneus were placed in a ten gallon tank containg a sponge filter, coarse gravel and several small, flat stones. The temperature was allowed to equilibrate at about 75° F. The first problem was trying to catch the adult corydoras, as these fish have an uncanny ability of escaping the net. To look at them feeding on the bottom, their bulky mass moving slowly along, one would not expect them to be able to dart about a tank as rapid as a racehorse on the home stretch.

The adults were fed a steady diet of frozen blood worms for a week and then the heater on the tank was disconnected. Several days later, the outside temperature dropped very low and the water temperature in the tank dropped to 68° F (as measured the following morning). That morning there were approximately 250 eggs on the sides of the tank. The adult fish were removed and the temperature was slowly raised to 80° F. After two days, most of the eggs appeared as though they would never hatch since they were covered with fuzz resembling fungus. The next day, a half dozen or so wigglers were noted and it was decided to let the tank go and see what would result. Much to our surprise, the Monday following a weekend during which the tank was not observed revealed what appeared to be moving gravel---there were approximately 150 minature Corydoras aeneus skittering across the bottom. Feedings were begun immediately with newly hatched brine shrimp and microworms.

After approximately one month, about half of the little catfish were moved to various tanks—to twenties, other tens and even a fifteen. It was easy to simply scoop up a net full and transport them to their new home. At the 60 day mark, however, it was

Winston's Encycloped

decided that the little corydoras should be moved to a 55 gallon tank to allow them to grow to a marketable size. It was at this point that the rodeo really began. The three quarter inch long fish would swarm across the tank followed by a large, fine mesh net. The results, however, were less than spectacular as only a few of the fry would be netted. It was quickly discovered that these two month old corydoras were following their wild instincts and burrowing into the gravel bed of the tank. The solution to the problem seemed simple enough, but it was nerve racking. A handful of gravel was scooped up and placed in a large white pan. As the gravel was spread out on the bottom of the pan, the little corydoras would scurry out and search for a safer hiding place. We were fearful of crushing the young bodies, but after a couple of hours all the fish were caught with no apparent losses.

The corydoras catfish are not extremely difficult to spawn although they may require several attempts before success is secured. It is reported that usually no more than 30 percent of the eggs hatch; this did not appear to be the case in our breeding attempt as more than half the eggs produced fry. One of the most interesting and exciting points in spawning the Corydoras aeneus is that all of the fry are minatures of their adult counterparts from day one of free swimming.

Aquarium (a-kwā'ri-um), a vessel or series of vessels constructed wholly or partly of glass and containing salt or fresh water in which are kept living specimens of marine or freshwater animals along with aquatic plants. In principle the aquarium depends on the interdependence of animal and vegetable life; animals consuming oxygen and ex-



Aquarium

haling carbonic acid, plants reversing the process by absorbing carbonic acid and giving out oxygen. The aquarium must consequently be stocked both with plants and animals, and for the walfare of both something like a proper proportion should exist between them. The simplest form of aquarium is that of a glass vase; but aquarium so na larger scale consist of a tank or a number of tanks with plateglass sides and stone floors, and contain sand and gravel, rocks, sea-weeds, etc. By improved arrangements light is admitted from above, passing through the water in from above, passing through the water in the tanks and illuminating their contents, while the spectator is in comparative darkness. Aquariums on a large scale have been constructed in connection with public parks or gardens, and the name is also given to places of public entertainment in which large aquariums are ex-

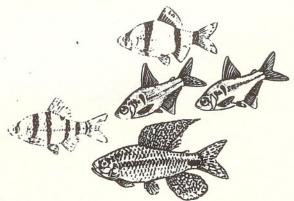


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SHOWPLACE OF TROPICALS 7123 LITTLE RIVER TURNPIKE ANNANDALE VIRGINIA 22003

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SPECIALIZING IN AFRICAN & SOUTH AMERICAN CICHLIDS. AQUATIC PLANTS AND JAPANESE GOLDFISH



HOW TO BECOME A FAMOUS AUTHOR

-Abstracted from "How To Get Original Articles Without Pulling Teeth!", by Kerry Teats, FAAS 3/82.

