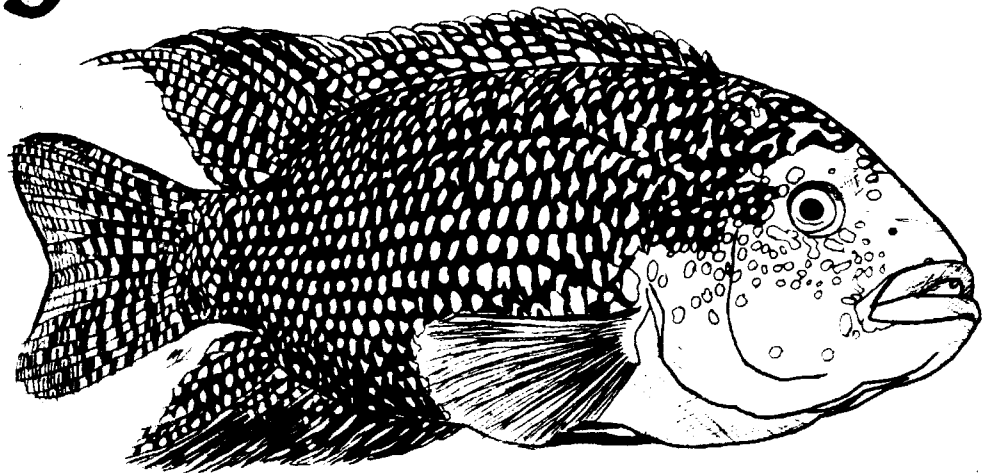


# DELTA TALE

OFFICIAL PUBLICATION OF P.V.A.S.

MAY 1976

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Volume 7

Issue 5

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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Editor: Ruth Brewer

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This month's cover is a tracing of Cichlasoma biocellatum by Mike Sprague from a slide by Ruth Brewer of a fish by the Storys.

MINUTES OF THE BOARD OF GOVERNORS MEETING

The Board of Governors met April 6 at the home of Ruth Brewer with 11 members present, plus our old friend, Gene Sergent.

Gene Aldridge reported \$606.70 in the bank. Dave McInturff said that on 840 tickets handed out for the special raffle, he had received \$160. It was decided to remind people to turn in their money now for tickets sold to date.

The next order of business was the storage of the show equipment. Pete Tietjen said he would have some figures at the general meeting but he remembered the prices to be expensive. Craig Tinggen reported that he had the paint for fixing the racks and Carl Hardy said he would recruit people at the general meeting to help in the fixing and painting of the racks.

The problem of getting the posters and flyers printed was discussed at length and decided that a lack of communication was the main problem. It will cost us approximately \$100 for the paper with our regular printer generously footing the printing cost of the flyers himself.

The trophies for the show were \$332.22. It was proposed that we find out the details on the trophies given at the recent Denis J. O'Connell fish show, plus other methods to try to keep down future trophy expense.

Sandwiches will be available for the judges on the Saturday of the show. Cokes and sandwiches will also be made ahead of time for sale to the general public to see if this is a money maker.

Many different methods of running the auction were discussed and nothing definite decided. Dave McInturff is supposed to work with Carl Hardy on getting donations for our regular raffle from the area fish stores.

The meeting adjourned at 9:30.

Respectfully submitted,  
Susan P. Sprague, Recdg Secy

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BOWL SHOW MAY 10, 1976

Guppies: Blue, Black, AOC  
Cichlids: Angelfish/Discus, Tilapia, Open  
Other: Sharks & Loaches, Catfish-American, Open

Program: "Fish Photography"  
by Gene Aldridge and Pete Tietjen

MEETING DATES

<u>Board of Governors</u>	<u>Cichlid Group</u>
Dave & Jan McInturff 8:00 PM	No Cichlid meeting
3463 Washington Dr.	because of show
Falls Church, VA	
578-0577	
May 4, 1976	

## HOW WE WIN AT FISH SHOWS

(Written by Nancy White, with Consultant, Jim White, who does all the work. Reprinted from Tank Topics, Greater Akron Aquarium Society, Akron, Ohio, January, 1976.)

