

# \* DELTA TALE \*

July 1987  
vol. 18 #7  
50¢

OFFICIAL PUBLICATION OF

potomac valley aquarium society



# POTOMAC VALLEY AQUARIUM SOCIETY, inc.



POST OFFICE BOX 6219 SHIRLINGTON STATION ARLINGTON, VIRGINIA 22206

Delta Tale is published for the benefit of the Potomac Valley Aquarium Society Inc., 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 PVAS, PO Box 6219 Shirlington Station, Arlington, VA 22206. Original articles and artwork may be reprinted by other non-profit organizations if credit is given to the author, Delta Tale, And PVAS. Two copies of the publication should be sent to Delta Tale c/o PVAS. Please place the authors name on one copy to insure that it gets to him/her. PVAS and Delta Tale disclaim any responsibility for content or availability of advertised merchandise or services in these pages. Customer satisfaction is a matter to be worked out exclusively between the advertiser and the buyer. All material for inclusion in Delta Tale MUST reach the editor by the 18th of the month prior to publication.

## 1987 PVAS OFFICERS

President: Gene Aldridge  
Vice President: Pete Thrift  
Treasurer: Gerry Hoffman  
Corresponding Sec.: Bob Pallansch  
Recording Sec.: Lea Spickler

## 1987 BOARD OF GOVERNORS

John Jessup, Ray Hughes, John Stieringer, Kenny Warren  
Ex-officio: Bob Roser

## 1987 COMMITTEE HEADS

Auctions: Alex Cummins	Fall Workshop: Gerry Hoffman
BAP: John Jessup	Bowl Shows: Jason Kooken
HAP: Alex Cummins	Programs:
Library: Pete Thrift	Ways & Means: John Stieringer
Membership: Pat Gore	FAAS: Gerry Hoffman
Spring Show: Pete Thrift	Delta Tale: John Mangan

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PVAS BOARD MEETING - JUNE 1, 1987

President Gene Aldridge convened the meeting at 7:30 p.m. at the home of Bob Pallansch. Also present were Gerry Hoffman, John Jessup, John Manjan, John Steiner, Pete Thrift and Kenny Warren. The recent spring Show/Auction was the main topic of the meeting. After Show Chairman Thrift summarized the weekend's activities, the board unanimously voted him congratulations for a superb performance despite many nasty surprises.

Treasurer Hoffman rounded off the fiscal situation thus:

Gross income	\$5200
Net	860
Bank Balance	1500
Due PVAS	550

Problems discussed included:

- The expense of printing the brochure (35¢ each)
- Lack of participation by PVAS members
- Effectiveness of inter-club mailings versus advertising
- Auction length

Under new business it was decided that PVAS will not hold a formal picnic this summer, but instead an informal outing, perhaps to Lilypons.

Members Aldridge, Hoffman and Jessup arranged to meet with IRS officials on June 3 to discuss tax-exempt/non-profit status.

The meeting was adjourned at 9:20 p.m.

Bob Pallansch  
Corresponding Secretary

ed. note- an informal field trip to lilypons and/or Kenilworth Water Gardens is being planned. If interested please contact either Gerry Hoffman or me as soon as possible. Once we know how many people are interested we will try to work out the details.

J.M.

REVISION TO SPRING '87 SHOW RESULTS

As was reported in last month's Delta Tale, John Jessup was awarded first place for his entry into the North American Natives Fish category by the assigned panel of three judges. However, after the awards were announced, one of the other show judges approached John and stated that it was his opinion that John's entry was not native to North America. After some further discussion and research, John has agreed with this judge that his entry did not belong to the class in question, and has returned his first place trophy to the Show Chairman and has asked that it be awarded to the original second place winner, Laurie Jean Crockett.

