

# DELTA TALK

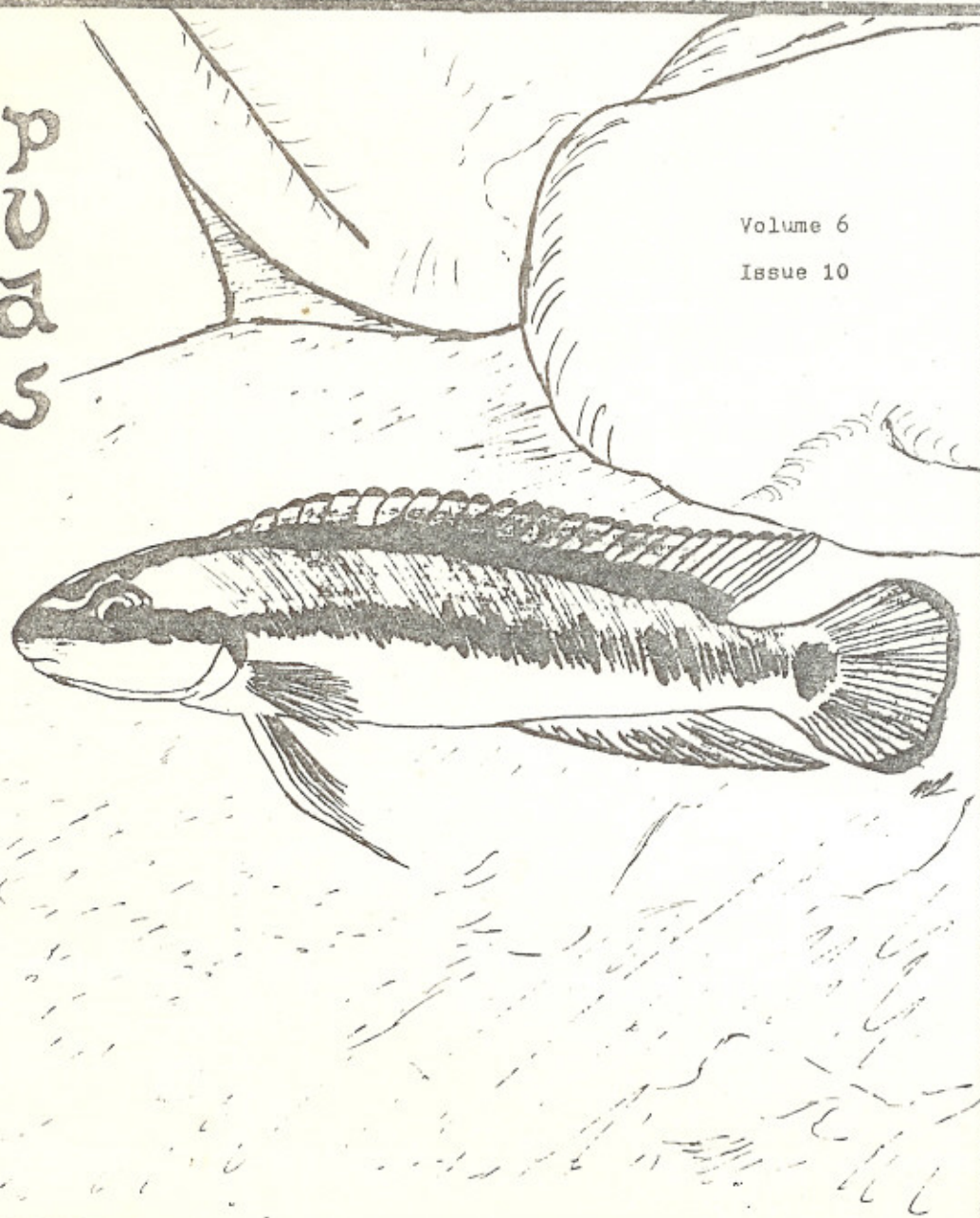
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OCTOBER 1975

papers

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Staff Artist: Tony Rizzuto

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This month's cover is a tracing of a photo by Mike Sprague of a Telmatochromis bifrenatis.

MINUTES OF THE BOARD OF GOVERNORS' MEETING

The Board met on September 2 at the home of Ted Walsh with nine members present. The Treasurer reported a balance of \$847.31. A Nominating Committee was proposed to consist of the following: Pete and Pat Tietgen, Ruth Gaines, Warren Garnar, Barbara Hudson, Craig Tingen, Steve Siska and Wendell Poulsen. The Corresponding Secretary was directed to contact these members and instruct them to bring a slate for 1975 officers to the October regular meeting.

Plans for the fall show were discussed. No capital outlay is necessary this year with the exception of improvements to the air supply. The Board authorized an expenditure of up to \$200 for this and it was agreed that Bob Smith, Chuck Story and Gene Sergent would design a positive air system for use this fall.

The meeting adjourned at 10:00 p.m.

Respectfully submitted,

Ruth Brewer, Rcdg Secy.

BREEDERS AWARD PROGRAM

By: Gene Aldridge  
BAP Chairman

The BAP is continuing to become more popular with the PWAS members. New participants are entering each month.

