

DELTA TALK

OFFICIAL PUBLICATION OF P. V. A. S.

APRIL

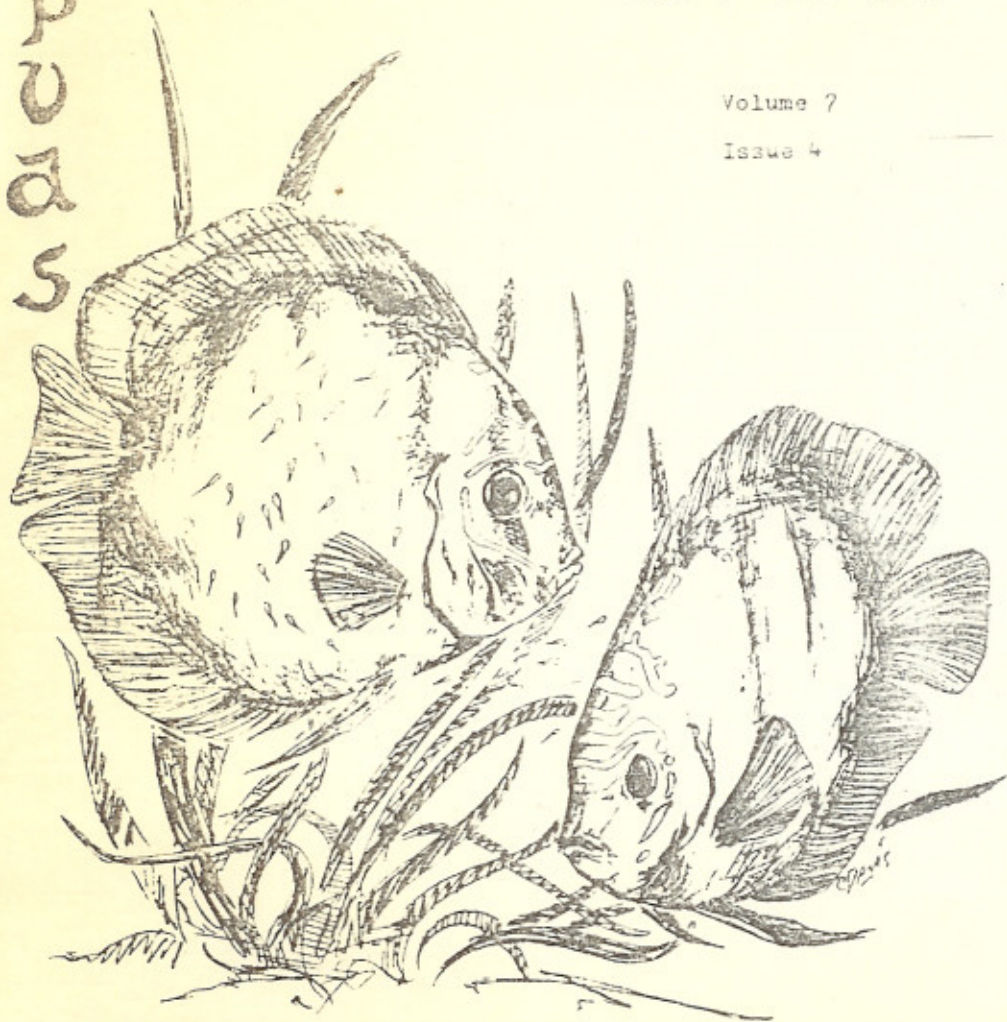
1976

RAP ISSUE

Volume 7

Issue 4

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DELTA TALE is published for the benefit of the Potomac Valley Aquarium Society (formerly the Potomac Valley Guppy Club), a non-profit organization, established in 1960 for the purpose of furthering the aquarium hobby by disseminating information, encouraging friendly competition, soliciting participation in its show, and promoting good fellowship. Correspondence should be addressed to Secretary P.V.A.S., P.O. Box 6219, Shirlington Station, Arlington, Virginia, 22206. Original articles and drawings may be reprinted if credit is given the author and DELTA TALE. Two copies of the publication in which the reprint appears should be sent to DELTA TALE which will forward one copy to the author. All materials for inclusion in the DELTA TALE must reach the editor no later than the Saturday after the monthly Monday meeting.

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EDITORIAL STAFF

Editor: Susan Sprague
Staff Artist: Tony Rizzuto

OFFICERS FOR 1976

President	John Jessup	Corres. Secy.	Chuck Story
Vice-President	Carl Hardy	Treasurer	Gene Aldridge
Recdg. Secy.	Ruth Brewer		

BOARD OF GOVERNORS

Ted Walsh	Susan Sprague
Bob Smith	Craig Tingen
Warren Garnar	Pete Tietjen
Dave McInturff	Jan McInturff

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This month's cover is of a pair of Discus and fry drawn by Charlie Davis of Fish Tales in Peoria, Illinois.

MINUTES OF THE BOARD OF GOVERNORS MEETING

The Board of Governors met March 2 at the Hardy home with 10 members present. Dave McInturff reported that he had received \$100 to date on 700 signed out raffle tickets.