Therefore, the official results for Class IIm shall read as follows:

First place - Laurie Jean Crockett  
Second Place - Gerald Pottern

Pete Thrift  
'87 Show Chairman

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**Vacation in Colorado**  
**Plan to Attend**  
**The 17th ACA Convention**  
July 17, 18, 19, 1987  
**Hilton Inn**  
**Colorado Springs, Colorado**

- *Tours* • *Speakers* • *Bowl Show*
- *Awards* • *Auction* • *Melodrama*
- *West African Dinner*

**Pikes Peak Cichlid Association**  
P.O. Box 17176, Colorado Springs, Colorado 80935

## Fast Change Artist

George White, PVAS

Anyone who has accidentally chugged water when siphoning out mucky aquaria should remember W.C. Fields's old maxim: "Never drink water." There is an easier way to maintain fish tanks than the old buckets and short hose routine. Below is my variation of a "new way" shown to me long ago by a fellow fish fan.

If you have a bathtub, shower or basement drain that you can dump water directly into, use a long garden hose--and eliminate hauling buckets of water. One end of the hose can be fastened to the inside of the aquarium with a large "A" shaped spring clamp like those sold at Sears. Make sure the end is deep in the tank near the substrait to siphon off the "heavy water." If you have fry in the aquarium, bind a four inch square of plastic screen to the end of the hose with a rubber band. Run the other end to your drain and suck on it two or three times. Since the hose is much longer than the ones usually used with buckets, you should be able to avoid ever accidentally swallowing water.

If you have more than one tank to maintain, the hose can be easily modified so it can be moved from one aquarium to the next without starting the siphoning action going each time. Buy a screw-on hose shut-off valve and attach it to the end of the hose that will go into the aquarium. When you finish with one tank, shut off the hose and move it to the next one.

Optional "vacuum" attachment. You can also clean the gravel as you change the water. Buy one of the clear plastic gravel cleaning siphoning set-ups from your local pet shop. Attach a "male" or "female" hose end (available from Sears and other hardware supply stores for repairing broken hoses) to the end of the siphon hose. Now it can be easily screwed onto your garden hose whenever it's needed.

Easy refilling. You can also use the long hose system to avoid lugging full buckets of clean water. Attach one of the hose to a handy sink faucet. Screw onto the other end a "pistol" style garden spray nozzle that has a lever or clip so it can be turned on or off at the aquarium. Turn on the water and either hold the hose nozzle or fasten it to the inside of your aquarium with the "A" clamp. This allows you to do other things in the fish room while the fresh water flows in.

If the faucet in the kitchen, bathroom, or where ever does not have threads for screwing on a garden hose, don't fret. Hardware stores sell adaptors that easily screw onto most faucets so a garden hose can be attached to them.

Most fish are not bothered by a few degrees shift in temperature when their water is changed. You should, however, frequently check on your "automatic" operation since the hot/cold mix coming out of your tap will shift sometimes without your having touched the knobs.

The "Rockefeller" option. If money's no object and some of your fish are very sensitive to changes in water temperature, you may wish to attach a water thermostat between the faucet and the hose. These cost about \$15 and \$25 at photographic stores that handle darkroom supplies.

RHODEUS amarus

KEEPING AND SPAWNING THE BITTERLING, RHODEUS AMARUS

by Mason Jones

The Bitterling is a European fish, which is very popular in Europe, but not so popular in America. I think the main reason for this is because the Bitterlings are not an extremely pretty fish. This is not true all the time, for advanced aquarists are looking for the interesting fish which holds true for many European aquarists also.

The Bitterling is found in central Europe living in slow-moving or stagnant streams and small rivers. I have found that the Bitterlings were a little more comfortable at temperatures of 76-78 degrees Fahrenheit, rather than a good temperature for tropicals, of around 78-84 degrees Fahrenheit. Feeding didn't present any great problems with my fish. I offered a wide variety of live, frozen, and even freeze-dried foods, of which, of course, live brine shrimp was their favorite. After live brine or tubifex, the preference between foods wasn't so noticeable. This species of fish stays rather small, and even in nature 3 inches is about the average for a mature fish.