Pick up any stack of society bulletins and in some, if not all, there will be mentions, articles, maybe even complete issues on a fish show. There is always one coming up, in the process, or just over. People who don't show their fish might argue that it isn't the most important activity of a club but all things added up as far as time and resources go certainly MARK the show as important.

One thing on the topic of whether or not to show your fish. The comment has been made to us, "I would not subject my fish to the rigors of showing them." To this I can only say hogwash! If done properly, the "rigors" are little more than an everyday tank transfer would be at home. Since we have had a large pair (male 7", female 5 1/2") of *H. euchilus* spawn in a bare 10 gallon DIVIDED tank at a show, had a honey gourami build a bubblenest in a bare 2 quart bowl at a show, have seen angels, scissortail rasboras, various barbs and tetras spawn at shows, have heard of even a pair of discus that spawned in a bare tank at a show; knowing this I just can't get too excited about the "rigors" the fish go through. Granted, I've seen some fish suffering, even dying or dead at shows, but my guess is these fish probably didn't fare too well at home either, OR the owner didn't take the necessary steps in moving them to the show. The fish that WIN have GOOD CARE written all over them, which leads to . . . .

Rule #1. Good Continuous Care At Home. This may seem elementary, but you'd be surprised how many people expect fish to win that have been fed when the mood strikes them or given a clean tank only when company notices the stench. I've read the recommendation that you should condition fish for show 2 or 3 weeks ahead of time, but if you do this and neglect them the rest of the year, just forget the whole thing.

Other than very old age, a nicked fin or scratch here and there, or soon after spawning, your adult fish should be in condition to show AT ALL TIMES. If they aren't, you are underfeeding, undercleaning, underlighting, overcrowding, combining incompatible fish, or any combination of these. Notice I left out overfeeding. That's because we feel this is nearly impossible, IF you are willing to do the necessary maintenance that comes with keeping fish well fed. I do a slow burn when I hear someone say to "keep fish on the hungry side." How would YOU like to be kept "on the hungry side"?

So much for home maintenance. Let's assume your fish are well fed, your water is clean and a survey of your tanks reveals many show quality adult fish. The next step is getting them to the show in the same condition, which leads to . . . .

Rule #2. Always Use ALL Of Your Own Water. If you don't have room to haul all the water for the fish you want to show, don't show that many fish.

Rule #3. Catch and Transport Carefully. Example: Entry is in a 29 gallon tank. Fill plastic bag, net out fish, put in bag and haul to show. Nearly fill 5 gallon show tank, either net fish out of bag or dump it into tank. That's one way and very commonly done. But we want to win. So...go back home and start over. Entry #1 is in 29 gallon tank. Put 5 gallon show tank carefully down in 29 and let #1 swim in. As you are lifting 5 out, now containing #1, let all but enough water to cover the fish flow over the side. (Makes it MUCH easier to lift out!) Now take siphon hose with floss over the end and finish filling 5 gallon tank to 3/4 or so full. Cover the top and take to the show. Not only has the fish not been touched, there is no quick temperature difference that occurs when the fish is hauled separately in a small amount of water with the bulk being transported in 5 gallon containers.

This is just one example. Put simply, you are striving to keep the fish ALWAYS surrounded with water, as much water as possible, and transferring him as little as possible. The mechanics of doing this are a matter of choice and depend on the species being shown.

So far so good. You have your fish at the show in their containers, in your water and have secured the top and hooked up the air. Now as late as possible before judging, move into . . . .

Rule #4. Clean and Polish. If you have a Diatom, now is the time to use it. If not, a Dynaflo will do for last minute cleanup, it just takes longer. Next, clean and polish the glass; outside front without fail, back and ends if you can get to them.