These are the current point totals:

<u>Name</u>	<u>Points</u>	
	<u>Firm</u>	<u>In Process</u>
Susan and Mike Sprague	70	-
Ruth Brewer	30	-
Gene Aldridge	50	-
John Jessup	35	30
Walt Lilley	125	-

These are some of the fish that have been bred:

S & M Sprague - H. compressiceps, G. brasiliensis, P. scalare, H. bimaculatus, Ps. socolofi  
R. Brewer - Aph. gardneri, Silver Angel  
Gene Aldridge - Bristle Nose Plecostomus  
J. Jessup - G. pellegrini, Orange Chromide, H. stapersi  
W. Lilley - Gold Sailfin Molly; Blue, Red-blue, Blue-black Guppy; Red Lyretail, Albino Swordtails; Silver Veil Angel; Betta splendens; Giant, Opaline Gourami

ETA

BOWL SHOW RESULTS AND STANDINGS  
September 8, 1975

<u>GUPPY</u>	<u>1st</u>	<u>2nd</u>	<u>3rd</u>
c. AOC	Lilley	---	---
<u>CICHLID</u>			
a. Angelfish	D,McInturff	R.Gaines	R.Gaines
b. African home spawn & raise	Jessup	Jessup	Jessup
c. Open	R. Gaines	Jessup	R.Gaines
<u>EGGLAYER/LIVEBEARER</u>			
a. Sharks/Loaches	D,McInturff	M.Young	B.Hardy
b. Catfish non cory.	M.Young	D,McInturff	---
c. Open	B.Hardy	J.Gaines	S,McInturff

POINT STATUS

<u>Guppy</u>	<u>Sept.</u>	<u>Ann'l</u>	<u>Egglayer/Livebearer</u>	<u>Sept.</u>	<u>Ann'l</u>
Walsh	-	41	B.Hardy	9	76
Sergeant	-	13	J.Gaines	7	53
Lilley	4	4	D,McInturff	8	15
			M.Young	7	10
			S,McInturff	3	3
<u>Cichlid</u>					
Jessup	13	87			
R.Gaines	12	32			
D,McInturff	4	13			

BOWL SHOW OCTOBER 13, 1975

Guppy: Multi, 2 matched males, AOC  
Cichlid: Cent. & S.Am. med, African dwarf, Open  
Other: Tetra, Characins, Open

MEETING DATES

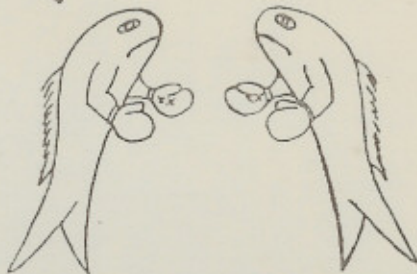
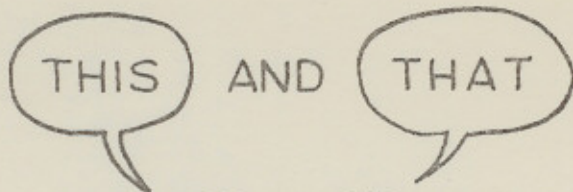
Board of Governors  
Oct. 7 8:00pm  
John Jessup  
1065 N. Manchester St.  
Arlington, Va.  
534-1704

Cichlid Group  
None in Oct.  
because of  
Fall Show.

TRADING POST

<u>Gene &amp; Pauline Sergeant</u>	560-8783
Breeding Albino Corydoras catfish	1 + gal. terrarium tanks
Breeding Marble Angelfish	(sliding top)
Breeding Zebra Angelfish	2 qt. bowls

## A-BOUT



By: Susan Sprague, PVAS

Let's all pull together for this Fall show coming up. If each of us puts in a little effort, this makes it easier on the people who generally do most of the work. Volunteer to put up posters and distribute flyers to area shops. See if the store that you frequent could be persuaded to give a donation to our raffle. It doesn't hurt to ask if it's done in a nice way.

If you are so inclined, you could donate a trophy. Another way to support the show is to enter your fish in some of the classes. Who knows--you may win a trophy!

!!!

On July 23, 1975, Dr. Rofen of Kordon Corp. wrote a letter ad-

vising all aquarists that Congressman Leggett and Dr. Greenwalt, Director of Interior's Fish and Wildlife Service, agreed to completely withdraw the proposed ban on importation of certain fishes and other wildlife. It has been decided that Congress and Interior would work together on legislation concerning importation of animals.

Dr. Rofen still contends that we should continue to write letters to the Dept. of Interior to demand proof from Interior that certain fish are injurious before they can ban the fish from importation. Be sure and write to PIJAC and they will be sure the letter gets to Interior. This way there is definite proof of the number of people who have written to Interior.

###

THE YEAR OF THE WHALE by Victor B. Scheffer (1969) Scribners Paperback Books.

A fictitious story about the first year in the life of a sperm whale. It is fundamentally true facts about whales woven into a story for readability. Sometimes it will break your heart to learn how cruel and vicious man can be! The author really lets you see what kind of life these huge creatures live. It is a truly amazing and eye-opening book!

& & &

AQUARIUM FISHES IN COLOR by Jens M. Madsen (1975) \$6.95 at Brentano's and Walden Book Stores.

I just acquired this book. The book is divided into four basic sections.

The part on aquarium maintenance is very elementary but it gives enough information for the novice just getting started.

