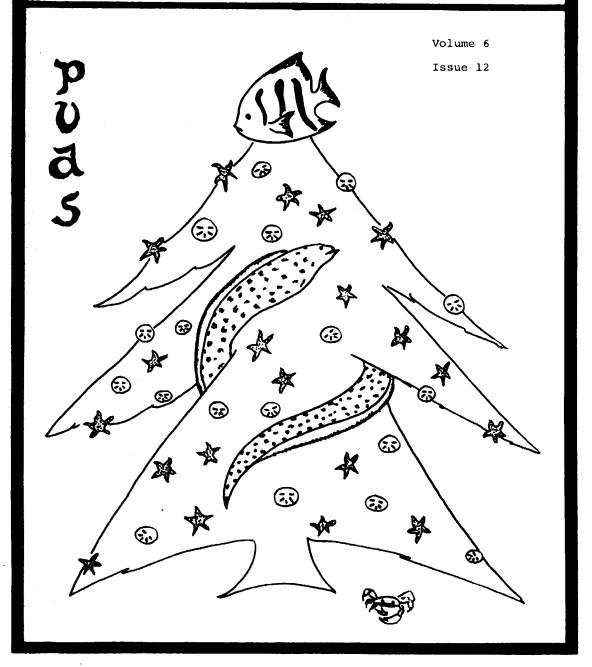
# DEETA JACE

OFFICIAL PUBLICATION OF P.V.A.S.

DECEMBER 1975



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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This month's cover depicts the Christmas season from a Fishy Point of View. It was drawn by Ruth Brewer.

### MINUTES OF THE BOARD OF GOVERNORS' MEETING

The Board of Governors met November 4 at the home of John Jessup with 8 members present. Craig Tingen, Pete and Pat Tietjen were also present as guests. Gene Sergent reported that the show receipts were \$673.40, expenses were \$508.72, leaving a profit of \$164.68. He turned over the books and bank signature cards for the new Treasurer and reminded the Board that the organization papers are at the Filston Branch of the First Virginia Bank.

Chuck Story reported membership stands at 65. Susan Sprague had no report for the <u>Delta Tale</u> other than to state a continuing need for articles. There was no report from the Salt Water Club. Gene Aldridge said that he had the revised BAP rules and was instructed to hold a meeting of the BAP Committee to firm up the rules and to publish them in the January <u>Delta Tale</u>.

The Board discussed suggestions and criticisms regarding the Fall Show, but it was decided that any firm decisions for changes should be left for the 1976 Board. There was some discussion of the vacancies in Committee Chairmanships, but no definite appointments were made. It was decided to send out a special flyer in January with dates and details for the Spring Show. The Board agreed to give a trophy for the O'Connell High School Show. Susan Sprague and Pat Tietjen agreed to round up donations for the Christmas party and the Board agreed to purchase a 5 lb. can of Tetramin as a raffle prize. There was a discussion of trophies, Gene Sergent donated \$20 to be used at the club's discretion for trophies, Gene Aldridge and John Jessup donated a third trophy. Further discussion of trophies was tabled for an ad hoc meeting of the Board at the November membership meeting. The meeting adjourned at 10:05.

Respectfully submitted, Ruth Brewer, Recording Secretary

# MEETING NOTICE

The Club's December 8th meeting is the Annual Christmas party. Everyone should have been contacted to find out who is coming and to ascertain what one can bring to the pot luck dinner. This is strictly a party and loads of fun.

Each person that comes to the party is asked to bring a fish related item or a dollar so that gifts may be exchanged. Please have them wrapped so no one can tell what they are. This is your entrance ticket. It is stressed that this means an item from every man, woman, and child who will be attending.

There will be a surprise item that anyone can use. Come to the party and you may win!

# BREEDERS AWARD PROGRAM

By: Gene Aldridge, Chran.

This program is now becoming even more popular with our club members. I want to congratulate the newest participants Walt Lilley and Diane Nixon in the BAP. They are doing extremely well. Don't let the writing of an article or making an oral presentation bother you. Just try. We have not had enough articles on any one species to cause any problems. However, if you want to write about some aquarium hobby related subject, just see me for permission.

# The current totals are:

<u>Name</u>		Points
Susan & Mike Sprague	Firm 70*	In Process
Ruth Brewer	50*	-
Gene Aldridge	65	30
John Jessup	35	30
Walt Lilley	125*	-
Diane Nixon	30	-

# \* Breeder Award

Good Luck to all!

