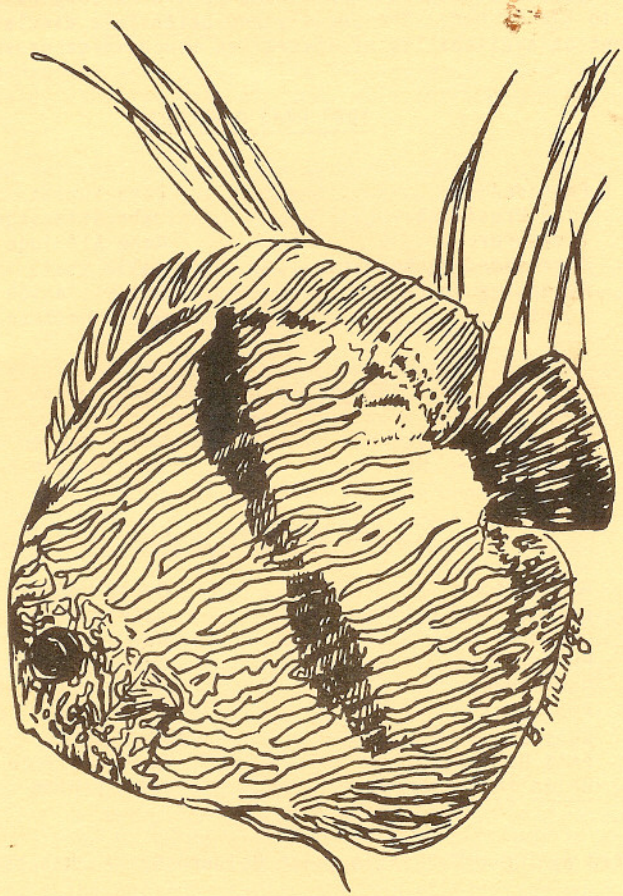
DELTA TALE

September – October 1990



Official Publication of the
Potomac Valley Aquarium Society

The Delta Tale is published for the benefit of the membership of the Potomac Valley Aquarium Society, Inc, a non-profit educational and social organization. The Society was founded in 1960 for the purposes of furthering the aquarium hobby by the dissemination of information and advice, and to the promotion of good fellowship among the membership by organized activities and competitions. All correspondence to the Society and to Delta Tale should be directed to the above address. Original articles and artwork appearing in Delta Tale may be reprinted by other non-profit organizations if credit is given to the author, Delta Tale, and PVAS. Two copies of the reprinting publication should be sent to Delta Tale at the above address; please add the author's name so that a copy of the publication can be forwarded to him or her. The Society and Delta Tale disclaim any responsibility for the content or availability of advertised merchandise or services within this publication.

1990 PVAS OFFICERS

President:	Pete Thrift
Vice President:	John Stieringer
Treasurer:	Gene Aldridge
Corresponding Secretary:	Julie Spall
Recording Secretary:	Bob Pallansch
Agent:	Gerry Hoffman

1990 BOARD OF GOVERNORS

Rick McKay - 91	Kenny Warren - 90
Tony Fitz - 91	John Mangan - 90

1990 COMMITTEE HEADS

Auctions:	Gerry Hoffman
Breeder's Award Program:	John Jessup
Library:	Ray Hughes
Membership:	Gene Aldridge
Bowl Shows:	Larry Wilkie
Programs:	Tony Fitz
Ways and Means:	Rick McKay
FAAS Delegate:	Gerry Hoffman
Delta Tale Editor	Pete Thrift

Printed by TOP CAT Printing, 164 Colburn Drive, Manassas Park, VA.

El Presidente

FALL WORKSHOP JUST AROUND THE CORNER!

