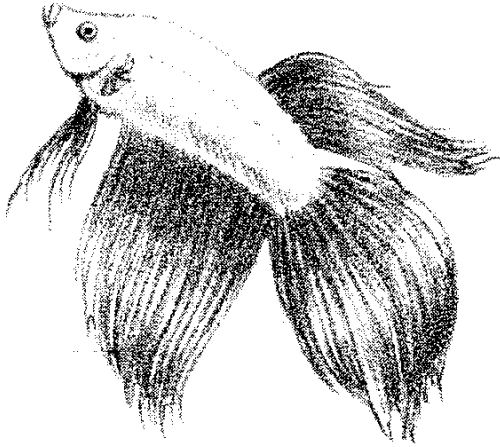


DELTA TALE

Official Publication of the Potomac Valley Aquarium Society

Volume 28 • Number 6

November/December 1997



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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 thru the dissemination of information and advice, and the promotion of good fellowship among the membership by organized activities and competitions.

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by Christopher F. Wright, PVAS.

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<http://www.erols.com/dsnell/pvas.htm>

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703/352-3365

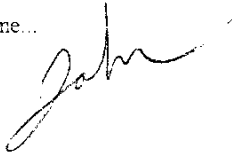
Frum the editor's desk

By the time you get this 1997 will be over. It was a pretty good year for PVAS. We had three very successful auctions, a great group of speakers at our workshop (which was, once again, free); an interesting and diverse selection of programs at our monthly meetings; and good participation in the bowl shows and BAP. A lot of credit for this goes to our outgoing officers. They deserve a big thank you from all of us.


Let's try to make 1998 even better. We have a number of new people that will be getting involved in running things and they will probably be bringing in a lot of new ideas and enthusiasm. Show them as much support as you can; try to participate in as many PVAS activities and programs as you can; and feel free to make suggestions or offer to help.


I am printing the PVAS BAP rules in this issue. I'd like to ask all of you to look these over and make comments on possible changes or revisions. I've had a few ideas of my own in mind but I'd like to get some input from others also. Be as specific, or general, as you want.

Until next time...

A handwritten signature in cursive script, appearing to read "John".

WHAT'S HAPPENING!

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

 Check out the PVAS Web site at <http://www.erols.com/dsnell/pvas.htm>

Jan. 12: PVAS Monthly Meeting. Program, bowl show, raffles, door prize, refreshments, mini-auction, and more.

Feb. 9: PVAS Monthly Meeting. All of the usual good stuff happening.

Feb. 27 - March 1: Raleigh Aquarium Society's "Carolina Aquarium Workshop XIV". Speakers, field trip, banquet, auction. More info elsewhere in this issue. This group always puts on a great weekend. I strongly recommend attending.

March 9: PVAS Monthly Meeting.

April 24 - 26: American Livebearer Association Convention, Akron, Ohio. Speakers (Derek Lambert, Shane Webb, plus more tba), banquet, auction, etc.

If you know of any "fishy" happenings let me know and they can be included here.

J.M.

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.

For Sale: Plastic fish bags. Standard thickness and 3 mil extra heavy. Several sizes of each will be available at PVAS monthly meetings and Auctions.

John Mangan, 12633 Oakwood Dr., Woodbridge, VA 22192.

The Raleigh Aquarium Society Presents:
Carolina Aquarium Workshop XIV

February 27-March 1, 1998

Garner, NC (Suburb of Raleigh)

Speakers, Field Trip, Banquet, Auction

Speakers Include:

Patrick McMillian

&

Gerald Pottern

North Carolina Animals & Plants for your Aquarium

Lee Finley

Catfish

Prof. Greg Lewbart

Fish Pharmaceuticals- What works & What don't

Al Castro

Characins, Barbs, Tetras & Rasboras

Marc Weiss

Discus

Rusty Wessel

Collecting Central American Cichlids

+More TBA

Registration Forms & More Info Available Mid-December

Schedule

Friday Feb 27

4PM- Field trip

7PM- Speakers

Saturday Feb 28

8AM-5PM- Speakers

7PM- Banquet

Sunday March 1

11AM- Auction

Gary Held

(919)387-0833

gaheld@macconnect.com

More Info:

Brian & Wendy Tramm

(919)387-5822

bktramm@intrex.net

Ken Fowlston

(919) 554-9074

PVAS Workshop Fall '97



Gene Moy, PVAS

The Potomac Valley Aquarium Society's (PVAS) fall workshop has been an annual weekend event with nationally known speakers, a banquet, and an auction. This year's event was on November 1st and 2nd.

