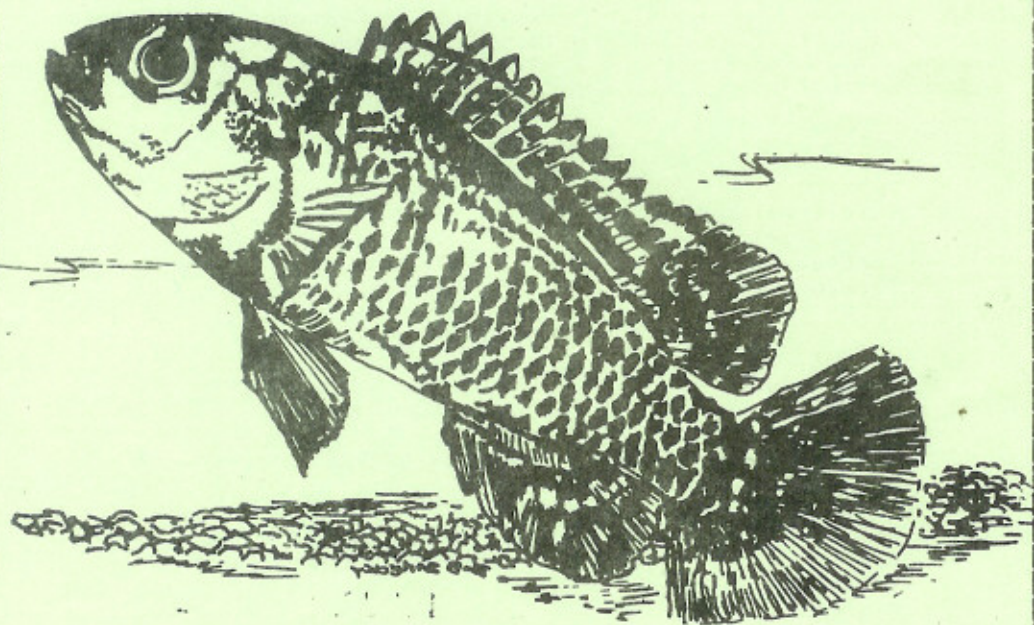


* DELTA TALE *

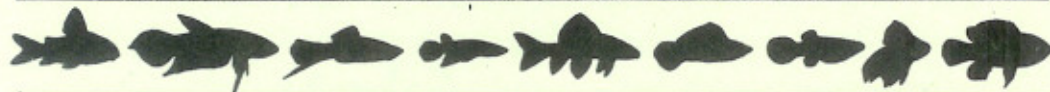
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OFFICIAL PUBLICATION OF

potomac valley aquarium society



POTOMAC VALLEY AQUARIUM SOCIETY



POST OFFICE BOX 6219 SHIRLINGTON STATION ARLINGTON, VIRGINIA 22206

The Delta Tail is published for the benefit of the Potomac Valley Aquarium Society, Inc. (PVAS), a non-profit organization, established in 1960 for the purpose of furtherin 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 Tail and PVAS. Two copies of the publication should be sent to the Delta Tail c/o PVAS. Please place the author's name on one copy to ensure that it gets to him/her. PVAS and Delta Tail 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 Tail MUST reach the editor by the 18th of the month prior to publication.

1988 PVAS OFFICERS

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Vice President:	Pete Thrift
Treasurer:	Gerry Hoffman
Corresponding Secretary:	John Mangan
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Spring Show:	Pete Thrift
Fall Workshop:	Gerry Hoffman
Bowl Shows:	
Programs:	
Ways & Means:	John Stieringer
FAAS:	Gerry Hoffman
Delta Tail:	Gene Aldridge

A FEW WORDS FROM YOUR PRESIDENT

The March 1988 issue of the Tropical Fish Hobbyist magazine on page 94, makes reference to an article in the June 1987 issue of Delta Tale by our own member, George White. His article outlines the use of plastic rain-gutter downspouts as hiding places for fish. Last summer George started me using this gutter material for hiding places. It has worked out very well for me. It is easy to cut and being brown does not look so out of place as the white PVC pipe does. The cost is about a dollar a foot so it is not that expensive and it comes in 8 foot lengths. WAY TO GO GEORGE.

The last weekend in February, I went to the Raleigh Aquarium Society Workshop with Gerry Hoffman and enjoyed myself a great deal. The company on the trips down to and back from Raleigh to Warrenton were enjoyable and helped make the trips shorter than they really were. THANK YOU GERRY. The talks by Ginny Eckstein and George Smit were very good and I learned something from each of them. George in part feels that a tank should have enough light in the proper spectrum to grow part of the food for the tank. This means putting four to six big flourescent bulbs on any tank under 100 gallons. You must be careful to have enough animals to all the food you are growing. PVAS was well represented this year with the Warren's, the Farmer's (new members), Eric Powell (another new member), G. Hoffman and yours truly.

In an attempt to save the club some money, we are going to start using a Bulk Mailing Permit. I will get the Delta Tale out a little earlier than I have been to help take care of the slow delivery time. This action should save the club between \$600 and \$700 a year. To take care of any problems on lack of information, I will include the Bowl Snow Classes and the Programs for TWO months in each issue instead of only one.

As a service to the members of the club, the Board has decided to make available "Sodium Thiosulfate" in crystalline form with the necessary instructions for making "de-chlor". This is an outgrowth of Comments made by Tony Fitz at our February Meeting. Hopefully it will be available at our April Meeting. If not then May. The cost will be some where in the \$1.00 to \$2.00 range.

For those of you that read FAMA on a regular basis, I am sure have seen the Amazon River collecting articles written by Gian Padovani. Though few names are given that was the trip that I was on and as you all know by now I enjoyed it very much.

Gene

FUTURE EVENTS

16 & 17 April - Ohio Cichlid Assn. Show - Wickliffe, Ohio - Info: Neadean Gunte - 216-442-1257

16 & 17 April - Delaware County Aquarium Society Workshop - Essington, PA. - Info: Rosanne Kilmartin - 215-543-5804

29 Apr to 1 May - North Jersey Aquarium Society Show - Meadowlands, New Jersey - Info: Dore Carlo - 201-437-5012 Night.

20 to 22 May - Potomac Valley Aquarium Society Show and Auction - Falls Church, Virginia - Info: 703-971-0594

1 to 3 July - Exotic Catfish Fanciers Show - Canton, Ohio - Info: Dave Hull - P.O.Box 8384, Canton, Ohio 44711

21 to 24 July - The Missouri Aquarium Society and the ACA Convention - St. Louis, Missouri - Info: Jim Thale - 314-343-4253

23 to 25 September - 1988 FAAS Convention - Blasdell, New York - Info: Jerry Dolce - 716-366-0969

TRADING POST

Ads for the Trading Post should be sent to Tom Hetzel, 5601 Seminary Road, Apartment #1702, Falls Church, Virginia 22041 by the 15th of the month prior to publication.