The next section on fish anatomy helps explain the various parts of the fish and their function. I found it very informative for the beginner with some interesting points for the more advanced hobbyist.

The photographic section was not completely accurate but at least there was an effort made to show the fish's color. The book presents many species not found in other books.

The last section deals with the descriptions of the fish. The book tries to include information concerning spawning and tank conditions. This information is pretty good with some data not seen elsewhere by me.

The photographic and description sections are very representative of both fresh and saltwater fishes. I think all and all it is a pretty good book.

\$\$\$

I went to the Octopus fish store after following their ad in the paper for a few weeks. I was disappointed in the store. They had some interesting ideas but most of the fish were in poor condition. I must say that they had the most gorgeous Queen Angel that I have ever seen. It must have been 12"-15" in length.

On the same afternoon I went to Tropical Lagoon on Georgia Ave. The store could be more organized and the fish displayed better but they did have quite a bit of diversity. There were puffers and archer fish plus some small ruby scats. I also saw 3" Uaru and a moderate amount of Africans.

The fish I was most taken with was a dwarf lionfish. Upon looking it up in Aquarium Fishes in Color, it appeared to be Dendrochirus brachypterus.

While I was out looking at these two shops, I stopped at Creative Plantings, a plant store with the motto "Where Plants Are Bigger Than People." They had lovely plants arranged in a pleasant manner. They give you a file card on each plant you buy explaining the conditions for the well-being of the plant. I also got some used flower pots to put in the fish tanks for plants or hiding places for fish.

???

Over the labor day weekend, Mike and I went on a picnic with some friends at Bull Run Park near Manassas, Va. We set up near the main playground and found out we were just up the hill from a creek. Upon scooping out the water, we found literally hundreds of fish of quite a few different varieties.

I fell in love with little 2" fish that scooted on the bottom right near the shore amongst the rocks and submerged tree roots. We dubbed them "blenny kind of fish" which later turned out to be some

sort of darter. There were also sunfish with red dorsal and caudal fins as well as loads of dace. There might have been others we didn't notice.

I just had to have a "blenny"--but how! Mike got a 12oz. plastic cup and punched holes in the bottom. Through much trial and error, I tricked one into swimming into the cup. I then put it into a tupperware pie taker. I tried for a crayfish but it was much too quick.

Meanwhile Mike had taken off his knit shirt and tied a knot in each sleeve and one in the neck. Using this for a false net, Mike used bits of hot dog roll to get the sunfish to come near the opening and then he scooped them up. He ended up with a nice 1" sunfish.

The rain decided to come so we were not able to catch any more fish. We sure had fun and plan to go there again!


\* \* \*

Reading through the exchanges brought me to this information taken from The Glades: a group of catfish fanciers interested especially in Synodontis cats are encouraging other people to correspond with them and exchange information. They ask anyone interested to write: Bonnie Hoskins, 6511 Johnson St., Hollywood, Fla. 33024.

+ + +

We had a few reviews in the May Algae.  
"Labidochromis---What is it?" by Gene Aldridge  
"Spawning Haplochromis compressiceps" by Jerry Meola

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30 gl. Perfecto Tanks---	23.00
# 410. Dynaflo Filter---	13.50
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PL. Aqua-King Filter---	29.00
Jr. Dirt Magnet-----	2.15
Sr. Dirt Magnet-----	3.15
16 oz. Silco Poly Fluff---	2.40
5 lb. Silco Poly Fluff---	10.80
14 oz. Met. Charcoal----	1.05
4 lb. Jungle Coal-----	3.50
100 gl. Instant Ocean---	19.00
25 lb. Estes Permacolor---	2.85
1 lb. Assorted Shale-----	.12

Order while quantities last!!

## PVAS VISITS THE LILLEY FAMILY

By: Ruth Brewer, PVAS

Any time a new member appears on the BAP points listing with over 100 points for openers -- it deserves some attention. And when that member has only been in the hobby since March, 1975, it deserves even more attention. Walt Lilley has 125 points for his first entry on the points listing. To look around his fish room, you'd think he was an old hand at the game. Actually, he and his wife, Mary, did have a community tank for a while back in '64 or '65, but Walt (who is a Lt. Col. in the Army) was in the field most of the time, finally winding up by going to Viet Nam and the bug never really got them that time. They started once again while he was stationed in Puerto Rico and collected a few native salt water fishes, but when he was transferred, the hobby had to go. They have been in the Washington area now since 1970 and feel settled here, so one day they began looking at tanks, went back the next day and bought a 29-gallon setup. The clerk warned them not to put Oscars in with the neons, but didn't warn them about tiger barbs. Disaster struck, but this time they were interested enough to begin reading and asking questions. The quest for knowledge paid off and with success came more tanks and still more tanks. In fact, the tanks were about to crowd them out of the living quarters for a while, but they finally moved most of them into one room on the lower level where Walt has constructed an attractive arrangement to display and work with the fish. Either some tanks didn't make it into the fish room, or they've added on some new ones. I have a feeling the fish will make another advance before too long.

When the Lilleys started this time, they became more and more interested in breeding and raising fish. They were highly successful with angels, gouramis, swordtails, mollies and guppies. Then, as happens to so many hobbyists in this area, cichlid power struck again. They saw their first African cichlids. Now they have 11 or 12 pairs and want to specialize in Africans. Eventually they plan to have only the cichlids and two other types of fish: the gold sailfin mollies and the blue snakeskin guppies. I was happy to know these two fish would stay -- they both are lovely.