The workshop speakers were: Jim Karanikas on rainbow fishes; our own John Mangan on livebearers; Dr. Wayne Leibel on South American Cichlids; and Rusty Wessel on collecting in Belize. The event was at the Howard Johnson's at Route 1 and the Beltway just south of Alexandria, VA.

Unfortunately, I did not make the talk on Rainbow fishes. These fish have recently gain tremendous popularity with new species coming available. I'm sure one of my other PVAS cohorts would fill you in.

Besides being the editor of Delta Tale, John Mangan has also been involved in the American Livebearer Association (ALA). John has been in the hobby for countless years and has personal experience on many of the livebearers. John's talk and slide show started by piquing the audience's curiosity by posing the question of what is a livebearer. Besides the so call big four of guppies, mollies, platies and swordtail; John provided his own experiences on goodeids, half beaks, pike livebearers, and others. John also show slides of a collecting trip to Mexico.

Dr. Wayne Leibel gave a very sped up and animated talk about South American cichlids. He is an American Cichlid Association (ACA) fellow. We partly owe his presence to Gene Aldridge, who met Wayne years ago. His approach in keeping fish was to keep it simple. Wayne admits to using box filters, sponge filters and the occasional power filter. He believes that we have a growing variety of fishes including cichlids. Dr. Leibel also encourage us to help maintain a particular species.

Rusty Wessel is also an ACA fellow. Rusty presented a talk on a collecting trip to Belize. Besides the slides of cichlids, Rusty showed what it was like to go on a collecting trip. Although I read Rusty's account in a recent Buntbarche Bulletin, it was a treat to hear the trip directly.

I hemmed and hawed about going to the dinner banquet or not. I finally decided to, and did not regret this one bit. Right before the dinner, there was a social, and I along with others had a chance to talk one on one to our guest

speakers. The dinner banquet on Saturday was catered affair with salad, roast beef, vegetables, rolls, and cake for desert. I don't think anyone went away hungry. Right after dinner, Wayne Leibel provided a talk about changes in the hobby from Victorian times to the present. Wayne talked about the improvements in technology, although he still prefers the simpler approach to fish keeping. He also spoke about the variety of fishes, especially cichlids. Again he encouraged us to maintain the species.

On Sunday, the auction of fish and supplies started a little late, but our auctioneers set the pace and sold everything by 6:30 PM. This auction the usual volume, but possible a little less variety. We had a lot of gold severums. I only bought five of my own to the auction. We even broke in a new auctioneer in Dave Snell, our PVAS treasurer. Alex Townsend and Rick McKay began to wear down a bit having to complete with the vocal group in the next room. The auctions always surprise me as to what sells and what doesn't. Among the items that seem to always sell well are angelfish, discus, corydoras catfishes, and plants. This auction was one of the more enjoyable for me, because I got to meet some of my fellow aquarists.

As usual, Dave Snell was extremely expedient and proficient in tabulating the result of the auction and sending out the checks. Dave presented some statistics on the items sold at the auction at the November monthly meeting.



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.

STANDINGS: Total for 1997.

Wayne Considine - 40

Dave Snell - 33

Rich Kahl - 13

Gary Hostetler - 12

Don Kinyon - 10

Gene Moy - 9

Alex Townsend - 7

Doug Worthing - 2

Ross Husse - 2

Everybody starts back at 0 in January so you all have an equal chance. All you have to do is participate.

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 hear 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.