The PVAS Fall Workshop and Auction is coming up fast! October 27-28 is only a few weeks away. The weekend will be held in Gaithersburg, and maps and directions will be printed in the workshop flyer and booklet. The workshop lectures will be held from 9 AM to 5 PM on Saturday. A buffet dinner and lecture will start at 6 PM, with a cash bar from 5 PM to 6 PM. Finally, the PVAS fall auction will take place on Sunday, October 28th. Several manufacturer may sponsor displays and exhibits, our $1 and 3/$1 raffles will be back, and Mike Trzonkowski will attend with his impressive and inexpensive aquarium plants for sale. The Saturday workshop will include the following speakers:

> Martin Moe is an nationally recognised authority on marine aquariums, fish, and invertebrates. He has authored several highly-praised books, and is in great demand as a lecturer and columnist.
>
> Peter Thode is a true authority on the care and breeding of discus and angelfish, and operates a most impressive commercial hatchery near Baltimore. Mr. Thode is also in great demand as a lecturer.
>
> Chuck Davis is widely recognized as an expert aquarist, and writes a column for Aquarium Fish Monthly. Chuck is a cornerstone of the North Jersey Aquarium Society, is in great demand as a speaker, show judge, and artist, and has been a friend of PVAS for many years.
>
> Gian Padovani is also an expert aquarist, and has organized several South American collecting trips. He writes frequently for Freshwater And Marine Aquarium Magazine, especially concerning catfish.

Our club is indeed fortunate to have such national hobby authorities as our workshop speakers. Ray Hughes and Tony Fitz have worked very hard to make this exciting event a reality. The cost for club members is only $5.00 ($10.00 for non-members). This will truly be a 'must' event! SEE YOU THERE!

AUCTION PROCEDURES CHANGES

Two changes concerning the Fall Auction need to be stressed. First, the Board has voted to close seller registration promptly at 11 AM. If you haven't registered and aren't in line to do so at that time, YOU WILL NOT BE ALLOWED TO REGISTER AS A SELLER. The Board took this action to insure that all items will be registered before the auction starts, thereby eliminating much confusion at the registration tables trying to register new items while logging auction results at the same time. DON'T BE LATE! PVAS members can pre-register their items and avoid the lines and headaches. Call Gene Aldridge for the details. In my opinion, pre-registration is the only way to go!!

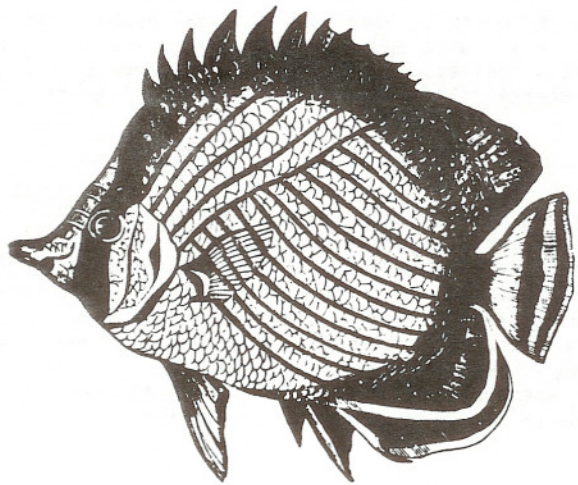
A second change is a new system of colored stickers which the seller can use to designate the order in which his items will be sold. The seller will be given four differently colored stickers for each four items he registers. Once the auction starts, all bags with a certain color sticker will be sold first, all bags with the second color sold second, etc. (Within limits - our auctions can be very hectic at times!) This allows the seller to plan a strategy to maximize the price his items will bring, and allows a buyer some rough estimate when a particular bag will be auctioned off.

FALL CLUB ELECTIONS COMING IN NOVEMBER

Finally, I would like to close this month by urging you once again to consider running for a seat on the Board of Governors or for a club officer position. Being a member of the Board does not mean that you are one of the most knowledgeable aquarists in the club, nor does it mean that you are an old-timer or are a member of a PVAS 'clique'. What it does mean is that you appreciate what the club offers both you and the future of our hobby. The only prerequisites is enthusiasm and a willingness to volunteer a little or a lot of your time to help the club accomplish its goals of furthering the aquarium hobby and increasing the enjoyment of its members in that hobby. Most of the Board members have been members for so long only because there hasn't been anyone willing to take over the club's operation from them. Beverle Sweitzer and Ray Hughes are co-chairing this year's nominating committee. Call either of them or myself for more information, or to volunteer yourself as a nominee. OUR CLUB REALLY NEEDS YOU!