FOR SALE:

Copies of about 40 assorted papers o darters originally collected for Master Thesis. Also, a variety of fishery biology and other text and hobby books at good prices. Please send a self addressed stamped envelope for a price list.

Chris Bergesen, 5116 Lawton Drive, Bethesda, Maryland 20816.

April Meeting Program - What a Judge looks for when judging fish. The leaders will be various Board members. The aim is hopefully to improve the Membership participation in the May Show.

May Meeting Program - Killifish (hopefully).

We are still looking for a Secretary for our Monthly Bowls Shows. Please volunteer.

BELONESOX BELIZANUS -
THE PIKE LIVEBEARER by John Mangan, PVAS

Belonesox belizanus is the of its genus and is a relatively large, for a livebearer, predatory fish. They can be found from southern Mexico through much of Central America and have also become established in the U.S. in some parts of Florida and Texas. They prefer shallow, slow moving waters where they hide in plant thickets and wait for their prey.

One look at an adult Belonesox is all that is needed to recognize it as a predator. The fish is torpedo shaped and has a small dorsal fin set well back on the body, for speed, and large sharp teeth for grasping prey. They also have a perpetual "snarl". This is due to the somewhat unique shape of their mouth which aids in holding onto their prey.

Belonesox is a Poeciliid and is very easy to sex since the male has a modified anal fin (gonopodium) just like the related guppies, platies, swordtails, etc. They also spawn, and give birth to live young in generally the same way as the more common livebearers.

"So", you may be asking, "what's the big deal about raising Belonesox? They're just big guppies."

In some ways this is true, but can you imagine an 8" female guppy swallowing a 6" male? I don't mean killing him and eating him bite by bite, I mean swallowing whole. With Belonesox this is very possible, and not at all uncommon. I've lost four full grown males this way. The first two were victims of one large female who was then banished to solitary confinement. I then obtained two more pairs which were set up in a well planted 30 gallon tank. The tank has an air operated outside filter and temperature was kept in the mid 70's. Most of the literature on this fish recommends the addition of salt to the water, some even go as far as to say that the fish will not breed, and in some cases even live, without this. However, I have found salt to be totally unnecessary.

Everything went well for quite some time. The males and females seemed to get along, fry were produced about once a month (more on this below) and the only aggression was between the two males. One became dominant and developed a lot of gold coloration in the throat and abdomen areas. The subdominant male could be identified by a broad black stripe down his sides, similar to juvenile coloration. I was able to tell that this is due to dominance by removing the dominant male and having the sub-dominant one "color up". When the dominant male returned the other one went back to the submissive coloration.

During this time the fish were kept well fed with small feeder goldfish. About once a week aprox. 20 goldfish would be dumped into the tank. Unlike Oscars or other cichlids, which would eat (or kill) all 20 within five minutes then lay around with a stomach ache for 3 days, the Belonesox would each eat one or two apiece and

then slowly eat the others one or two at a time over the rest of the week. Everything seemed to be going along very smoothly until I ran out of feeder fish for a few days. Since everything had been going so well I didn't worry much about it. I brought home a bag of goldfish when the new shipment came in and dumped them in the tank as usual. The two females rushed out of the plants and each grabbed a goldfish, but there was no sign of the two males. I didn't think to much of it since it was quite common for any number of the fish to be back in the plants and not visible. The next day I glanced into the tank, saw the two females but not the males, still didn't worry. Next day, glanced in again, still no males in plain sight. Now I began to worry a little bit, but just a little, I still thought they must be back behind a plant leaf. I decided to take a closer look. After much searching there was no sign of the males. The lesson here: If you want to keep Belonesox don't run out of feeder fish.

While I'm on the subject of feeder fish- every article I've read about Belonesox talks about feeding them on guppies. Don't waste your time and money trying. I can't imagine trying to keep my adults full on guppies, even being able to get them wholesale. I have several 2" juveniles I've kept to raise as my next generation of breeders which can each eat 2 or 3 average size feeder guppies per day. I'll let you try to figure out how many it would take to satisfy an 8" female.

After all of this, if your still crazy enough to want to raise Belonesox, you need to be told, or should I say warned, about raising the fry. The female Belonesox can give birth about every 4-6 weeks, and can easily have well over 100 fry per brood. Pregnant females do not have to be isolated from the others. Well fed Belonesox will not eat their fry. The fry are about $\frac{1}{2}$ " at birth and have a dark stripe down their sides. The fry will hang motionless in the plants and will resemble small sticks or pieces of debris. The first one I saw was when making a water change and I tried to suck one up with a siphon. To my surprise the piece of plant I was trying to clean up swam away. There is no big hurry to remove the fry from the parentstank (if, as I said above, the adults are well fed). As an experiment I've left a number of fry in with the adults for about a week before they finally got eaten, and that was because I ran out of goldfish.

Sounds easy enough so far, doesn't it? Well here comes the hard part, feeding the fry.

The fry are born hungry. The best food I've found for the fry is brine shrimp. By this I don't mean baby brine like you feed to those wimpy little cichlid fry, I mean adult brine shrimp. Daphnia is the next best, if you can raise enough, and you need LOTS. The fry eat enormous amounts of food and if they don't get it they eat each other, actually even when they do get it they often eat each other. I've seen a baby Belonesox eat another one the same size.

The cannibal then seems to double his size overnight (this isn't much of an exaggeration), which makes it easier for him to eat his next victim, and so on until all of a sudden you've gone from over 100 ½" fry to 2 or 3 2" fry in an amazingly short time. You can slow this process by separating the fry by size often. You need very sharp eyes though. It's very common to have one large cannibal find a dark corner or other hiding place where he sits very still so you don't notice him until he's the only fish left in the tank.

The only time I've managed to raise most of a spawn up to over an inch, was when I fed them lots and lots of adult brine shrimp. I then sold them to a local wholesaler (don't count on doing this though as there is a very limited market for Belonesox). They will also eat Daphnia, as mentioned above, mosquito larvae, newborn guppies (an entire brood of guppies, from a large female, is just an appetizer though for a brood of Belonesox) and some will even eat flake food. Growth on flake food is extremely slow though. As the fry grow they graduate to larger and larger guppies, then finally goldfish.

