# \*DETA TALE \*DECEMBER 1982 VOL. 1V ISSUE 12 50¢

# polomac valley aquarium society



Happy Holidays!

## DOTOMAC VALLEY AQUARIUM SOCIETY



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MEMBERS AND NON-MEMBERS HAVING QUESTION ABOUT FISH, AQUARIUM KEEPING, AND BREEDING CAN CALL ONE OF THE OFFICERS LISTED ABOVE, WHO WILL BE GLAD TO ASSIST YOU.

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#### A NOTE FROM THE PRESIDENT

This will be my last letter to you as president of the PVAS. The past year has been a difficult one in some ways, especially with the problem of a meeting place always before our eyes. But it has also been a good year in that it has shown that our membership is secure enough in its appreciation of the PVAS that it was able to take the shifting about in stride. For that, you all deserve congratulations.

At this particular time in the tenure of a president, one of the most difficult tasks must be faced -- that of insuring that everyone who deserves thanks for jobs well done is properly recognized. This is always a tough job because there is always someone who is forgotten. The old adage "Virtue is its own reward" is probably most appropriate at this point and I intend to seek refuge in it by issuing a blanket "THANK YOU" to all who deserve it.

I must, however, take just one moment to thank a particular individual who has done a truly outstanding job. As some of you know, the Breeder's Award Program suffered through a period of inactivity after a rather phenomenal beginning back in the 1970's. Then it was taken under the chairmanship of Gerry Hoffman and it has blossomed ever since. He is doing an outstanding job and should be commended for it. Being the chairperson of such a committee is time consuming and requires a great deal of devotion, plus a thorough knowledge of fish. Now, with the addition of the plant program. I believe we are doubly blessed having someone like Gerry in the post who is willing to devote the time and the patience to do such an outstanding job. Thank you, Gerry, for a job well done.

May I take this opportunity to thank each of you for your continued participation in the PVAS? We face another, possibly arduous, year that is bound to present its own ration of problems. Your presence and your acceptance of responsibility is your surest guarantee of the future success of the PVAS.

May I also offer may best wishes to each of you during this holiday season? I hope to see you all at the Christmas Party!

The November meeting of the PVAS Board of Governors was held at Ruth Brewer's home. Present were Darrell Holman, Kenny Warren, Pete Tietjen, Jim Long, Ruth Brewer, Jim Hajdics, and Chryss Guiler.

Darrell Holman called the meeting to order at 8:00 p.m.

Ruth Brewer presented the Treasurer's Report, which was subsequently accepted by the Board. A discussion of the Fall Banquet followed when Ruth announced that several food items were not included in the \$12.50 price; thus, the Society was presented with a larger bill than expected. It was suggested that we search for a new banquet location.

Darrell Holman brought up the subject of the Christmas party. Jim Hajdics will check into the main dish that Marriott can provide and the Society's membership will bring salads, vegetables, and desserts.

Some new auction activities were suggested, such as silent bidding and a flea market table.

The Board would like to extend thanks to Pat and Maggi Mahoney for housing our banquet's guest speaker, and also to Jim Hajdics for donations to the snack bar at the auction.

December's Board meeting will be held at Kenny Warren's home on December 6, 1982.

Darrell adjourned the meeting at 9:00 p.m.