The Bitterling has a fascinating reproductive cycle, which is dependent upon freshwater mussels. Of all the types of mussels, the painters mussel, *Unio pictorum* seems to be the favorite. A good second choice if painters mussel isn't available would be the swan mussel, *Anodonta cygeres*. So, now you have your fish and your mussels, what comes next? Well, even though your little brown mussels don't look alive, they are, and you must feed them. Now don't get all upset because you can't find any mussel food on the shelves of the local pet shop, all you have to do to feed mussels is don't keep a filter on the tank they live in. Mussels are filter feeders, and strain things out of water and use them as food, and if you filter all the particles out, your mussels will die. If they do die, it is important to remove the dead debris from the tank, or it will cloud the tank water. These types of mussels are a very touchy to pollution, in nature, or in your home. The reason Bitterlings are disappearing in nature is because man is polluting the water they live in. The Bitterlings are fairly hardy and can survive small amounts of pollution, but the mussels can't, so the mussels die and since the fish are dependent on the mussels, the fish die also. So, if you can keep the fish and the molluscs alive together, you are half way done with breeding them. The breeding tank should have 2 or 3 mussels, live plants, and aeration.

When spawning time approaches (April to June; the male turns bright red on the front of his body, also on his belly), a male Bitterling will choose a mussel he likes and defend it from intruders. If it is around breeding season, you can identify the female if you can see the ovipositor.

The spawning technique of these fish is very elaborate and I will attempt to explain it. First, a male coaxes the female near the mussel he has been guarding until now. Then, head pointed down, she watches the mussel. As the mussel slowly opens its shell to collect fresh water, food, and oxygen, the female Bitterling darts into the mussel and lays one or two eggs on the gills of the mussel. Then the male expels his sperm into the respiratory system of the mussel, which carries the sperm to the mussel interior. This process is usually repeated until about 100 eggs have been laid. Incubation time is about 2-3 weeks, depending on the water temperature and water quality. As the eggs hatch, they stick to the gills of the mussel. After the yolk sacs of the baby Bitterlings is gone, the babies leave the mussel. They are about a week old, and about 1 cm long. The fry are quite hardy but it is not easy to raise them, even though its far from impossible.

As I mentioned before, any species of Bitterling is quite a rarity. When you "DO" find them, most likely they won't be sold as Bitterlings. I once purchased some at a store where they were marked as Java Rice fish, which don't look at all like Bitterlings. If you have a pair of these interesting fish, you should try your hardest to breed them, and distribute the fry among other aquarists. If you don't have some of these fish, I would advise you to give them a try.

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Reprinted from SPAWNS, Society Promoting Aquarium World Nature Systems,  
Kenvil, New Jersey August 1985

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#### AMERICAN LIVEBEARER ASSOCIATION CONVENTION

To be held in conjunction with the Medina County Aquarium Society  
Annual All Species Show and auction.

AUG. 29-30, 1987

Medina County Fairgrounds, 4-H Building, Smith Road Entrance,  
Medina Ohio.

For more information contact Wayne Swait (216) 948-3833 or  
Earl Steffensen (216) 666-3636.

## WHY DO CICHLIDS NAMES KEEP CHANGING?

By Dale Speirs

The Latin binomial system of naming plants and animals is a logical and useful system, but is afflicted with some instability. Names are constantly being altered, and there are a number of species assigned to different genera by different authors. With all these names floating about the literature, which one is correct?

There are two reasons for changing names, taxonomy and nomenclature. Taxonomy is the science of describing and classifying objects. Taxonomy and nomenclature are not synonyms and cannot be used interchangeably, although many people do so. When a new species is discovered, it is usually described, classified, and named in the same article, hence the tendency to treat taxonomy and nomenclature as all part of one process.

A group of international commissions set the rules for nomenclature. For cichlids, the rules are determined by the International Commission on Zoological Nomenclature (ICZN). The basic principle of nomenclature is that the earliest valid name published is the one that shall be used. If such is the rule, then all one has to do is establish the earliest valid name for a species. With this done, little in the way of changes would be needed.

### CATCH-22. What is a species?

This question is always good for an argument in the company of any group of biologists. No matter if you are discussing cacti, canaries, or cichlids, there will be some taxonomic group causing trouble. Species are not always distinct from each other. There are numerous groups such as mbunas which shade into each other. Characteristics which are important in classifying cichlids are not always agreed upon.