Pete

ON THE COVER: a reprint of a great cover illustration of Symphysodon discus Heckel, drawn by B. Millinger for The Darter, the publication of the Missouri Aquarium Society.



VARIETY - THE SPICE OF LIFE
THE BRACKISH AQUARIUM

Maxine Gorsline
Kitsap Aquarium Society

The setting up of a brackish aquarium brought many rewards and great frustration as I tried to find adequate literature on the subject. The brackish tank combines the best of fresh and marine environments. Many of the fish are similar in appearance to marine varieties, are easily bread, and are of a reasonably low cost.

"Brackish water can be defined as having a salt concentration less than that of seawater". Freshwater contains a small amount of salt, but seawater and/or brackish water contains a greater concentration, in addition to trace minerals. An example of brackish water in nature is where the mouth of a river meets with sea water.

THE TANK. The size and type of fish wish to keep will determine the right tank size for you. I would, however, recommend a glass tank, for its scratching resistance (salt scale is quite abrasive). If your tank contains any metal, the salt mix will cause it to rust. I chose a 27 gallon Hex.

FILTER. In talking to different store personnel, I found that they agreed that the sub-sand (biological) filter was best. Turbulence is important. It helps simulate the currents of the fishes' natural habitat. Surface turbulence increases the amount of dissolved oxygen in the water and helps to disperse accumulated CO2 into the atmosphere.

WATER There are several ways that brackish water can be obtained for your aquarium, aside from the wild. One is to buy a commercial marine mix currently on the market. Another is to buy non-iodized rock salt and then just add water to produce the desired consistency. To obtain a more natural solution, I used diluted commercial salt water mix. The marine mix has more ions than just sodium. It also contains trace minerals, elements found in natural sea water. When visiting aquarium stores, I have observed salt content readings of 1.002 to 1.007 in brackish aquariums. Salinity in my tank is 1.006. I used crushed coral as the substrate and a piece of cluster coral for decoration to obtain a pH value of approximately 7.6. When the proper conditions were obtained and running smoothly for 24 hours, I added several seasoning fish.

FISH. I chose four young, healthy black mollies to "seed" the aquarium and get the biological filter established. Mollies are particularly hardy and relatively inexpensive. (Also, the store agreed to their return later.)

One bit of frustration started here concerning the obtaining of these mollies. In several fish stores, they were kept in fresh water, which meant that they would require a longer acclimation period. (An example of why beginning fish hobbyists get discouraged). Mollies are a brackish water fish. They thrive, grow, and live longer in their proper environment. The fault lies with both the fish store and the aquarist. The fish store should explain the proper conditions and the aquarist should do enough research to know the fishes' requirements BEFORE taking them home.

The acclimation of these mollies to brackish water (what seemed most logical to me) took two hours. They were fed a variety of live and flake foods. The mollies were in the tank for approximately two weeks prior to buying other brackish fish. During this time period, I checked the pH and ammonia content daily. Listed below are the brackish fish which I found (when I could locate them) both before and after the initial set up and are available in the local fish stores.

Glassfish - These fish are found near the tropical coasts of both the Pacific and Indian Oceans. They are a shy fish. Live foods are required and if in competition with other fish for food, they will probably starve. One interesting feature of these fish is their transparent bodies. They would do best in s species tank. Two common species that are available are Chanda lala and Chanda ranga.

Puffers - The puffers are the reason I decided to set up a brackish tank. Actually I call them "little bubbles" because of their round little bodies. They swim or propel themselves to the front glass when someone is near in hopes of being fed. Live foods must be provided and they can be quite gluttonous. They'll eat as long as you'll feed them, to the point of only being able roll around the bottom of the tank like little balls. They grow to almost two inches and make an excellent addition to the brackish aquarium. The three species commonly found are the Figure Eight, the Leopard, and the Green. The upper half portion of their bodies are green and the lower half is white.