In discussing the Spring Show, Chuck Story reported that a truck would be available that he had sent out a preliminary letter to our complete mailing list. A committee consisting of Susan Sprague, Gene Aldridge, Pat Tietjen and Carl Hardy was appointed to re-write the show flyer. No firm plans have yet been made for storing the club's equipment after May of this year. When the move is made, certain refurbishing will be needed and Carl Hardy was authorized to buy paint, estimate the job and get volunteers for carpentry and painting. Chuck Story is to draft letters of invitation to judges. The same limit of 10 bags per person for the auction would be continued. Dave McInturff will begin collection of donations for prizes. Any member who is planning to request a donation from a favorite shop should let Dave know in advance to avoid duplication of requests. The Treasurer requested that the next Delta Tale carry a reminder of the need for trophy donations. Edna Walsh and Ginny Story have volunteered to have sandwiches and cold drinks available on Saturday.

Pete Tietjen reported that a suggestion had been made to hold the next Winter Weekend Workshop here. After discussion, the Board voted against the proposal. Susan Sprague's resignation as Delta Tale Editor was regretfully accepted. The Board agreed that she would assume the post of Recording Secretary and Ruth Brewer would take over as Editor. Gene Aldridge reported that the BAP Committee had met and agreed on some changes in the BAP rules. New rules and points will be published in the April Delta Tale.

The meeting adjourned at 10:50 p.m.

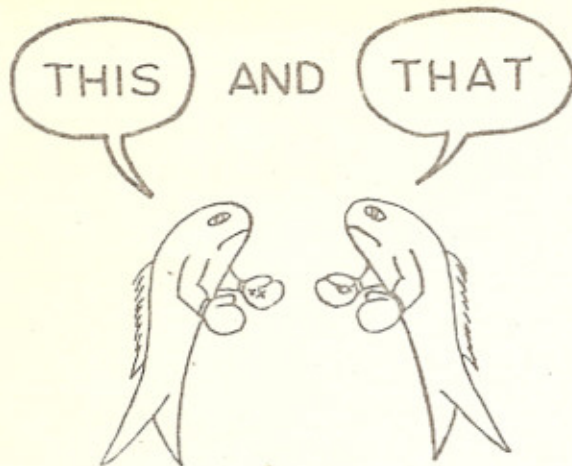
Respectfully submitted,
Ruth Brewer, Recdg Secy

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* FLASH *
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Our friends, the Kordon Corporation, have asked us as tropical fish hobbyists to do them a favor. They want all fish stores to have the opportunity to have and sell Kordon products.

If your favorite fish store does not sell Kordon products, they want to know about it. Send the store's name and address to Kordon. The new Kordon address is 2242 Davis Court, Hayward, California 94545.

A - BOUT



By: Susan Sprague, PVAS

Well, it's time for me to make my farewell address as Editor of Delta Tale. This issue will be a joint effort with the new Editor.

Due to family expansion and my new job, I find it impossible to keep up with the publication. I would rather not be Editor if I can't give as much to the Delta Tale as I feel it deserves. I'm sorry to give up the position because I have learned so much through reading other publications from throughout the country. I have also learned a few things about printing and writing. I am amazed that I enjoy writing an article and hope that someone may learn something.

I do have some very good news. Ruth Brewer has agreed to take over as Editor if I would assume her post as Recording Secretary. Since I don't plan to become inactive, I readily agreed to the exchange. Ruth has been my right hand "person" since I became Editor. She has spent untold hours typing for me and writing articles. I couldn't have remained Editor for this long without her help and support. We are fortunate that Ruth has agreed to take the post.

Thank you all who have contributed articles while I was Editor. Keep up the good work and help Ruth too. For those who haven't submitted anything, the first article is the hardest. Believe me, writing is not as difficult as it may seem. All you need is an idea and I'm sure more people have new ideas than have written for the publication. Part of the hobby is sharing with others to learn more about our little finny friends.

BREEDER'S AWARD PROGRAM UPDATE

The Potomac Valley Aquarium Society started a Breeder's Award Program about a year ago. The program was started with several things in mind: one, to encourage members to breed fish; two, to share with others the knowledge they have gained. This shared knowledge will appear as BAP reports in the Delta Tale. There will be a monthly update in the Delta Tale, showing each participant's point total. Each month more members are joining in so, if you have not, come on and join in.

This is the third revision of our program and includes several very important changes, one of which is the inclusion of a Special Category Form. This form is to be used to request program changes. The BAP Policy Committee will approve actions by a simple majority vote. This Policy Committee consists of Chuck Story, Ted Walsh, and Gene Aldridge. You, as the requester, will receive a copy of the submitted form as a reply. Any approved changes will be available to all members. Points once awarded and recorded will not be changed.

Also included are some point changes effective on 12 July 1976. The most important are reductions for angels from 20 to 10 points and rift-lake mouthbrooders from 15 to 10 points. You have until 12 July to get the higher points. No reports for these at the old point structure will be accepted after 1 August 1976.

The Committee is in need of help, particularly in Fairfax County and in the Bowie area of Maryland. If you want to help, let me know at the next meeting. If you live in one of the other areas and are willing to help, let me know.