Chryss Guiler

Recording Secretary

### POTOMAC VALLEY AQUARIUM SOCIETY

Treasurer's Report - 10/31/82

9/30/82	BANK BALANCE			61 265 45
	•			\$1,365.45
	Plus Revenues:			
	Memberships		¢ 77 00	
	October Raffle		\$ 77.00	
	Fall dinner tickets		17.00	
	Refund - Mr. T's		325.00	•
	Replacement of cash advance		11.96	
	Sale of Conde pump		200.00	
	Fall auction receipts		125.00	
	3/\$1.00 raffle		1,290.00	
	Tank raffle		176.00	
	T shirts		177.00	
	Cokes & snacks		32.20	
	w bliacks		78.50	
				+2,509.66
	Less Expenses:			
	BAP - Lettering for awards		6 10 07	
	Certificates		\$ 18.97	
	Frames for awards		20.80	
	New checks		33.28	
	Labels for Delta Tale		17.65	
	Trophies for Bowl Show		3.44	
	Postage - October Delta Tale	_	61.36	
	Auction & dinner:	3	37.00	
	Xeroxing	5.00		
	Postage for flyers	23.00		
	Cokes	32.28		
	Breakfast for workers	18.76		
	Checks to Sellers			
	Mr. T's - dinner	961.01		
	Cash advance for change	511.89		
	Raffle prizes	200.00		
	Supplies	238.62		
	Evnenger for an allege	3.40		
	Expenses for speaker	60.00		
			<u>2,053.96</u>	
10/31/82	DAME DATABLE			-2,246.46
-0/31/02	BANK BALANCE			\$1,628.65

Unpaid auction tabs: \$266.67

#### Lamprologus meeli

by Art Lembke, FVAS

Lamprologus meeli is one of the small snail-shell dwellers of Lake Tanganyika. In the wild, they inhabit abandoned snail shells and will do the same in the home aquarium if they are provided the opportunity. The fish is basically non-aggressive and may be kept with other fish. However, like most other aquarium species, for sqawning they should be provided a tank to themselves. In addition, the fry must be separated from their parents in about one week after becoming free swimming or else the adult fish will drive the fry from the protective shells and some will be eaten.

The initial difficulty in spawning <u>L. meeli</u> is finding specimens of this species, and in particular a suitable breeding pair. Even if the difficulty of finding the fish is conquered, sexing this fish also poses a problem. If the fish are from the same brood and are of adult size, with all other things being about equal, the males should be about twoic as long as the females. The adult male reaches about three inches in length, the female being about one and a half inches. I obtained four fry and raised them to adulthood, keeping one pair and selling the other two fish.

Although the fish will accept shells that are just large enough to get their heads into, for spawning a larger shell is needed. large snail shell, about three to four inches in diameter, is usually sufficient. A separate shell should be provided for each fish in the aquarium. I set up a 30-gallon tank for breeding with several snail shells in one corner; the tank also contained five Lamprologus compressiceps (pearly). For about a month, the L. meeli stayed in their own shells. They would bury the small snail shells in the sand so that only the openings were visible. The larger shells were about half buried and just prior to breeding, the larger shells of the male and female were turned to face each other. At this time I noticed the fish were swimming in and out of only one shell. The next day, I counted eight eggs on the inside lip of the shell. In three more days there were six fry laying on the sand outside the shell. The fry were extremely small and essentially only their eyes could be seen at this stage. The parents were removed from the tank at this time, the other species having been removed earlier. The fry were fed an egg yolk mixture for the first two weeks. After two weeks, the fry began to venture out of the snail shells and they were moved to a five-gallon tank so they could be cared for more easily. One of the fry was lost as a result of the transfer. They were fed powdered TetraMin and by 60 days they were three-quarters to one inch long. Although the fish has little color, it does have interesting markings and because of its shell-dwelling habits is an interesting fish to the hobbyist.

#### Polycentrus schemburgki

by Darrell Holman

For those aquarists who are actively involved in a breeder's award program, and would like to take an easy way out in spawning a fish from the difficult category, then just obtain a pair of Polycentrus schemburgki, Schemburgk's leaf fish. This fish is a member of the Nandid family of fish and occurs throughout most of northeastern South America and Trinidad. It inhabits the coastal tributaries of large rivers living among submerged tree roots, limbs, sunken leaves, and other suitable debris. The overall body and head shape is much like that of some cichlids, giving it a rather fierce appearance. The variable coloration ranges from a light gray, to brown or dark brown, and black, sometimes being displayed plain and mottled patterns with the male spotted with blue and green at spawning time. Their aggressiveness and cannabalistic nature along with their very large mouth make them potentially dangerous for any type of community life, but their convenient size (about three inches) doe make it possible to maintain them in somewhat small aquaria (10 gallons being best). Their diet consists mainly of small fish, but once aclimated to aquarium life they can be coaxed into taking other foods such as tubiflex or other worms.