Scats - The two common varieties are the "Red" and the "Green". They also make an excellent addition to the brackish tank and are very active. The "Green" retains its color from juvenile to adult. The "Red" seems to fade to brown as they get older. Scats need to have a generous portion of vegetable matter in their diets and will eat live plants if present in the tank.

Monos - (Monodactylus species) - Monos grow to about the size of an adult angelish. They are a good brackish companion if kept in schools of four or more. The body is silver-white with two vertical blank lines on the front half with a dorsal fin of canary yellow. Monos will eat a variety of foods, including flake.

Gobies - The varieties of gobies found in this area are the Bumblebee, the Sleeper, and the Night. The Sleeper is a rather drab sliver gray, the Night has light blue eyes, and the bumblebee looks like a bumblebee and is quite beautiful with its yellow and black markings. They do swim but most often they can be seen jumping from place to place on the bottom or hanging on the side of the glass. I've heard it said that they can be quite nippy toward other fish, but the five I have haven't exhibited such behavior.

Archers - One of the larger species (10"). They have a large appetite and will eat smaller fish. They are a known predator.

Other brackish fish include: pipe fish, Anableps, sole, halfbeaks, chromides, rainbows, some killies, and several others.

There is nothing complicated about setting up a brackish aquarium. It adds a new dimension for the tropical fish hobbyist - an interesting one that brings many hours of enjoyment.

(reprinted from The Kitsap Aquarian, Kitsap Aquarium Society)

PVAS BOARD MEETING, AUGUST 6, 1990

Kenny Warren hosted the meeting, convened at 7:50 pm by President Pete Thrift: also attending were Juliet Spall, Beverle Sweitzer, Robert Pallansch, Rick McKay, Ray Hughes, Tony Fitz, and Gene Aldridge.

Pete announced that meetings would soon be moved to the large classroom at the Wood Center, since the meeting room will be unavailable; and that '91 calendars will cost PVAS $1.29 each; 60 will be purchased.

Tony suggested buying a laser printer for the Delta Tale editor's use; Gene will look into options, and Pete reiterated that the Delta Tale is starving for original material.

Ray Hughes will head the nominating committee.

'90 FALL WORKSHOP:

- PVAS will buy a '55 setup and several tens for the raffle.
- Kenny will pick up sodas to be sold at the auction and possibly at workshop breaks.
- The board decided to print a separate Workshop brochure, with full-page dealer ads costing $50.00 each.
- Ray will check into Tetra sponsorship of one speaker.
- Pete will look into feasibility of video taping Workshop sessions.
- Gene moved that admission be $10.00 to non-members ($17.00 with membership) and $5.00 to members; seconded by Rick, passed.

Tony moved —

- that a buffet for Saturday night be catered; seconded by Juliet, carried; Ray will arrange catering, dinner will be at 6 pm and cost $15.00 per person.
- to strictly enforce all auction rules, including a maximum of 5 listings per species to one seller; seconded by Gene, passed unanimously.
- to cut off registration at 11, and begin the auction at 11:30; seconded by Rick, carried.
- to use 4 dot cclors to establish auction-period priorities; seconded by Kenny, carried unanimously.

The meeting adjourned at 9:45.

Respectfully submitted,

Robert J. Pallansch
Recording Secretary

MARTIN MOE'S TEN TIPS TO "CAN'T FAIL" MARINE AQUARIUM KEEPING

1. Use an all glass tank. No metal anywhere! 20 gallons is a good starter size. 50 gallons is more expensive but better because it is more biologically stable.

2. Use an undergravel biological filter with the highest possible flow rate. Coarse silica sand, #620, is a very good filter media; coarse gravel is also good. Powerhead pumps on the lift tubes provide the best water circulation, although one inch diameter air lift tubes are adequate.

3. Understand and allow for proper "run in" of the biological filter. Run it at least three weeks under a light biological load (a few hardy fish or a crab or two). Do not add new fish or invertebrates until nitrite (NO2) levels drop to near zero. Clean the gravel in the filter about twice a year when running under normal biological loads.