Breeder's Award Program

BAP Checkers:

Annandale/Falls Church area: Jeff Burke (703) 941-3230
Montgomery County: Ray Hughes (301) 424- 3531
Montgomery County: Wayne Considine (301) 977-5973
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) 630-7674
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 445***
Don Kinyon 220**
John Mangan 155**
Gene Moy 85*
Lorne Williams 75*
Gerry Hoffman 10 +
Dave Snell 10

Recent activity: Don Kinyon receives 20 points for *Corydoras paleatus*; 10 points for Praecox Rainbows (Don says the secret to raising the fry is to start them out "green water"); and 10 points for *Fundulopanchax gardneri*. Gene Moy receives 10 points for *Cichlasoma (Archocentrus) septemfasciatum*.

I'd like to encourage more of you to participate in this program. You don't need to have lots of tanks or be an expert. Part of the fun of this hobby is learning and experiencing new things. If you need help or advice we have lots of members who would be very willing to share their knowledge and experience with you. Make it one of your New Year's Resolutions to get started with in this program. There is a complete set of rules, etc. on the following pages.

WATERWORKS®

Christopher Wright

This month, part two of "chemical" aspects of maintaining a healthy environment for your planted freshwater tanks i.e., water additives and treatments.

In the last installment of this series, I promised to undertake some "scientific" testing of pH adjusters. Yes, seekers, for quite a while, the Bat Cave was alive with the sounds of briskly bubbling buckets filled to the brim with chemicals—four of 'em, to be exact. I took them thru their paces...and well, I truly regret having to tell you this, but the news is not good.

Here's what I did. First off, this was all done very scientifically—every precaution was taken to ensure there was no cross contamination or contamination from outside sources. For example, I watered the yard for quite awhile to flush out my system, the five gallon buckets were rinsed extensively, one bucket was used to fill the other four by adding to the individual buckets one and a half gallon at a time, all initial water quality/pH tests were double or triple-checked until I was sure they were correct—you get the idea. Every effort was made to guarantee an even playing field. I even used brand new airstones and tubing. I wanted to be *real* sure that this whole thing was done properly.

The basic thrust of my experiment was to perform a side-by-side comparison of Seachem's Acid Buffer™ and Kent Marine's pH•CONTROL MINUS™. My REAL LIFE experiences with these products were discussed at length in the last article. I was also interested in how Sodium Biphosphate would perform in comparison with these much more refined (and expensive) commercial products, even though it did not fit my criteria of a pH adjuster that didn't add phosphates—it does. So, Sodium Biphosphate became the third bucket and the fourth was, of course, the CONTROL Bucket...this is science, after all: you gotta' have CONTROL. Anyhow, I just filled that guy up and gave him his own airstone. Note that Jungle's A.C.E.™ was used to dechlorinate all (for what it's worth), and Kent's pH•CONTROL MINUS was used in conjunction with their pH•STABLE™ (the STABLE is a buffer). This was necessary if one follows the directions. The pH•STABLE was only added for the initial startup.

Moving right along here, I simply adjusted the three "test subjects" with their respective chemicals until they showed the exact same reading of 6.8 (slightly acid). I used aeration in all buckets to eliminate CO₂ as a factor and to keep the chemistry mixed. Then I let them run for a couple days. This would give them a chance to "rebound" back to their original pH—or close it. I expected them to do this, and sure enough, they did. (See the table).

Then I let them bubble away for two weeks. Several periodic tests revealed that they stayed quite consistent. At the end of the two weeks, I adjusted the pH back down to 6.8. Notice how both products stayed extremely even with each other and stubbornly went back up into the alkaline zone. Approximately three weeks later, I adjusted them back down to 6.8 again. At that point, Seachem's Acid buffer instantly clouded the water when added, and it stayed consistently cloudy for two weeks. One day I looked and the milkiness was suddenly gone...go figure.

BOTTOM LINE: neither of the products delivered. And I was mildly shocked that the hardness values didn't go up and stay up (to speak of). I have read several times that it is very difficult to chemically adjust water more than .2 in either direction, and this little experiment would bear that out; you should lock this fact into your memory.

I do want you to keep in mind that I have had extremely limited success in keeping a couple tanks at or near neutral with these products—one tank stays near 6.4. But my mixed results are more of a function of the individual ecologies/contents/environments of the tanks. I think, in our wacky Washington water at least, that this whole process is a crap shoot, and keep in mind that there's always a chance of a pH crash.