Brewer - Killifish: Dageti, Bivittatum Nixon - Swords, Guppies, Zebra Danio Aldridge - Labidochromis freibergi

ETA

To aide me, as Program Chairman, in planning interesting and informative programs for the coming year, please take a moment and fill out this questionnaire. Return it at the December meeting.

1.	Type of Fish Raised (check more than one)					
	Guppy Livebearer South American cichlid Tetra/barb Gouramis/betta killies Salt water Angelfish/discus South American cichlid African cichlid S.A. catfish African catfish Other (specify)					
2.	Number of tanks Average size Largest tank Homemade?					
3.	Areas you would be interested in learning more about?  Water chemistry Do-it-yourself in the fishroom General tank maintenance Preparation for a fish show Judging Fish photography The fish store business Aquarium plants Aquarium design Any suggestions?					
4,	Would you like to hear guest speakers? Yes NO					
5.	Do you enjoy movie/slide presentations? Yes No					
6.	Would non-fish, but nature-oriented, films or programs be of interest? (birds, snakes, etc.) YesNo					
7.	Would a monthly question and answer session be helpful? Yes No					
8.	Would you be willing, if asked, to give a program on your specialty or area of interest? Yes No					
9.	Would monthly oral BAP or spawning facts be of interest?YesNo					
10.	Would you be willing to pay an extra amount to get a top-notch, out-of-town speaker? Yes No					
Ans	comments on programs, past or present?					

Thank you. Peter Tietjen PVAS Program Chairman

### AQUARIUMS ARE BEAUTIFUL DECEMBER 1975 CASH & CARRY SPECIALS: from SPRINGFIELD 2 oz. Staple Tetramin---2.00 AQUARIUM SERVICE 6 oz. Staple Tetramin---5.40 8 oz. Staple Tetramin---6.00 SAVE 15-40% ALWAYS! 2 oz. Growth Food----2.25 2 oz. Condition Food----2.25 2 oz. Guppy Food-----2.25 \* aquariums & supplies 2 oz. Brine S. Treat----2.25 \* complete pet accessories 2 oz. Tetra Ruby-----2.25 8 oz. Tetra Ruby----7.75 freshwater installations 2 oz. Tetra Marin----2.25 maintenance services 5 1b. Staple "sp.mix"--26.25 5 1b. Growth Food-----50.00 daily delivery service 5 lb. Condition Food---50.00 \* cash & carry specials 5 lb. Guppy Food-----50.00 5 lb. Tetra Marin-----50.00 \* catalogs are now available: # 110. Banquet Vac. Food--.70 William L. Smith & Staff # 140. Giant Banquet----1.30 8 oz. Met. Froz. Brine--1.55 (703) 451-7937 16 oz. Met. Froz. Brine--2.60 Hours: Tues.-Fri. 9:00 - 8:00 32 oz. Met. Froz. Brine--4.40 Sat. 9:00 - 4:00 "\$\$\$ ONLY" Order while quantities last!! CALL TODAY: DECEMBER 1975 DECEMBER 1971 CASH & CARRY SPECIALS!! CASH & CARRY SPECIALS!! # 410. Dynaflo Filter----13.50 5% gl. Perfecto Tanks----5.50 # 425. Dynaflo Filter --- -- 16.00 10 gl. Perfecto Scono----5.75 # 430. Dynaflo Filter----18.00 15 gl. Perfecto Tanks---11.50 PL. AquaKing Filter---29.00 20 gl. Perfecto Tanks---14.50 Vortex Diatom Filter----33.00 29 gl. Perfecto Tanks---23.00 14 oz. Met. Charcoal----1.10 30 gl. Perfecto Tanks---26.75 4 lb. Jungle Filter Coal-3.50 40 gl. Perfecto Tanks---52.75 8 oz. Silco Fluff-----1.40 55 gl. Perfecto Tanks---58.75 16 oz. Silco Fluff-----2.40 20 gl. Perfecto "H-L" --- 22.25 5 lb. Silco Fluff-----11.00 30 gl. Perfecto "H-L"---33.75 Met. Hush I Air Pump----3.40 10 gl. 0'Dell Economy----6.00 Met. Hush II-----6.50 15 gl. O'Dell Tanks----11.50 Met. Hush III ------10.75 20 gl. 0'Dell Tanks----14.50 Silent Giant Pump-16.00 29 gl. 0'Dell Tanks----23.00 # 2. Dynamaster Pump---25.50 30 gl. 0'Dell Tanks----27.75 Deluxe Habitrail Set---15.00 40 gl. 0'Dell Tanks----54.00 Starter Habitrail Set---8.25 55 gl. 0'Dell Tanks----60.00 Habitrail Fun House----6.40 14 gl. 0'Dell Hexegon---27.00 Habitrail Sleeping Den--6.40 27 gl. 0'Dell Hexegon---43.00 Habitrail Choo-Choo----14.50 47 gl. 0'Dell Hexegon--145.00 "违违告 ONLY" "\$\$\$ ONLY" Order while quantities last::