Elsewhere in this issue of Delta Tale you will find a composite article on things to include when you write articles. Remember the more informative you are, the easier it is for someone else to follow in your steps.

The current totals are:

<u>Name</u>	<u>Points</u>	
	<u>Firm</u>	<u>In Process</u>
Susan & Mike Sprague	130*	
Ruth Brewer	75*	
Gene Aldridge	80	15
John Jessup	55*	45
Walt Lilley	200**	
Diane Nixon	60*	
Pat & Pete Tietjen	15	
Jan & Dave McInturff	85*	

* Breeder Award

** Intermediate Breeder

Sprague - Tetracanthus
 Brewer - Formosa, betta
 Lilley - Swordtails, cory cats, gourami, zebra, round nose auratus
 Nixon - Burtoni
 McInturff - Socolofi

Congratulations to Walt Lilley for becoming an Intermediate Breeder.

E. T. A.

BAP ARTICLE CONTENT

By: Susan P. Sprague, Editor
Gene Aldridge, BAP Chrmn.

The suggestion was made that a statement of possible BAP article content could be useful to our members. We are not suggesting that the points to follow are all inclusive or necessary in a report to the committee. They are basically ideas that could be useful in writing and would be of help to someone trying to spawn that species.

I. Fish

A. Parents

1. Scientific and common names
2. Age
3. Sex differentiation
 - a. Size
 - b. Coloration
 - 1) Normal
 - 2) Spawning
 - c. Finnage
4. Wild or tank raised
5. Tank mates
 - a. Number and type
 - b. Effect on spawning

B. Fry

1. Size of eggs
2. Size at free-swimming and 60 days
3. Coloration
4. Age at sex differentiation

C. Background

1. Geographic location
2. Natural habitat
 - a. Stream, river, etc.
 - b. Plants, rocks, etc.
3. Method of spawning - egg scatterer, livebearer, mouthbrooder
4. Care of young
 - a. Ignore or cannibalistic
 - b. Mouthbrooder
 - 1) How long carried
 - 2) How long accept after first released

II. Food

- A. Type - live, frozen, etc.
- B. Breeding conditioners
- C. Times fed per day

III. Water conditions

- A. Temperature
- B. pH and DH
 1. Hard or soft
 2. Alkaline or acid
- C. Water changes
 1. Frequency
 2. Amount

- IV. Tank
 - A. Size
 - B. Decor
 - 1. Rocks, driftwood, etc.
 - 2. Plants - floating or rooted
 - a. Live
 - b. Plastic
 - 3. Gravel or bare
 - C. Filtration and aeration
 - D. Community or special

April 1976

BREEDER'S AWARD PROGRAM

The Potomac Valley Aquarium Society has established a BAP (Breeder's Award Program) to encourage members to breed fish and to share with others the knowledge they have gained. The Program is open to all members (except corresponding members) and there is no time limit on breeding a particular fish. You proceed at your own pace. Awards are given as detailed in the rules. To get started all you need is a pair of fish, something to keep them in, and a Breeder's Award Form to fill out. Read the rules that follow and you are on your way.

If you have any questions, please don't hesitate to call one of the Breeder's Award Committee members. The handy forms to record spawnings can be obtained from any Committee member at the regular meeting.

The Committee members are:

Chairman

Gene Aldridge (931-7426)

Montgomery County

Bob Smith (948-8698)
Ted Walsh (277-8249)

Bowie/Bel Air

Steve Siska (261-7923)

Fairfax County

David McInturff (578-0577)
Ruth Brewer (893-6997)

Alexandria/Arlington

Chuck Story (370-3593)
Susan Sprague (534-7487)

If you have a spawning which needs verification, contact the Committee member nearest you. If, after a few tries, you are unable to contact the person nearest you, contact the next nearest. It is your obligation to see that you contact one of the Committee members to verify your spawning.

A copy of the spawning report is attached. This report should be as complete as possible when filing for points. It is to be filled out in duplicate. Forms may be obtained from any Breeder's Award Committee member.

POTOMAC VALLEY AQUARIUM SOCIETY
BREEDER'S AWARD PROGRAM

Purposes:

The purposes of the Breeder's Award Program are:

1. To promote the keeping and breeding of tropical fish,
2. To recognize outstanding achievement in the breeding of aquarium fishes,
3. To encourage research into the spawning of the more difficult species, and
4. To make accounts of successful spawning techniques available to club members through the Delta Tale and/or the general meetings.

Eligibility:

All members are eligible for the Breeder's Award Program except corresponding members.

The Program:

The Program is made up of five (5) levels of competency. They and their requirements are as follows:

1. BREEDER AWARD - Has attained 50 breeding points from categories 1 through 10.
2. INTERMEDIATE BREEDER - Has attained Breeder status and a total of 150 breeding points.
3. ADVANCED BREEDER - Has attained Intermediate Breeder status and a total of 300 breeding points.
4. MASTER BREEDER - Has attained a total of 500 breeding points, plus has spawned at least one species from each of 3 categories on the difficult species list.
5. GRAND MASTER BREEDER - Has attained Master Breeder status and has spawned at least one species from the target species list.

