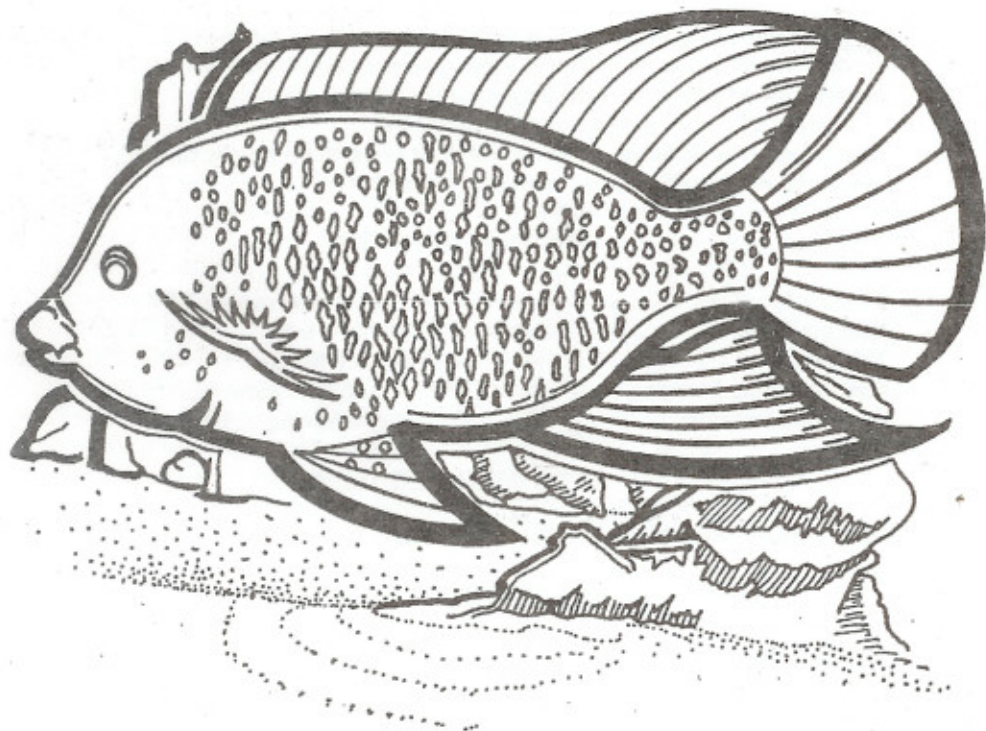


* DELTA TALE *

Mar/Apr 1996
vol. 27, #2

OFFICIAL PUBLICATION OF

potomac valley aquarium society



The *Delta Tale* is published bimonthly 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 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 P.O. Box 664, Merrifield, VA 22116.

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 PVAS. Please include the authors name on the mailing label of one copy so that it will be forwarded.

PVAS disclaims any responsibility for the content or availability of merchandise or services advertised in *Delta Tale*. Customer satisfaction is a matter to be worked out between the advertiser and the buyer.

All materials for inclusion in *Delta Tale* must reach the editor by the 10th of even numbered months (Feb.,April, etc.).

1996 PVAS OFFICERS

<u>President</u>	Alex Townsend
<u>Vice President</u>	Pete Thrift
<u>Treasurer</u>	Rich Blumberg
<u>Corresponding Secretary</u>	Mark Kaprow
<u>Recording secretary</u>	Val Spring

1996 BOARD OF GOVERNORS

John Jessup Rick McKay Kenny Warren Ray Hughes

1996 COMMITTEE HEADS

<u>Breeders Award</u>	John Mangan
<u>Library</u>	Alex Townsend
<u>Membership</u>	Gene Aldridge
<u>Bowl Shows</u>	Alex Townsend
<u>Programs</u>	
<u>Ways & Means</u>	Pete Thrift
<u>Delta Tale</u>	John Mangan

Printed by TOP CAT PRINTING, Manassas Park, Va.