The Lilleys have five children with one married and living away from home. The oldest resident daughter, Jackie, who is a dental technician, has her own tanks in her room and is raising bettas. The others -- Diana, Walter and Kenny -- are all students at Fairfax High and are more involved with school activities than fish, although they help out with the fish work. The Lilleys have 26 tanks so they need all the help they can get!

After looking at the obviously fine condition of the fish, I asked what kind of food they got. They are fed some live tubifex and adult brine shrimp, but mostly a variety of dry and freeze-dried products, including a lot of growth foods and liquify for the fry. Whatever the combination, it certainly works.

In addition to taking care of the fish, Walt bowls, collects American and Canadian coins and first day covers and Mary is interested in music (she plays piano) and golf. The house and garden are full of flowers, they grow vegetables and still have time to pet the dog. We wish them all the luck in the world in their new hobby.



## BREEDING OF GIANT GOURAMIS (COLISA PASCALIA)

By: Walt Lilley, PVAS

This breeding represented my first attempt at breeding egg layers.

Initially my Gouramis, two males and one female, were kept in a twenty-nine gallon community tank. Both males were constantly chasing the female and fighting each other. I selected the male that appeared to win most of his battles and left him and the female alone in the large tank. (I had read somewhere that Gouramis needed a lot of space for breeding.) Temperature of water was maintained at 84°0, pH was 7.0 and DH was 125.3. The diet consisted of almost 100% live food (brine shrimp and tubifex worms) along with some dry food. For five or six days the male chased the female, biting her on the tail several times. Both fish colored up beautifully. For those of you who have not seen the male in breeding color, let me tell you that you have really missed something. His colors become extremely vivid, almost luminescent. I had no floating plants so I had floated a 4x4 inch piece of waxed paper to provide an anchor for the bubble nest. On the seventh day I replaced the waxed paper with some Water Sprite. That evening the male made his bubble nest. I did not witness the egg "laying" but while checking for eggs less than 48 hours after the bubble nest was built, I noticed some extremely tiny babies falling tail first from the nest and then immediately swimming back into the nest. I removed the female from the tank (the male pretty well restricted her movements to the far end of the tank anyway) and left the male alone with the fry for two more days. I fed Liquid Small Fry initially, followed by TetraMin Baby Food "E", baby brine shrimp and Growth Food.

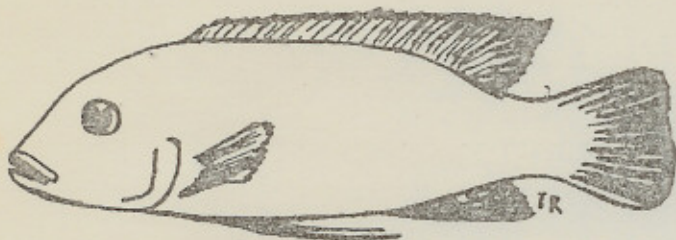
## BREEDING OF OPALINE GOURAMIS (TRICHOGASTER MARMORATUS)

By: Walt Lilley, PVAS

The preparations for breeding the Opaline Gouramis are identical to those of the Giant Gourami. In my particular case I did a few things a little differently. I placed a pair of Opalines into a fifteen gallon tank of their own. This tank contained several floating plants and also, approximately one inch of gravel. I maintained a temperature of 82°0, a pH of 7.0 and a Dh of 125.3. Their diet consisted of mostly live food, brine shrimp and Tubifex worms, along with a little dry flake food. The male constantly chased the female butting her quite hard. She got very heavy with eggs and I was very disappointed that the male was not building his bubble nest as the Giant Gourami and Bettas had. On approximately the eighth day, I noticed that the male was exceptionally rough with the female but she didn't seem to let it bother her as much as it seemed to earlier. Then I noticed tiny white eggs on the surface of the water. Gourami eggs float, rather than sink. I have never talked to anyone else who has bred Opalines to see whether my pair was breeding as the average pair or not. Anyway, my Opalines did not embrace at all, the male simply pushed and butted the female to cause release of the eggs. The male did not build a bubble nest earlier, instead, he built it as he gathered the eggs and placed them in the midst of the floating plants. After approximately three hours of this, I removed the female. I left the male

in the tank for another three days before removing him. The spawn consisted of approximately 100 fry which I fed Liquid Small Fry initially and then TetraMin Baby Food "E", baby brine shrimp and Growth Food. I have encountered no problems with them since birth.

#### SPAWNING PSEUDOTROPHEUS SOCOLOFI



By: Mike Sprague, PVAS

If you've ever spawned a Pseudotropheus species or read an account of their spawning, this article will be a repeat. The hardest part of spawning P. socolofi is obtaining a breeding pair. Simply provide the correct environment and stand back. P. socolofi will do the rest.

In my particular case, the environment consisted of a 40 gallon tank maintained at 75° with pH 7.0 and DH 230 ppm. My pair, a 3-1/4 inch male and a 2-1/2 inch female, were approximately one year old. They were maintained as part of a Malawi community and fed on four types of TetraMin, frozen brine and a homemade paste food.