Order while quantities last!!

### WAVES FROM THE CORAL REEFS

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By: Ann Garnar, PVAS

1975 has been a good year for firsts in the Northern Virginia area for marine hobbyists. At the Spring Show, we had two set tanks. In the recent Fall Show, we had two marine classes -- vertebrate and invertebrate. It was a shame that there were not more entries. However, "we" overheard some people saying "if they had only known..." so now we can look forward to the next (!) show for more marine entries.

There has been discussion concerning the writing of rules for the marine classes and by the next show, these rules should have been written, approved and be in effect. We are fortunate in that response to our letters to other marine societies has been tremendous. The Palm Beaches, CSA and C-Sea (both of Cleveland) and Hawaii have sent us copies of their rules. Charles Wonderlin of The Marine Hobbyists News contacted us with the Cleveland people's names and has offered his moral support and the support (in writing) of his publication. We hope that the implementation of these rules will entice more marine hobbyists to enter their fish in future shows. If you have any ideas or suggestions, please contact us.

It is interesting to note that our entries, the Queen Angel and the Harlequin Shrimp, were relieved to be returned to their homes and their appearances in the show did them no harm. The Shrimp immediately jumped on a starfish and the Queen readily ate flake food with the extra treat of pieces of shrimp. They are ready to go again. We admit to some worry but report with great joy their adjustment from tank to being shown under abnormal conditions (for them) and back to tank. Secretly, I think they are both exhibitionists!



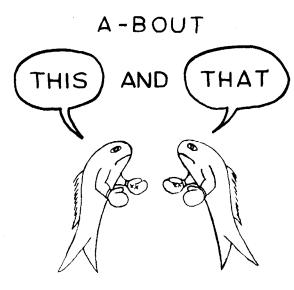
BRING 'EM BACK ALIVE

By: Larry Wilson

Collecting is always fun but that is only the half of it. Getting your specimens back home in good shape is a must or the whole effort will have been in vain. At the end of the day of the Salt Water Group's first collecting trip many of us were faced with our first attempt to transport the fruits of a day of collecting back to the safe confines of our aquariums at home. As it turned out, not very much planning had been made for the trip back. In spite of the lack of preparation most of the fish got home OK. I had brought a converter for change