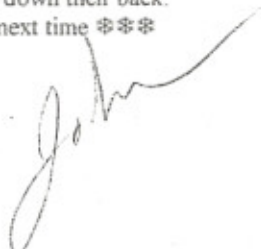
From the editor's desk

I was hoping to be able to tell you all about the Raleigh workshop and the PVAS bus trip but neither has taken place as of the day I'm writing this (Feb. 3). Since I'm more or less snowed in by the blizzard of '96 jr. I decided it would be a good day to get a Delta Tale put together so it can actually get out on time, although you never know what may come up between now and the time I get this mailed. I've been doing this long enough to know that if something can happen to put you behind schedule it will. Speaking of which- Although it still has to get official approval from their board of directors, I will be taking over the job of editor of Livebearers, the journal of the American Livebearer Association. This doesn't mean that I'm going to give up my job as Delta Tale editor. I'm going to try to do both. This will mean though that I'm going to need a little more help from some of you than I've been getting lately. As always, I need original articles and artwork to print, I could also now use someone(s) (what's the plural of someone? If anyone knows please tell me since I have no idea) to help type up reprint articles for those all too frequent times when I have nothing original to print. One of the reasons that the Delta Tale has been coming out so late is that I have nothing to print and have to type up some reprints to fill space. I'm not going to always have the time to type up articles for two publications and if I have to make a choice the ALA publication will get priority for my time (I've been an ALA member for much longer than I've belonged to PVAS, and that's a long time). So it's up to all of you- either help out a little or continue to get the Delta Tale late.


Don't forget the PVAS Winter Auction will be held on March 17 at the Howard Johnson's hotel (rt 1 at the beltway). Hopefully all of the major snowstorms will be over by then. There will be lots of great stuff offered for sale- fish, plants, live food cultures, supplies, and who knows what else. You never know what will show up but there's always lots of stuff and quite a few bargains, especially if you can stick around until the end. Complete details can be found elsewhere in this issue.

I'm going to go shovel some snow now. I'm going to pack as much as I can into my freezer and the first person I hear complaining about the heat this summer is getting it shoved down their back.

Until next time ***



WHAT'S HAPPENING!

 For up to the minute information on what's happening call the free PVAS hotline anytime. (703) 352-3365

March 11: PVAS Monthly Meeting. Program, door prize, raffles, mini-auction, bowl show, refreshments, and more!! Free oxygen to the first 500 people to arrive. Everyone else will have to hold their breath.

March 17: PVAS Winter Auction. To be held at the Howard Johnson's Hotel rt 1 and the beltway. Complete info elsewhere in this issue and on the hotline. Lots of fish & supplies will be auctioned.

April 18: PVAS Monthly Meeting. Program- "Raising Unusual Livebearers" by John Mangan. Door prize, raffles, mini-auction, bowl show, refreshments, etc. Due to the large number of people that turned blue and passed out at the march meeting we have arranged for extra oxygen so no one will have to hold their breath unless they really want to.

May 3-5: American Livebearer Association Convention. To be held near Detroit, MI. Contact John Mangan for info.

May 13: PVAS Monthly Meeting

June 9: PVAS Spring Auction

TRADING POST

PVAS members may advertise in the trading post at no charge. Send ads to *Delta Tale*, c/o John Mangan, 12633, Oakwood Dr. Woodbridge, VA 22192.

For Sale: backissue aquarium magazines. Many different titles. Send SASE for catalog. John Mangan, 12633 Oakwood Dr., Woodbridge, VA 22192.

For Sale: Breeding group *Corydoras panda*, 10 fish- 5 male, 5 female, \$50 group obo.
Cyprichromis leptosoma, (Blue Flash) 1", \$6 each.
Neolamprologus ocellatus, 1/2 - 3/4", \$3 each.
Contact Jeffrey Burke, (703) 941-3230.

MARCH 17, 1996

POTOMAC VALLEY AQUARIUM SOCIETY

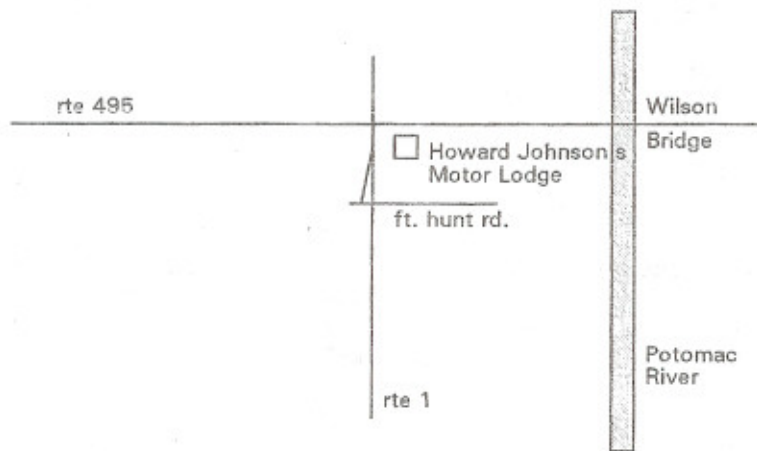
AUCTION!