As an example, the haplochromine genus GAUROCHROMIS was set up on the basis of jaw structure, but according to Hoogerhoud (1984) this is not a useful characteristic. Therefore the species of genus should be kept in the genus LABROCHROMIS. Who is right? Over a period of time, a consensus will emerge and everyone will agree on one particular nomenclature. Unfortunately, this period of time could take decades. In the interval, the aquarist must make a decision, based on reading literature and thinking the matter over. If in doubt, be conservative and wait to see how the experts decide. Some aquarists collect labels more than they collect cichlids. Kullander's revision of CICHLASOMA proposes some hefty alterations but most zoologists are sitting back and waiting for further documentation. Why hurry and regret it later?

Cichlid hybrids have been discouraged by most aquarists for the good reason that species are muddled enough without adding to the confusion. Tilapias, spread thruout the tropics by humans, are now difficult to find as pure strains. It has been suggested by one study (McAndrew & Majumdar 1984) that there is no longer any possibility of establishing a definitive nomenclature for tilapias. Depending on which author you read last, a particular species might be TILAPIA,



SAROTHERODON, or OREOCHROMIS. You are not obligated to use one name only for this fish, but have the choice depending on which author you agree with. It is a taxonomic decision based on belief, not nomenclature based on international agreement.

In habitat, it is not always easy to establish if hybrids exist or if they are part of a variable species (Crapon de Caprona and Fritzsich 1984). Is a grey cichlid a hybrid offspring of a black cichlid and a white cichlid? Or do all three belong to one species with variable skin color, exactly as humans?

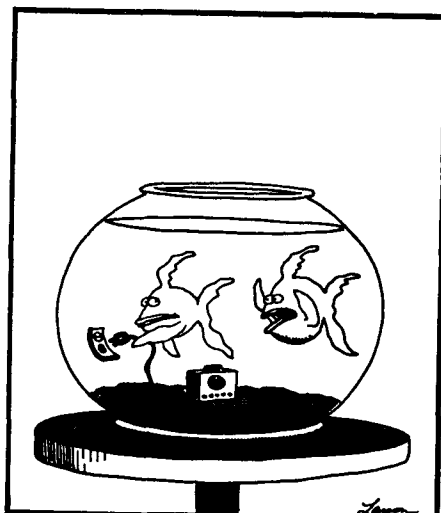
REFERENCES:

Crapon de Caprona, M and B Fritzsich (1984) Interspecific fertile hybrids of haplochromine Cichlidae (Teleostei) and their possible importance for speciation. NETHERLANDS JOUR. ZOOLOGY 34:503-538

Hoogerhoud RJC (1984) A taxonomic reconsideration of the haplochromine genera GAUROCHROMIS AND LABROCHROMIS (Pisces, Cichlidae). NETHERLANDS JOUR. ZOOLOGY 34:539-565

McAndrew, RJ and KC Majumdar (1984) Evolutionary relationships within three tilapine genera (Pisces, Cichlidae). ZOOLOGY JOUR. LINNEAN SOCIETY 80:421-435

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Reprinted from BUCKEYE CICHLID LOVERS BULLETIN, Ohio Cichlid Association, Mayfield Heights, Ohio September 1985



"Bob! You fool! Don't plug that thing in!"

## ARE CICHLIDS THAT SENSITIVE TO WATER CHANGES?

Dale Speirs, OCA, CAS

Aquaristic authors have a habit of making definitive statements which may be true in some places but not in other places. I have just finished reading yet another article which says 'Never do large water changes in a Rift Valley tank, and only do small changes as infrequently as possible'. My Rift tanks have 25% to 50% of their water changed weekly. The new water is about 10 degrees C. colder than the aquarium tank. Despite this alleged brutality, my Julidochromis ornatus are now on their third generation, and the assorted species of Lamprologus are as aggressive and active as one would hope them to be.

So why the overuse of 'never'? Part of the reason may be that wild specimens are more sensitive than domesticated individuals. I doubt this though, because my cichlids may have been spawned and raised in captivity, but have come from acidic tanks of eastern aquarists into the alkaline tanks of Calgary water (pH 8.4). The change from Lake Tanganyika to any North American tank cannot be worse than the change from an Ontario tank to an Albertan tank. Additionally, wild specimens undergo natural selection in the journey from the Rift Lakes to their ultimate life in domestic circumstances. The weak will die on the journey or shortly thereafter; any survivors should be of sterner stuff.