Acknowledgement:

Attainment of any of the five levels will be recognized in the Delta Tale and at the general meeting. Awards will be presented at the regular monthly meeting for all five levels of achievement.

Requirements:

1. Breeding points are awarded by proof of spawning of fish in of 17 different categories. Points may be gained only once from each species except in the case of guppies where each IFGA recognized category (color) may be spawned and points gained will count towards the Breeder Award.
2. Spawning is defined as raising of at least ten (10) fry to sixty (60) days of age after hatching. Mouthbrooder eggs are considered hatched seven (7) days after breeding. If sex is readily determinable, two pairs must be included in the 10 fry.
3. Breeding is defined as the physical act of mating. A mating of killifish is considered to be the total quantity of eggs deposited during a one-week period. All fry hatched from the one-week spawn are counted for the purpose of satisfying the requirements of the BAP. The final verification date would be 60 days after hatching.

Function and Authority of Committee:

The Committee shall oversee and enforce all rules and regulations governing the Breeder's Award Program. Among these are verifying and awarding points to qualifying members, keeping proper records of awards, making proper awards to qualified members, reviewing the rules and regulations at least once a year for possible improvements, and reporting to the Board of Governors.

Changes and Modifications of the Rules:

From time to time the Committee may feel that certain changes or modifications in the rules may be advisable. The Committee will adhere to the following procedures should it wish to make any changes or modifications. No changes or modifications will be retroactive.

1. A date for the change or modification is chosen by the Committee.
2. The proposed change with the effective date will be published in a conspicuous manner in the Delta Tale at least three months preceding the effective change.
3. Special rulings or category changes should be made in writing on the Special Category Form. The requester will be notified in writing of the action taken. All changes or clarifications will be available to all members.

Points or Awards Earned by Committee Members:

Any member of the Committee wishing to claim points must secure confirmation in the approved and customary manner. In addition, he must secure the confirmation of at least two members of the Breeder's Award Committee, in the case of the Difficult and Target Species.

Categories:

The 17 categories and their breeding point values are as follows:

- Category 1. - 10 points - Any species of livebearing fish except as indicated elsewhere.
- Category 2. - 10 points - All mouthbrooding cichlids (African and New World) except as indicated elsewhere.
- Category 3. - 10 points - Any species of cichlids except discus, substrate rift-lake, those known as dwarf cichlids, or those listed elsewhere.
- Category 4. - 10 points - Any species of danio or brachydanio or any species of goldfish or koi carp.
- Category 5. - 10 points - Any species of barbs.
- Category 6. - 10 points - Any killifish that is not a bottom spawner.
- Category 7. - 15 points - Any species of anabantoid other than Chocolate or Kissing gouramis.
- Category 8. - NOT USED.
- Category 9. - 15 points - Any species of fish known as dwarf cichlids.
- Category 10.- 15 points - Any endemic rift-lake substrate spawning cichlids except as indicated elsewhere.
- Category 11.- NOT USED.
- Category 12.- 20 points - Any species of catfish except as indicated elsewhere.
- Category 13.- 25 points - Any species of bottom-spawning killifish.
- Category 14.- 25 points - Any species of characins (mostly tetras).
- Category 15.- 30 points - DIFFICULT SPECIES (See following).
- Category 16.- 50 points - TARGET SPECIES (See following).
- Category 17.- Various - Special assignment fish.

The DIFFICULT SPECIES LIST is a list of species whose spawnings have been recorded, but can still be considered rare or difficult. At the present time the categories are as follows:

1. Any species of Discus (*Symphysodon*).
2. Neon Tetra (*Hyphessobrycon innesi*) or Cardinal Tetra (*Cheiridon axelrodi*).
3. Kissing Gourami (*Helostoma temmincki*).
4. Any species of Silver Dollar or Piranhas (*Serrasalmus*, (*Rooseveltiella*, *Pygocentrus*, *Metynnis*, *Mylossoma* or *Myloplus*).
5. Any species of Rasbora.
6. Any species of Puffers (*Tetraodontidae*).
7. Any species of Whiptail Catfish (*Loricaria*).
8. Butterfly fish (*Pantodon buchholzi*).
9. Any species of Leaf fish (*Monocirrhus*, *Polycentropsis*, or *Polycentrus*).
10. Any species of Half-beak (*Hemiramphidae*).
11. Four-eye (*Anableps tetrophthalmus*).
12. Any species of Sticklebacks (*Gasterosteidae*).
13. Spotted Headstander (*Chilodus punctatus*).
14. Chocolate Gourami (*Sphaerichthys osphromenoides*).
15. Oscars, Red devils, Severums.
16. Non-designated species (a difficult species of the breeder's choice may be substituted for one of the above 15 categories. In order to qualify a species for this award, the breeder must submit a written request to the Committee for approval prior to awarding points. Reasons must be provided). This category can be used more than once in attaining the Master Breeder Status.

recorded,
categories

The TARGET SPECIES LIST is a list of aquarium species whose spawnings have not been reliably reported by the home aquarist.