ing 12 volt DC electricity from the car battery to 110 volt AC to run a couple of Silent Giants. Two styrofoam shipping containers were used to hold the water. Before I put the water in, I lined each with a large sheet of plastic, filling each about half full. Then we tried to keep the numbers in each about even, putting those that looked compatible, insofar as we could tell, in the same container. After they were all in, one thing that was obvious was that there were too many of everything. Next time I would be wiser to be much more selective, taking home only those that were really wanted. Anyway, it was too late then to take them back so they all got a ride back to Virginia. I then connected up a 6" air stone to each pump and put one in each box, gathered up the plastic sheet around the hose and tied it with a rubber band. That way there would be a minimum of spilling. For additional protection, the lid was also placed on the box. However, at the first stop to see how they were riding, I found that the plastic had been tied too tightly around the air hose and it had popped the lid off. That was easy to fix by just loosening the rubber band I had tied it with. The ride home took about 5 1/2 hours but the fish all made it back in good shape except for a couple that had disappeared on the way. Somebody had gotten hungry, I guess. That was my first collecting trip and that was all it took for the bug to get me good. So the next time that I had a chance to do some more, I decided to really do it right -- at least better. It was only a couple of weeks later that my wife and I went back to the same spot for a whole week. What I used for collecting that trip really worked out fine and will be my standard method until I find something better. I set up a 20 gallon tank at home before I left that I modified slightly. It had the underground filter that I have described in a previous article with a couple of slight modifications: instead of at least a 3" bed of gravel, I used only about 1 1/2". Then the key difference was the stand-pipe. I made it into two sections so that I could run the air stone with the tank either half full or filled to the top as normal. The tank rode over in the trunk half full resting on a piece of plywood for support with the air pump going all of the time to be sure the filter bed stayed active. When we got to our cabin at the beach, I drained the water out so I could get the tank out and set it up inside. This time I filled it up all the way using water from the bay which was a couple of blocks away. The problem of temperature control was taken care of with a regular heater that I had brought along. Each time I added some new fish that I had collected during the day I made about a 50% water change even though I did acclimate each batch before putting them into the tank. I'm not sure the 50% water change was necessary but the water was free and it worked for I never lost a single fish that time, nor on another trip that I made a couple of weeks later. On that trip and the later one that I mentioned, I brought back over 20 fish each time with not a single loss either time. Getting set for the return trip was just about the same procedure as starting out except that I left a couple of extra gallons of water in the tank over the filter bed when I moved the tank from the cabin to the trunk of the car. It only took a couple of minutes so the fish were not bothered by it at all. After the tank was in the trunk I filled it up with water to the lower pipe level and started the air pump going. I forgot to mention the preparation of the splash baffles that are necessary to keep the back of the car dry. I cut two pieces of styrofoam that would fit snuggly inside of the tank on each end, leaving about about 4" between the two in the middle. There are probably other ways to keep the water from splashing out but the baffles worked fine for me. There is one problem that I have not solved completely and that is the temperature. The first trip back, the weather was overcast and on the cool side so the temperature was no problem at all. The second trip was not as nice, at least for the fish it wasn't. The sun was out and the temperature was higher. By the time I got home the temperature was up to  $80^{\rm O}$  and the fish were showing signs of distress. All survived, but it would not have taken much more before some would have been lost. My planned solution then, and one that I'm sure I will have to use sooner or later, is to watch the temperature closely and at about 780 put a small plastic

bag of ice in the tank until the temperature comes down to a safe level and keep doing that as long as necessary. Another possible solution would be to make the trip back at night when the heat from the sun would be no problem. No matter what the problems are, I am convinced that the effort is well worth the result. I get as much enjoyment from my tank with the fish and creatures that I have personally collected as I do from the tank with the most exotic "store bought" fish I have. Try it, you'll like it.



By: Susan Sprague, PVAS

I missed my column last month because we had just gotten back from a trip to Florida. While we were there, we went to Disney World & Sea World, both located outside Orlando, Fla.

While at Disney World, I was most impressed, from a living things standpoint, by the lush vegetation. The trees, shrubs and plants were in beautiful condition when you realize how many people visit there each day.

The day after seeing Disney World, we went to Sea World. The dolphin and whale show is fantastic. Shamu, the killer whale, is approximately 20 ft. long and weighs 6500 lbs. He behaves as gentle as a kitten. At Sea World I was most interested in the fact that all their sea water there is artificial.

Two other items of interest at Sea World are a 100,000 gallon reef tank with lemon sharks, angelfish, and many other varieties of saltwater fish I don't know the names of, living in harmony. The second item was a show comprised of special lighting, photography and water fountains synchronized to music depicting the four seasons. An ingenious display!

We didn't get a chance to go to any fish shops since our trip was so whirlwind and we were visiting relatives.

# #?\*1 #?\*1 #?\*1

I insisted that we stop in Atlanta, Ga, on our way home to try and see a few fish stores. I'm sure glad I did.

We were most interested in the Yellow Pages advertisement of a store called <u>Just Fish</u>. The ad specified African cichlids and marine fish. That was the place for me.

We arrived around lunch time and were greeted by the owner-managers, a husband and wife team. They were very friendly and seemed to know their fish. The husband is a hobbyist turned shop-

owner. Just Fish has been open for approximately a year. They say it has been a rough year but they stuck it out.

I immediately fell in love with a mated pair of marine coral shrimp. I wanted them but I figured it would be dumb to try and take them to Virginia with a two day stop in between. I finally decided to blow caution to the wind and we set about getting the shrimp ready for transport.

The owners gave us a styro which we lined with two plastic garbage can liners. We put about 3 gallons of saltwater and the two shrimp in the box along with two small bubble-up filters filled with a bottom layer of fluff, mid-layer of activated carbon, and a top layer of fluff. The top was placed on the styro and the plastic bags were folded on top of that and all of this was put into a cardboard shipping carton.