TROPICAL FISH AND EQUIPMENT

HOWARD JOHNSON HOTEL, 5821 Richmond Highway, Alexandria,
VA. (route 1 at the beltway).

A great opportunity to buy-sell fish, plants, aquariums, books, equipment, supplies...
We will also hold a raffle for new equipment and supplies!

Registration 9 am - 12 noon
The auction will begin at 11 am!



Directions: Howard Johnson's is located on the east side of rte 1 just south of rte 495 and north of Fort Hunt Rd. Exit rte 495 onto rte 1 south. Howard Johnson's is located on the other side of the divided highway. Follow the signs for Ft. Hunt Rd., then turn back onto rte.1 heading north.

POTOMAC VALLEY AQUARIUM SOCIETY

AUCTION RULES

RULES FOR THE SELLER

1. You do not need 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 at 12 PM. Auctioning will begin at 11 AM. Items arriving after 11 AM may not be placed on the tables until after the first break. You must be in line by 12 PM to register.
3. All items must be labeled with the identity of their contents, to include: number, sex (if possible), and other pertinent data. Use a waterproof marking pen and adhesive label. Labeling equipment will be available at the auction site, but items must be labeled before being registered.

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 of each sex is present. If you are not certain label "unsexed". Any major flaws should also be mentioned. PVAS reserves the right to reject any fish judged as unsuitable for auction.

Supplies: All equipment **MUST** be labeled as to working condition, missing parts, and any other pertinent data. PVAS reserves the right to reject any item judged as unsuitable for auction.
4. **Proper fish bags must be used.** Live items must be bagged with ample air and water (don't overfill the bag with water, leave plenty of air space also). Make sure the bag is of a suitable size for the fish in it. Do not overcrowd fish. More than one bag may be joined together as one item if necessary. Fish packed in ziploc or similar bags will not be registered. If a fish is registered in a bucket, tank, bowl, etc. the container will be considered part of the item and they will be auctioned as a unit. PVAS reserves the right to reject any improperly packed item and to re-bag any item if necessary.
5. Registration is limited to 15 items per person. A limit of 5 bags per species or color variety or form is allowed unless prior approval is obtained from the auction chairman.
6. Each item to be auctioned will receive a label with an item number and a colored dot. Those items with a red dot will be auctioned first. Each seller will be given one red dot for each four items registered. There will also be three other colors. The order that these are auctioned in will be determined by the auction committee and/or chairman after the auction begins.

7. Items will be offered as is and will be sold as one item. Once registered, the contents of an item may not be split.

8. Each item carries a \$1.00 minimum bid, unless the seller assigns a higher minimum (make sure to include the minimum on your label if it is higher than \$1). The seller may lower the minimum on an item that does not sell. Items that do not sell will be set aside and offered again at the very end of the auction.

9. 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 sellers responsibility to give PVAS a proper name and address to receive payment. Envelopes for this purpose will be filled out during registration.

10. The seller will receive two-thirds of the selling price. PVAS retains one-third.

11. 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.

12. The auctioneer retains the right to set aside any improperly bagged or marked item, or any sick or otherwise unsaleable item.

13. Fish species that are restricted by either federal or state statues will not be accepted.

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 breaks.

3. Bidding raises will be in \$1.00 increments. The auctioneer has the right to alter this on an item 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. See the treasurer before the auction. Proper identification will be required in these instances.

5. All sales are final.

6. In all cases the decision of the auctioneer is final.

Goodied Selection Probabilities

BY GEORGE WHITE, PNAS

Once upon a time there was a legendary aquarium club magazine editor. He was a good editor, well-liked by his subjects. For one thing, he had likeable characteristics such as a willingness to edit and mail out aquarium club magazines on a semi-sporadic basis with little monetary incentive. He was also willing to pitch in and help with all the aquarium club activities; for example, his aquarium club has not staged a single club aquarium show at which he was not a judge during the past three years.

Despite all of his admirable characteristics, the legendary aquarium club magazine editor was not perfect. He did have one noticeable quirk--he coveted goodieds. This personality quirk led, of course, to his being teased occasionally. Once as the legendary aquarium club magazine editor was preparing two boxes of fish to ship to a customer and a box of goodieds to take along to the annual Goodied convention in Hackensack, New Jersey, he left the packed boxes in a room with some of his friends. The legendary aquarium magazine editor returned just in time to grab his box of Goodieds and the two boxes of fish to ship and scramble off to the airport.