At spawning time the male claimed a secluded area of gravel behind a rock. The pair circled, head to tail, in a tight circle. The female dropped eggs and had them fertilized by the male. She would pick them up in her mouth on her next trip around the circle.

The female mouthbrooded 15 eggs for 23 days before dropping the free swimming fry. At this time, she had been removed to a 10-gallon tank. The fry and mother remained in this tank about two weeks before the mother was moved. The fry received live baby brine and ground TetraMin.

Fourteen fry survived to 60 days of age. At that time, they were from 3/4 to 1 inch and ready for the local market. They should be a great addition to someone's collection of African cichlids.

#### CICHLIDS, CICHLIDS AND MORE CICHLIDS or, THE 4TH ANNUAL AMERICAN CICHLID ASSOCIATION CONVENTION

By: Randy Crout, PVAS

On July 4, 5 and 6, 1975, the fourth annual American Cichlid Association Convention was held in Lincoln, Nebraska. For those members who managed to travel to the middle of nowhere for the second straight year, however, there was a pleasant surprise. Unlike the past three Conventions, there were no snags, hassles or other diff-

iculties. This is not to knock last year's Convention in Lubbock, Texas, but the Convention in Lincoln was so well run that the Board of Trustees has voted to award the group a plaque to show our appreciation.

How I ever managed to get there, when I have never been to a regular meeting of FVAS is quite a long story, so I won't bore you with the details. I do think, however, that it is appropriate for me to give all those back east a report on what was for me a very enjoyable time. Unlike Lubbock, the Board of Trustees was not kept locked up in hearings during all the interesting talks and, unlike Lubbock, the air conditioning was in good working order - thank God! For those of us who were dumb enough to go looking for shops in Lincoln, we soon learned that unless we were prepared to sweat off ten or so pounds (for me that would be disastrous), then we'd better stick inside. Yes, Lincoln in HOT! It was at least 95 every day. But on to the Convention itself.

I arrived in Lincoln at 8:15 a.m. on Friday morning after a seven hour drive from Columbia, Missouri at 85 mph. Few people were up at that time, not to mention that most of our party were half dead. But who goes to bed when you are at a Convention. I certainly didn't. Anyway, a quick check of the fish room revealed quite a few cichlids were in stock, nothing of the spectacular sort however. Around 10:00 a.m. or so people began to congregate and the show soon began. After preliminary introductions, etc., Dr. George Barlow began with an excellent talk on the cichlids in Nicaragua. His presentation was followed by such notables as Dr. Joanne Norton and Paul Loiselle, who gave talks on genetics in Angelfish and the genus *Tilapia* respectively. Slides accompanied almost all of the talks and were certainly helpful. Friday night ended with a showing of more slides, mostly African Rift Lake varieties. Some cichlidophiles, however, got a slide projector of their own and began showing some lovely photos of Neotropical cichlids. As Dean Stock and Paul Loiselle haggled over identifications, the rest of us just gazed at the amazing beauty of the cichlids shown. Sometime after eleven Jerry Meola began showing his collection of African slides. This gave me the opportunity to finally hit the sack - not to say that Jerry's slides were bad, it was just that I had seen all of them many times.

Saturday had more talks, photography shops, beginner's seminars and saw myself with a few other idiots going out into the Lincoln urban area (?????) and discovering some very nice, clean aquarium stores. They were fairly well stocked and had a fairly decent collection of cichlids. The stores, however, did not have an overwhelming supply of people populating their stores. After all, there aren't too many nuts in this world that will travel in the Lincoln sun at 1:00 in the afternoon.

Saturday evening began with the Banquet and a talk given by the very brilliant and astute Mike Oliver. Mike who is studying for his Ph.D. gave an excellent talk on Malawi Haplochromis. His presentation was also accompanied by slides. Unlike the other slides, however, these were slides of Africa itself. Like Paul Loiselle, Mike has also traveled in Africa and has had the fortune to dive in Lake Malawi. Our hearts turned green with envy as we saw some lovely shots of the Malawian coastline and then, lo and behold, there were

shots of the fishes themselves. With the finish of Mike's talk, the awards were given out and, if there was a bad spot in the entire convention it was this. Not that the awards were not well deserved; they certainly were. The bad point here, was that the announcer couldn't pronounce a single scientific name. Some of you will undoubtedly think I am being overly critical as not many can fathom Greek and Latin but, certainly, there must be someone better at such than this particular announcer. We all had to guess who and what won what. Tom Koziol and Rosemary Lewis seemed to grab most of the awards. Tom for his superb photography and Rosie for her lovely fish. Her pair of *Lamprologus tetraoanthus* won three awards, including Best of Show. Our own Jerry Meola, now departed for African Fish Imports in New Jersey, won second prize for his shot of *Trematocranus freibergi*. Around ten-thirty that evening the auction began with Colonel Kaufman and her corps wizzing through the hundreds of cichlids on the block. Considering the Colonel didn't know a thing about cichlids she did a fantastic job. The fish moved rather well but sold for rather cheap prices, which, of course, was very nice for the buyers but not so nice for the sellers. I went out about midnight and came back at 3:15 a.m. only to discover that the auction was still going and by the time the last fish were sold it was about five in the morning.