We talked to the owners a while longer and learned that their marine fish are cought by two private collectors in Florida. The fish all seemed in good condition.

That night when we stopped in S.C. with relatives, we hooked the two filters up to a Hush II. The shrimp had done well from Atlanta to almost Charlotte, N.C. without any air.

When we finally got home, the shrimp adapted to their new tank easily. Now 3 sheddings and 4 weeks later, they act as if they own the tank.

### . . .

Before our Fall Show, we were sent some application forms by the International Betta Congress and the National Aquarium Club. The addresses for more information for either are as follows:

> International Betta Congress or National Aquarium Club c/o Walt Maurus 10068 Cavell Livonia, Mich. 48150

# BIANKETY BIANK BLANK

It seems that our dear Post Office Department has done it again. I was sent the information concerning the winners at the Pall Show about 3 weeks ago and I have not gotten them yet.

Also concerning the show - John Jessup's name was unintentionally left out of the list of trophy donators. Sorry John!

I was informed that Halox-American, Inc. donated TROP-OXY, a new medication for fresh and saltwater diseases.

### . . .

Mike and I just spent the weekend of Nov. 15, 16, 17 in York,

Pa, and one of the highlights was a talk on the 15th by Bud Welty of Pittsburgh, Pa. The affair was staged by the Greater York Aquarium Society.

Bud writes a monthly column in the Youngstown (Ohio) Aquarist entitled "Let's Talk Cichlids". I'm not sure how many tanks he runs but I understand well over 100 - mostly cichlids.

The talk on African Cichlids was most interesting. He concerned himself with general maintenance and compatability of the fish. Bud had many beautiful slides with accompanying personality discussion. He stresses that he doesn't get involved in the arguments concerning the technical names of the fish. The reason is that different areas have their own names for the same fish.

After Bud's talk, there was an auction where people bought good fish very inexpensively. The whole audience was then invited to Connie & Tony Rizzuto's for informal discussions and a yummy supper.

# ADVANCE NOTICE

The February meeting's program will be a mini auction. The rules will be the same as last time - a limit of 3 bags or fish items per membership not per person. There will be no bowl show that month.

# MEETING DATES

Board of Governors
Dec. 2 8:00pm
Gene Aldridge
3045 S. Buchanan St.
Arlington, Va.
931-7426

Cich	<u>ulid</u>	Gro	<u>up</u>
Dec,	17	8:	00 pm
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751.	-0672	?	

Saltwater Group
Dec. 19 8:00pm
Larry Wilson
8225 Smithfield Ave.
Springfield, Va.
451-5935

# NOTICE FROM THE LIBRARIAN

When anyone wants material from our exchange library, please give Ted Walsh a call at least a week in advance of the meeting, tell him what you want (by subject, or by specific issues) and he'll do his best to find everything he can and bring it to the next meeting. If you just want to do some "fishy" reading, let him know that and he'll make up a package of 20 issues or so and bring it in for you. Ted's phone number is 277-8249.

# TRADING POST

Craig Tingen 751-0672 (after 4 p.m.)

Round Nose Auratus fry

- P. elongatus Likoma Island fry
- P. johanni fry
- L. joanjohnsonae Type "B" fry
- P. macrothalmus fry

# LABIDOCHROMIS FREIBERGI

By: Eugene T, Aldridge, Jr., PVAS

The LABIDOCHROMIS freibergi is one of the new recently described fish from Lake Malawi, This cichlid was described by Don S. Johnson, in the first issue of TODAY'S AQUARIST, based on one fish collected off Likoma Island by Peter Davies, et al. The genus LABIDOCHROMIS, is one of ten Lake Malawi endemic genera making up the broad group labeled "Mbuna".

For those of you who do not know, the mbuna are a grouping of ten Lake Malawi genera that are monophyletic, meaning they come from a single stock HAPLOCHROMIS-like in origin. They all started by scraping algae from rocks, and most still exist that way. LABIDOCHROMIS genus has diverged from the original by developing sharp needle-like teeth for eating various types of insects from algae. The mbuna are only from Lake Malawi and do not include any species of the genus HAPLOCHROMIS even though some of them stay around rocks and scrape algae. There are several genera that are close but not true mbuna, like the TREMATOCRANUS and AULONOCARA. I am sure as we learn more about this group, more genera will be added. Just recently the genus IODOTROPHEUS was added and I am sure in the future the genus MICROCHROMIS will be added. I have now gotten deep enough into the subject of what is and is not an mbuna, so I will stop. If you want more information, read all or part of the following books "Mbuna" and "The Cichlid Fishes of the Great Lakes of Africa". Figure one shows you roughly where Lake Malawi is in the southeast portion of Africa.