At this point, I'm pretty fed up... I'm getting out of the chemical business and will now look into filtering over peat. **DON'T FORGET** the other two alternatives: reverse osmosis and deionization filters !!! These processes take most everything out of the water, and one then mixes the filtered water with tap water to gain a target pH. It works, and a lot of serious plant people use one of these techniques.

Seachem Acid Buffer™				Kent pH•Control Minus™			
Date	pH	GH	KH		pH	GH	KH
10/5	6.8	10	5		6.8	10	5
10/7	7.6				7.6		
10/12	7.6				7.6		
10/19	7.6	<i>pH adjusted back to 6.8</i>			7.6 (-)	<i>pH adjusted back to 6.8</i>	
10/21	7.4 (-)				7.4 (-)		
11/8	7.4 (-)	<i>pH adjusted back to 6.8</i>			7.4	<i>pH adjusted back to 6.8</i>	
11/9	7.4 (-)				7.4 (-)		
11/16	7.4	11	4		7.4	10	4

GH: General hardness
KH: Carbonate hardness

Note: by the end of the test, both buckets had lost approx. 1/2 gallon due to evaporation.

The table below shows the track records of the sodium biphosphate and "Control" buckets. I discontinued testing of these two before the other two, for the air pump driving these two buckets was just a bit over exuberant; I had heavy evaporation. By 11/8, the control had lost 1/2 gallon and the other had dropped a full gallon. The pH drop towards the end of the cycle is probably a reflection of this.

Notice that the control/unadjusted bucket did almost as well as the others. Which reminds me of a point made in the last article: most plants and fish are domestically raised and can get along all right at a pH of 7.6. Of course, any pH lower than that would be far better, and don't expect many fish to even *think* about breeding 'til you get that pH down to their native levels.

Please note: I'd had intentions of discussing our odd water and its odd buffering, this would have included a rather involved discussion of water chemistry in general and what is or is not in our local water. Well, I still don't feel qualified to do this, and to my way of thinking, it doesn't matter much now. The chemistry fix doesn't appear to be reliable, and it seems like one is going to get mixed results no matter what. But let me **EMPHATICALLY** state that I believe these chemicals would probably work in other water(s). To that end, this test would apply to Arlington, Virginia's water only, and PLEASE don't anyone think they're doing a public service and publish this in print—or on the Web. It would be doing an extreme injustice to the manufacturers. I would not approve, and neither would , I'm sure, the Potomac Valley Aquarium Society.

Sodium Biphosphate				Control (no additives)			
Date	pH	GH	KH		pH	GH	KH
10/5	6.8	10	6		7.8	10	6
10/7	7.6				7.6		
10/12	7.6				7.6		
10/19	7.6	<i>pH adjusted back to 6.8</i>			N/A		
10/21	7.2 (+)				N/A		
11/8	7.2 (-)				7.4		

GH: General hardness

KH: Carbonate hardness

I've been threatening for some time now to do a brief review of test kits. I'm not even going to waste our time talking about the bad ones. I'm just going to rave on about the ones that I've used and found consistently reliable. Note that there are several major players whose products I have not tried...remember? "If it ain't broke, don't fix it!" Why experiment when you've got something that works?

For me, Aquarium Pharmaceuticals RULES. I use their liquid pH, ammonia and nitrite kits. For phosphates and nitrates, I use their Dry Tab test kits. The great thing about the Dry Tab series is that they last forever. They have expiration dates on them; I've got a phosphate refill that's good to March 2000! Of note: a PVAS member remarked to me that the hardness of the tablets put him off. They are quite hard and are supposed to be. It does take awhile to get those little suckers completely dissolved, but just think of the workout you're getting! (As if lifting all those buckets during water changes wasn't enough!!!!?)

Tetra also makes a nice pH test kit, and I find their square-cornered vials easier to pour the excess out of when "evening up," they are a bit pricey, though. I use Tetra's Hardness test kit exclusively.

For CO₂, I've only tried one kit, and loved it. LaMotte produces it, and it's fast!

Now, if I may, I need some assistance. Does anybody know of a good, reliable, affordable iron test kit? I've tried two: one was useless, the other started out great but then went bad (?), I think. HELP!!!