"As a past editor of one aquarium society publication and the current editor of a specialty club publication, I sympathize with the plight of aquarium society editors everywhere....How to get original articles from your members rather than constantly using reprints to fill publication pages....

I know these three outlines are very simple and basic but they convey the general idea of writing an article and what to put in it. And the next time you ask one of your members to write an article and they "cop out" with a poor excuse, you can use these as a retort to them."

OUTLINE FOR AN ARTICLE ON SPECIES OF FISH OR PLANT

- 1-Introduction: Tell what the article is on.
 - A. Give common name.
 - B. Give Latin name.

2-General information

- A. Area from (country, river, lake, etc.)
- B. Water requirements
 - a. Temperature
 - b. Ph (Alkalinity)
 - c. Dh (Hardness)
 - d. Any other
- C. Biotype of area found in

3-Specific information

- A. Size
- B. Temperment (Fish)
- C. Sex differences (Fish)
- D. Food requirements (Fish)
- E. Color
- F. Method of propagation (Fish & Plants)
- G. Any other information

3-General hints on care and keeping

4-Conclusion: Why sould hobbyist consider keeping this fish or plant.

OUTLINE FOR B.A.P. ARTICLE

1-General introduction

- A. Include species
 - a. Latin name
 - b. Common name

2-Breeding

- A. Conditioning breeders
 - a. Food
 - b. Water temperature
 - c. Water conditions (pH & dH)
 - d. Other

B. Observation of breeding activity

- a. Method of breeding (livebearer, mouthbrooder, etc.)
- b. Time of spawning
- c. Water conditions (if different from conditioning)
- d. Parental care, if any.
- e. Other comments

C. Hatching

- a. Length of time
- b. Condition of fry (free-swimming, stripped mouthbrooder, egg-sac absorption, etc.)
- c. Size of new-born fry.

3-Caring of fry

- A. Water conditions
- B. First food
- C. Second food
- D. Growth
- E. Other

4-Additional comments and observations on spawning and care.

BASIC OUTLINE FOR AQUARIUM HOBBY SUBJECT

1-Introduction

- A. Tell what you are going to talk about.
- B. Use a "catchy" start to attract reader's attention.

2-Body

- A. Tell what you want to convey in simple terms.
- B. Describe in full how to do what you're explaining.
- C. Use diagrams and drawings to convey your ideas.

3-Conclusion

- A. Make sure you told what you wanted to get across.
- B. Give conclusions and opinions to support your ideas.

LET'S BE HONEST— SOME AUCTION GUIDELINES FOR LABELING FISH

Join Salada, MCAS

Having worked a number of auctions conducted by MCAS and other neighboring clubs, and having bid on fish offered at these auctions, I believe that I am qualified and also have an obligation to comment on my observations. A condition has developed regarding the labeling of fish that are offered at these auctions, namely, the improper use of the terms "pair", "mated pair", "trio", "unsexed", and "mixed sexes".

I offer the following definitions as guidelines for the seller to use so that the prospective buyer will not be disappointed when he discovers that the "pair" he purchased is really two males! As far as I have known, the term "pair" in our hobby meant two fish of the opposite sex. If one is going to sell two of the same sex, he sould label them as "two" rather than a "pair".

The term "mated pair" implies that this pair has bred in the seller's or a previous owner's tank. Often I have heard sellers comment that they bagged one femule from one tank and one male from another tank and "passed them off as a 'mated pair'". Their justification is "Sure they bred, but not with each other." Come on, let's be honest.

I have always been led to believe that "trio" refers to one male and two females, but I have seen reverse trios (one female and two males) offered with the bidder believing that he is bidding on a normal trio. If one is selling a "reverse trio", he should be honest enough to label it as such.

Continuing along this line, if one is not sure of the sex of the fish he is offering, particularly when they are fry, he should label the bag "unsexed". This way the buyer will not be disappointed with his purchase.

And ther term, "mixed sexes", requires clarification. This is really one step removed from "unsexed". Mixed sexes implies at least one of each sex. If the seller is uncertain, he should label them "unsexed". This guideline could also be applied to labeling fish as "male" or "female". For example, some fish such as the Julidochromis, are difficult to sex. Again, if not sure, ask someone who might be able to identify the sex, and if this does not work, label with a "?". At least the buyer will not be displeased with his purchase.