Spawning P. schemburgki is done very easily if you can supply them with a sufficient diet of live foods. Live foods are a necessity if you are expecting to keep them in optimum spawning condition. I was able to maintain them in top condition by daily feedings on live guppies. Other foods such a live brine shrimp and even flake foods were given, but the guppies seemed to do the trick.

For a spawning set-up, I used a 10-gallon tank with two inches of fine natural gravel planted with various species of cryptocorynes and aponogetons. A corner filter box was used for filtration and a heater was added to maintain a temperature of 80° F. The pH was maintained at 7.0 and the dH at 4° and a teaspoon of salt per gallon of water was added. Two flower pots with holes knocked the the sides were placed in the tank on their tops; this provides a possible spawning site and the second pot can be used by the female as a hiding place.

The breeders were then placed in the spawning tank and for two weeks were heavily fed on guppies. The male took up residence in one of the pots and his aggressive manners worsened. His coloration changed to black with brightly colored spangles scattered throughout the body. The female turned a very light gray in color and soon joined the male in the pot. Soon the activity started. The male would stand guard at the entrance while the female deposited a few eggs. The male would then follow her along the trail of eggs, fertilizing them. This continued for about an hour until 200 to 300 eggs were deposited. After the spawning had ceased, the male chased the female away and he attended the eggs. I then removed the female so there would be no fighting going on.

The eggs hatched in 48 hours and the male guarded the fry for approximately five more days until they were free swimming, then he seemed to lose all interest in them. I then removed the male and turned my interest to feeding the fry. Their first food consisted of newly hatched brine shrimp and in two weeks they were given sifted daphnia. At 30 days of age, they were large enough to take newly hatched cichlid fry and in two more weeks were feeding on Heterandria formosa fry and each other. At 60 days, I had 86 three-eighths to one half inch long replicas of their parents.

#### Spawning Apistogramma cacatuoides

by Darrell Holman

The cockatoo dwarf cichlid, Apistogramma cacatuoides, is a peaceful little cichlid from the Dutch and British Guianas in South America. The male of the species attains a total length of about 2½ inches with the female remaining slightly smaller. The oberall coloration of my male fish was a light brown with an olive-green overcast with a dark horizontal stripe down each side from the eye to the caudal peduncle. The dorsal, caudal and anal fins are a light blue color. The female is usually a light brown except when spawning, when she turns a bright yellow.

Spawning A. cacatuoides presented very few problems, with the exception of the water conditions. The spawning tank consisted of a  $5\frac{1}{2}$ -gallon aquarium containing a dark-colored substrate with a few live plants and a small flower pot turned on its side. The filtration consisted of a corner box filter which contained a little peat to help maintain relatively soft, acid water; the pH was maintained at 6.8. The temperature was between 76 and 82° F.

Once the pair was placed in the spawning tank, they investigated every little crevice in the tank and then took up housekeeping in the flower pot. On the second day I noticed that the female had changed in color to a bright yellow and both sexes were actively cleaning the inside of the flower pot. Later that evening I noticed that approximately 100 rather large eggs had been laid within the flower pot and the female was standing guard. The male could be seen hovering near the surface in the far back corner of the tank. The male was then removed and the female left to tend the eggs. On the evening of the fifth day, I found that the eggs had hatched and the fry had been moved out of the pot to a crevice between two plants with the female still standing guard. Two days later the fry could be seen bouncing about the tank with the yolk sack almost completely absorbed. I then removed the female and commenced feeding the fry on newly hatched brine shrimp. At the end of 60 days, I had approximately 75 three-eighths inch long fry.

The genus <u>Corydoras</u> is noted for its numerous species and unidentified specimens that closely resemble one another. Catfish for sale in retail pet shops, and even those that deal only with fish, are often unidentified, misnamed, or called something like "Spotted Catfish", "Skunk Cats", or "Leopard Catfish". Very few species are easily identifiable by the average hobbyist, and even the taxonomists seem to be in disagreement over what to call a certain Corydoras specimen. To illustrate the complexity and variability among Corydoras species, one need only examine the excellent photo I.D.'s in Dr. Warren E. Burgess' recent series in T.F.H. entitled <u>Corydoras & Co.</u>. Part I is in the July \*82 issue, Part II in August, and PartIII in October.