At the present time the list is as follows:

1. Red-tailed Shark (*Labeo bicolor*).
2. Any species of *Plecostomus*.
3. Dwarf Loach (*Botia sidthmunki*).
4. Glass Catfish (*Kryptopterus bicirrhus*).
5. Any species of Scats (*Scatophagus*).
6. Any species of Headstanders (*Anostomidae*) except *Chilodus punctatus*.
7. Any species of fish naturally found exclusively in salt water.
8. Any species of Hatchet fishes (*Gasteropelecidae*).
9. Any species of Glass fishes (*Centropomidae*).

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BREEDER'S AWARD PROGRAM

REQUEST FOR SPECIAL CATEGORY ASSIGNMENT (2 copies)

TECHNICAL NAME _____ COMMON NAME _____

Current Category _____ Points _____

Requested Category _____ Points _____

Reasons-(Show specifically why this fish is in the wrong category):

Name (Signed) (Date)

BAP Committee Action

Member

Approved

Disapproved

1. _____

2. _____

3. _____

Final Action _____

Requester Notified _____ In Delta Tail _____

Coordinator

GENERAL RULES

ENTRIES -- Accepted 9:00 A.M. until 12:01 P.M., May 22, 1976.
Includes fish -- set tanks -- dealers tanks.

Judging -- 12:15 P.M. to 4:00 P.M.

Open to Public -- 4:00 P.M. to 6:00 P.M.

2 Quart drum bowls are available. Please advise number required prior Show Date (\$2.00 deposit per bowl required). Call Jan McInturff - 578-

All tanks or larger size drum bowls must be provided by entrant.

Entrant must provide a stand for tanks of 5 1/2 gallons or larger.

CLASSES I through IV may not have individual lights or decorations. Heat may be provided by entrant. Air will be provided by the Club. Bring your own airline and airstones.

Class I (Guppies) single entries will be shown in 2 quart drum bowls. All others in drum bowls or larger container not to exceed 2 1/2 gallon tank.

CLASSES V and VI Set Tanks and Dealers Tanks -- all equipment must be supplied by the entrant -- Tank -- Stand -- Filters -- Lights -- Extension Cords -- etc., no restriction on tank size. NO ENTRIES WILL BE ACCEPTED WITHOUT STAND.

CLASSES III through V should be labeled above the water line to indicate the generic or the common name of the fish.

ENTRY FEES -- SINGLE FISH \$1.50 (female may be added, but will not be judged).

MATCHED FISH AND PAIRS (I i, j, k) (IV h, i) \$2.00
SET TANKS - \$3.00
DEALERS free

AWARDS -- Trophies for 1st place -- Ribbons for 2nd and 3rd place for CLASSES I - V. Dealers have rotating plaque. ONE Best of Show Trophy for Classes I - II - III - IV

May 23, 1976

OPEN TO PUBLIC 9:00 A.M. to 4:00 P.M.

AWARDS promptly at 12:30 Noon

RAFFLE promptly following awards.

AUCTION immediately after Raffle. Limit of 10 bags per person, plus fish entered in this show. Fish for auction must be registered by 12:00. Please leave your name and address when registering.
NO money will be given out at the show.

Fish bowls and other entries will not be removed until after presentation of awards.

Fish designated for auction may not be withdrawn. PVAS receives 25%.

PRIVATE SALES of fish within the show area are PROHIBITED!

1. Entries will be judged and pointed in each class in accordance with current class standards.
2. Set tanks - freshwater or marine - should present an overall pleasing appearance of fish and/or invertebrates, plants and other decorative materials. In the marine class, algae is considered a plant.
3. Exhibitor will be responsible for proper classification of his own entries. Assistance can be provided by a member of the show committee if needed.
4. THE POTOMAC VALLEY AQUARIUM SOCIETY will not be liable for any entries, but will act to the best of its ability to protect all exhibits against theft and tampering.
5. THE SHOW COMMITTEE will have the final ruling on all matters pertaining to the show and entries.
6. No entries will be removed, once entered, until completion of the awards presentation, except that dead or sick fish may be removed only by a member of the show committee.
7. Decisions of Judges in all classes are FINAL. AFTER JUDGING is completed, questions may be asked of the judges.

The following Classes are open to public competition:

- | | |
|---|---|
| <p>I. GUPPIES</p> <ol style="list-style-type: none"> a. RED b. BLUE/GREEN c. AOC BI-COLOR d. AOC e. H/BLK RED f. H/BLK AOC g. SNAKESKIN h. FEMALE i. 2 MATCHED MALES j. 3 MATCHED FEMALES k. 5 MATCHED MALES | <p>III. EGG LAYERS (continued)</p> <ol style="list-style-type: none"> f. SHARKS & LOACHES g. CHARACINS, TETRAS h. BARBS i. KILLIFISH j. OPEN |
| <p>II. LIVEBEARERS</p> <ol style="list-style-type: none"> a. FANCY SWORDTAILS b. FANCY PLATIES c. FANCY MOLLIES d. REG. OPEN | <p>IV. CICHLIDS</p> <ol style="list-style-type: none"> a. CENT. & SO. AM. LARGE 6"+ b. CENT. & SO. AM. MED. -6" c. CENT. & SO. AM. DWARF d. ANGELFISH e. RIFTLAKE MBUNA f. RIFTLAKE NON-MBUNA g. NON-RIFTLAKE AFRICAN h. AFRICAN PAIRS - 1 M, 1 F i. NEW WORLD & ASIAN PAIRS -
1 M, 1 F j. OPEN |
| <p>III. EGG LAYERS</p> <ol style="list-style-type: none"> a. CATFISH-CORYDORAS b. CATFISH (AFRICAN) c. CATFISH-ALL OTHER d. ANABANTOIDS e. BETTAS <p>(continued)</p> | <p>V. SET TANKS</p> <ol style="list-style-type: none"> a. FRESHWATER b. MARINE <p>VI. DEALERS TANKS</p> |