Belonesox aren't for everyone, but they are possible to spawn and raise if you are willing to make the commitment to give them what they need. Which means that if you want to raise Belonesox you should be committed.

I have to go now. There's two guys here that keep insisting I try on this funny looking jacket, even though I keep telling them that the sleeves look way too long...

OFF THE LEASH PARK



From the
Arlington
Journal

"Oh, I love it! Let's let him almost
get there, then—wango!"

Deer editer - I is a cichlid keeper
and am writin to ya about da
article by dis Tony Fitz guy.

I got dis ta say to him - "Hey Tony!
Real men keep big cichlids not dem
wimpy liddle killifish. why do dey
even call dem killifish, huh? Dey

couldn kill nutin. I'd like ta see one
try ta take on my Oscar "Jake". Den
we'd see who got killed, Hahaha!

So Tony, ya can take your wimpy killifish,
and all dem liddle tetras and stuff two,
and ~~██████████~~! Remember ders only 2
kinds a fish - cichlids and cichlid food.

yurs truly
me

Note: According to reliable sources at the National Enquirer
the above letter to the editor was actually written by a former
Delta Tale editor who is a well known rabble rouser and notoriously
bad speller. J.M. self appointed Delta Tale Investigative reporter.

EDITORIAL COMMENT: The comments in this publication reflect the thoughts
of the authors and in no way the Editor!!! eta.

An Alternative to Small, Beautiful Fish
or

A Commentary on Last Month's Article Entitled
An Alternate to Big, Ugly Fish

by Gerry Hoffman

Last month's Delta Tale contained a well written article by one of the club's newer active members on his interpretation of the preponderance of large-cichlid lovers in the club. Being an "old-timer" in PVAS, I feel it is necessary to let the world know that PVAS is most definitely not made up of people who feed goldfish to large mouthed cichlids, but as a whole, the club consists of what I shall call generalists, or people who keep a lot of everything. Very few members have only large cichlids (I don't have one), and the days of the African Revolution are gone and dead here in the National Capital Area. So let me respond to that article in a tongue-in-cheek fashion, or killifish-in-cichlid-mouth fashion.

At this point I rejoice since so many PVAS members refuse to put large bad guy fish in their tanks, and instead choose the many other types of fish that also make the hobby interesting. In the club, the Breeder's Award Program is set up to reward the well-rounded hobbyist, not someone who maintains only one type of fish. For example, if you kept only killifish, or large cichlids, you wouldn't stand a chance of obtaining the more prestigious, higher awards. Rules for our Bowl Show were put into effect when cichlids were the "in thing" and needed a separate category so the "other fish" would get equal merit. Today the cichlids don't turn up in large numbers in the Bowl Show table. Witness last month's killifish category: 20 entries alone. Yes, our club does like fish other than large cichlids, and some may even keep a killie or two. Now I will mention the hallowed words of fish that true PVAS'ers keep:

All Other Fish Than Killies.

1) Killifish are small. Yes, next to my upstairs show tank (well planted with plants frequently available at PVAS auctions from people who don't have large, plant-eating cichlids), I have several pairs of binoculars with which to find those little guys from four feet away.

2) Being the antithesis of killifish, other fish are uniquely beautiful. Ask any catfish lover if his brown, scaly, whiskered, sucker-lipped friends aren't lovely.

3) Why keep fish in small tanks? The larger the space the better. And what's wrong with an occasional mouthful of mulm when trying to start those siphons for water changes?

4) Killifish are too dumb to stay in their tanks. Any

killie lover knows these guys can find a way to get out of any tank, so the hobbyist has to spend more money to buy tank tops or covers. Other fish look at the dead bodies, on the floor and say, "I'm not going to end my days being sucked up a vacuum cleaner hose".

5) Most female killifish look so alike that different species can't be kept together. Did you ever hear of a community tank of killies?

6) Killifish never live long. I love listening to fish stories from hobbyists keeping such and such alive for 10 years or so. Most normal people who keep pets want them to be around for a while.

In summary, a poll of PVAS members would reveal a wide variety of well-founded interests that primarily exclude large cichlids. One member even has a whole basement of grey and darker grey goodeids! Tetras are enjoyed, catfish are available, community tanks abound, and a few of us might even stoop to keep some of those species with ridiculous names like *Aphyosemion blahblahblah somethingorotheri* Elephant watering hole #22, 1982 strain. Real nice names. We love the simple stuff - Cardinal Tetra, guppy, clown loach, yellow-tailed Goodeid (no, not that one, sorry). Anything, but don't call our club a cichlid club.

TRADING POST

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

FOR SALE: Copies of about 40 assorted papers on darters originally collected for my Master's Thesis. Also, a variety of fishery biology and other text books and hobby books at good prices. Please send a self-addressed, stamped envelope for a price list.

Chris Bergesen, 5116 Lawton Drive, Bethesda, MD 20816

FOR SALE: E. chaperi chaperi \$5/pr.
N. korthause (red) \$5/pr.
Swords (red brick) \$3/pr.

Tony Fitz - (301) 340-7876

DUPLA AQUARIUM SYSTEMS

DUPLA Usa Inc.
575 Broad Street
Bridgeport CT 06604

(203) 368 2111

TO: *All F.A.A.S Aquarium Society Presidents*

FROM: Dupla Press

As you may have learnt, the Marine Optimum Aquarium will not be available for some time, mainly due to the unfavorable currency exchange rates presently in effect between the dollar and the Deutsch mark.

The good news however is that we are now offering a more up-to-date book on Reef tanks.

THE MARINE FISH AND INVERT AQUARIUM, written by Albert J. Thiel is now for sale. 270+ pages on all subjects that interest anyone keeping a reef tank :

Some of the topics :

- Redox potential, measuring, interpreting and using it
- Protein Skimmers
- Ozone
- Oxygen reactors and dissolved oxygen levels
- Carbon dioxide in the reef aquarium
- Tests and recommended maximum levels
- Light including metal halides
- Macro-algae, Micro-algae, blue-green algae
- Basic and advanced trickle filters and how to build one
- and many others, including the diagrams needed to build units and reactors.

The regular price of the book is \$ 18.50

We are making this book available to your Society at THE SPECIAL PRICE OF \$ 13.50 including postage, but you must order now, and prepay. The minimum order is 5

We will ship either to the Society, or directly to the members if you provide us with a list.

We believe that this book is worth every penny you will pay for it, and that it will become a reference for anyone wishing to convert to a Trickle wet-dry system.

Many instruments presently used are discussed, and many how-to techniques are explained in detail.

If you have any questions, feel free to call us at (203) 368 2111 Time 9.00 to 5.00 EST

We look forward to hear from you.