4. Use an external (or internal) activated carbon filter. Start carbon filtration after the tank is run in.

5. Change some water regularly. 10% every month or, under a light biological load, 30% every four to five months.

6. Use a quarantine system for all new fish and invertebrates. Set up a 10 to 20 gallon marine tank with a functioning undergravel biological filter and keep new animals in this tank for at least three weeks before introducing them to the main tank. Never add sick or distressed fish to the main tank!

7. Give fish a 30 second to one minute freshwater bath before placing them in the quarantine tank. This procedure causes external parasites to drop off the fish. Do not add the freshwater from the bath to any marine aquarium.

8. Keep the tank at the proper temperature. Temperatures should not fall below about 75 degrees F (24 degrees C), or go above 85 degrees F (29 degrees C).

9. Use proper lighting. Full spectrum fluorescent with an additional strong violet/blue light peak is good. Use at least two bulbs per tank, especially if invertebrates are maintained. Four bulbs including an Actinic 03 blue bulb is required for reef tanks with live corals and algaes.

10. Give the fish and invertebrates proper food in proper amounts. Variety is important! Some high quality flake food, some greens, some shrimp and other raw sea food (avoid oily fish flesh). Don't overfeed! Uneaten food should not accumulate on the tank bottom.

There are many other methods, procedures, techniques, and equipment that produce excellent results in keeping marine aquaria. The above ten tips, however, will help the new marine aquarist to be successful with a minimum of expense and uncertainty. It is also important to read good books and articles on keeping marine aquaria to gain in knowledge as you gain in experience. I, of course, recommend The Marine Aquarium Handbook - Beginner to Breeder, by Martin A. Moe, Jr. Published by Green Turtle Publications, P.O. Box 17925, Plantation, FL, USA 33318, and, hopefully, available at your local tropical fish store.

(reprinted from Carolina Aquarist, Raleigh Aquarium Society)

Breeding Crenicara Filamentosa

by

Sal Silvestri
Norwalk Aquarium Society

For my money one of the most beautiful representatives of the South America dwarf cichlids is the Crenicara Filamentosa, commonly called the "Checkerboard Cichlid" because of the pattern on the body when not in breeding color. When in courting behavior the checkerboard pattern turns to solid lateral lines. A fully grown male gets to be about 2.50" standard length (SL) and the female to 1.75" SL. The sparkling coloration and spectacular finnage of the adult male makes it one of the most sought after representatives of this group.

Unfortunately, there are certain aspects/characteristics about this specie that also makes it one of the hardest to maintain and BREED. In their natural habitat they are known as a blackwater specie, being found in water with no measurable hardness and pH values of 5.0 to 5.5. Thus success in breeding depends upon duplication of natural water conditions. Also, they are "extremely" intolerant of dissolved nitrogenous wastes.

I have successfully maintained this specie many times but I was never able to breed them. I even got as far as having the female lay eggs, but they never hatched. Now all fish hobbyists are MASOCHISTS and I am no exception! (This is a true statement folks. Who else do you know that willingly gets aggravated, irritated, frustrated and literally abused by these little creatures and always comes back for more punishment? Think about it! I openly admit that I fall under this category!) So I again purchased eight juveniles of this specie and gave it another try.

I placed the eight juveniles in a heavily planted 15 gallon tank. The water temperature was kept at 80 degrees, since they like the water on the warm side, the pH at 6.8 and the water hardness showed to be soft, based on the reading of a hardness test kit. At this point I wasn't too concerned with the hardness since they were not yet mature and ready to spawn. I fed them twice a day, alternating between a good flake food, frozen blood worms, frozen brine shrimp and live tubifex. In their tank I changed 15% of the water twice a week. Under these conditions, they prospered and grew rapidly. Within two months the males were already noticeable because they had developed the beautiful lyretail with its long extended area on the upper and lower edges of the caudal fin. I should mention one more important fact, these fish are extremely shy, therefore I would recommend that you give them some 'non shy' tank companions. I found that guppies or small characins will do the trick. As soon as I put these dither fish in the tank the C. Filamentosa came out of hiding, browsed around, and competed for food. This gave me the opportunity to really enjoy them.