Aquaria tend to acidify with time because of fish excreta, exhaled carbon dioxide, and lack of pH buffering in most tanks. Metallic ions are affected by pH and some become more toxic as pH changes (Campbell and Stokes, 1985) but somehow most fish survive.

The most important factor in water changing is local water quality. Towns with heavily-treated water may require caution in water changes because of the assorted chemicals in them, such as chloramines. I suspect that aquarists who say 'never!' live in such places. Calgary, with no chloramination, draws its water from mountain rivers with no major upstream users. Consequently the water is of excellent quality. I have often wondered if there is any correlation between the success of a local aquarium society and the local water source. Poor water quality may result in a struggling aquarium society, since there is a neverending struggle to keep fish alive, a struggle that many aquarists may forego. Discus are difficult to maintain in Calgary, while African cichlids do very well indeed.

No matter what kind of filtration is used, pollutants may build up, hence the need for frequent partial water changes. What is the safe concentration of pollutants? If the fish start to show signs of distress, then the safe limits are already long past. The danger zone is invisible and fish may not show any immediate reactions. Test kits are expensive and not entirely certain because safe concentrations of a pollutant vary with species, individual cichlids, and the presence of other stress factors. As an example, ammonia is often considered to be safe below .0125 mg/L, but recent research shows this to be a false assumption (Meade 1985). An aquarist who uses test kits is still not any better off, because safe concentrations are often set arbitrarily, by guess and by golly. Partial water changes will be more effective because they keep pollutant levels down.

### REFERENCES:

- Campbell, PGC and Stokes, PM (1985). Acidification and toxicity of metals in aquatic biota. *CAND. JOUR. FISHERIES AQUATIC SCIENCES* 42:2034-2049  
Meade JW (1985). Allowable ammonia for fish culture. *PROGRESSIVE FISH CULTURIST* 47:135-145

(reprinted from Buckeye Cichlid Lovers Bulletin, Ohio Cichlid Assn.)

A MESSAGE FROM MEMBERSHIP !

The Spring Show was a memorable membership month. I'm pleased to report that 14 new memberships were received- the highest number in any single month in over 2 years that I have been membership chairman.

I'd like to take this opportunity to welcome the new members and say that on behalf of PVAS, we look forward to seeing you at future meetings.

James Omari Pitts, Jr.  
Eric Chen  
H. Noble Jones  
Mickey Helms  
Jim Stahl & Dotty Edenhart  
Lee Tingen  
John O. Osgood  
Everett Casey  
Martin Sternin  
Larry T. Inouye  
Joe Rockwell  
Michael Lee  
Evelyn C. Low  
Tony Fitz

PAT GORE  
MEMBERSHIP  
CHAIRMAN

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Q & A

Questions on any aspect of fishkeeping can be sent to Rick Bell, 1785 Hill Meade Sq. Frederick, MD 21701.

ed. note- the Q & A column is now back in business. Send your questions to Rick at the adress above and he will answer them in this column.

## TRADING POST

Ads for the trading post should be sent to Tom Hetzel, 5601 Seminary Rd. #1702, Falls Church, VA 22041, by the 15th of the month prior to publication.

**FOR SALE:** Perfecto 55 gallon tank, full hood, and cabinet stand. Tank is plate glass, not tempered glass. Tank and hood have never been abused and are in perfect condition. Custom cabinet stand is far above what is available in any pet shop. This set-up will be the center of attention in any room. \$165. May consider selling separately.  
Pete Thrift, 971-0594

For Sale: Several 55 gallon setups. Contact Kenny Warren 378-8838.

For Sale: Belonesox fry \$2 ea.; Backissue aquarium magazines—send SASE for catalog. John Mangan, 9770 Oleander Ave, Vienna, VA 22180.