Sincerely,

Dupla Press

POTOMAC VALLEY AQUARIUM SOCIETY



POST OFFICE BOX 6219 SHIRLINGTON STATION ARLINGTON, VIRGINIA 22206

28th ANNUAL FISH SHOW AND AUCTION

MAY 20-22, 1988

SCHEDULE OF EVENTS

FRIDAY, May 20

6 PM to 9 PM - Early Registration of Show Entries

SATURDAY, May 21:

9 AM to Noon - Registration of Show Entries

1 PM to 5 PM - Judging

2 PM to 8 PM - Public Viewing of Show Entries

SUNDAY, May 22:

8:30 AM to 1 PM - Public Viewing. The public is cordially invited to attend the Awards Presentation and the Auction.

9 AM to 12:30 PM - Registration of sale items for the Auction

11 AM - Awards Presentation

11:30 AM - Auction, continuing with periodic breaks until all items are sold

THERE IS NO ADMISSION CHARGE FOR VIEWING THE SHOW OR ATTENDING THE AUCTION

RAFFLES - RAFFLES - RAFFLES

Aquarium-related prizes will be raffled off at intervals during the Auction. You must be present to win these prizes. At the close of the Auction, a 55-gallon tank set-up will be raffled off. You need not be present to win this prize.

Tickets for both raffles may be purchased at any time during the Auction at the concession stand. Soft drinks and souvenirs will also be on sale.

COMPETITION CATEGORIES

All classes (excepting VIII) are open to public competition

- I. Livebearers
 - a. Guppies
 - b. Mollies
 - c. Swordtails & Platies
 - d. Goodeids
 - e. Other Livebearing Fish
- II. Egglayers (Non-Cichlid)
 - a. Catfish, Corydoras
 - b. Catfish, African
 - c. Catfish, All Other
 - d. Betta Splendens
 - e. All Other Bettas & Anabantoids
 - f. Sharks & Loaches
 - g. Characoids, Under 3" Mature
 - h. Characoids, Over 3" Mature
 - i. Barbs
 - j. Goldfish & Koi
 - k. Danios, Brachydarios, & Rasboras
 - l. Killifish
 - m. North American Native Fish
 - n. Other Non-Cichlid Egglayers
- III. Cichlids
 - a. New World Large (Over 7" Mature)
 - b. New World Medium (4" to 7" Mature)
 - c. New World Dwarf (Under 4" Mature)
- III. Cichlids (continued)
 - d. Angelfish
 - e. Rift Lake, Malawi
 - f. Rift Lake, All Other
 - g. Discus
 - h. Non-Rift Lake African
 - i. Cichlid Pairs
 - j. Other Cichlids
- IV. Marine
 - a. Fishes
 - b. Invertebrates
- V. Family of Fishes
- VI. Plants
- VII. Set Tanks
- VIII. Dealer Tanks
- IX. Photography
 - a. Photographic Slides
 - b. Photographic Prints
- X. Arts and Crafts

THE FOLLOWING APPLIES TO ALL ENTRIES

Once entered into the competition, no entry may be removed until after the Awards Presentation on Sunday without the consent of the Show Chairman. All entries must be removed by 6 PM, Sunday, May 22, or they will be disposed of at the discretion of the Show Chairman. All entries must be accompanied by an entry form, a copy of which is in this flyer. There will be qualified hobbyists available to assist you in classifying your entries. PVAS can assume no liability for any entry. However, at least one qualified hobbyist will be present at all times during the show to assure the safety and well being of the fish, and to deter theft or other damage.

AWARDS

Trophies will be awarded for Best In Show (Classes I through IV), Reserve In Show (Classes I through IV), Best In Class (Classes I through IV), and for First Place in each category of each class (Classes I through IV, IX, X), and First Place in classes V through VII. Ribbons will be awarded for Second and Third Place in each category of each class. A Dealer's Rotating Trophy will be awarded for Class VIII.

INFORMATION

For additional information, please contact Mr. Peter Thrift, Show Chairman, at (703) 971-0594 weekdays between 6 PM and 9 PM, and weekends between 2 PM and 4 PM.

SHOW RULES

The competition is open to anyone.

FOR CLASSES I THROUGH VI:

TANKS, OTHER CONTAINERS, AND STANDS: All tanks, drum bowls, and stands must be furnished by the entrant. All containers must have at least two clear, flat sides. Tanks larger than 5 1/2 gallons must be accompanied by a stand. An air pump, filtration, light, and extension cord must be furnished by the entrant for each tank larger than 5 1/2 gallons, as they may have to be placed at some distance from the PVAS-supplied air source.

DECORATIONS AND LIGHTING: No decorations of any kind, including plants, back or side painting, or gravel, will be allowed in Classes I through V. See below for Class IV. The external bowl or tank bottom may be painted flat black. Only tanks on stands may have entrant-provided lighting.

AIR, HEATERS, AND FILTRATION: PVAS will furnish a constant air supply for all bowls and small tanks. Entrants must furnish their own airline and airstones. A supply of each will be available for purchase from PVAS. Box and sponge filters or outside filters will be allowed at the entrant's discretion. In Class IV, undergravel filtration may be used, but the tank must otherwise be bare. Heaters are allowed in all classes.

FOR CLASS V (FAMILY OF FISHES):

An acceptable entry consists of a breeding pair of adult fish and their fry. The fish may be displayed in a single container, a divided container, or separate containers.

FOR CLASS VI (PLANTS):

An acceptable entry consists of a single species of any recognised aquatic plant displayed in a single container. Several individual species may be displayed as separate entries in a compartmented container. A rooted plant may be displayed in a pot or floating. No gravel or planting medium is allowed on the bottom of the container. No fish or other fauna may be present in the container.

FOR CLASSES VII & VIII (SET TANKS):

Entries may represent either freshwater or marine environments, and may stocked and decorated as desired. These tanks will be judged on the overall appearance of the tank and its contents. The appearance of the tank stand will not be judged. All equipment must be supplied by the entrant. All entries must be ready for judging by noon on Saturday.

FOR CLASSES IX & X (PHOTOGRAPHY, ARTS & CRAFTS):

Judging of photography will be based primarily on composition and technique. Art and Craft entries must consist of a non-photographic representation of freshwater or marine fishes or their associated environment, and are judged on originality, design, and overall artistic merit. All entries are expected to be the work of the entrant. If desired, entries may be titled but must not display the name of the entrant. Entries will be accepted by mail provided they reach PVAS before Friday, May 15. Use the PVAS address on the cover of this flyer, and enclose applicable entry fees. Entries will be returned only if a stamped, self-addressed mailer is enclosed.