Dr. Burgess' article shows via the photograph the limitless variety in spotting patterns, reticulations, linesand stripes, and coloration in the subgroups of Corydoras that have been created by Nijessen & Isbrueker. Written descriptions of the species have been omitted, except for a sentence under each photo, so you can try and identify that lonely oddball catfish in your tank by visually correlating it to one in the three articles. Outdated synonyms are corrected, and the series is a wonderful source of identification for the Corydoras enthusiast.

In the spring of this year, a different Corydoras was available in quantity at a nearby shop. Although still very young, I attempted to sex the spotted cats by direct vision from above. My original guess of 3 females/\$ males turned out just right, since I now have 3 females/4 males (one death). The group was placed in a ten gallon bare-bottomed tank with a number of growing Cynolebias whitei and lots of floating aquatic plant cover(Ceratophyllum). Everyone received excellent feeding of live white worms, tubifex, and a homemade concoction. After several months, the agitated swimming activity of ready to spawn catfish was noticed, and the females were slightly plump. Although still small, after moving the group to a ten gallon set-up with numerous crypts I got the desired result---eggs.

Now it was time to identify my Corys, and with the recent series of articles in front of me I was ready to find the right picture. Sold as <u>C. leopardus</u> in the store, my fish didn't look very much like the appropriately labeled picture. The fish in the spawning tank had a very flat snout with the barbels pointing directly downward, and the spotting pattern wasn't so pronounced. But there he was on the next page with the label <u>Corydoras sp.</u>, possibly <u>trilineatus</u>. What, no name for sure? Oh well, that is the point of my opening comments, that intra-species variability is so great many fish are hard to properly identify. Apperently my fish is in the <u>punctatus</u> group anyway.

My Corys spawned several times over the next months, and I was present on several of the occaisions to witness the rituals. This fish deposits only one egg each time it goes through the spawning sequence, which I hope would be characteristic of its sub-group. The fry are raised similarly to other Corydoras species, enjoying small live foods and powdered prepared mixes. Although proper identification remains in doubt, one thing doesn\*t-- the enjoyment and satisfaction received from a spawning that may have not been before too often by other hobbyists.



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#### BASICS OF YOUR FIRST SET-UP AND TANK MANAGEMENT by Sally Van Camp, CNYAS

Seeing as we have been getting so many new members into the society lately, and the majority of them are beginners, I felt that it would be a good idea to get something down in print that these people could use as a guide in starting out in the hobby. I have been getting many phone calls lately, not just from members but from shop referrals, with questions regarding a newly set up tank. But I find that the caliber of question that is asked shows a general lack of information on the part of the caller.

I have read that the average length of time that a person (beginner) is in the hobby is only six months! This is a shame because a loss of time, fish and money are to be had. I don't know what the reasons could be from; possibly due to lack of information on the part of the beginner and/or the lack of direction from a reputable shop owner. Everyone knows all too well that there is a diversity of belief as to what is the right way of doing things as opposed to the wrong way. What may be the correct and work fine for one person may result in disaster for another. I think that if you ask 6 people the same question, you will get 6 different answers. The best thing to do when you ask a question, is to take it one step beyond that and find out something on your own. I've had tanks for almost 20 years now and believe me, there is a lot I don't know. The next thing to do is get some books, if you can't buy any, borrow, go to the library...do something! Most questions I have been asked are very basic and can be answered with a little reading on the part of the hobbyist.

One thing that really frosts me is to go into a shop and see a person, completely new to the hobby, smiling away, piling up his gear to be bought on the table. Usually the novice is getting pretty good equipment to start with. It is better to pay a little more for equipment, a heater for example, than to wake up one morning to find a tank full of cooked fish (and it has happened to me). There are many reputable companies on the market today who sell wares that fit an individual's needs, so the decision of what to buy is not a problem any more. What infuriates me is to see the fish that a person may be 'coaxed' into purchasing. Now let's see....You have just bought a 10 gallon tank; how about some neon tetras, angel fish and maybe a baby oscar. That's a good group to start out with. Needless to say, the angels will probably eat the neons if they are small enough, and the oscar, well check back with him in a couple of months, you will need to buy a larger tank. As far as the angels...no fins-the oscars thought they would be a nice addition to their daily meal. tell you what kind of fish to buy would take another article in the REFLECTOR so I will only say at the moment, don't let the size of the fish that you see sway you. Many fish, ie, oscars, Jack Dempseys, some species of the tetra family, will grow to be good sized specimens with the proper care. So get some knowledge under your belt before you hit the stores. You first purchase should be that book that I mentioned earlier, and the tank and its inhabitants will come later on.