The L. freibergi males will grow in size between 7 cm to 10 cm, with the females a couple of centimeters shorter. The colors are a bright light blue with eight or nine dark blue-black vertical bars. The females have the same color pattern but in very subdued colors. I have two adult males about the same size; one has eight bars while the other has nine. I got them from separate sources, that is, one came from California and one dame from New Jersey. I do not know the African collector they came from however, I am sure they came from the same one, but from different parts of the lake. Side by side there are slight differences, but I'll be damned if I am going to pickle a "live" fish just to prove the point. Their temperament is definitely sulky in nature and they stay hidden whenever possible. They are not outgoing like the other members of the "mbuna" group.

The description provided by Don S. Johnson is on the skimpy side and P. Jackson in "Mbuna" indicates it seems very close to L. vellicans. I personally do not know enough about L. vellicans to make any scientific judgements; however, Figures two, three, and four reflect the head structures and teeth of known members of the genus. Figures two and three are L. vellicans and L. caeruleus respectively and were copied from the references by Fryer and by Fryer and Iles. Figure four is L. freibergi and is a tracing from my slides. (These slides are available for anyone who wants to take the trouble to see them. Just ask.) As can be seen,

the three are similar but not the same on the surface. Therefore, I am making the assumption that the  $\underline{L}$ , vellicans is different from  $\underline{L}$ , freibergi.

This species comes from a rocky shore habitat, like the other members of the genus. The very nature of this species indicates there are a number of caves and crevices required to sulk in. Pages 7 through 12 of "Mbuna" will give anyone an excellent idea of what the rocky and/or sandy shores of Lake Malawi look like. These fish are of such a nature that they will spend their entire life in an area no bigger than a standard double bed.

The water chemistry and temperature requirements for this fish are the same as the other mbuna. The water temperature can range from 70° to 80° Farenheit, the alkalinity 7.4 to 8.2 and hardness of 200 ppm to 300 ppm. If you have ever raised African cichlids, you know that they have a wide range of living conditions. The above figures are only a guide. This cichlid will be very happy in average tank water that is neutral to slightly alkaline, but not in acid water. They will exist in acid water, but not too well and slowly pass on to the place where all good cichlids go. There is no need for me to outline how to get this type of water, because you should know. Use whatever one of the standard buffering agents suits you best: tuffa rock, oyster shells, marble chips, or salt. If you already have Rift Lake Africans successfully living in your tanks, you can raise L. freibergi without any trouble.

The genus IABIDOCHROMIS as a whole is a small aquatic invertebrate eater. The teeth and mouth structure are well suited for picking small crustaceans out of algae. No analysis of stomach was included in the official description, but I see no reason why the following major invertebrates would not be present: Chironomid, Hydropsychid, and Eubrianax larvae, Ostracods and Mayfly nymphs. Algae, as such, is a very small part of the diet. I would suspect that algae got into their stomachs as a by product of picking crustaceans out of the algae covering the rocks. I have had L. freibergi in my tanks for nearly a year now, and they have done extremely well on standard flake foods with a weekly helping of live or frozen brine shrimp. I feed seven kinds of flake on a rotating basis. Physically all of my L. freibergi have done very well on this type of diet.

I have not actually seen my <u>L</u>, <u>freibergi</u> spawn, however, I have seen some of the preliminaries and see no reason to believe they do it any differently than other mbunas. The female will carry the eggs anywhere from 21 to 24 days. The lower water temperatures tend to cause a longer brooding time. There is one very interesting facet of parental care exhibited by <u>L</u>. <u>freibergi</u> females and in all <u>LABIDOCHROMIS</u> females I have: <u>AFTER RELEASE</u>, NO BABIES ARE PICKED BACK UP BY THE MOTHER. In the beginning, I thought this was unusual, now I know this to be a characteristic of the whole genus. The babies are 7 to 10 mm in length when released and are well able to care for themselves. They tend to get along a little quicker than other mbunas at this young age. They are relatively slow grewers. I do not have any <u>L</u>. <u>freibergi</u>

big enough yet to breed.