Before I went to bed I made the idiotic mistake of seeing what was on for the morning and found to my dismay that the BOT was supposed to make a report to the membership. Oh well, up at 8:00 a.m., I ate breakfast and rushed over to the meeting. DUMB! There were only 15 members and only two other Board members, Al Castro, the Chairman and Phil Zimmers from Omaha. A few other talks capped the day with the majority of people tending to their newly acquired fish. Things finally began to wind down as most people left by 3:00 p.m.

I guess the most impressive things for me were the fantastic African Safari slide show put on by the Barrett family of Oklahoma City, the film Paul Loisel showed that was for mature audiences only and the slides of Africa and the African Haplochromis. The Barretts utilized six slide projectors and put together a great program. Accompanying the projectors was a variety of African-type music and occasional narration. Funny little cartoons popped up every now and then and added quite a bit to this really incredible show. As for Paul's film, it was actually Dr. Wickler's now infamous study of *Haplochromis burtoni* and the "egg dumpling" theory. It was quite fascinating and I must say that those sexy male *H. burtoni*'s put the American male to shame.

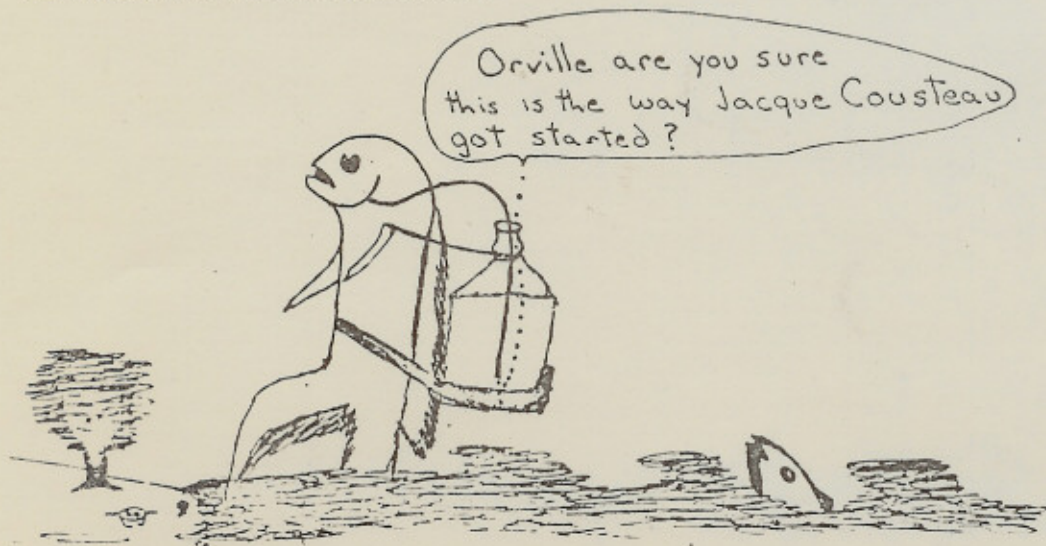
An evening with the Fishers of Oklahoma City, Jim and Beth Greenwald of Los Angeles, Ed Taylor and the Colorado bunch capped a perfect convention. As for next year, Miami just received the nod from the board. Again, however, I will have to travel 1200 miles to get there. Oh well, the things one will do for cichlids. But then, I guess this phenomena is not confined just to cichlid hobbyists but to all other fish hobbyists. Whatever, the Convention was great fun and I even learned quite a bit. I heartily recommend it to everyone, if you can afford to go.

Over the weekend of 17 May, they bred again. I looked for the eggs after seeing that the female had lost a lot of girth and was slightly beaten up. After our snow, I found the eggs up inside the top of a pottery mushroom. The male takes care of the eggs by fanning and picking dirt off them. The female does not stay around. The eggs were the same as previously described. The male gets quite agitated when anyone comes close, but not really aggressive.

The bristles on the nose of the male form an inverted Y. The two top ends of the Y start at the eyes and end up at the tip of the nose. These bristles are roughly 10 mm in length, with real short ones of about 2 to 3 mm in length around the edge of the mouth. The nose of the female is completely bare.

About three days after the eggs were laid, several small 8 mm fish, with egg sacs attached, were on various parts of the tank glass. The inside top of the mushroom was covered with babies. Forty-eight hours later, they could not be found; therefore, I resigned myself to the fact that they had been eaten. A few days later, I was surprised to see 15 to 20 babies running around the tank, the next day the whole tank was covered with babies. A month later, there were about 75 babies about 15 to 20 mm in length. In early September, some of the biggest ones are 56 mm in length. There is a great divergence in size.

A month later they bred again; however, the male offered no defense of the eggs so they were eaten by the babies. I have no other empty tanks, so the babies and the parents cannot be separated. In early September, the 10th to be exact, I found a large bunch of eggs resting on the sand right at the glass. I said to myself, "What the heck, why not try to raise the babies artificially?" So I put them in a specimen jar with an airstone; sometime Friday the eggs hatched. Saturday morning the water was awfully milky. I drained it and replaced the water with tank water. That evening, I discovered a stupid thing -- I forgot to put the airstone back in the specimen jar, however, I still have six or seven swimming all over the place in a large fine mesh net hanging in the tank. I will just see how far I can get with them. This could be a way to raise baby plecostomus by the carload. As of the 17th, they are free swimming and beginning to look like plecostomus.