One of his friends told the legendary editor that he had mixed the labels on the three boxes so that none of them was labeled correctly. Each box contained dozens of bags, each of which contained only one fish. The types of fish in the sealed shipping boxes were: all Goodieds (for the show); all Cichlids; and a mix of Cichlids and Goodieds.

The editor, being clever as all legendary aquarium club magazine editors are, smiled and said: "This is easy. I can open one box, look at only one bag and tell what is in all three boxes."

Was he lying??? (Rumor has it legendary aquarium club magazine editors never lie.) Or, did he have a trick??? Assuming that the legendary editor was neither dishonest nor tricky, how could he check only one bag in one box and know what was in each of the three boxes?

Cyprichromis leptosoma
Blue Flash

By Jeffrey Burke, PVAS

I had a pair of *Synodontis* catfish that I was trying to breed in a 55 gallon tank. When the female jumped out of the tank and committed suicide I found myself with a free 55 gallon tank. I decided the tank would be perfect to house a group of *Cyprichromis leptosoma* and *Tropheus moorii*.

First I purchased a group of ten sub-adult Blue Flashes and they settled quite nicely into their new home. After a few months the *Tropheus* fund was achieved and 8 sub-adults were bought and put into their new home. All of the *Tropheus* mysteriously dies within 3 weeks, but the Blue Flashes were healthy and did not have any ill side effects.

At 6 months one of the Blue Flashes turned from a pale gray/blue to bright blue with black dorsal and pelvic fins which were white tipped and the tail was bright yellow. This was the first of three males. After about a year from introduction 8 out of 10 survived (3 males and 5 females). There were two dominant males and one submissive male. The two dominant males were continuously quivering in front of the females and seem to tolerate each other, but chase the submissive male with a vengeance whenever he came out of his safe haven which is a small cave.

I have not yet seen the actual spawning take place yet although I have seen mouthbrooders spawn before. The first 3 times the female had a mouth full of eggs, the eggs disappeared. The fourth batch I removed four fry from her as soon as I saw the fry's eyes through the throat of the mother. At twenty days old the fry were self sufficient even though they still had large egg sacs. The next group the female carried the duration in the 55 gallon tank. She released 3 fry at 28 days and the last 2 at 30 days. The fry at 30 days had no egg sac and looked like miniature versions of their parents. They stayed together in a school at the top of the tank and blended in with young from the previous batch. From day one of release they ate flake food, micro worms, frozen foods; needless to say they were not picky eaters.

The first five spawns yielded only 18 fry, they were not what you'd call prolific, but the parents didn't bother the young and no intervention was required.

"The Living Sea"

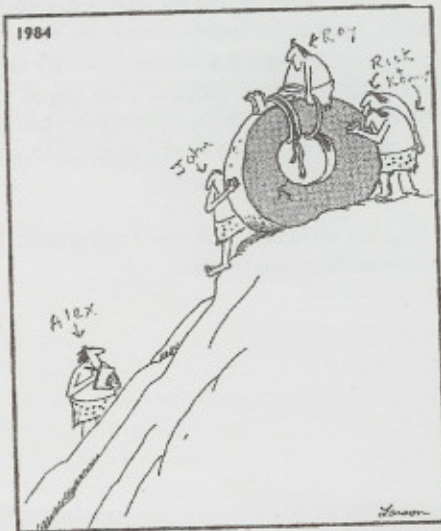
a game review by GEORGE WHITE PVAS

"The Living Sea," a snappy little game by EMA, combines fast moving action with the guessing and suspense of trivial pursuit. But, unlike some games, the knowledge you pick up while having fun is anything but trivial--its all about the seas and oceans, ranging from the Chesapeake Bay to the Great Barrier Reef. The accompanying info sheets give snapshot definitions of key marine elements such as "pods" and trade winds. This game is clearly an ocean freak's delight, providing lots of details about some of the world of water's greatest attractions. Litteral Zone anyone??

"The Living Sea" includes instructions for a simple version (for those who like action without too much detail) and a more difficult version with a time limit to add to the excitement of trying to figure out what the correct name is--shades of TV game shows. Anyway, the game's fun, costs only \$10.95 plus \$4 postage and handling, and is produced by a Virginia company! Those who want a game can get it from:

Educational Materials Associates, Inc.,
P.O. Box 7385,
Charlottesville, Virginia 22906.

(As you might guess from the company's name, they produce things other than sea games, e.g. games on the Civil War, World War II, etc.)