Now relax, do some fish shopping, gab with fellow entrants - anything to pass the hours of judging. Finally the time arrives to reveal the winners. What a thrill to see a sticker or dot on your tank that wasn't there before judging!

If you have shown fish and not been on the winning side often enough to suit you, there are a few more things that might be considered.

Be very objective when choosing fish to show. Just because you love it, doesn't make it perfect. That bent fin you hardly notice on your pet cannot be overlooked by the judge. In fact, it's the first thing he'll see. A show fish should represent as nearly as possible the ultimate of its species, and so, when buying mature fish, raising them, or choosing from your tanks, start with perfect fish. By this I mean straight spine, normal (for the species) head, mouth, & eyes, no bent rays in ANY fins, and no out of place markings. If you buy immature fish to raise for show it is doubly important that you examine closely. A slight defect at 1" looks like a gross deformity at 4". It gets worse instead of better. Minor scratches, nicked fins and missing scales will heal, but not at a weekend show. Heal first, then show.

Know the ultimate size of the fish. No, that's wrong. Know what book is being used as a reference for the show and what that book SAYS is

the ultimate size. The few standard reference books differ on some species and you should know what book is being used and how sizes given compare with your entries.

Temperature. Excluding discus and a few others, most people maintain tanks in the mid to upper 70's at home. (we do) But most show sites are around 70°, so unless you intend to put a heater on each entry (Please! Not on bowls!) start lowering the temperature at home about a week before the show and have this accomplished in 3 or 4 days. This gives them a few days at home in normal surroundings to get used to the lower temperature. It won't usually hurt them if you DON'T do this, but it gives them one less adjustment to make at the show if you do.

Now for a few particulars.

Veil Angels = Tall tanks. The two just naturally go together, both in raising them and showing. An angel is not a shark. It doesn't LIKE to swim with its dorsal out of the water. If your tank is too short while the fish are growing up, the dorsals will become bent. In showing the veils, which often have a vertical span of 12" or more, use a tank tall enough to give them room to strut plus get them off the bottom. Those long thin filaments will pick up the slightest amount of debris from the bottom and once on the filaments, it looks like fungus even though it isn't. Lacking time to examine it under a microscope, the judge must ASSUME it's fungus and pass it by.

Livebearers in general; swords in particular. The normal life span is 1 1/2 - 2 years. In that length of time, given AVERAGE feeding and care, they will usually reach a good size. But by that time they are also OLD and look it. Back becomes bent, tail droops, mouth doesn't shut quite tight and swimming becomes listless. The "trick" is to feed and care for them so well that ultimate size is reached while they are still under one year old. Then you have a beautiful big healthy YOUNG specimen that thinks the judge is going to feed him. He LIKES the judge and the feeling becomes mutual.

Gouramis. The natural drive of these fish (like most) is to reproduce. But gouramis can't just pick a leaf or rock or a cave to spawn in. They need a calm surface to build their nest. For about a month before showtime, keep them in a tank where the surface is moving too much for nest building. When you put them in a bowl or tank for show, don't add air. They don't need it, and the calm surface is just what the male has been dreaming of. He colors up, blows a few bubbles and winks at the passing judge who makes a note of it all.

Rare Fish. If you have identified it, write the scientific name on your entry form. Then (assuming it is in show condition) if the judge isn't sure of the identity, he can ask that it be checked. With great relief, the show committee finds the necessary info on your form and your fish is then properly judged.

Of course, if identity is unknown by you AND all concerned and there is no reference of it (it happens) you can only hope the judges are experienced enough to recognize maturity in fish, for most mature

fish do have a "finished" look about them that juveniles usually lack. This is seen in a well developed body, often noticeable breeding tubes, full finnage, etc., and someone who has seen and studied fish for a decent length of time can make a good educated guess on maturity. If you know the judges fall in this category (and most do) don't be afraid to enter that mystery fish. Mark on your entry form, Not Identified in Reference. Then, assuming its condition is good enough to place it in contention, the judge can draw on his experience with fish to determine the unknown factor - maturity. While there is often a vast difference in maturity and ultimate size (i.e., a fish may spawn [maturity] long before it reaches maximum growth) size, after all, is just one of many factors in judging fish though admittedly an important one.