COME AND MEET OTHER TROPICAL FISH HOBBYISTS

SHOW YOUR FISH

ADDRESS & MAP
ON BACK COVER

THE 5TH ANNUAL SOUTHEASTERN
WINTER WEEKEND WORKSHOP

By: Pete Tietjen, PVAS

The 5th Annual Southeastern Winter Weekend Workshop was held in Lexington, Kentucky on February 19, 20, 21st. Hosted by the Central Kentucky Aquarium Society, the meeting lived up to all three of its W's, for it took place on a Weekend, it sure was a Workshop, and even if the Saturday temperature was in the 70s, Sunday was back to Winter. It was a very enjoyable experience and all I can say to you who missed it is "tough luck".

Pat & I set out on Thursday the 18th to drive the 612 long miles to Lexington. We intended to get away by 7 pm and drive 'till midnight. Well, with bagging fish, packing suitcases and generally getting Pat moving, it was 10 pm before we hit the road. So instead of making Washington, Pa. the first night, we stayed over in Breezewood, Pa. The fish we were taking were in drum bowls in styro's so after bringing them in, and leaving a 7:30 am wake up call, we went to bed. Pat awakened during the night claiming she heard splashing in the bowls. She was right. The six P. socolofi fry decided to chase each other around their tank with 1 1/2" of water in it. They settled down and so did we.

Friday, after breakfast, we once again hit the road and 8 hrs. later arrived in Lexington. We checked into the motel, site of WWW and immediately ran into fish, fish and more fish, including a human one, PVAS member Bill Trout who had driven out that day with Kenny Warren. They went through West (By God) Virginia, rather than Ohio and Pa. and CB'd it all the way. Who's got the front door?

The center of activity late on Friday afternoon was the swap room, and to this room we quickly gravitated. Upon unexpectedly discovering two tanks with air and heat and water waiting for my fish, I wasted no time in getting them out of their drum bowls and into the tanks. Pat meanwhile was checking out the fish in other tanks and making noises about which ones she's really like to have. Over half the fish were rift lake cichlids, but there were other types, including plume tail platies (more on them later), angels, and some guppies and catfish. Leaving Pat to oogle fish, I left to register and reconnoiter the premises.

On registering, I got our name badges, schedule of siminars, auction number and various pens, pads, and free Kordon and Mesco samples. Taking this loot, I dragged Pat from the swap room back to our room to plan strategy for the rest of the day, and the next two.

Out in the hall, we ran into an old PVAS member and her new husband. This was Sue O'Meara Austin and her husband Pat (Pacyderm) Austin from out Memphis way. We filled them in on what's been happening in PVAS and ate dinner with them. Following dinner, a reception was given in the hospitality room, and it wasn't just water that was being served. The party there lasted 'till midnight and then moved to individual rooms. We saw a slide pro-

gram on artificial hatching and raising of the eggs of M. simulans and then moved to another room to just look at random slides and talk fish--mostly cichlids.

Saturday dawned warm and cloudy, but there was little time to observe the weather. The seminars started at 10 am. Pat and I agreed to split up, each with a tape recorder to try to learn as much as possible. The tapes will be available to listen to by PVAS members. The seminars ranged from water chemistry by a college professor to photography by a Canadian. Pat heard an excellent talk on Julidochromis by Sam DeFazio from the Chicago area who is raising all species of Julies. From what she said it was very informative. Dr. Charles Mendenhall spoke on Haplochromis but I did not hear it and Pat was unable to tape it. We do have tapes on Marines, fish diseases, North American darters, and catfishes. All the talks were good, but obviously some better than others. Unfortunately, for me, one of the poorer talks was on photography. I missed Mendenhall to hear it. Finishing the afternoon was a report on the status of the hobby by Dr. Rofen of Kordon Corp. It mainly dealt with the problems of attempted Federal regulation of the hobby, and what we, as hobbyists, can do about it.

Saturday night was a dinner, drawing and dance. The dinner was good, the dance band not so hot, and the raffle was interesting. Two smog air pumps were raffled as were many Mesco and Kordon supplies. All that I won was a trio of plume tail platies, a strain of platy that had been rescued by a man from Mobile, Ala. He was selling fish for \$25.00?trio, and I won them. When they spawn, I'll have platies for sale.

The auction was on Sunday. It began at 10 am on the dot and featured much organization, strange prices, and was deemed a success.