As I have said previously, these guidelines arose from my own personal experiences at auctions. I made some purchases expecting one thing and receiving another. A number of experiences such as this could discourage hobbyists from bidding at auctions. This is only one facet of the auction scene that I have chosen to comment on. There are others, such as misidentification of fimh which I will leave for semeone else to write.

With the many auctions coming up this spring and summer, let's be honest in our labeling and not be guilty of fostering the principle of Caveat emptor! Happy bidding.

Reprinted from FAAS Report, March 1982

1	
NAME	POINTS (through April 12,1982)
Gerry Hoffman	585***
Woody Griffin	525***
Garland Neese	680***
Pat&Maggi Mahoney	595***
Darrell Holman	460***
John Jessup	445***
Vince Edmondson	330***
Ruth Brewer	305***
Jim Hajdics	190**
Art Lembke	£165**
Wagner Family	165**
Kenny Warren	90*
Tom Wright	80*
Gene Aldridge	80*
Thompson Family	55*
Amy Stirman	40
Ken Fisher	30
Leslie Stirman	10

Recent Points Awarded:

Wagners	Corydoras aeneus Xiphophorus helleri	20 10		
Pat&Maggi Mahoney	Geophagus braziliensis Macropodus opercularis			
Garland Neese	Mollienesia latipinna Haplochromis henryi Haplochromis strigatus Haplochromis fenestratu			
Art Lembke	Lamprologus meeli	15		

The Breeder's Award Committee has registered our BAP with FAAS (Federation of American Aquarium Societies) so that our BAP participants can recieve the certificates that FAAS awards. Their requirements are slightly different from ours, but all PVAS points from January 1980 can be credited to the FAAS program. If you didn"t get a copy of the FAAS rules last meeting contact me and I will get you started.

Gerry Hoffman

30WL SHOW

APR H. 1982

I. Cichlids

A. Angelfish and Discus

1st: Silver Angel -- Amy Stirman

B. Non-Rift Lake Africans -- No Entries

C. Open

1st: Albino Mbuma -- Amy Stirman

2nd: Cobalt Zebra (Pseudotropheus) -- Amy Striman

3rd: Melanochromis auratus -- Amy Stirman

11. Egglayers/Livebearers

A. Livebearer, Non-Guppy -- No Entries

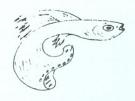
B. Sharks and Loaches

1st: Pygmy Loach -- Gerry Hoffman

C. Open

1st: Bumblebee Goby -- Gerry Hoffman

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4
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POTOMAC VALLEY AQUARIUM SOCIETY PO BOX 6219, SHIRLINGTON STATION ARLINGTON, VIRGINIA 22206

		19	
	APPLICATION	N FOR MEMBERSHIP	
NAME			
STREET			
СІТУ		STATE	
PHONE			
Number of tanks			
Type of fish			
Time in hobby			
Fish you have spawn	2 d		
What you would like to do in this Club?			
Which sub-group int you? (guppy,cichli	rests d, other)		
How long do you pla	n to be in th	is area?	*
Occupation			
Membership dues for	the Potomac	Valley Aquarium :	Society are:
Family Individual	\$10.00 \$ 7.00	Correspondi Junior	\$3.00

Completed applications accompanied by your check or money order should be mailed to P.V.A.S., P.O. Box 6219, Arlington, Virginia 22206.

Please attend our meetings at the Cocoa-Cola Bottling Plant, 5401 Seminary Road, Alexandria, Virginia at 8:00 P.M. Potomac Valley Aquarium Society P.O. Box 6219 Shirlington Station Arlington, VA 22206

FIRST CLASS MAIL

1982 MEETING DATES:

JAN.	11	APRIL	12		JULY	12	OCT.	11
FEB.	8	MAY	17	*	AUG.	9	NOV.	15
MAR.	8	JUNE	14		SEPT.	13	DEC.	13

The May 17, 1982 meeting will be held at the Westover Baptist Church, intersection of North Washington Boulevard and Patrick Henry Drive, in Arlington, VA.

Meetings start at 8 p.m. Doors open 7:30 p.m. Bowl Show registration, 7:45 p.m. to 8 p.m.