#### THE TANK

You need to buy a tank, but what size? Most beginners start out purchasing a 10 gallon aquarium. It is a nice size but you will be limited as to the number of fish to put into it. A 15 or 20 gallon tank would be better. The so-called high tanks may look nice but esthetically, they are not the best thing to buy. The greater the water surface area you have the better; so a 20-long would be your better buy as opposed to a 20-high.

Remember that a gallon of water weighs approximately 8.8 pounds and when you figure that you are also adding the weight of the gravel, ornaments, rocks, etc to a tank, the 8.8 weight then increases to 10 pounds/gallon. Make sure the floor where you are placing the tank is supported well. If you own a good carpenter's level, use it. A tank should be sitting level on the stand. If you have no access to a level, place the bare tank on the stand and add about an inch or so of water. Check around all the sides of the tank to make

sure that it is setting level. An unlevel tank means undue stress on the glass and the possibility of a crack later on. NEVER, NEVER, NEVER move a tank that has water in it.

#### HEATERS

Unless you are going to buy something like the gold fish or the white clouds, you will need to get a heater. There are many kinds to choose from but you are better off in spending the extra money and getting a good model. Your shop dealer will be able to direct you to the better heaters that he has to offer. All heaters need REGULAR maintenance (cleaning the points) to prevent these points from fusing together and over-heating your tanks. Seventy-two to seventy-five degrees is a good temperature range to keep your tanks at. Most fish fit into this average temperature range. A good thermometer (the new digitals are great) is a must.

Never place a plugged heater into a tank of water as this will result in the tube cracking. Also remember to unplug the heater when you are doing your water changes.

#### GRAVEL

There is a wide range of gravel to choose from. Your color preferance will most likely win out here. Remember that the darker the gravel, the darker you fish will become to camouflage himself to some degree. DO NOT use 'gravel' that is sold for use in salt water tanks (dolomite, oyster shells, coral). Salt water gravel is especially blended to help maintain the alkaline pH that a salt water tank needs as well as add minerals to keep the water quality very hard. Most fresh water fish do not tolerate these very hard alkaline conditions. Also be careful of the gravel that contain sharp edges as with colored glass. These edges will be very harmful to bottom dwelling fish. Rinse out the gravel thoroughly before you use it to remove any dust and particles. A good rule of thumb to remember is 1 pound of gravel for each gallon of water in the tank.

#### **FILTRATION**

Here you may need to do some research. There are three kinds of filtration systems: undergravel (or biological), mechanical (outside filter) and chemical (outside filter plus charcoal).

The filter's basic function within the aquarium is to remove the tiny suspended matter in the water and collect it within the filtering material (filter floss and charcoal). After a few days there is a build up of filth within the filter. Unwanted bacterial and parasitic colonies develop wherever there is dirt and if the filter is permitted to become very dirty there will be a great increase in these unwanted enemies. As the build-up increases, due to lack of attention to the filter, these colonies are returned to the aquarium via the water output stem.

Filters of this type should be changed frequently and the yardstick for when this should be undertaken is the filtering material, particularly the floss which becomes darkened.

Both these filtering materials are inexpensive and therefore it is preferable to re-new them rather than try to clean them. (We all know that the price of filter floss has greatly increased in price over the past years. An excellent, cheaper, but equally effective substitute is 100% polyester material that is used for pillow stuffing. This can be purchased in any department store and on sale you can purchase a one pound package for as little as \$1.59)

An outside filter removes particles from the water and increases water circulation. By adding charcoal you help to remove ammonia and other elements from the water. Remember that charcoal will also remove some medications so be sure to read the

directions on a bottle of medication before you use it. Outside filters can be power driven or be used with a good powerful air pump. Both are very effective in keeping the water clear.