In closing, let me say that it may be a few issues before another "WaterWorks" appears, if there are any at all. I've enjoyed writing them, but I don't seem to have much spare time, and quite frankly, I've received almost no feedback from anyone... I'm assuming there's just not that much interest out there.

Good luck.

Every "WaterWorks" article will contain this little (little?) "disclaimer." It's important that it be understood that, though I have done extensive research, I am not offering myself up as an "expert" in this field. Unless otherwise noted, any information is thought to be that which the MAJORITY of aquarists believe to be true. I have found that for every person who says, "Do it this way," there is someone who comes along and says, "I've always done it the other way." I've encountered this phenomenon at every step--some memorable "aquatic contradictions" will be noted throughout the series. A few ideas and suggestions will be from my own experience. If you read between the lines, they'll be easy to spot.

It should also be duly noted that I'm not going to get too technical. I'm keeping it simple on purpose. If you want to get to the real nitty gritty, hop on the web--or buy some books.

Furthermore, in order to ensure that skeptics, cynics (and attorneys) across the land sleep better at night, let me emphatically state that I have absolutely no connection whatsoever with any manufacturer, distributor, et al. If I appear to have any biases (for or against), it is because I tried, or you tried, a product, and we either liked it or found it to be less than satisfactory. These articles are simply one man's search for the truth (and algae-free tanks)...proceed with caution; do your research; your results may vary; shake before using; take two aspirin and call me in the morning; and finally, and even more emphatically, "IF IT AIN'T BROKE, DON'T FIX IT!!!"

W A T E R W O R K S T H R E E

POTOMAC VALLEY AQUARIUM SOCIETY BREEDER'S AWARD PROGRAM

(Revised May, 1995)

The Potomac Valley Aquarium Society Breeder's Award Program (BAP) was established to encourage members to breed a broader variety of fishes and to share with others the knowledge they have gained by doing so. The program is open to all members in good standing (except corresponding members) of the Potomac Valley Aquarium Society. There are no time limits, you may proceed at your own pace. Awards are given as detailed in the rules below.

Purposes:

The purposes of the program are:

1. To promote the keeping and breeding of fishes.
2. To recognize outstanding achievement in the breeding of fishes.
3. To encourage research into the spawning of the more difficult species of fishes.
4. To make accounts of successful spawning techniques available through the *Delta Tale* and through association at the general meetings.

Program Eligibility:

All members of PVAS in good standing, except corresponding members, are eligible to participate in the program.

The BAP Committee:

The BAP Committee shall consist of five members. The Chairman shall be appointed by the President of PVAS. The remaining four members shall be appointed by the Chairman, with the consent of the Board of Governors. The President of PVAS is *ex officio* a member of the committee.

Function and Authority of the BAP Committee:

The committee shall oversee and enforce all of the rules and regulations governing the BAP. Among these are verifying and awarding points to qualifying members, keeping proper records, making appropriate awards to qualified members, and reviewing the rules and regulations at least once each year for possible improvements.

The BAP Checkers:

The BAP Checkers are appointed by the BAP Chairman and are empowered to verify all spawnings. If you have a spawning which needs to be verified, contact the checker nearest to you and arrange for the necessary appointment to check the fish. If you are unable to contact your nearest checker contact one of the other checkers or a BAP Committee member. BAP Committee members are empowered to verify all spawnings. The forms

which must be completed to report a spawning may be obtained from a checker or a BAP Committee member.

The Program:

The program is composed of five levels of achievement. These levels and their requirements are as follows:

1. **Breeders Award**- Attainment of 50 breeding points from any of the categories.
2. **Intermediate Breeders Award**- Attainment of Breeders Award and a total of 150 breeding points from any of the categories.
3. **Advanced Breeders Award**- Attainment of Intermediate Breeders status and a total of 300 breeding points, including at least 100 points from categories 2 or 3. Fishes from category 7 worth over 15 points may also be included.
4. **Master Breeders Award**- Attainment of Advanced Breeders status and a total of 500 breeding points, including at least three species from the Difficult and Target lists.
5. **Grand Master Breeder**- Attainment of Master Breeders status plus spawning of at least one additional species on the target list over and above those spawned for Master Breeders status.