JUDGING

All entries will be judged equally by established PVAS standards. If an unbreakable tie occurs, duplicate awards will be made. In all cases, the decision of the judges is final. Judging sheets will be available for entrant review after the judging process is completed. A list of show judges may be found elsewhere in this flyer.

INSTRUCTIONS FOR FILLING OUT THE SHOW ENTRY FORM

Please use this form to enter the show competition. Fill in the requested data at the top of the form. This will facilitate entry registration, insure the safeguarding and return of your entries, and allow PVAS to notify you of future events.

In the CLASS column, list the competition category for each individual entry. A swordtail, for instance, would be placed in category "Ic". Do not write in the BOWL NUMBER column, as this is for use by the registrar in assigning a specific number to your entry. You may tally your total entry costs by entering the correct fee for each entry, or the registrar will do this for you. If you wish to have the entry placed in the auction and sold after the completion of the show competition, write "Yes" in the AUCTION column. If you have any questions, the registrar will be happy to assist you.

LIST OF SHOW JUDGES

The following individuals have tentatively accepted invitations to judge this competition:

Bob Goldstein, Raleigh Aquarium Society
Dave Herlong, Raleigh Aquarium Society
Gerry Pottern, Raleigh Aquarium Society
Ed Taylor, 5-D Tropical Fish Farm
Dave Shaw, Aquaria International

PVAS AUCTION - SUNDAY, 22 MAY

RULES FOR THE SELLER:

1. You do not have to be a PVAS member to buy or sell hobby-related items, including fish, plants, equipment, etc. in the auction.
2. Registration of items for sale will begin at 9 AM and will end promptly at 12:30 PM on Sunday, 22 May.
3. The auction will begin immediately after the awards ceremony and will continue, with periodic breaks, until all items are sold.
4. All items must be labeled with the identity of their contents, to include number, sex (if possible), and other pertinent data. Use a permanent marking pen and adhesive label. Labeling equipment will be available at the auction, but labeling must be accomplished before the items will be registered.

a. Fish: 'Pair' means one of each sex. 'Mated Pair' means a pair that have spawned WITH EACH OTHER. 'Trio' means one male and two females. 'Reverse Trio' means two males and one female. 'Mixed Sexes' means at least one specimen of each sex. If you are uncertain, label the bag 'Unsexed'.

b. Supplies: All aquarium equipment MUST be labeled as to working condition or missing parts. PVAS reserves the right to reject any equipment judged to be unsuitable for auction.

5. Proper fish bags must be used. Live items must be bagged with ample air and water. Fish packed in "baggies" or similar bags will not be registered. If a fish is registered in a bucket, tank, or bowl, the container will be considered part of the item and will be auctioned as a unit. There will be a supply of fish bags for sale at the registration desk. After registration, the Auction Committee reserves the right to re-bag any item as is necessary.
6. Registration is limited to fifteen (15) items per person.
7. A limit of five (5) bags per species or color form/variety is allowed, unless prior approval is obtained from the Auction Chairman.
8. For every five (5) items registered in the auction, one (1) colored sticker will be given to the seller to attach to the item of his choice. These items will be auctioned first.
9. Bags will be offered 'as is' and will be sold as one item. Once registered, the contents of a bag may not be split.
10. Each item carries a \$1.00 minimum, unless the seller assigns a higher minimum. The seller may lower the minimum on an item that does not sell during the auction.
11. No payment will be made to the seller on the day of the auction. Payment will be forwarded by mail within ten days after the auction date. It is the seller's responsibility to give PVAS a proper name and address to receive payment. Envelopes for this purpose will be filled out during registration.
12. The seller receives two-thirds of the selling price. PVAS retains one-third.
13. All items not sold must be claimed at the close of the auction, or they will be disposed of at the discretion of the Auction Chairman.
14. The auctioneer retains the right to set aside any improperly bagged or marked item, or any sick or otherwise unsaleable item.
15. Fish species that are restricted by either federal or state statues will not be accepted. These include, but are not limited to: Piranhas, Texas Cichlids, and Walking Catfish.

RULES FOR THE BIDDER

1. All persons wishing to participate in bidding are required to register with their full name and address. Bidding numbers will be assigned to all buyers.
2. Items may be inspected only before the auction and during the intermissions.
3. All bidding raises will be in one dollar (\$1.00) increments. The auctioneer has the right to alter this procedure at his discretion.
4. Successful bidders will have their items brought to them, at which time payment is expected. An authorized bidder may run a tab, or pay by check. Please see the Treasurer before the auction. Proper identification will be required in these instances.
5. In all cases, the decision of the auctioneer is final.

POTOMAC VALLEY AQUARIUM SOCIETY
 Show Entry Registration Form

Name: _____ Address: _____

Telephone: () _____

Club: _____

Entry Class	Bowl Number	Entry Fee	Auction?
1	:	:	:
2	:	:	:
3	:	:	:
4	:	:	:
5	:	:	:
6	:	:	:
7	:	:	:
8	:	:	:
9	:	:	:
10	:	:	:
11	:	:	:
12	:	:	:
13	:	:	:
14	:	:	:
15	:	:	:
16	:	:	:

Entry Fees: Single Fish - \$2.00 Dealer Tanks - no charge
 Pairs and Families - \$2.00 Slides and Prints - \$1.00
 Plants - \$1.50 Craft and Artwork - \$1.00
 Set Tanks (non-dealer) - \$2.00

PVAS MEMBERS NOTE: No more than \$20 in entry fees will be charged to club members entering five or more sub-classes, regardless of the number of total entries.

In Defense of the Humble Box Filter
Tony A. Fitz

I want to make it clear at the outset that I am not reactionary. I am a scientist, and it is a part of my job to keep abreast of advances in technology. Much of our modern technology is terrific. My writing of this article, for example, is made much easier by availability of a computer and powerful word-processing software. Many facets of our modern technology increase greatly the quality of our lives, making today a great time to be alive. I repeat, I am not a reactionary.

However, not all modern technology makes our lives better. As ecologists tell us, high technology causes myriad problems in our society. Each of us can recite horror stories of technology gone wild; one of my "favorites" is the depletion of ozone caused by our rampant use of fluorocarbons, which threatens the health of future generations. Like other special interest groups, aquarists are subject to deceptions of modern technology. I wish to refer in this communication to the modern filtering systems that are peddled for the supposed well-being of our aquatic pets. By and large, these fancy-dancy filtration systems are outrageously overpriced, unnecessarily complicated, and programmed for rapid replacement by the next new generation of more expensive and more complicated devices. I am not convinced that any of these devices work acceptably. I don't believe that any of them compare favorably to the homely, ordinary, been around for a jillion years, box filter.