You should also be aware that some judges will not even consider a fish they don't know. While I feel this is wrong, it is still the decision of the one judging and you might want to find out his/their position on the subject before entering your prized unknown.

Then too, showing isn't necessarily always to win. We've entered fish, not really expecting them to win, but hoping someone could identify them. It goes without saying that more interested people would see the fish in one day at a show than in our home in a year.

Small Fish in General. For some reason, it has been our experience that the livebearers, tetras, small barbs, small gouramis, dwarf cichlids, etc., show much better in a drum bowl, so when possible, that is our choice for a container. The rounded sides seem to present a challenge to the fish and they don't really like resting on the small round bottom. Since the judge likes to see the fish swimming to judge it, a bowl increases this likelihood. It's pretty hard to find a corner for hiding in a bowl!

Everyone who enters shows has a few "tricks" up their sleeves that they hope will make the difference. They don't always work. We have entered 19 shows since our first in Sept. '73 and in only one had very entry place. If asked to give the single most important rule for winning at shows, we'd answer without hesitating, RULE #1 - Good Continuous Care At Home. Without this, a train load of "tricks" will not make you a consistent winner. And if you are following this rule at home, your rewards are much more than trophies and ribbons. You'll have beautiful healthy fry if you're a mind to, little or no disease to contend with, and fish that live long enough to become really good friends rather than short-term visitors.

I don't mean to imply that losers neglect their fish and winners are perfect aquarists. The truth lies somewhere in a grey area between the two, along with luck, good and bad judging, preferences, number of entries, (Sure! A winner in a class of 5 can quickly become a loser in a class of 20) and a host of other variables that are usually unpredictable. But for the things you CAN predict and control, DO SO! Showing fish is too darn much work to mess up by ignoring fundamentals of good fish-keeping. Combine the two, throw in a

dash of show-know-how and prepare a place for the trophies and ribbons . . . .

Ah yes! Trophies and ribbons. IS that the ultimate goal in entering shows? Probably. But it shouldn't be touted as the ONLY goal. How often have you read in club publications, "Support your show! Enter those beautiful fish! You just might win a trophy or ribbon!" Some go on to add that it's fun even if you don't win (which it is) and that you meet a great bunch of fellow hobbyists (which you do). But I seldom see emphasized the fantastic amount of knowledge that can be gained from ENTERING shows.

For comparison, think of a reference book you may have. When you acquired the book, you probably studied only the fish you owned at the time. Months pass, maybe years, and you try new species of fish. Out comes the book with each new acquisition and the book ALSO becomes new each time, for you didn't take much notice of species listed until you got them.

The same goes for entering shows. If you visit a show and have no entries, most fish displayed become a blur in your mind in a few short weeks. But the classes you ENTER (i.e., the ones you're INTERESTED in) are scrutinized both before and after judging. Win or lose, you examine CLOSELY ALL other entries in the class, and believe it or not, you REMEMBER them! You learn new species, what to shoot for or how close your fish are to ultimate size, color and finnage. You see what damage careless handling can do to certain species. Your knowledge gained and RETAINED is in direct proportion to the number of classes you enter. And there is no substitute for having your fish right there at the show for on the spot comparison.

I place no stock in the oft heard comment, "I've got some at home TWICE that size!" The comment isn't really a lie, it's just a natural, perhaps unavoidable illusion, governed by our human inability to compare two or more things separated by time, distance and affection. We learned 18 shows ago that double sized fish at home mysteriously shrink when placed beside their competition. But by leaving them at home, you deny yourself the DEFINITE knowledge that can come only from direct comparison, which leaves nothing to our often inaccurate memories.