We left the auction after the last of our fish had been sold. Dr. Mendenhall had invited Kenny and Bill to stop by his house on the way home so we tagged along; me with my camera. After Kenny replaced his fuel pump and with the C.B. on, we drove to Mendenhall's house in Ft. Thomas, Ky., overlooking the Ohio River. The house is vintage Civil War, with low ceilings in the basement, but the fish don't mind, for here are over 100 tanks ranging up to over 450 gallons filled with cichlids, all mixed together. Africans and S. American's all got along fine and even spawned in the big tanks. Rare and expensive fish sat in solitary splendor. Two big Cyphotilapia frontosa regally swam about with various fish. Year old H. moori and H. rostratus lived together, just as in Lake Malawi. There was too much to see in the 45 minutes we were there, so I just took pictures. I sure hope they will turn out. Finally, satiated by fish, we left, ostensibly to drive to Pittsburgh to stay overnight with a college friend. Actually, due to the snow and icy roads of Ohio in February, we only made it to Zanesville, spent the night and drove home the next day.

Was it worth it? You bet it was. I can hardly wait 'till next year, or even the ACA convention in Miami in August. Fish conventions are a lot of fun and you learn something, too.

By: Michael W. Gos

(Reprinted from Looking Through the Glass, Greater Lafayette Aquarium Society, June 1974.)

Probably the first thing noticed by the new brackish water buff is the tremendous lack of information on the subject. I have been unable to find any information at all that is geared to the hobbyist, and only slight bits geared toward the scientist. The best way to learn about this forgotten (or perhaps, never discovered) branch of the hobby appears to be trial and error. Pieces of information can be gotten from books on specific breeds of the fish you wish to keep, and some general information can be found in oceanography texts, for those scientifically oriented.

The brackish water system combines the best features of both fresh and marine systems. From fresh water it has the breedability of the fish, the lower cost, and probably the best of all, live plants. Many brackish water fish are as colorful as saltwater fish.

Water

The first task in setting up the brackish tank is the tank itself and its water. I chose a 29 gallon tank to begin with since I bought all the fish very young. I began with straight tap water. Since our water has a pH of 7.6 and a hardness of 20 DH, it is useless for all but brackish and saltwater. It should be said that water of less hardness or alkalinity can be used since most gravels cause increases in pH and hardness anyway.

Once the water is obtained, I strongly suggest that you check the store you plan to purchase your fish from. It has been my experience that most stores keep brackish water fish in either fresh or salt water. As a result, you will have to acclimate them back to brackish gradually. I bought my fish before adding the salt.

If the fish were in saltwater, you must set up the tank for saltwater and then make periodic water changes with fresh water until you reach the desired salinity. For this, a hydrometer is necessary. Oceanographers define brackish as: in the vicinity of 10-20 parts salt per thousand.

If you were fortunate enough to have a dealer who keeps his fish in fresh water, the task is easier, and less expensive, since you won't need a hydrometer.

In my 29 gallon tank, I added 2 teaspoons of salt per day. The salt should be sea salts from your dealer, but coarse rock salt or non-iodized salt will do. Keep track of how much salt you are putting in. The goal is one to three teaspoons per gallon. Mollies, swordtails, and some cichlids do best at the lower end, and puffers, archerfish, and bumblebee gobies prefer the higher salinity. Once the salinity is correct, any evaporation can be corrected with fresh water since the salt is still in solution, but after siphoning, the replacement water should have the same salinity as the tank.

Plants

Most hardy plants will thrive in the brackish tank. I keep my tank at 2 teaspoons salt per gallon. In it I maintain temple plants, Val, Anacharis, hornwort, water sprite, hairgrass, and a banana plant. All do well in this salinity, as I'm sure do a lot of other plants that I haven't tried yet. Again, the plants should be in while the water is still fresh so they to can be acclimated slowly. One word of warning, mollies love Anacharis, so if you keep more than a pair, you can expect stripped branches.

Fishes

These fish are only a few that can be kept in a brackish tank. I'm listing only the ones that specifically belong in brackish water. Many fish can be adapted to any type of water, but since Nature is perfect they'll do best in their native habitats, or in this case, in an ecosystem as close to Nature as possible.

Mollies: One of the reasons aquarists (especially beginners) have problems with mollies is because they either don't know, or choose to ignore, the fact that mollies need brackish water. This is partly the fault of the pet shop owners for not telling the buyer, and partly of the buyer for not researching the fish beforehand.

Mollies seem susceptible to ich, fungus and mainly, shimmy. It has been my experience that shimmy can be cured by raising the water temperature to 90° F for 2 or 3 days. This temperature doesn't hurt any of the other fish, as I normally keep my tank at 80° F anyway.

Mollies need a partial vegetable diet. They love to pick at algae in the tank, as well as Anacharis. They also appreciate some cooked spinach as a treat. One word of warning though. Use only organically grown spinach since the biocides used on most vegetables are deadly to fish.

Mono or Malayan Angel: This fish, along with the red scat, is responsible for my interest in brackish water. Both are as beautiful and as colorful as saltwater fish. And their quick darting movements are truly magnificent. When buying this fish, I suggest getting them very young, less than one inch in diameter. The body should be pure white with two vertical black stripes on the front half, and a brilliant canary-yellow dorsal fin.