For the person interested in the small Rift Lake cichlids, the members of the genus LABIDOCHROMIS are for them. The majority are under 10 cm (4 inches) in length. Dr. Mendenhall in his article "The Genus Labidochromis" indicates the largest are 12 cm (5 inches) long, however, I have never seen any this big. The largest I have ever seen have been under 10 cm. The ones that intrigue me the most are some of the unidentified LABIDOCHROMIS I have. that are in the 5 to 8 cm range, and they will breed at about 2/3 this size. The L. freibergi are very tolerant of my water changing schedule. It gets changed about once every six to eight weeks. They like places to hide. I use a conglomeration of tuffa rock, shale, PVC pipe and joints, flower pots and slate. The using of flat shale pieces and the 2 inch PVC pipe and joints as risers makes for some very good rock piles. It also cuts down on the weight, as the pipe is JUST heavy enough to stay down. It almost floats. The LABIDOCHROMIS are great ones to hide, if you have not already guessed, but they do provide a service. By hiding, they keep the other fish in the tank out front where you can see them.

If you have a small place in one of your tanks, why not try one of the LABIDOCHROMIS freibergi. Another unmentioned thing in their favor, they do not cost a great deal. All the ones I have cost me \$10.00 or less, mostly less, each.

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Jackson, P.B.N. & Ribbinck, T. (1975) Mbuna.

Johnson, D.S. (1974) Today's Aquarist, Vol. I. No. 1, pp. 14-16.

Mendenhall, Fr. C.L., The Genus Labidochromis, <u>Cichlidae</u> (Date unknown)

Fryer, G. (1956) New Species of Cichlid Fishes from Lake Nyasa.

Rev. Zool. Bot. Afr. 53: 81-91.

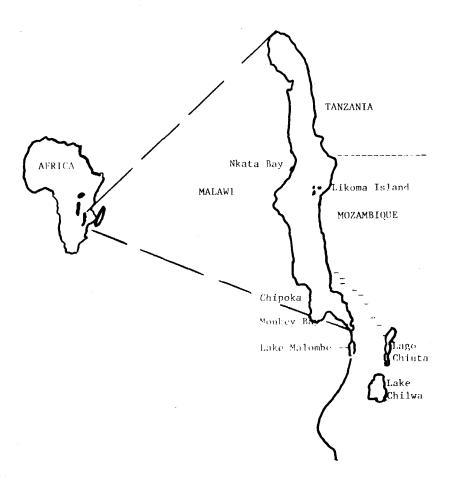


Figure No. 1 Partly from TODAY'S AQUARIST Vol. 1 No.1

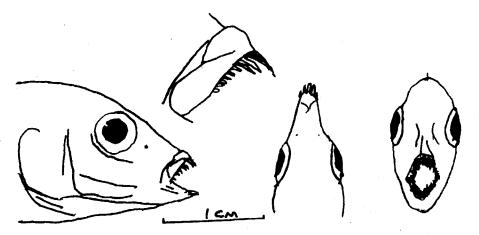


Figure No. 2 LABIDOCHROMIS vellicans

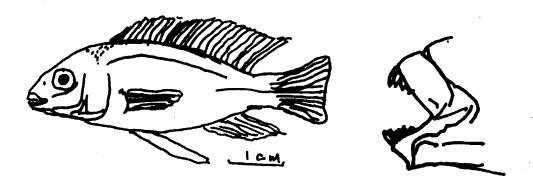


Figure No. 3. LABIDOCHROMIS caeruleus.

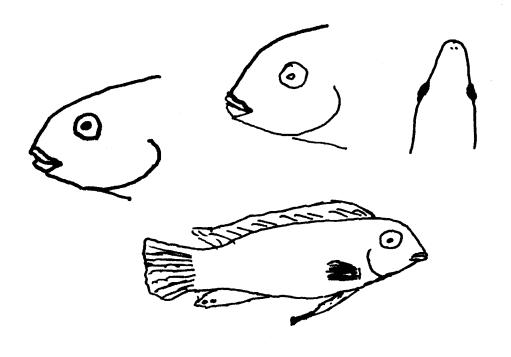


Figure No. 4 LABIDOCHROMIS freibergi

Browsin' Thru

By: Pat Tietjen

The Valley Stream - August 1975 Edgewood Valley Aquarium Society

From Davises Fishroom - "The Celebes Rainbow Fish" by Larry Davis

This article concerns an interesting, currently popular fish, "When first seeing them, most people incorrectly assume that they are a type of soft-water tetra or characin of some kind." Actually, they are hard-water fishes whose colsest relatives among the common aquarium fishes are the Australian and Queensland Rainbow-fishes."