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(reprinted from Carolina Aquarist, Raleigh Aquarium Society)

Of the eight that I purchased I ended up with five males and three females. The first spawn occurred without me even knowing about it. I only noticed the fungused eggs when I was doing a water change. The eggs were laid on a leaf. This specie has a preference for vertical spawning sites. The leaves of a large aquatic plant is preferred for this purpose, even though such substitutes as slate strips and clay flower pots have been known to be used. In nature the dominant male services several ripe females in turn, but in captivity they can also be bred on a single pair basis. As the pecking order got to be hazardous for some males I removed three and left only the two dominant males. Seeing that they had already spawned once, I kept a close watch on the tank. I also began to lower the pH and hardness by gradually adding rainwater whenever I did a water change. PLEASE REMEMBER that this process has to be done gradually and constantly checked since very soft water is very unstable. It took me ten days to bring the pH down to 5.2 and hardness to approximately 50 ppm. The lowering of the pH and the hardness can also be accomplished by other means (ie: peat filtration, phosphoric acid etc..) whichever you (the hobbyist) find most comfortable to use.

Two weeks after I had discovered the first spawn I noticed a female hovering around a small Brazilian sword plant. She would chase away anyone coming close to the plant. I thought that maybe she had spawned, but there were no eggs to be found. Two days later I saw one of the males in the same vicinity. They both had lost thier checkerboard pattern and this was replaced by parallel lateral bands. This is a transformation they go through just prior to spawning. I returned the next day and was greeted by a very agressive and colorful female guarding a clutch of eggs. She had deposited the eggs on the leaf of the plant, and there must have been 80-100 pale ivory-colored eggs in this clutch. She would not tolerate anyone near the eggs, even the male was chased away. There are three characteristics that one should look for when a spawn has occurred or is about to happen:

1) Lateral lines on the body, as mentioned above.
2) Very aggressive behavior.
3) Female's ventral fins turn red with black leading edges.

The female is very attentive of the eggs, constantly swimming over the eggs and removing any particles that may land on them. Everything was going fine for two days, then the eggs disappeared. For an instant I thought that they had hatched and the female had moved the fry. But no such luck! It was evident that something did not meet her requirements and she had eaten the spawn. This sequence was repeated two more times with the same results. It was at this time that decided that I was going to pull out the next spawn and try to hatch them artifically. Therefore when I next noticed spawning activity I prepared a separate container (I use a filter box which I can hang on the inside of another tank). I filled this container with straight rainwater, pH 4.5 and conductivity of 8 microsiemens. I also added trace elements to the rainwater. This is very important since rainwater is missing the normal trace elements found in streams or tap water.

After they had spawned I waited one day and then I removed the leaf with the eggs. I placed the eggs in the box filter, added Methylene Blue to the

water and an air stone so the the eggs would have a constant flow of water over them. I waited two days before checking if they had hatched. The first sight that greeted me was a leaf with a clutch of fungused eggs, this of course was immediately followed by the overwhelming feeling of total DESPAIR!! But as I started to clean out the box, I received the surprise of my life. When I went to remove the leaf I noticed very small specs being scattered around the box. Upon closer examination I discovered that they were fry. They must have been hiding under the leaf. Who said life is dull? The fry are difficult to see because they are sooo...small and a nondescript grey color. The fry became fully developed in seven days, at this time I started feeding microworms and three days later I fed baby brine shrimp. They are surprisingly hardy and grow fairly rapidly. The characteristic adult checkerboard pattern appears about the fifth week posthatching.

In closing I would say that if anyone is looking for a challenge, try spawning this fish without removing the eggs. I know that this is an on-going challenge for me. DIDN'T I TELL YOU THAT WE (HOBBYISTS) ARE ALL MASOCHISTS?? One final note, please remember that the above story represents my experience "ONLY". It is not the bible, only a guide. Experiment and see what best works for you. GOOD LUCK!!!