The undergravel type of filter is very efficient and requires less attention than any other type of filter. It uses the gravel as filtering material. The water is drawn downward through the sand and returned to the aquarium via the water lift tubes. Once the debris within the aquarium is drawn into the gravel, the micro-biochemical processes change it into fertilizer for the plants, a condition which is desirous if healthy plants are to be maintained.

An undergravel filter is good if you wish to keep your tank pH level on the acidic side. Once the pH in a tank is down (below 7.0) this filtration system will help maintain it to some degree. The only problem with an undergravel filter is that you will need to "break-down" your tank once or twice a year to thoroughly clean the gravel. Most medications can not be used with this type of system as it will kill the beneficial bacteria that are living in the gravel and under the filter plate. Rapid death of this bacteria will quickly pollute the tank and kill all inhabitants. Some plants do very well with this type of filtering system others do not. You will have to do some research and find out which ones prefer this system.

The normal aeration stone is manufactured from a material which is porous enough so that it permits the air from the pump to pass through the stone and return to the water in the form of small bubbles. Many aquarists believe that this action is placing oxygen directly into the water which in incorrect. Actually, the bubbles cause turbulence which brings more of the aquarium's water to the surface where it absorbs oxygen from the air.

These stones clog very quickly and in this state may cause a back-pressure upon the pump which, if permitted to continue, can cause damage to the pump. This type of air stone should be changed every few weeks, and the one removed soaked in vinegar for several days then allowed to dry before reuse.

#### LIGHTING/COVER

Both incadescent and fluorescent lights have a different spectrum of color and plants may grow better under one kind and not the another. Fluorescent lighting should be used with caution in breeding and raising tanks as there has been some indication that this lighting can cause sterility. Fluourescent lights are much cheaper to operate and even though the incadescent is cheaper to buy and install you are most likely better off in making the initial investment for the fluorescent. The one big disadvantage in using an incadescent light is that it gives off so much heat that it heats the surface water as well as causing damage to surface plants. The temperature in a small tank can be raised as much as 10 degrees in a days time if this lighting is kept on for 12 hours or so.

A good tight cover on your tank will insure two things: one is that you won't loose any fish from jumping out and fish do jump; and secondly, water evaporation will be kept to a minimum.

#### ORNAMENTS

Use only ceramics bought in pet shops as they have a special glaze on them and the paints used do not contain lead which is lethal to fish. Shells and coral as I have stated before are not for fresh water tanks. Plastic plants...here again careful what you buy. Some plants contain metal wiring and this wiring when exposed to water will rust...also lethal. Driftwood - again purchase in shops as they have been treated to kill any bacteria harboring in the wood. Coconut shells after being cleaned and preboiled are good hiding places for night loving fish.

Cleanliness within the aquarium is the positive approach for the drastic reduction of problems such as disease or fatalities of fishes and plants which can result in heavy expenses for replacement of losses as well as medications to combat these problems.

Preventive measures can provide a full measure of assurance if undertaken regularly. There is no guarantee that this assurance will be sustained if chores are undertaken on a haphazard basis. Water within an aquarium, irrespective of the gallonage, must be considered to be in a state of stagnation and this condition is responsible for the inside glasses becoming coated with a slimy film. Furthermore, if the aquarium is exposed to too much light it is probable that there will also appear a growth of algae.

To permit this build-up on all the sides of an aquarium not only presents an unsightly appearance but provides an ideal breeding for unwanted bacterial, parasitical and fungal colonies within the aquarium. It is a simple matter to remove the slime or algal coatings. I usually remove the algae growth from all but the back side of the tank glass. This glass is usually picked on by those fish that like vegatable matter in their diet.

Usually the sediment that settles on the top surface area of the bottom sand is comprised of decaying excreta from the fishes and snails, decomposing, uneaten foods plus the decaying fragments of aquatic plants.

If left unattended, there is the definite potential that the water will become foul. The decaying material will cause an increase in the bacterial colonies present, particularly the anerobics. This will lead to a decrease in the dissolved oxygen content in the water and may be very harmful to both fishes and plants.