They are very pretty when maintained in a proper set up-dark gravel, a few green plants and maybe a petrified log. According to this article, "This fish is much like a congo tetra in that the colors tend to recede when the fish is subjected to the light necessary for photographing them" producing "relatively good pictures." The Celebes Rainbow prefers a very clean tank, highly aereated water and are somewhat fussy eaters, needing regular water changes. They are fairly easy to spawn.

Colorado Aquarist - July-August 1975 Colorado Aquarium Society. Inc.

"Ever stop to think about why you keep fish?" The reasons would fill reams and reams of paper. Read Sally Winkler's article "Fish Fantasy". I think you will find it interesting and a little thought provoking.

Tropic Tank Talk - April 1975 Greater Detroit Aquarium Society

"Pulp from Hammer's Mill" by James Langhammer. Deficiency in a fish - Jim states he finds it strange that in each case, the blame is placed on the fish - or upon the capriciousness of nature. Its never placed on the aquarist's shoulders - where it belongs in every case he mentions in the article. I believe this article may open a few eyes and produce some food for thought.

The Youngstown Aquarist - October 1975 Youngstown Area Tropical Fish Society

"Let's Talk Cichlids" by Bud Welty, Pittsburgh Aquarium Society (YATFS Staff Writer). No. 29 of a series concerns itself with the feeding and raising of the fry. Failure to raise the fry is all teo common in the hobby and also failure to raise the larger part of a spawn is also too common. Bud gives us some valuable advice on a successful spawn.

Colorado Aquarist - September 1975 Colorado Aquarium Society, Inc.

"Grow Them Green" by Ella Pittman. A well written item on plants. Recommendations on types of fish that get along well with plants. Not all fish are compatible with plants. Plants can be maintained with undergravel filters if certain precautions are taken first. Remember lighting is very important to plants. Incandescent lights are recommended over flourescent lights. Temperature is another important item to remember. If plants are moved or disturbed often they don't get a chance to get established. Better to pot them so that when the plants must be moved you move the whole pot without disturbance to the roots. A very interesting article.

# HOW I RAISED GIANT DELTA-TAILED GUPPIES

By: Edwin Wager

The number of large guppies one can produce is limited to the number and size of tanks. It is better to raise a few large beautiful guppies than to raise many stunted guppies.

First is the selection of breeding stock. You must select the largest, most colorful and widest tailed guppies available in the area you live or order some good stock through the mail.

I would obtain three or four pair which would allow for any losses after you have purchased them.

For best results separate the babies from the parents and raise the young of the same age together. Young guppies require as much room or more than adults for good growth.

I allow two fish per gallon of water. For instance, one could raise forty good guppies in a twenty gallon tank. I used Amazon sword plants and water sprite in my tanks with non-soluble gravel.

Good filtration is essential and I prefer the above-gravel underwater filters or an outside filter. The filter floss is changed weekly and the charcoal once a month.

I believe partial water changes are essential for good growth and health of the fish. Aged or conditioned water can be used but not untreated tap water. I recommend that one-tenth of the water be changed every week.

Feeding in small amounts several times a day is best. I alternated flake foods with frozen or freshly hatched brine shrimp. You can purchase baby frozen brine shrimp at some shops and baby guppies love it.

After they are several weeks old pick out the smaller fish of the same age and dispose of them, keeping the large ones. There will usually be runts in every brood of young. If allowed to mature with the large ones, they will degrade your stock.

After their tails start developing and they get their coloring, pick out the ones with the widest and best formed tails and with the colors you like best. Sometimes the largest and most colorful fish develop late so don't be too hasty to get rid of a large fish who doesn't show much color or fin development,

Do not keep a guppy in your tank that you don't want to pass his particular trait on to the next generation.

To summarize: 1) select good breeding stock

2) maintain cleaniless

3) do not overcrowd

4) make frequent water changes

5) cull the undesirables

6) feed frequently without feeding too much

at one time

 feed some live foods such as brine shrimp or other live foods

These rules are also good for raising other tropicals.

Fancy guppies look their best when kept without other species of fish. Some species of fish like to nip the guppies' tails. I use corydoras catfish for scavengers since they don't bother the guppies and they are not a nuisance like snails. I do not like snails in the aquarium because they soon overpopulate and compete with the fish for oxygen.

(REPRINTED from Fish & Tips. Feb. 1975)