### Tanks for Sale:

40 gal. Set-up - Includes: Woodgrain tank; Perfecto full hood; 2X4 wood stand; Supreme Danner heater; Supreme Aquaking power-filter (less than one year old); gravel; slate; and, fish. Also 10 gal. tank and 610 AquaClear power-filter (used as feed tank).  
Whole Set-up: \$300.00

30 gal. Set-up - Includes: Woodgrain tank; glass canopy with strip lighting; angle-iron stand; gravel; heater; and, 610 AquaClear power-filter.  
Whole Set-up: \$100.00

### Fish for Sale:

#### Killies

Aphyosemion australe (gold), A. filamentosum, A. scheeli, A. walkeri, Epiplatys annulatus, Cynolebias whitei, C whitei (albino)

#### Rainbows

Bedotia gaeyi, Ireatherina wernerii

#### West African Cichlids

Nanochromis transvestitus, N. Dimidiatus, Pelvicachromis roloffi, P. taeniatus (kienke), P. taeniatus (wild), P. affin. subocellatus

#### South American

Apistogramma agassizi, A. agassizi (red body), A. cacatoides (red tail), A. trifasciata, A. nijsseni, A. jiffira, Crenicara filamentosa

#### African Cichlids

Lamprologus brevis, L. lelupi, L. tetracanthus, Cyphotilapia frontosa

#### Miscellaneous

Badis badis

For all the above call:

Ricki Tyau Day - 364-5014 Night - 765-6713

# POTOMAC VALLEY AQUARIUM SOCIETY



POST OFFICE BOX 6219 SHIRLINGTON STATION ARLINGTON, VIRGINIA 22206

## APPLICATION FOR MEMBERSHIP

DATE \_\_\_\_\_ 19 \_\_\_\_

NAME \_\_\_\_\_

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

TELEPHONE H \_\_\_\_\_ W \_\_\_\_\_

OCCUPATION \_\_\_\_\_

Where did you hear about PVAS/get this application? \_\_\_\_\_

Number of tanks \_\_\_\_\_ Time in hobby \_\_\_\_\_

What can this club do for you ? \_\_\_\_\_

What do you want to do for the club ? \_\_\_\_\_

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.

MARYLAND

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Rockville, Md 20852

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(301) 521-4529

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2230 Veirs Mill Rd  
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585-6562

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Rockville, Md 20852

881-6182

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Annandale, VA  
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Arlington, VA 22206  
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BEACON MALL PET CENTER

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660- 6100

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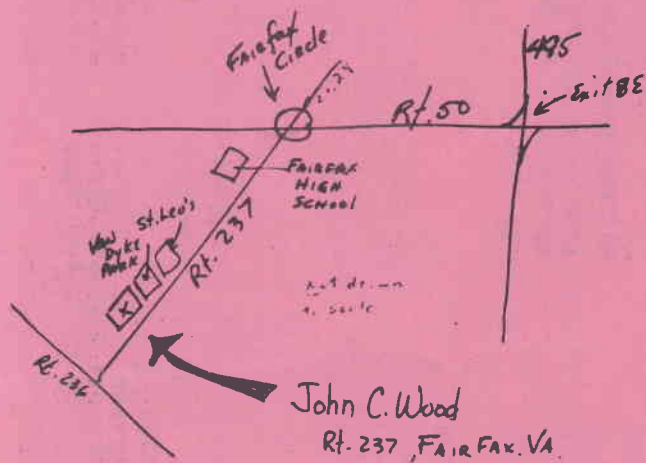
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Springfield, VA 22150  
922-7358

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243-C Harry F. Byrd Hgwy.  
430-9667

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



PA. Fish Culturists  
1823 Dudley St,  
Philadelphia, PA 19145

The Potomac Valley Aquarium Society will meet on the following dates in 1987:

Jan. 12	May 11	Sept. 14
Feb. 9	June 8	Oct. 12
March 9	July 13	Nov. 9
April 13	Aug. 10	Dec. 14

Meetings are held at the John C. Wood Facility, Rt. 237 (Old Lee Hgwy)  
Fairfax City, VA. Doors open at 7:30, meetings start at 8:00 PM. Everyone  
is welcome.