Early experiments in transportation by the PVAS Board. We eventually decided to use a bus for the field trip. (This is also the real reason Roy is on crutches)

THE HUSBANDRY OF THE BLACK SAILFIN GOODEID *GIRARDINICHTHYS VIVIPAROUS*

By James K. Langhammer

For nearly twenty-five years I've dedicated much of my tank space and hobby energies to maintaining colonies of goodeids - many of which were threatened with extinction in the wild and have become increasingly so with the passing years. There is within the hobby a sort of pseudo-sophistry that implies if a fish bears living young and you can buy a gravid female, then the subsequent birth of young in "your" tank makes "you" an accomplished aquarist and the fish an "easy" species to breed! No matter, of course, that FEW aquarists today actually show any ability to husband these "easy" species through several generations while simultaneously raising quality specimens in terms of size, color, and vigor. Remember your school days and being a sophomore? Derived from the Greek and meaning "wise-fool", a sophomore is an intermediate stage in becoming accomplished. Show me an aquarist who considers live-bearing fishes in general as being "easy" and I'll show you a sophomoric aquarist who can't raise them successfully! "Too easy to keep" and you can bet that aquarist can't even keep them alive!

In any case goodeids include among their ranks some of the most difficult fresh-water species to husband in captivity. Goodeids more so than most families of fishes vary remarkably in their needs. Consequently some species CAN BE EASY in one area, yet may prove nearly impossible to husband in another area of the country. Sometimes these differences can be hard to pinpoint. For example, the species *Allotoca dugesi* and *A. maculata* simply won't establish for me as permanent colonies - no matter how many variables I alter, my success has at best been minimal. Intriguingly, a few aquarists in other parts of the country beg people to accept their surplus stocks of these two species.

The Black Sailfin Goodeid is one of those problem species. It is small, colorful, and has nice finnage - all qualities which make it a desirable aquarium fish. Yet internationally it has proven very difficult to keep in captivity. Its status in the wild is precarious at best since its habitat is the central valley where Mexico City's urban spread has all but eliminated natural waters and those that remain are highly polluted. Continued replenishment of captive stocks from the wild is not only irresponsible but may soon become internationally illegal since Mexico has finally signed the CITES accord protecting endangered species.

After several attempts to husband this species unsuccessfully from stocks acquired from many different sources, I received stock from Derek Lambert (London, England) in August 1990 that were F1 from his own collection the previous winter. I might have failed with these fish again if Derek had not CHALLENGED me to keep them beyond a generation or two, saying "this species is inherently weak through inbreeding in the wild and succumbs quickly in captivity as a result of its lack of adaptability". I love challenges, especially when the gauntlet is dropped by Pat Lambert's prodigal son! (Actually now that

I think I've solved the "secret" to keeping the Black Sailfins, I'm suspicious that those devious Brits tricked me into doing their homework for them!

The Black Sailfin comes from the cool high plateau of central Mexico and should in no way be construed as a fish of high temperatures. Goodeids by and large are all placed at risk by aquarists who try to husband them at temperatures above 75 degrees F. True they can survive higher temperatures but their metabolism seems compromised and their susceptibility to the toxic nitrogenous excretory waste-products of their community is pushed to dangerous limits. NO GOODEID NEEDS TO BE KEPT WARMER THAN 75 degrees F!

A cool aquarium and regular water changes of 50% several times a week provide the minimal conditions for this species. Perhaps because of the cool natural habitat coupled with a relatively short summer season, Black Sailfins mature faster than any goodeid I've ever worked with - my shortest generational interval was 44 days between the 4th and 5th generations.

Diet is the most critical component in the management of this species based upon my experiences. Nearly everyone who has kept it has reported deaths of fish characterized by massive abdominal distention. The problem hits all sizes and ages and never seems to be an epidemic but rather to appear randomly and sporadically. Eventually the colony dies out. Medicated foods containing tetracycline (for bacteria) and/or metronidazole (for protozoans) gave no relief and suggested to me this problem was not pathogenic. My next best guess was that the quality and quantity of foods might be inappropriate and that this fish with its short stubby body might be susceptible to fatal bouts of constipation.