Acknowledgments:

Attainment of any of the five levels will be recognized in the *Delta Tale* and at the next general meeting. Awards are presented each December at the annual Christmas meeting.

Requirements:

1. Breeding points are awarded upon proof of spawning in any of the categories. Points may be gained only once for each species. Color morphs are not eligible for additional points. The one exception is albino. In general, albino forms are thought to presents some additional difficulty in regards to sensitivity and raising of fry.
2. Spawning is defined as: for a 10 point fish, raising at least 10 fry to 30 days of age after hatch/birth, or release of fry in the case of mouthbrooders. For all higher point fishes, raising at least 10 fry to 60 days of age.
3. Breeding is defined as the physical act of mating. A mating of killifish is considered to be the total quantity of eggs deposited and fertilized during a one week period, and all of the fry hatched from the one week breeding are counted as part of one brood for the purposes of satisfying the BAP requirements.
4. Spawns must be the product of eggs fertilized through breeding a pair of fish in one's own tanks, and not the result of obtaining eggs or gravid fish from another breeder and then hatching the spawn.
5. Any fish not included, or not adequately covered, in the existing categories may be assigned points by the BAP Committee upon written request. This request must be made prior to the awarding of points.
6. Following a successful spawning, it is the breeder's responsibility to assure that his points have been properly verified and reported. A spawning report must be submitted in order to receive points. A copy of the Breeder's Award Form, that is to be used for this purpose, is attached. This may be photocopied, or additional forms may be obtained from any checker or the BAP Chairman.

7. The requirement for 10 fry may be waived by the BAP Committee when a fish is known to generally produce less than that number in an average spawn. Requests for such a waiver must be made to the BAP Committee in writing prior to awarding of points.

8. There is no intent under this program to require the tearing down of a tank to look for eggs. The sight of free swimming fry is enough to trigger the start of the reporting process. Questions in this area should be referred to a BAP Committee member for resolution.

Proof of spawning:

1. The first verification/inspection for all categories of breeding must be performed within 10 days of hatching/birth. For 10 point fishes, this first notification may be made by telephone to a checker, or any other member of PVAS in good standing, who can then verify the call by signing the BAP Form at the next general meeting. All 15 and higher point fishes must be verified and inspected within 10 days by a BAP Checker or Committee Member.

2. The second verification and inspection for all categories must be made by a BAP Checker or Committee Member. Depending on the category, the fry must be at least 30 or 60 days old, and in the correct number (at least 10 unless approved otherwise), at the time of the inspection. The fry may be brought to a general meeting for verification.

3. For all 15 point and higher category spawnings a summary of the spawning procedure must be submitted. This may be in writing, for publication in *Delta Tale*, or as an oral presentation at a general meeting. This written or oral report must be submitted within 4 months of submission of the BAP Form to receive credit for the spawn.

4. For all categories a Breeder's Award Report Form must be submitted to the BAP Committee. Any spawning may be investigated at any time by the BAP Committee.

5. Any BAP Committee Member or Checker wishing to claim points must do so in the prescribed manner. BAP Committee Members or Checkers may not verify their own spawnings.

Changes and Modifications to 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 changes to the rules and regulations:

1. A date for the modification or change will be 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 3 months before the effective date of the change.

3. Requests for category changes must be submitted to the Committee in writing. The requester will be notified in writing as to the action taken.

4. All appeals from the rulings of the BAP Committee must be made in writing to the PVAS Board of Governors for final decision.

5. No reduction in points is retroactive. However, when a change results in upgrading points, award of the additional points to the breeder depends upon meeting any and all of the additional requirements imposed upon the new category.

CATEGORIES

Category 1- 10 point fishes:

Any species of livebearing fish, except as noted elsewhere.

Any species of cichlid, except as noted elsewhere.

Any species of Cyprinid (barbs, danios, white clouds, etc.), except as noted elsewhere.

Any species of rainbowfish, except as noted elsewhere.

Any species of plant/mop spawning killifish, except as noted elsewhere.

Category 2- 15 point fishes:

Any *Gambusia* species, except as noted elsewhere.

Brachyrhaphis rhabdophora.

Heterandria bimaculata.