I use nothing in my tanks but box filters or their close relative, the sponge filter. I have used box filters in my aquaria for more than 25 years. During most of that time, I also invested regularly in the latest of the usual array of "improvements" which included undergravel filters, outside the aquarium filters, power filters, reverse-flow, inside-out, upside-down, every-which-way-but-work filters, whatever fad was passing my way at the time. I use none of these "improvements" anymore. Many never worked to begin with, many didn't work for long, many were ridiculously labor-intensive, and none of them were an improvement upon the humble box filter.

The box filter is simplicity incarnate. It essentially contains a grand total of three parts; a box, a lid, and an insert containing two tubes upon which to place filter material. Contrast this with your garden-variety "power filter", which has about as many moving (although not necessarily working) parts as my car, and breaks down at least as often. Look, almost nothing can go wrong with a box filter! How long does your mega-aquarium-vacuum last? The box filter is one of the few purchases one can make in which cost equals value. You can buy box filters like doughnuts, a dozen at a time. Buy and fill them in large groups, then use them as needed. I fill my box filters with two layers of polyester pillow stuffing (available in any big department store) sandwiched around a layer of finely granulated

charcoal. I'm not certain that the charcoal does anything, but I feel virtuous when I put a freshly packed filter in a tank and the puff of black smoke comes out, and it also gives me a handy excuse ("Tony, isn't it about time you changed that filthy filter?", my accuser taunts. "That's not filth", I reply smugly, "the dark color is caused by the charcoal in the filter". Neither my accuser nor I believe this defense, but I save face). So you can use a box filter until it reaches your tolerance of filth, then take it out and replace it with a clone. When the mood strikes you, clean all of the dirty filters en masse.

Occasionally, a box filter will break. While many of mine have been in use for twenty years, some have been broken through various acts of neglect or violence. But the neat thing is, if a box filter breaks, just throw the thing away, and invest in a new complete outfit which costs, as of this day at a retail outlet that I frequent, a grand total of \$1.39. As in 139 pennies. How many things can you buy for \$1.39 that will do a job, do it well, and last for years if not decades? Try that with your basic wet-dry/protein skimming-bionic reverse quadruple-flow blow-hard filter.

The box filter needs minimal maintenance. This section of my diatribe is directed at the "power filters". These things are all losers, but are earnestly touted by aquatic retailers since their markup means profits, and customers amazingly want the dumb things. What is the attraction of a power filter? First of all, each power filter has its own little power source. I have 80 tanks, not including various odd containers of fry, foods and other aquatic offal. The last thing that I want is 80 individual power sources. No thank you. If I had but one tank, and was looking for activity to fill my spare time, then maybe I would want a power filter. Without doubt, the power filters that I have used during recent years (may they all rest in peace) gave me plenty of purpose, as I struggled to keep the junky things functional. More importantly, the maintenance that power filters demand will not await your convenience. Allow me to illustrate. One night I may decide, OK, that corner tank has not had a water change since Watergate, exceeding even MY tolerance. So I slurp out half of the water, and then get (a) bored, (b) sleepy (c) distracted (d) interrupted, and don't finish the job. Does anybody else out there ever fail to instantly complete a water change? Anyway, the box filter works just about as well in a tank half full of water as in a full tank. I ask the reader, how well does your outside, power filter work in a half-full aquarium? I rest my case. In addition, your power filter is programmed by its capitalist manufacturers to croak after an interval which coincides with the introduction of the next improved model, or approximately three months, whichever comes first. What do you do when your power filter noisily groans to a halt on a Saturday night after you have just overloaded you tank with rare and valuable killifish? If one of my box filters is judged to be nonfunctional, it is summarily removed and replaced in seconds by one of it's clones. How many of you have spare

power filters ready for service? And while I am impartially reviewing the field of power filters, I have another question. What is so great about these things that pump hundreds of gallons each hour? Is polluted water moving at 80 mph any better for your fish than stagnant polluted water? I would think that the turnover of 5 % of the total tank volume per hour (i.e., approximately the entire water volume is filtered out once per day) would be more than enough. What do high flow rates accomplish other than to snatch up that much more uneaten food, so it can rot in the filter? If the food is going to rot, I would rather it do so where I could see it and do something about it. Of course, in my experience manufacturers wildly inflate the flow rate of their power filters to begin with, and the flow diminishes inexorably with time until it is no more than a dribble. Therefore, after a few months your \$79.95 power filter will imitate the flow rates of my \$1.39 box filter.

Another virtue of the simple box filter is that it works. I was indoctrinated for most of my life to believe that the undergravel filter was the greatest invention since sliced bread. Friends, it might as well be me to inform the uninformed among you that the undergravel filter is a communist plot, conceived and designed to destroy our morale as our fish all die. Undergravel filters are most efficient at disguising, not preventing, problems. We have been bombarded with a continual line (also known as brainwashed) about how the good-guy bacteria in undergravel filters convert the bad-guy organics into good guys, and create a mini-universe of utopia for our finned residents. This Party line, Comrade, is Hogwash (in my considered, cautious, unbiased, censored for family viewing opinion). Undergravel filters will keep our tank water looking great, alright, as we are lulled into complacency about water changes, and the "good-guy" bacteria break down our overfeeds into death sera (yes you, gentle reader, you of the loving thrice-daily feedings of considerably balanced fare, do indeed overfeed your fish, just like all the rest of us, and be aware that just one overfeed, caused maybe by a simple case of transient anorexia in your prized cichlid, is sucked inexorably into your undergravel filter, there to rot invisibly but catastrophically). The problems produced by bottom filters (ditto power filters) are both living and subcellular. A microbiology professor once told me that crystal clear water can contain 1,000,000 bacteria per milliliter. That translates into about 40 billion bugs in a 10 gallon aquarium. Is that a lot of bacteria in your beautiful tank? Your suffocating fish will think that it is. In the interest of brevity, and to the reader's certain relief, I won't dwell upon the cesspool of toxic organic molecules that will also surely lay waste to the fish in your "crystal-clear" tank. So my point is that all of us overfeed at least occasionally. In the tank containing a box filter, the debris sits obnoxiously on the bottom. We can benignly watch it rot, or we can slurp it away. The choice is left to the aquarist. In the undergravel filtered tank, the evidence is squashed into the substrate, much like it is crammed

into the reservoir of a power filter, and left to fester like a cancer. OK. Some of you have the discipline to avoid overfeeds, or at least suck it out before it wreaks havoc. I apologize to you, wherever you are, for including you in this discussion of an imperfect group of humans. For the rest of us, and you know who you are, you have seen the evidence of your malfeasance in the death of your fish.