(reprinted from The Wet Pet Gazette, Norwalk Aquarium Society)

INDUSTRIAL SUPPORTERS OF PVAS

During the past months, PVAS has solicited over 50 hobby manufacturers asking for donations of their products to be used for our workshop raffle, our monthly meeting raffle, and as doorprizes. The firms below decided to support us - many of them have supported our club for over 20 years. Shouldn't we decide to support them?:

Aquarium Fish Magazine
Aquarium Pharmaceuticals, Inc.
Brampton Company
Finny Products Company
Freshwater and Marine Aquarium Magazine
Fritz Aquaculture Products
Rolf C. Hagen (USA) Corp.
Hikari Sales USA, Inc.
Mardel Laboratories
Marineland Aquarium Products
Perfecto Manufacturing Company
San Francisco Bay Brand, Inc.
Tetra USA
Tropical Fish Hobbyist Magazine
Wardley's, Inc.

TREASURER'S REPORT

Cash Balance as of 1 January 1990 ..... $1859.61

Income: 1 Jan 90 - 31 Jul 90

Membership Dues	$618.00
May Auction Gross Receipts	4870.41
Jan - July Mini Auctions	82.00
Jan - July Raffles	128.00
T-Shirt Sales	30.00
Miscellaneous	20.00
TOTAL	$5748.41

Expenses: 1 Jan 90 - 31 Jul 90

Delta Tale Printing & Postage.....	888.49
Taxes	305.64
Meeting Expenses (notices, etc).....	430.79
Fall Workshop Deposit	100.00
1989 BAP Prize	135.00
May Auction Seller Split	3039.76
Insurance	161.00
Miscellaneous	360.49
TOTAL	5421.17

Net Gain or (Loss): 1 January 90 - 31 July 90 327.24

Cash Balance as of 31 July 1990 ..... $2186.85
Paid membership as of 31 July 1990 88

Trading Post

FOR SALE: two glass 30 gallon tanks with plastic tops and Supreme PME power filters, and angle iron stand. $100 for all. Must be picked up.
Gene Aldridge 998-8757

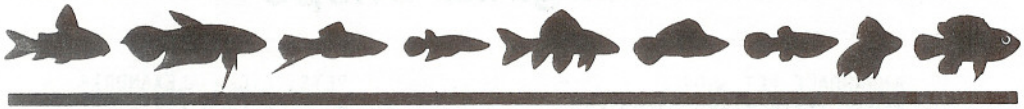
FOR SALE:
- 36 gallon tank (13"x13"x48"), sliding glass top, 48" fluorescent light strip, undergravel filter, wooden stand, excel cond. - $85
- ECL AccuTemp 275w heater, still under warranty. $11
- two unsexed medium gold angels. $7 and $4
- two unsexed Geophagus braziliensis. $3 each

Pete Thrift 971-0594

FOR SALE: 12 Metaframe slate-bottom 10 gallon tanks.
Marguerite Bucher 717-334-5610

CALL PETE THRIFT AT 971-0594 TO PLACE YOUR BUY, SELL, SWAP, OR WANT ADS!

POTOMAC VALLEY AQUARIUM SOCIETY



POST OFFICE BOX 6219 SHIRLINGTON STATION ARLINGTON, VIRGINIA 22206

APPLICATION FOR MEMBERSHIP

DATE: _____ 19__

NAME: _____

STREET: _____

CITY: _____ STATE: _____ ZIP: _____

TELEPHONE: (HOME)_____ (OFFICE)_____

How long have you been in the hobby? _____

What parts of the hobby interest you? _____

_____

What can PVAS do for you? _____

Have you ever belonged to another aquarium society? _____

If yes, which one(s)? _____

Individual annual dues for membership in the Potomac Valley Aquarium Society are $12.00 per year, renewable each June.

Please hand this application to any PVAS member, or mail it to the address above. You will be contacted.