Any species of dwarf cichlid (under 4" at maturity), except as noted elsewhere.

Any endemic Rift-lake substrate spawning cichlid, except as noted elsewhere.

Any species of *Geophagus*, except as noted elsewhere.

Angelfish (freshwater).

Cyphotilapia frontosa.

Goldfish & Koi.

Rainbowfishes of the genus *Glossogobius*.

Bottom spawning African Killifish (see appendix I).

Any species of Anabantoid, except as noted elsewhere.

Any species of goby, except as noted elsewhere.

Badis badis.

Elassoma evergladei.

Category 3- 20 point fishes:

New World large cichlids, except as noted elsewhere.

Chromides (*Eitropus*).

Any species of catfish, except as noted elsewhere.

Category 4- 25 point fishes:

Bottom spawning South American killifish (see appendix I).

Any species of Characin, except as noted elsewhere.

Category 5- Difficult Species, 30 points. The following are species whose spawnings have been recorded, but are still rare or considered difficult:

Anableps species.

Belonesox belizanus.

Any species of discus (*Symphysodon*).

Cichlasoma severum.

Crenicara filamentosa.

Geophagus jurupari.

kissing gourami (*Helostoma*).

chocolate gourami (*Sphaerichthys ophromenoides*).

Category 5 cont.

Neon tetra.

Cardinal tetra.

Any species of silver dollar or piranha (*Serrasalmus*, *Rooseveltiella*, *Pygocentrus*, *Metynnis*, *Mylopus*, etc.).

Any species of *Rashora*.

Any species of puffer (Tetraodontidae).

Any species of whiptail cat (*Loricaria*).

Any species of bristle-nose cat (*Ancistrus*).

African butterfly (*Pantodon buchholzi*).

Any species of leaffish (*Monocirrhus*, *Polycentopsis*, *Polycentrus*, etc.).

Any species of halfbeak (Hemiramphidae).

Any species of stickleback (Gasterosteidae).

Spotted headstander (*Chilodus punctatus*).

Non-designated species- A difficult species of the breeders choice may be substituted for one of the above. In order to qualify a species for this, the breeder must submit a written request to the BAP Committee prior to the awarding of points. A complete explanation of the request is required. This sub-category may be used more than once to qualify for Master Breeder status.

Category 6- Target Species, 50 points. The following are species whose spawning has not, or very rarely, been reported by the home aquarist:

Any species of loach.

Any species of Loricariidae, except as noted elsewhere.

Glass Catfish.

Any species of *Scatophagus*.

Any species of headstander (Anostomidae), except as noted elsewhere.

Any species of fish naturally found exclusively in saltwater, except as noted elsewhere.

Any species of hatchetfish (Gasteropelecidae).

Any species of glassfish (Centropomidae).

Non-designated species- A target species of the breeders choice. In order to qualify a species for this, the breeder must submit a written request prior to awarding of points. A complete explanation of the request is required. This sub-category may be used more than once to qualify for Master Breeder or Grand Master Breeder Status.

Category 7- Special Assignment:

7-A- 10 points:

Less than 10 fry of the following will be accepted:

Heterandria formosa.

Poecilia latipinctata.

7-B- 15 points:

Less than 10 fry of the following will be accepted:

Cyprichromis nigripinnis.

Lamprologus meeli.

Appendix I:

The three different categories into which killifish are divided in this program reflect the varying degrees of difficulty found in spawning these fishes.

Category 1 covers all of the plant spawners. They spawn readily in mops or in a planted tank and the eggs hatch in about two weeks. In general the fry are not difficult to raise.

Category 2 covers the African bottom-spawners. While they are usually spawned over a peat or fine sand bottom, many of them will spawn on bottom mops. The usual method of hatching involves storing the eggs in peat moss for a period of several weeks or months during which time the eggs may be lost to fungus or bacteria. It is this additional step that gives the added point value to these fishes.

Category 4 covers the South American bottom-spawners: *Cynolebias*, *Pteolebias*, *Austrofundulus*, *Rachovia*, *Simpsonichthys*, etc. These are the true "ploughers" who completely bury themselves in the spawning medium (usually peat) before the eggs are released. They have been found to be more difficult to maintain and to spawn than the African bottom-spawners and the fry are generally more difficult to raise.