## NEONS - ONE AT A TIME!

By: Dave Perry, S.A.S.  
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Well over a year ago, the gauntlet was officially thrown down in our society. Our illustrious president (better known as ole Long, Tall and Ugly) bred Neons. Not only that, but he bred the Black Neons and Cardinals. So I say's to myself, "Self, we can't let him get away with anything as hard as that. We'll just have to breed and raise them the easier way." And so, after months of exhaustive study, I finally found the secret - complete and utter neglect. The only big drawback is that you'll have to do it ten times to get your points in the Breeders Award Program. By my calculations, and if things progress as swiftly as the last time, I should have my points for breeding neons by October, 1983. But enough of my joyous anticipation. Let me relate for you, step by step, my unorthodox method for spawning and raising the difficult neon.

Now, the first thing I recommend is that you obtain six or eight specimens. My first study indicates that the eggs are infertile and also invisible if you don't have the fish to begin with. So, you obtain some and put them away to grow. For most aquarist's this will take from six to nine months. For me it took 2½ years. But, by cracky, they've sure got to be mature at that age. Now, the ones that survive your "tender loving care" have got to be separated - fat ones in one tank, skinny ones in another. I used a divided tank so that with the seepage between the glass divider, they would have the same water conditions and temperature. Along with the glass divider, I used a piece of blue plexiglas so they would not be able to see each other. Not for me the heart-breaking sight witnessed by Mr. Zaal, that of seeing the female lay eggs on one side of the glass and the male try and fertilize on the other side of the glass (see, Joe, I do learn something from your articles).

So, now we have our neons sexually isolated. The next step is conditioning. I found out early that they were not really that receptive to trout chow. In fact, TetraMin was eaten with about as much enthusiasm as a young child has for spinach. When the biggest female came to the top one day and let me know her displeasure (I think it's called a 'raspberry'), I decided that it was time to put a little effort into their feeding. So we went the live food route - baby and adult brine shrimp, white worms, fairy shrimp, daphnia. It seemed that their capacity for live food was about 4 times their body's volume (using Archimede's principle concerning the volume of water displaced by a body is equal to..... Aw, forget it.)

Most aquarists will tell you that it takes from 2 to 3 weeks to condition parents. I wanted to be sure. I took 7 months! A long time, to be sure, but man, were they conditioned. That horny little male would have bred a piece of Swiss cheese, if he could have figured out which hole the eggs would come out.

Now, I started preparing the tank. Tap water was put through my ion-exchange tube. It went in at pH 8.0 and hardness 120 ppm, it came out at pH 7.8 (don't ask me to explain that) and hardness less

than 10 ppm. To counteract the high pH, I used a double dosage of Blackwater Tonic, and diatomed the water. I don't know what the pH of the water ended up at, but the indicators showed somewhere around 7.0. However, we know how accurate those little kits are.

In each corner of the tank I put some filter floss weighted down with marbles. As we all know, the crafty little devils will lay a lot of them in corners; to be saved as a later midnight snack. In the centre was a floating mop. At one time I used to literally fill the tank with nylon mop to keep them from getting at the eggs. In fact, it was so bad that a pair of Glo-lites once spent a week in a spawning tank without knowing that the other one was there!

Now as everyone who has read Mr. Zaal's article knows, neons will breed on the third day in a dark covered tank. Somehow (probably because they were in isolation for 7 months) my neons did not have access to this information. Therefore, it seems reasonable to assume that instead of spending the first day in their lighted, uncovered tank getting used to it, they spent their time spawning. And lacking something else to do, they spent the rest of the day eating their eggs. Next time I'm going to put a tiny little ball in so they can play, instead of devouring eggs.

And so, 24 hours after setting them up, I came upon a few uneaten eggs and promptly set the parents back in the divided tank. I hope they have some pleasant thoughts to remember on those cold nights for the next 7 months. I covered the spawning tank and left them for 3 days. At the end of that time, I lifted the green garbage bag and there they were, tiny little glass slivers with yolk sacs. I covered them again and left them for 4 days, to absorb their yolk sacs. In the meantime, I went around merrily bragging about my prowess as an aquarist. Comes the end of the four days and I go to view my prize specimens. You guessed it! Nothing! I looked and looked, but nary a specimen. Muttering a few obscenities, I shut off the air to the sponge filter and walked away. My only consolation was knowing I had a definite pair, laying viable eggs.

Everything proceeded normally (in our household, that means hectic) for about a week and a half. Then, on the Sunday night of the Detroit Workshop, I was showing Denny Brock through the fishroom (you all know Denny, don't you - like a sports car - racy and close to the ground). When asked what was in this tank, I told him that I had bred some neons but the alkaline water must have ate 'em up. Well, it didn't get them all, he says, 'cause there's some swimmin' there. Yup, that's a fact, I says. As you can see Denny and I have some very intelligent conversations.

And that's the suspenseful story of how I have one single, solitary neon swimming in his own little tank. There he is, folks, living proof that it's not hard to raise neons, just time consuming.

By: Pat Tietjen, FWAC

Aquatic Topics - July 1975

Aquarium Shops Vs. Aquarium Societies or Aquarium Shops Vs. Aquarium Societies  
by Harry Abrams, June 1975, Indianapolis Aquarium Society.