Virginia Shops

ANNANDALE PET SHOP
7406 Little River Turnpike
Annandale, VA 22031
256-2400

DISCOUNT PET CENTER
Manassas Shopping Center
9028 Mathis Avenue
Manassas, VA 22110
361-7769

BAILEY'S PET CENTER
Leesburg Pike Plaza
35217 South Jefferson Street
Falls Church, VA 22041
931-1400

BEACON MALL PET CENTER
Beacon Mall Center
6776 Richmond Highway
Alexandria, VA 22306
660-6100

NATIONAL PET AND AQUARIUM
Williston Shopping Center
6168 Arlington Blvd
Falls Church, VA 22046
533-7828

OAKTON PET SHOP
Oakton Center
Rt 123 & Hunter Mill Road
Oakton, VA 22124
281-9622

PET MART - TYSONS
8417 Old Courthouse Road
Vienna, VA 22180
281-8181

PETS, ETC - ALEXANDRIA
Mount Vernon Plaza
7688-B Richmond Highway
Alexandria, VA 22306
768-2200

PETS, ETC - CHANTILLY
Sully Plaza
13932 Lee-Jackson Highway
Chantilly, VA 22021
378-2777

PETS, ETC - HERNDON
Stuart Center
462 Eiden Street
Herdon, VA 22171
437-0381

PETS, ETC - STERLING
Hechinger Jamesway Plaza
243-C Harry Flood Byrd Hwy
Sterling, VA 22170
430-9667

PETS-N-THINGS
Pan American Center
3081 Nutley Street
Fairfax, VA 22031
573-4400

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

WILSON'S PARROTS & MARINE LIFE
Shirley-Edsall Industrial Park
5605-G General Washington Dr
Alexandria, VA 22312
922-7358

These shops support our club -

Maryland Shops

ANIMAL EXCHANGE
765-A Rockville Pike
Rockville, MD 20852
424-PETS

AQUARIUM CENTER
Randlestown Plaza Center
Liberty Road at Offutt Road
Randlestown, MD
301-521-4529

BROTHERS PETS INC.
13810 Georgia Avenue
Aspen Hill, MD 20906
460-4600

CONGRESSIONAL AQUARIUM
Congressional Plaza
162 Congressional Lane
Rockville, MD 20852
881-6182

FISH FACTORY AQUARIUM
582 North Frederick Avenue
Gaithersburg, MD 20877
301-977-7500

GLENMONT TROPICALS
Glenmont Shopping Center
12345 Georgia Avenue
Wheaton, MD 20902
949-0344

MARINE CARE SPECIALISTS
15820 Redland Road
Rockville, MD 20855
330-0720

MONTGOMERY TROPICALS
7845-G Airpark Road
Gaithersburg, MD 20879
301-670-0886

PETLAND
Briggs Chaney Plaza
13833 Outlet Drive
Silver Spring, MD 20904
890-0044

PETLAND
White Flint Plaza
5268 Nicholson Lane
Kensington, MD 20895
231-5216

PET MART - ROCKVILLE
2230 Veirs Mill Road
Rockville, MD 20851
762-3505

RICK'S FISH AND PET SUPPLY
36 South Market Street
Frederick, MD 21701
301-694-9664 301-831-6866

SHOWCASE AQUARIUM
11248-11250 Triangle Lane
Wheaton, MD 20902
942-6464

TROPICAL FISH WORLD, INC.
Walnut Hill Shopping Center
16529 South Frederick Avenue
Gaithersburg, MD 20877
301-921-0000

TROPICAL LAGOON
9439 Georgia Avenue
Silver Spring, MD 20910
585-6562

they deserve our support in return!

POTOMAC VALLEY AQUARIUM SOCIETY
P.O. Box 6219, Shirlington Station
Arlington, Virginia 22206-0219

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THE POTOMAC VALLEY AQUARIUM SOCIETY WILL MEET ON THESE MONDAYS IN 1990:

8 JAN	9 APR	9 JUL	15 OCT
12 FEB	14 MAY	13 AUG	12 NOV
12 MAR	11 JUN	10 SEP	10 DEC

Meetings are held at the John J. Wood Facility, 3730 Old Lee Highway (Rt 237), Fairfax City, Virginia. Doors open at 7:30, and the meeting starts at 8PM.

ALL ARE WELCOME!