Appendix II:

The names, both common and scientific, used above are to be considered as an aid to identification and placement of species only. A fish may be known under a number of different common names, and scientific names may change. If there is any doubt about placement or identification of a species consult the BAP Committee for assistance.

Date:

The above version of the PVAS BAP Rules becomes effective as of Sept. 1, 1995.

BAP Committee Members:

John Mangan (Chairman) Gene Moy
Gerry Hoffman
Gene Aldridge

BAP Checkers:

Occoquan, and surrounding area: John Mangan (703) 491-4980.
Oakton/Vienna area: Rick McKay (703) 281-1647.
Springfield: Pete Thrift (703) 971-0594.
Montgomery County: Ray Hughes (301) 424-3531
Annandale/Falls Church area: Jeff Burke (703) 941- 3230
Mt. Vernon/ Olde Town area: Gene Moy (703) 765-0865

Breeder's Award Report Form

Name: _____, Phone _____

Name of fish: common _____
scientific _____

Category # _____, Points _____

Inspection Dates: 1. _____, Inspected by _____

2. _____, Inspected by _____

Date of spawning _____

Date of free swimming _____

to be filled out by BAP Chairman

spawning report or oral presentation submitted _____, date _____

Fill out as much of the following as possible/applicable for this spawning.

Conditioning of breeders: Age _____, Size _____

Tank Size _____, Temp. _____

Foods _____

Breeding: Tank Size _____

pH _____, Hardness _____, Temp. _____

of males _____, # of females _____

Care of eggs: Approx. # _____, Size _____, Color _____

Incubation time _____, Fungicide added _____

Parental or Artificial Incubation _____

Care of fry: Tank Size _____, Temp. _____

Foods _____

Approx. # at hatching _____, 30/60 days _____

Approx. size at hatching _____, 30/60 days _____

Please fill out form in duplicate. Retain a copy for your records.

Below give as much information as possible on procedure; and any other general information such as time between spawnings, filters, substrate, plants, light, salt, etc. that may be helpful in spawning of this species. If additional space is needed use other side.

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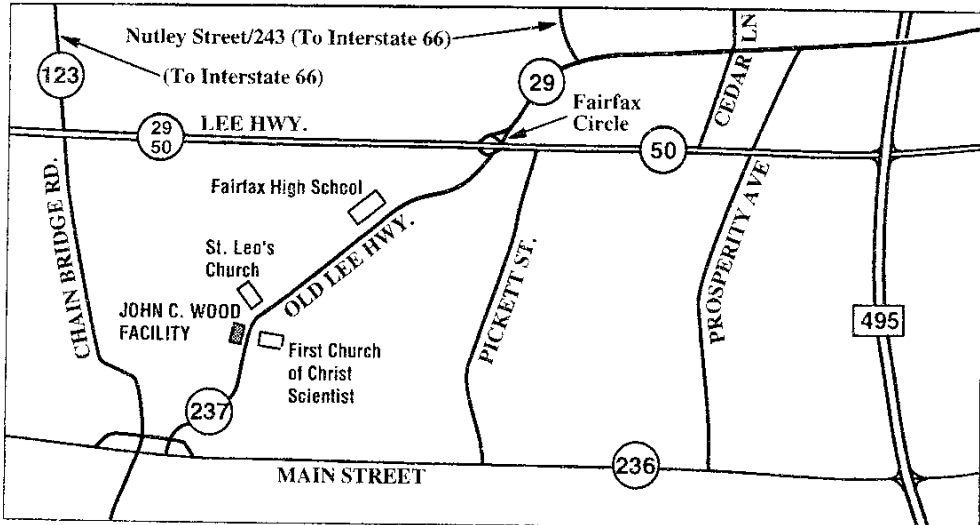
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David J Snell
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Centreville, VA 22020



MEETINGS are held at the John C. Wood Facility, 3730 Old Lee Highway (Route 237), Fairfax City, Virginia. We meet in room 6, which is located behind the police station. Doors open at 7:30 and meetings start at 8:00—**EVERYONE IS WELCOME!**