If you are striving to raise fish that will approach the ultimate of their kind (aren't we all?) whether for breeding, bragging, beauty, show, sell, or just pure satisfaction, ENTERING fish shows is probably the best way of learning what "ultimate" is, and where you REALLY stand on the ladder toward it. You can't set this knowledge on a shelf or hang it on a wall, but neither will it get dusty or tarnish. You've got it for good, to improve and build on, making you a winner regardless. Really, you can't lose.

There are so many more things that could be covered on showing fish: The vast amount of knowledge gained BEFORE entering (ultimate size, family, species, where from); Know the rules, almost by heart; Complaints on judging - don't! The list could go on and on, and I'd



soon be into next month's bulletin. I just hope this lengthy article encourages some to enter shows, for it's an aspect of the hobby we feel is truly fantastic.

We are often asked what percentage of wins we have. In awards, it's between 60 & 70%. In fact, it's 100%.

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THE BISHOP DENIS J. O'CONNELL  
AQUARIUM SOCIETY SPRING SHOW

This year's show was the second for the O'Connell Club and it was obvious that they learned a lot from last year's experience. Things ran smoothly from registration, through judging, viewing by the public, the awards and the auction. What a great place to hold a show!

PVAS members were not as well represented this year as last due to the fact that several of them had to be out of town, working, or for some other reason couldn't make it this year. Despite this, our club members came home with quite a few ribbons and trophies: Dave McInturff led the list with 6 firsts, 2 seconds and 3 "best of class" trophies. Other winners were Jim Long, Mike Young (who found time to set up the "best of class" winner for set tanks in the midst of all his duties in arranging the show), Ruth Brewer and Mike Sprague.

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THE PVAS SPRING SHOW

As the 1976 O'Connell show fades into history -- the PVAS Annual Spring Show looms on the horizon. Now's the time to roll up the shirt sleeves, or open the checkbook, or maybe both! Carl Hardy needs help in getting the equipment to the Coke plant and set up and Gene Aldridge needs trophy donations (even a partial trophy donation would be gratefully received). In between the set-up and the auction, help is needed for all sorts of jobs -- registration, benching, policing, fish-sitting, and many others. After the awards and the auction, there's still the break-down and clean up. If you haven't already been asked for help don't be afraid to volunteer. Carl's number is 765-1940. He'll be happy to hear from you.

DON'T FORGET

PVAS 1976 SPRING FISH SHOW

May 22 & 23

Coca-Cola Plant  
5401 Seminary Road, Alexandria

BREEDING THE LIKOMA ISLAND ELONGATUS  
(pH 7.2 DH 483.3)

By: Walt Lilley, PVAS

I selected a pair of *Elongatus* as my first pair of African cichlids because of their beautiful coloring. The male has blue bands over a light background and the female (young) is a yellowish tan. I understand the female eventually turns to a blue color as she ages although I have never seen it. It is almost embarrassing to write an article on "Breeding the *Elongatus*" because there is really very little to do besides place the male and female together.

I placed the pair of *Elongatus* into a ten gallon tank of their own. I had built some caves out of shale on a bed of dolomitic limestone. The *Elongatus* needs alkaline water and the limestone (approximately one pound per gallon) seems to maintain the alkalinity just perfectly. I also added one tablespoon of marine salt per two gallons of water. The *Elongatus* enjoys colder water so no heater is used at all. I had been told that the African cichlid was well known for tearing up any plant life in sight so I placed one artificial plant only into the tank.

It seems like days would pass without any sight of the *Elongatus* at all, they really kept to the rocks. I fed them tubifex worms, brine shrimp and dry flakes (they showed themselves at feeding time).

One day, approximately six weeks after I purchased them, I noticed that the female seemed to have an extra large mouthful of something and would not eat anymore. The mouthful of "something" ended up being thirteen babies which she released approximately 28 days later. The female held the eggs and then the fry for approximately 30 days before releasing them. Of course, sometime prior to the end of the 30-day period, the female (or the male) must be moved because the male will eat the fry. I left the female with the fry for approximately 7-10 days before placing her back with the male so that she could rebuild her strength after fasting for 30 days. The female *Elongatus* presented me with the first fry in July and has repeated twice since.