Hold everything. Before you put that hate-letter into the mail, I don't really mean everything that I have said about power and undergravel filters. Honest, I'm kidding, sort of. Heh, heh. Put that rope away. I will grudgingly admit that your undergravel filters and megaton power filters work better than box filters. The power filter is overpriced and requires too much maintenance for my tastes, but it's OK, I guess, and truly useful in large tanks containing many large (ugly) fish. The undergravel filter is also OK, as long as the aquarist recognizes the danger of being lulled into complacency by crystal clear, but poisonous, water, and is willing to tear down the whole nasty apparatus at all too frequent intervals. My box filters aren't highly efficient, and may be so useful to me only because most of my fish are small, beautiful killies that don't require much filtration or aeration.

Not that box filters do not work in large tanks. I have a 35-gallon tank containing three large piranhas and three box filters. Piranhas are not very bright, and at intervals mine race insanely through the tank until they bash into the side, wreaking havoc in their wake. Occasionally they will reduce a box filter to its three basic parts, considerably saving me the trouble of dismantling the apparatus. I suspect that the piranhas would wreak similar havoc on power filter plumbing, and we all know how well power filters function once the siphon is broken. I also have a 50 gallon tank that is devoted primarily to aquatic plants, also containing assorted fish and three box filters. Is it doing OK? I guess it is, since the plants have grown to occupy all available space, and some are flowering at this time. I believe that the success of any reasonable filtering system is almost independent of the filter, relying instead upon the schedule of water changes. If you want healthy fish and plants, you gotta do the water changes. If you try to substitute filters for water changes, you will surely pay with the lives of your aquatic denizens.

OK, end of tirade. I won't do it again. I promise. These things are not worth getting all worked up over. I hope that I have helped create the foundation for constructive discussion. However, please don't throw away your undergravel and power filters yet, and let's not have a run on the box filter retail outlets. Unfortunately, box filter function is dependent upon a functional, reliable airpump. Friends, you need to learn that the airpump industry is in a sorry, sorry state. What good is a dependable box filter when the worthless junky airpump ...

PVAB BOARD MEETING - Monday, March 6, 1988

PVAB President Gene Aldridge convened the Board of Directors at 7:45 pm at the home of Ray Hughes. Also attending were Gerry Hoffman, John Mangan and Bob Pallansch.

Announcements:

The show flyers are ready for printing, and all manufacturers' letters have gone out and donations are beginning to come in. Eight-and-a-half by eleven posters were suggested, to save printing costs.

The Rockville Senior Citizens' Center is available for The Fall Workshop (\$550.00 Sat. and Sun.). Ray Hughes was asked to check hotel sites in the area.

F.A.A.S. Convention will be held in Nov. in N.Y. City, with a 75-class show.

President Aldridge found that bulk mailing and pre-printed postage can save PVAB over \$600.00 yearly; the Board agreed to convert, and to advance deadlines for Delta Tale (basically, put 2 issues to bed at once) to compensate for slower delivery.

The Board also agreed:

To purchase 100 lbs. of Kodak sodium thiosulfate (de-chlor) for re-packaging in 1- or 2-lb. lots for resale at meetings and shows. Other saleable items were discussed, but except for live-food cultures, none met the test of avoiding competition with local stores.

To canvass the membership for orders of The Marine Fish and Invertebrate Aquarium by A.Thiel to obtain a bulk discount.

To set up a cash flea-market table at the May auction, for items judged not acceptable for auctioning.

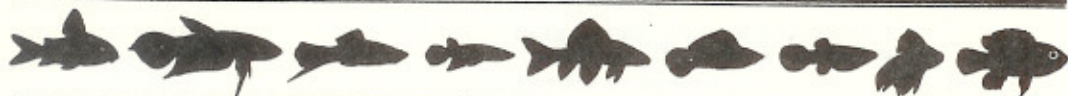
To simplify auction recording by providing a separate registration sheet for each seller (average 40 sellers).

Other auction-streamlining procedures were discussed, as was the revision of monthly bowl show classes, to reflect changing entry ratios.

The meeting adjourned at 11:00 pm.

Respectfully submitted,
Robert J. Pallansch,
Recording Secretary

POTOMAC VALLEY AQUARIUM SOCIETY



POST OFFICE BOX 6219 SHIRLINGTON STATION ARLINGTON, VIRGINIA 22206

APPLICATION FOR MEMBERSHIP

DATE _____ 19 _____

NAME _____

STREET _____ APARTMENT _____

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 thw club? _____

Membership dues for the Potomac Valley Aquarium Society are:

Family: \$12.00
Individual: \$10.00

Corresponding: \$7.00
Junior (under 18) : \$5.00

Please send application and check for dues to the address above.

BAP BOARD MEMBERS

John Jessup (Chair) (Oakton) 255-7238
Gerry Hoffman (Warrenton) (703)-347-7486
John Mangan (Vienna) 938-4778
Alex Cummins (Montgomery) 656-6355
Gene Aldridge (Ex-Officio) (Arlington) 998-8757

CHECKERS

Arlington County:-----Pat Gore - 522-3884
Fairfax-Vienna:-----Jim Long, - 280-1753
Alexandria:-----Jerry or Amy Stirman - 941-6729
Clifton-Centerville:-----Kenny Warren - 378-8838
Dale City-Stafford:-----None
Warrenton:-----Gerry Hoffman - (703)-347-7486
Prince Georges County:-----Alex Cummins - 656-6355
Montgomery County:-----Ray Hughes - 424-3531

NOTE: If you cannot reach your nearest checker, please call your nearest BAP Board Committee Member or John Jessup at 255-7238. Arrangements will be made to get someone to check your fish.

BOWL SHOW REPORT FOR

MARCH

CICHLIDS
New World Dwarf

1st None

Riftlake, Non-Mbuna

1st G. White - L tetracanthus
lancer

2nd G. White - L tet.
suttoni

3rd G. White - T burgenoi
Brachyrandia imitation

Open

1st G. White - A nyassae

2nd G. White - L fuelliborni

3rd G. White - H venustus

Judges Choice -- Aplo lineatus

EGGLAYERS/LIVEBEARERS

Killifish

1st John Stieringer - Aplo lineatus

2nd Tony Fitz - Blue Gularis

3rd John Stieringer - Aplo panchax

Catfish, Non-Cory.