Although the F1's Derek brought me were very small and didn't appear gravid, seventeen days later they had young. Over the next several months I accumulated a large number of F2 offspring. I set up four different colonies to study diets. I also relocated many fish to new homes (all but one of which proved unsuccessful in establishing colonies). The dreaded "bloat" was showing up everywhere but reproduction was keeping ahead of mortality in my tanks. Nonetheless I realized that traditional diets that had worked with other goodeids were not successful here. Usually I have tried to feed a wide variety of foods - dry commercial flakes for their vitamin and mineral supplements, home-blended meat pastes, and live foods. As I sorted and manipulated diet combinations, I became convinced that live worms and flake foods seemed to cause constipation in these fishes so I discontinued their use. The results were dramatic but not completely successful; there were still occasional deaths. Thinking the fish might be exclusively vegetarian in their natural diets, I tried a number of commercial child-food pastes that were only fruit/vegetable combinations. Tanks that were fed exclusively or partially on these herbivorous supplements did no better - and in the former case, I felt fared worse!

In frustration I asked Derek to describe their habitat. He said he had found them swimming in a foul broth of crustaceans and algae. This raised the interesting concept for me that these fish might need a continuous source of high-roughage food so that their guts

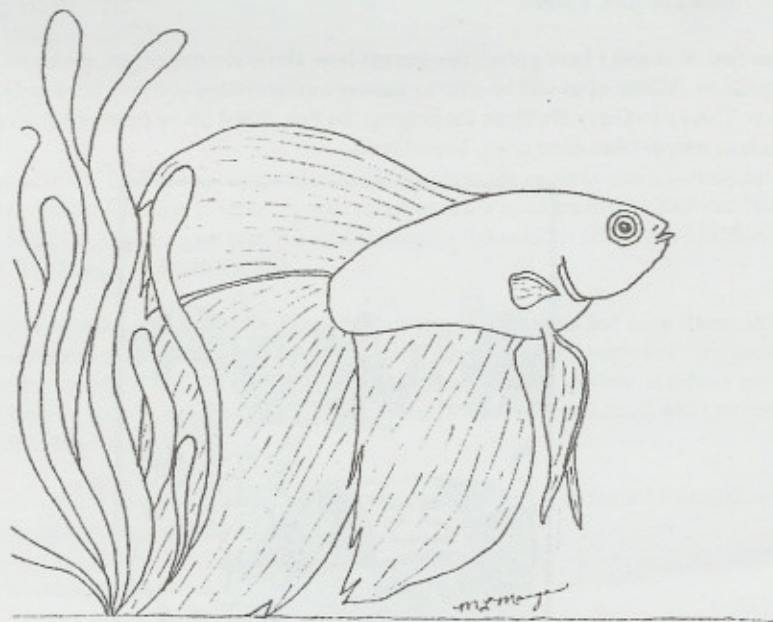
more or less processed food continuously, without interruption and without pockets or spaces of intestinal gases that might interfere with the fecal column.

In addition to colonies fed the herbivore pastes, I next restricted two colonies to diets consisting of only: 1) daphnia and green water fed so generously that the foods were present 24 hours a day, and 2) live baby brine shrimp morning and evening fed essentially to the fish's satiation but without polluting the tank with uneaten shrimp (usually I find baby brine shrimp will live at least for 12 hours in fresh water). Unquestionably the last two diets have proven best. As I move now into the F6 generation, the colonies fed essentially only one crustacean - either baby brine shrimp or daphnia - are thriving and I've seen no mortality in those colonies for several months. I've now discontinued all colonies fed on other foods.

Although I'll probably continue with independent colonies fed exclusively on these two different diets of crustaceans, my best subjective evaluation is that the colony fed the daphnia and green water diet seems more colorful. In most other respects I would say these two diets offer comparably healthy colonies of the Black Sailfins.

The Black Sailfin is one of the fishes that may not reach the Twenty-first Century as a wild species. It needs your help to survive. I hope my experiences and observations will assist in making this species a commonly-kept aquarium fish.

Reprinted from Tropic Tank Talk, publication of the Greater Detroit Aquarium Society.



PVAS MONTHLY BOWL SHOW

RULES:

1. Any PVAS member may participate.
2. Each participant may enter up to three (3) fishes per month.
3. Fish must be displayed in a clear container with at least two flat sides to allow easy viewing by the judge(s). The container should be of an appropriate size for the fish being displayed. Covers are strongly recommended. Some containers will be available on a first come first served basis.

4. POINTS:

Each participant will receive 1 point for each fish entered (up to 3)

First place will earn an additional 3 points.

Second place will earn 2 points.

third place will earn 1 additional point

Prizes will be awarded to the persons with the highest number of points at the end of the year.

Additions may be added to these rules as needed.