I have also bred the "Roundnose *Auratus*" and "Red Zebra" in the same manner under the same conditions with the exception that all of my Africans are now in community tanks instead of single tanks.

\* \* \* \* \*

T R A D I N G P O S T

*P. williamsi* - \$3.00 each  
*Labid. species* (nee *joanjohnsonae*) - \$3.00 each  
*C. urophthalmus*, 8 in. - \$15.00  
One pair (unmated) Red Devils, Male 8 in.,  
Female 6.5 in. - \$30.00

Joel L. Goodman  
4112 Wakefield Chapel Rd.  
Annandale, Va. 22003

BOWL SHOW RESULTS AND STANDINGS

April 12, 1976

	<u>1st</u>	<u>2nd</u>	<u>3rd</u>
<u>Guppy:</u>			
Red	Walsh	-	-
5 Matched			
Males	Walsh	-	-
AOC	Walsh	Walsh	Walsh
<u>Cichlid:</u>			
C&SA Dwf	McInturff, J.	McInturff, J.	McInturff, J.
Haplo	-	-	-
Open	McInturff, J.	McInturff, J.	-
<u>Egglayer/ Livebearer:</u>			
Other than			
guppies	-	-	-
Killies	McInturff, D.	Donnelly	McInturff, D.
Open	McInturff, D.	McInturff, D.	Donnelly

POINT STATUS

	<u>Apr.</u>	<u>Qtr.</u>	<u>Ann.</u>		<u>Apr.</u>	<u>Qtr.</u>	<u>Ann.</u>
<u>Guppy:</u>				<u>Egglayer/Livebearer:</u>			
Walsh	17	36*	53	McInturff, D.	14	27*	41
McInturff, S.	-	5	5	Donnelly	5	6	11
Nixon	-	2	2	Lenzen	-	10	10
				Nixon	-	4	4
<u>Cichlid:</u>				Warren	-	2	2
McInturff, J.	16	18	34				
Warren	-	22*	22				
Sprague	-	9	9				
Nixon	-	6	6				
Lenzen	-	4	4				
Tietjen	-	3	3				

\* Quarterly Award

\*\*\*\*\*  
 \*  
 \*  
 \* LIQUIDATION SALE \*  
 \*  
 \* Pauline and Gene Sergent are liquidating their fish \*  
 \* equipment in preparation for leaving town. First choice \*  
 \* to club members. Large numbers of 10 and 15 gallon tanks; \*  
 \* also 2-1/2, 5 and 5-1/2 gallon tanks. Box filters, heaters \*  
 \* and miscellaneous odds and ends. \*  
 \*  
 \* Call early for best quality equipment. \*  
 \*  
 \* 560-8783 \*  
 \*  
 \* \*\*\*\*\*

## LAMPROLOGUS TETRACANTHUS

By: Susan P. Sprague, PVAS

Lamprologus tetracanthus is a typically aggressive Lamprologus from Lake Tanganyika in Africa. I have seen reports that the fish can attain the size of 6"-8", though mine are only 4" and 5".

The fish have a subtle beauty. The basic body color is brown-beige with numerous off-white and blue hued spots set in longitudinal lines through the body and all fins except the pectorals. The face is clear of spots. The upper fourth of the body is much darker with the dorsal and caudal fins edged in black with a narrow white line just below the black one. The anal fin is edged in black. The fish appear to take on darker body color when spawning and protecting their eggs and fry.

I originally acquired ten L. tetracanthus in December, 1974. They were approximately 1"-1 1/4" TL. I housed them in a 20-gallon long. In July, 1975 it was obvious that the fish were beginning to pair off. To the best of my ability, I tried to sex the fish by the appearance of the genital openings. I picked what I thought were four males and two females and moved them to a 40-gallon tank which I set up as a Tanganyikan substrate community. There were ten J. marlieri ranging from 2"-4", two J. ornatus 1 1/4" - 2", a 3" breeding pair of L. brichardi and four J. transcriptus 1 1/4" - 2".