1st Ray & Barrie Farmer - Black

2nd Ray & Barrie Farmer - Panaque

3rd Ray & Barrie Farmer -

Open

None

TOTALS thru Mar 88

MONTH			QUARTER			ANNUAL			
K. MULLER	-	1	1	1	1	T. FITZ	7	36	36
						R. HUGHES	-	9	9
						K. MULLER	-	5	5
R & B Farmer	1	1	1	1	1	R & B Farmer	12	12	12
G. White	23	23	23	23	23	T. Williams	1	1	1
						J. Stieringer	11	11	11
						T. Hetzel	5	5	5
						J. Mangan	-	13	13

APRIL CLASSES

CICHLIDS: Angelfish and Discus, Non-riftlake African, Open

EGGLAYERS/LIVEBEARERS: Livebearers (non-Guppy), Sharks & Loaches, Open

MAY CLASSES

CICHLIDS: New World Mouthbrooders, Pseudo., Open

EGG/LIVE: Goldfish & Koi, Characins, Open

IMPORTANT NOTICE: The Quarterly and Annual Totals include the adjustment of totals for January and February errors. Sorry for the mistakes they were my fault. We still need someone to take over for Jason. etc.

MARYLAND

ANIMAL EXCHANGE

765-A Rockville Pike
Rockville, Maryland 20852
424-PETS

RICK'S FISH & PET SUPPLY

36 South Market Street
Frederick, Maryland
(301)694-9664 831-6868

AQUARIUM CENTER

Randallstown Plaza Center
Liberty Road at Offutt Road
Maryland
(301) 521-4529

PET MART ROCKVILLE

2230 Veirs Mill Road
Rockville, Maryland
762-3505

FISH FACTORY AQUARIUM

582 N. Frederick Avenue
Gaithersburg, Maryland 20877
(301) 977-7500

SHOWCASE AQUARIUM

11248 11250 Triangle Lane
Wheaton, Maryland 20902
942-6464

GAITHERSBURG PET CENTER

642 Quince Orchard Road
Gaithersburg, Maryland 20878
(301) 948-1133

TROPICAL LAGOON

9439 Georgia Avenue
Silver Spring, Maryland
585-6562

GLENMONT TROPICALS

Glenmont Shopping Center
12345 Georgia Avenue
Wheaton, Maryland
949-0344

CONGRESSIONAL AQUARIUM

Congressional Plaza
152 Congressional Lane
Rockville, Maryland 20852
881-6182

PETLAND

White Flint Plaza
5268 Nicholson Lane
Kensington, Maryland 20895
(301) 231-5216

MONTGOMERY TROPICALS

7845-G Airpark Road
Gaithersburg, MD 20879
(301) 670-0886

VIRGINIA

PETS-N-THINGS

Pan Am Center
3081 Nutley
Fairfax, Virginia 22031
(703) 573-4400

TYAU TROPI-CARE

6905 Duke Drive
Alexandria, Virginia 22307
765-6713

ANNANDALE PET SHOP

Markham East Center
4231-F Markham
Annandale, Virginia 22003
256-2400

AQUARIA INTERNATIONAL

1180 Pendleton Street
Alexandria, Virginia 22314
683-4811

BAILEYS PET CENTER

Leesburg Pike Plaza
3527 S. Jefferson Street
Baileys Cross Roads
Falls Church, VA 22041
931-1400

BEACON MALL PET CENTER

Beacon Mall Center
6776 Richmond Highway
Alexandria, Virginia 22306
660-6100

DISCOUNT PET CENTER

Manassas Shopping Center
9028 Mathis Avenue
Manassas, Virginia 22110
361-7769

NATIONAL PET & AQUARIUM

Willston Shopping Center
6168 Arlington Blvd.
Falls Church, VA 22046
533-7828

OAKTON PET SHOP

Oakton Center
Rt 123 & Hunter Mill Rd.
Oakton, Virginia 22124
281-9622

PET MART TYSONS

8417 Old Courthouse Road
Vienna, Virginia 22180
893-8181

WILSON'S PARROTS & MARINE LIFE

Shirley Edsall Ins Park
Build America 5
5605-G Gen Washington Drive
Alexandria, Virginia 22312
922-7358

SUNSHINE PETS

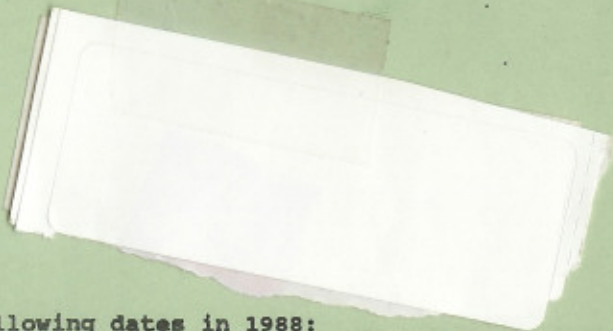
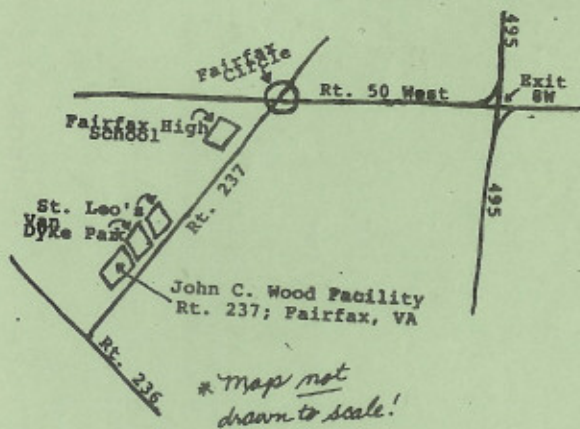
7395H Lee Highway
Falls Church, VA 22042
573-6946

PETS, ETC.

Herndon	Sterling	Alexandria
Stuart Centre	Hechinger Jamesway Plaza	Mt. Vernon Plaza
462 Eiden St.	243-C Harry F Byrd Hwy	7688-B Richmond Hwy
Herndon	Sterling	Alexandria
VA 22171	VA 22170	VA 22306
437-0381	430-9667	768-2200

POTOMAC VALLEY AQUARIUM SOCIETY
P.O. BOX 6219
SHIRLINGTON STATION
ARLINGTON, VA 22206

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The Potomac Valley Aquarium Society will meet on the following dates in 1988:

11 Jan	9 May	12 Sep
8 Feb	13 Jun	17 Oct
14 Mar	11 Jul	14 Nov
11 Apr	8 Aug	12 Dec

Meetings are held at the John C. Wood Facility, Rt. 237 (Old Lee Highway), Fairfax City, VA. Doors open at 7:30, meetings start at 8:00. **EVERYONE IS WELCOME!!!**