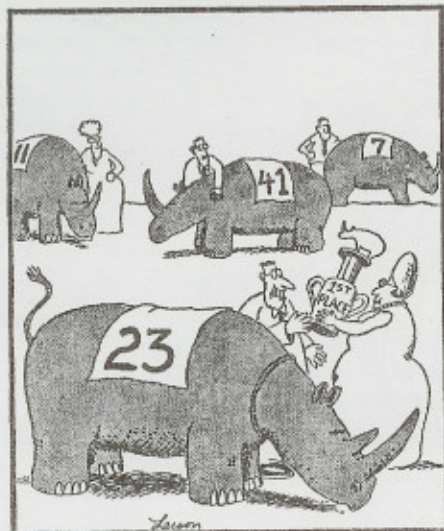
To encourage participation in starting this program back up we will be giving a small prize to everyone entering (a can of fish food most likely). The end of the year prizes haven't been decided on yet but will be something good.

STANDINGS:

Alex Townsend: 7 points

John Mangan: 5 points

Now that Alex and I have gotten this started how about the rest of you giving us some competition. Either of us will be glad to answer any questions you may have and/or give advice. Thanks to Gerry Hoffman for judging the Feb. Bowl Show (even if he did pick all killifish as winners and none of my livebearers).



Breeder's Award Program

BAP Checkers:

Annandale/Falls Church area: Jeff Burke (703) 941-3230
Montgomery County: Ray Hughes (301) 424- 3531
Mt. Vernon/Olde Town area: Gene Moy (703) 765- 0865
Oakton/Vienna area: Rick Mckay (703) 281- 1647
Occoquan/Lake Ridge area: John Mangan (703) 491-4980
Prince George's County: Lorne E. Williams (301) 505-2917
Springfield/Franconia area: Pete Thrift (703) 971-0594
Warrenton/Manassas area: Gerry Hoffman (540) 347-7486

We still could use some more checkers. There are a number of areas where we don't have anyone. Even if there is someone already listed for your area we could always use someone else to help spread the work around.

BAP Standings:

Breeders Award *
Intermediate Breeder **
Advanced Breeder***
Master Breeder****
Grand Master Breeder*****

Jeffrey Burke 320***
John Mangan 155**
Gerry Hoffman 10 +
Don Kinyon 30
Lorne Williams 10

Recent activity: I'd like to welcome Lorne Williams to the program, as a participant and a checker (Prince Georges County). Lorne receives his first 10 points for Red-tail Half-black Guppies. Don Kinyon receives an additional 10 points for Blue-eyed Cichlids and 10 points for Orange Australe Killifish.

A reminder- make copies of your forms before you submit them and keep them. Anyone who was involved in the program in the past will have to submit copies of their forms to get credit. All of the old records are being considered lost at this time. If I don't get copies you'll have to start from scratch. (Unless someone knows where Tom is and can get the stuff from him).

Anyone wishing to get started in the program - see me or any of the BAP checkers at the monthly meeting and we can help you.

Keep breeding those fishes.

PVAS INCOME AND EXPENSES

1995

Bank Book Balance 2017.50
Beginning of year

Income
Auction 15420.95
Membership 974.00
Monthly Auction 41.00
Monthly Raffle 229.75
Raffle 789.25
Workshop/
Field Trip 460.00
250.00
Miscellaneous 12.00
TOTAL INCOME 18176.95

TOTAL CASH AVAILABLE 20194.45

Expenses
Auction 8785.67
Auction Expense 2388.18
Insurance 185.00
Meeting Expense 454.87
Membership 0.00
Phone Bill 595.82
Postage 795.23
Printing 965.66
Raffle Expense 965.23
Speakers 404.09
Supplies 384.00
Taxes 35.00
Workshop/
Field Trip 768.45
1180.72
Miscellaneous 269.50
TOTAL EXPENDITURES 18177.42

BANK BALANCE 2017.03
Year end

CASH INCREASE/(LOSS) (0.47)

POTOMAC VALLEY AQUARIUM SOCIETY
PO BOX 664, Merrifield, VA 22116

Application for Membership

Date: _____

Name: _____

Street: _____ Apt. _____

City: _____ State: _____ Zip: _____

Telephone: _____

Optional information:

Occupation: _____

Where did you here about PVAS/get this application? _____

Number of aquariums: _____ Time in the hobby: _____

Special interests: (e.g., catfish, cichlids, etc.) _____

Reason for joining: _____

Membership dues for PVAS are:

Individual/Family: \$12/yr

Corresponding: \$ 9/yr

Junior (under 18) \$ 5/yr

Please send application and check to the address above.