After a short period of time, it was obvious that the L. tetracanthus were trying to rule the tank. The critical point came when I discovered two of my J. transcriptus barely alive in the corner where two of the L. tetracanthus were establishing their territory. Right then I decided to move all L. tetracanthus out of that tank. On tearing down the tank, I discovered one of the rocks had approximately 200 off-white eggs on the side of it. I set up a 20-gallon long and put the pair of L. tetracanthus and two others into the tank with many rock caves. That was a mistake. The pair proceeded to beat up one of the other two L. tetracanthus. Then I made mistake #2. I put the two odd fish in a 10-gallon tank together and the undamaged fish killed the already badly beaten one.

Meanwhile the pair split up -- one fish under the rock cave with the eggs and the other fish at the opposite end of the tank in another group of caves. I assume it was the female who stayed with the eggs and the male who was doing his duty of guarding. They met occasionally in the rock cave where the eggs were. The eggs hatched in three days and were free swimming four days later. I found it interesting that their bodies were the same off-white color as the eggs and approximately a quarter inch long.

The fry grew quite slowly on a diet of live baby brine shrimp and various kinds of crushed Tetramin. They may have grown faster if they had had more room.

An unfortunate event occurred when they were one month old. Since there were so many young, I was feeding quite heavily to keep the fry

growing. I also was not changing much of their water. One night I discovered one parent and approximately half the fry dead in the tank. I immediately made a 50% water change which seemed to be what was needed. I later separated the parent (believed to be a male) from the young. I put that fish plus the five remaining adults into a 55-gallon tank with various Malawi mouthbrooders, namely L. fuelleborni, P. socolofi, H. compressiceps and some others. Two of the fish paired off and spawned. They would not allow any fish near their territory. They were also not above biting the over zealous aquarist poking her fingers too close to the young babies.

The water these fish were kept in was moderately alkaline, between pH 7.0-7.6 and fairly hard, 100-200 ppm.

Just recently, March 15th, I discovered this second pair had spawned in a 20-gallon tank with a few caves, floating water sprite and duckweed, and approximately four months old young. I will be interested to see if the two spawns will exist together in the same tank.

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## BAP REPORT

The Breeder's Award Program is progressing quite satisfactorily. Read the April Delta Tale for a complete update and explanation of the Program.

The current totals are:

NAME	POINTS	
	Firm	In process
Susan & Mike Sprague	130*	-
Ruth Brewer	105*	25
Gene Aldridge	80	15
John Jessup	55*	45
Walt Lilley	200**	-
Diane Nixon	60*	-
Pat & Pete Tietjen	15	-
Jan & Dave McInturff	95*	-

\* Breeder Award

\*\* Intermediate Breeder Award

Brewer - Cory Cats, Phase II Jewels  
 McInturff - Killifish

Gene Aldridge, BAP Chairman

## CATFISH HAVE KITTENS

By: Ruth Brewer, PVAS

As a confirmed "fish nut", I think all fish are interesting and I do not have a favorite. But if I did, it would be the corydoras. These little fish are relatively undemanding, almost always healthy, hard workers and long lived. They come from South America where they inhabit slow-moving streams, rooting among the vegetation for food and generally living peaceful, harmless lives. The presence of a small spine in the dorsal fin serves as a means of protection for them; I have been told that even a piranha will not bother the corydoras.

There are a number of species of corydoras; one of the most popular in this area is the albino corydoras, a tank developed variety, probably originally *C. aeneus*. Last fall I purchased two pairs that had been kept in water containing one tablespoon of salt per five gallons. I wanted some corys to be housekeepers for my killies which I keep in slightly brackish water (one teaspoon salt per gallon). Although I had believed that corys could not tolerate any salt, I found that in the small proportions I was using, they seemed to have no difficulty.