The need for good rapport and relations of an aquarium society with Aquarium Shop owners and vice versa. I think the issues raised by Harry are interesting and worth thinking about. I also believe we have the same problems in our area. Read the article and judge for yourself. I think you will find it worthwhile.

Guppy Roundtable, Pan Pacific Guppy Association, May/June 1975

An interview with Glen Parrish as told to Jack Rosengarten. Also some pictures by Mike Khalid taken of Glen's Minnow Farm. An interesting article about a fish farm owner.

Coastal Aquarium Society, Coastal Gulps, July 1975

Winning the Battle Against Bacterial Fish Diseases by Diane Elliot.

Know anything about bacterial diseases? How about gram-positive or gram-negative bacteria? How about what medication to use when your fish does have bacterium of some sort? If not, I think you can learn a bit when you read this item. This is a reprint from Northwest Aquaria, the Greater Seattle Aquarium Society, May/June 1974.

Fin Features - June 1975, Central Ohio Aquarium Society

Interested in learning how to provide artificial respiration for your fish when they need it? Read Tank Tips and Straight Talk by Stu Wheeler. Also learn the best way to clean plastic plants, filters and other plastic aquarium accessories.

The Perfect Summer Fish by Rich Shank. An article on killifish. Rich states that "they are only as much trouble as you make them." Since I'm not into killifish, I couldn't say. It's an informative article for those who are.

Marine Hobbyist News June 1975

U.S.S.R. Report by George Mamonov, Kiev, U.S.S.R.

A most detailed and informative article on the "very complicated interrelationships between the different species of algae, bacteria, and other marine animals, including fish invertebrates."



"Different algae can stimulate or suppress the development of other algae and animals." He goes on to say that "the absence of many algae in the marine aquarium is often one of the causes of fish infections, the quick development of bacteria, and the destruction of the natural regime under captive conditions."

There is more on this article and many others I found informative. I really feel that those who are into marine set-ups should read this international marine hobbyist newspaper from beginning to end, every time it comes out. You all put so much (money and time) into the keeping of marine life in an artificial environment that it should be of the utmost importance to find out how to maintain "life", not just the purchase of a "pretty" or interesting denizen of the sea.

#### Marine Hobbyist News - July 1975

There is an item entitled Do It Yourself 750 Gallon Reef.

John Phillips of "The Aquarist" in Champaign, Illinois "stated that so many of the disease and food problems encountered in a small closed system such as 20 or 55 gallon tanks do not occur in the large tank."

Stephanie and John Phillips also have a fat, healthy, contented Moorish Idol which has been in captivity for four months because of the 750 gallon mini-reef.

#### The Kitsap Aquarium - July 1975, Bremerton Aquarium Society

The Firemouth Cichlid, "Cichlosoma Meeki" by Ken Mearns, B.A.S.

A thorough article on this interesting fish.

#### The Calquarium - June 1975, Calgary Aquarium Society

Are you interested in collecting live food for your fish? Read In Defense of: Collecting Live Food by Brian Newman, C.A.S. You can collect and freeze enough food during the "peak season" to last you through most of the winter. Cuts cost on purchasing convenience foods.

Kuhli loaches are amusing, efficient scavengers. There is something about them that really appeals to me. Read Squiggles by Ron Kobe, C.A.S. Ever try to catch one? It takes patience. There is more information here on kuhli loaches than I've been able to find in most books.

#### Super Fish al Notes - June 1975, Madison Aquarium Club

The last Brownsin Thru mentioned this magazine's article on penicillin, now the June issue continues the discussion of antibiotics. This time it's on Streptomycin.

Fish Net - July/August 1975, Northwest Ohio Aquarium Society

Continuing article on Aquarium Plants - Types and Uses (the first part was published in the May issue). Most interesting. It's by Evelyn Cohen, reprinted from Tropic Tank Talk. I enjoy aquarium plants and a well planted aquarium is a thing of beauty, therefore, I read anything and everything other aquarists have to tell or write on the subject.

The Buntbarsche Bulletin #47, March/April 1975, Journal of The American Cichlid Association.

This bulletin has an article on tilapias by Paul V. Loisel. The Editor's note indicated that the article had been prepared some time ago. "However, the explanation of the generic 'name change' is very useful to those not yet familiar with how (or why such changes are made)."

There is also a most interesting article on Julidochromis in the same issue. To me "julies" are very special fish and I avidly devour anything I can find on them. There was a response in Bulletin #48 in a Letter to the Editor by Pierre Brichard on Julidochromis.

Pierre Brichard would appreciate very much if ACA members could write him about the double mode of spawning used by Julidochromis, "the first, continuous spawns of a few young at a time without ever a stop; the second, very heavy spawns (100-200) every six weeks."

Also information from any breeder raising julie spawns successfully - on the ratio of ♂♂ to ♀♀.

His address is:

Pierre Brichard  
Box 2313  
Bujumbura, Burundi

The Editor believes there is sufficient interest on a far-reaching scale in this most fascinating and beautiful genus to warrant a Special Study Group. She asks "[i]f anyone would like to head up such a group and has the time available to devote to a detailed, ongoing project, jsut let me know and I will print the information."

Editor's address: Rosemary Lewis  
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