SUPPORTING SHOPS

ANNANDALE PET SHOP

7406 Little River Trnpg.
Annandale, VA 22031
256-2400

AQUATIC ENHANCEMENT

PO Box 22677
Alexandria, VA 22304
765-4620

CREATURES 'N CRITTERS

9575 Braddock Rd.
Fairfax, Va
978-0745

DISCOUNT PET CENTER

9028 Mathis Ave.
Manassas, VA 22110
361-7769

NATIONAL PET & AQUARIUM

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

OAKTON PET SHOP

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

PET MART-TYSONS

8417 Old Courthouse Rd.
Vienna, VA 22180
281-8181

VIRGINIA

PETS ETC-ALEXANDRIA

7688-B Richmond Hgwy.
Alexandria, VA 22306
768-2200

PETS ETC-CHANTILLY

13932 Lee Jackson Hgwy
Chantilly, Va 22021
378-2777

PETS ETC-HERNDON

462 Eiden St.
Herndon, VA 22171
437-9667

PETS ETC-STERLING

243-C Harry Flood Byrd Hgwy.
Sterling, VA 22170
430-9667

SUPPORTING SHOPS

ANIMAL EXCHANGE

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

AQUARIUM CENTER

Liberty Rd. at Offut Rd.
Randlesstown, MD
521-4529

BROTHER'S PETS

13810 Georgia Ave.
Aspen Hill, MD 20906
460-4600

CONGRESSIONAL AQUARIUM

162 Congressional Ln
Rockville, MD 20852
881-6182

DISCOUNT PET SUPER- MARKET

1321 A&B Rockville Pike
Rockville, MD 20852
309-9110

FISH FACTORY AQUARIUM

582 N. Frederick Ave.
Gaithersburg, MD 20877
881-6182

HOUSE OF TROPICALS

7389F Baltimore-Annapolis Blvd.
Glen Burnie, MD 21061
761-1113

MARINE CARE SPECIALISTS

16065 N. Frederick Rd.
Rockville, MD 20855
330-0720

MARYLAND

MARYLAND TROPICALS

13884 Old Columbia Pike
Silver Spring, MD 20904
879-0200

MONTGOMERY TROPICALS

7845-G Airpark Rd.
Gaithersburg, MD 20879
670-0886

RICK'S FISH & PET SUPPLY

1003J West Patrick St.
Frederick, MD 21702
694-9664 831-6866

SHOWCASE AQUARIUM

11248-11250 Triangle Ln
Wheaton, MD 20902
942-6464

TOTALLY FISH

14332 Layhill Rd.
Silver Spring, MD 20906
598-2229

TROPICAL FISH WORLD

16529 S. Frederick Center
Gaithersburg, MD 20877
921-0000

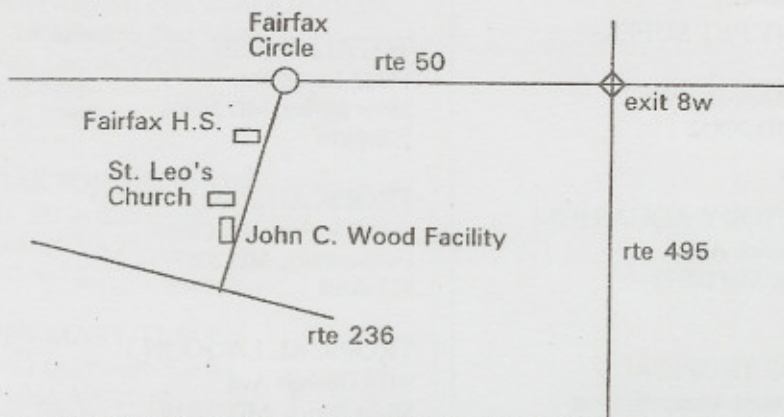
TROPICAL LAGOON

9439 Georgia Ave.
Silver Spring, MD 20910
585-6562

AQUATIC CREATIONS LTD

2909 Urbana Pike
Ijamspille, MD 21754
(301) 831-8200

Potomac Valley Aquarium Society
PO Box 664
Merrifield, VA 22116



Meetings are held at the John C. Wood Facility, 3730 Old Lee Hgwy. (rte 237), Fairfax City, VA. Room 7 (in the rear of the building). Doors open at 7:30, meetings start at 8:00. Everyone is welcome.