It was obvious that these were two pairs. It is easy to sex mature, ripe females -- seen from above, the males are slender while the females are much wider toward the head, giving them almost a triangular appearance. Naturally, I hoped they would spawn. They were first placed in a five and a half gallon tank with gravel, a few live plants and no other fish. The tank received about 10-12 hours of light per day from either fluorescent or natural light. Aged Fairfax tap water with a pH of approximately 7.2 was used. The temperature was raised to 80° for several days and then dropped sharply to 70°. The fish were fed well on a variety of live, flake and paste foods. A heavy aeration was supplied through a bubble-up filter. Nothing happened as a result except that the females got even fatter. After a couple of tries with raising and lowering the temperature (supposedly a sure-fire method of getting corys to spawn) with no results, I decided that it was useless to keep "pampering" them and I put them to work in a killie tank. The water, light, gravel, plants etc. were about the same as the corys had been accustomed to in the "spawning" tank. The females continued to increase in girth, but still nothing happened. 15-20% water changes were made every couple of weeks. I had still seen no signs of spawning activity when I went away for a few days at Christmas, leaving the fish to be fed by a friend. When I returned, cory eggs were everywhere! There were patches up to three square inches on all four walls of the tank, on the filter, the plants and even on the gravel. At that time, the occupants of the tank were three or four *A. gardneri*, a half dozen or so small *E. dageti* and the four parents. I left them all there for two days until I could clear some space to put the fish. During this time, the killies completely ignored the eggs and the only signs of interest I saw from the corys was an occasional whiskering of the eggs by one or another of the parents. This did not seem to be parental care, but rather the usual cory curiosity. Up to the time the adults were removed, the eggs had

no signs of fungus, but by the next day, fungus had started and eventually was in patches everywhere there were any eggs. By the fifth day, I could see very tiny fry which seemed to move in a sort of whirling fashion. After the tenth day, I siphoned out the fungus. It was difficult to see the fry against the white gravel, but clearly there were lots of them. At about two weeks, I moved 21 Cynolebias nigripinnis fry into the tank thinking that I could feed both batches of fry at the same time with powdered dry food. This was a serious mistake. I overfed and wound up losing countless cory fry as well as 10 of the nigripinnis. Up to this time, I had made small water changes by draining water through an airstone and dripping in new water. Now I had to get the fry out fast and into an almost 75% change. The corys were then about one month old and about 3/8 to one inch in length. From then on they did well on a diet of live baby brine, green water and Tetramin pellets.

The parents spawned again one month after the first spawn, but I did not save these eggs. Before I really got organized for the second spawn, the snails in the tank had found the eggs and had a feast. The third spawn was about three weeks after the second and I did save these. Both the second and third spawns were much smaller than the first, but the third spawn has been far more successful. The fry grew at a faster rate and a much larger percentage survived. On both the surviving spawns, I was able to move a few of the larger ones into other tanks with small fish and (feeling as though I was violating the child labor law) put them to work. I miscalculated on size differentials on one batch of six and lost them, but the others have all done very well.

It is difficult to write about corys without using words like "cute", "adorable" and "cunning". Even the usually phlegmatic Sterba in Freshwater Fishes of the World breaks down and says "Young Mailed Catfishes are among the drollest of fish-children." I hope these two experiences with cory fry will be only the beginning of a long series. I learned a great deal by my mistakes on the first spawn, but there's always more to be learned.

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#### HAVE YOU READ?

The April issue of Smithsonian? There's an article about Gene Stratton-Porter that should interest anyone who goes in for either photography or wildlife. "Although she was most famous as a best-selling novelist, Gene Stratton-Porter was also a naturalist and photographer of distinction." She received her first camera in 1895.

"Ups and Downs of Deep Scattering Layers in Oceans" in the same issue should appeal to the salt-water fans.