When monos are in distress, they blacken. This can be caused by fear, or illness. If he is black in the tank at the store, pass him by. If he is black when put in your tank, don't be concerned unless it lasts for more than a couple of hours.

The mono has a bad reputation for not eating. It is an undeserved one. My monos eat anything from vestigial winged Drosophila, through flake foods and frozen shrimp, to fingers in the tank . . . They'll even eat newly hatched brine shrimp. I'm concerned about their appetites when they reach adulthood. They'll eat me out of house and home. When full grown, they're about the size of an adult angelfish.

Puffer Fish: There are three species of this fish commonly kept in the brackish tank -- the green, the leopard, and the figure 8. I chose the figure 8 because of its markings and colorings. Mine was about 1/2" long when I got him, but they grow fast. This little fellow also has a tremendous appetite and after a meal is so bloated he can hardly move.

He would have to be considered a novelty. When removed from the water, he blows himself up like a porcupine fish. This is the only fish I've ever seen that doesn't use his tail for propulsion. All propulsion comes from movement of the dorsal and anal fins. He uses his tail just like the rudder on a boat. It is really a cute sight.

Scats: There are several types of scats available to the hobbyist. My favorite is the red scat. Its color rivals many saltwater fish. The green and brown varieties are less colorful, though. These fish are susceptible to ich, so check the fish carefully before you buy it. This fish is also very active and can uproot plants.

Archer Fish: This is another novelty fish whose excellent marksmanship is well known. There is only one problem. This fellow is rather playful and is fond of shooting passers-by just for the fun of it. As a result, the tank should be covered at all times.

While he is not a pretty fish, he is interesting enough to make up for his lack of color. Again, I'd suggest getting him when small. About 2 inches is a good size.

Bumble Bee Goby: This little fish is pretty hard to find. I've found a store in Lake County that carries them occasionally. His bright yellow and black stripes give him his name. He too is as colorful as a saltwater fish, but has a temper, and should be kept one to a tank.

There are other fish that need brackish water, including some cichlids, but these are the ones usually kept. There is, however, another group that can be kept. These are animals other than fish. These novelty animals include oysters, worms, and baby whales.

Some research should be done before buying any of these to determine the salinity required.

The best part of the brackish tank is cost. For 11¢ you can get a box of non-iodized salt and convert an ordinary set-up to brackish. For 11¢, you can't go wrong.

MEETING DATES

Board of Governors
April 6 8:00pm
To Be Announced

Cichlid Group
April 21 8:00pm
Susan & Mike Sprague
6708 N. 18th St.
Arlington, Va.
534-7487

Saltwater Group
To Be Announced

BROWSIN' THRU

By: Pat Tietjen, PVAS

Tank Topics - February 1976
Greater Akron Aquarium Society

Jewels - Alias Julidochromis, This Time Marlieri by Nancy White
An interesting account of Nancy's association with "Julies" - the four Julidochromis species. They are waiting for number 5 for additional challenges.

A Case of Wrong Identity by Rick Graham

For those interested in Oranda, this article mentions a few of the various types - some of the more popular ones. Rick advises that when looking for young Orandas, pick the one with the bluntest nose. These have a better chance at good head development.

The Secrets of Spawning Fish by Rick Johnson

Rick states this is the article that is finally going to reveal all the secrets that the experts use to get their fish to spawn. Read his article and learn some "secrets".

Aqua Antics - January 1976
Sarnia Aquarium Society

The Functions of Body Slime in Fishes by Bob Fenner
Reprinted from Tropical Breeze 1975, San Diego Trop. Fish Society

The slime serves three main functions for all fishes: 1) Osmo-regulation 2) External Protection 3) Reducing Turbulence.

Bob also states that "outside of the three 'biggies' many groups of fishes benefit in other ways from their slimes."

I believe you all will find this article of interest. I really enjoy this magazine. There are many other articles of interest in this issue - do read it.

Fin Features - February 1976
Central Ohio Aquarium Society

AXOLOTLS and Other Strangers by Frank Juodvalkis

For those interested in "oddballs", here's one for you. This article tells of Axolotls, mudpuppies, Congo eels, hellbenders, and sirens.

The Youngstown Aquarist - February 1976
Youngstown Area Tropical Fish Society

Marine Madness by Judy Cartwright, YATPS Staff Writer
On Feeding Marines

When you first get your fish home, chances are that he will eat only frozen brine shrimp. Many will soon take flake foods easily. But this isn't a complete diet, regardless of the manufacturers' claims. So begins Judy's article on the variety of foods for the marine aquarium. Of course, whatever is fed, it should be fed in moderation. Apparently, these creatures can overeat and do themselves in. Do read this one; it has good common sense in it.

What Does a Fish See? by Bill Kuhlman

First let us take into consideration the habitat of fishes in general--water. Water is not a good medium for light. Red rays are absorbed very rapidly within the upper layers and only the shorter blue and ultraviolet wave lengths penetrate very deeply at all. Thus, the eye of the fish must be relatively large in order to accept enough light to make vision possible.

So Bill Kuhlman's article goes. I recommend it as worthwhile reading. Very interesting.

Reprinted from Soundings (Narrows Aquarium Society, P.O. Box 9306, Tacoma, Wash. 98409)

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