The simplest method to remove sediment is by syphoning, using a hose of about 3/4 inch diameter. Do not place the hose too near the surface of the sand as it is only necessary to remove the larger loose debris on the surface. If undergravel filters are in operation, the smaller particles of this debris are drawn beneath the surface of the sand and act as a fertilizer for the plants.

By viewing the gravel from the side glasses you can see if the sand has become foul. This is usually caused by over-feeding. If there are dark patches just below the top surface area, this indicates that the sand has become foul and will not support aquatic plants. Remove one of the plants near this area and if it has black roots this definitely confirms that the sand has become foul. Another indication that the sand has become foul is the rising of bubbles from the gravel bed and/or the odor of "rotten-eggs" caused by decomposition of rotted material trapped in the gravel.

If this condition exists there is only one solution. It requires that the fishes are removed and the aquarium completely taken down. The sand must be thoroughly cleaned in a strong salt solution and thoroughly rinsed in cold water.

With proper tank maintenance you will be well on your way to keeping your tanks and yourself free from the worry of problems that might arise later on. A conscientious hobbyist has a routine for tank management and follows this routine on a schedule to fit his needs.



(Reprinted from THE REFLECTOR, Sept., 1981, Central New York Aquarium Society, 923 Wadsworth St., Syracuse, NY 13208)

## DON'T STARVE YOUR PLECOSTORUS (Hypostomus)

by Helen Glass Owner, B&B Pet Shop

Recently a customer told me that she was never able to keep a Plecostomus (Hypostomus plecostomus) alive for longer than several months. Also, she said, in her aquariums, the plecostomus either grew very slow, or not at all. When asked how many she had lost, she said over a period of 3 or 4 years, probably 6 or 7. She had one that had lived close to a year, my immediate thought was that the fish had probably died of starvation.

Most hobbyists do not understand that the plecostomus relies almost entirely on algae for its food, and very few, if any, aquariums have enough algae to fill its need. To supplement the fish's diet, I suggest using spinach. I use canned spinach prepared in this way: pour off liquid, separate the leaves as much as possible, then rinse in clear water. Carefully spread the spinach leaves on a cookie sheet and freeze. When frozen solid, put small quantities in plastic or freezer wrap, Keep frozen until ready to use, then all you have to do is break off a small piece and drop it into the tank. This insures the plecostomus of getting an adequate diet.

Belonging to the family Loricariidae, or armored catfishes, the plecostomus is popular among fish hobbyists. Hypostomus means mouth underneath, and plecostomus means folded mouth. There are probably about 35 or 40 varieties other than plecostomus which resemble it, but they are not the same family. For instance, the bushy-mouthed catfish resembles the plecostomus, and is sometimes sold as one, but it definitely is not a plecostomus. The bush-mouthed catfish is also an algae ester.

The plecostomus has fairly small eyes, a pointed snout, and a subterminal mouth. In the aquarium they seldom grow beyond 12". It clings to the glass of the tank or the rocks with it's large sucking disks or lips. They have a reptilian like tail and in the large plecostomus, when they switch or lash out with the tail, it can tear up the plants. This is about the only undesirable feature, because as a rule, they do not eat or attack smaller fishes. However, two plecostomus in the same tank, may battle with each other.

Temperature does not seem to be too important - at 70° up to around 80° seems to suit their requirements. You may think this fish is a slow mover until you try to catch one, then their quick get-away will surprise you. On the armored body are many small spines sticking out which can tear the net. When removing from a net, the best way is to grash the fish by it's hand head

net, the best way is to grasp the fish by it's hard head.

Hiding places such as rocks and ornaments should be provided as this species is mostly nocturnal, it usually stays hidden during the day. It is also a good idea to avoid too much light at any time.

In my shop, I have never had a spawning of this species, but recently a customer told me that her plecostomus had spawned, and she promised to bring me some. However, as yet P have not received any. Another pet shop here in Riverside did have a customer bring in a spawning of his plecostomus, and he said he had about 400 fry. The funny thing about that spawning was, the customer did not know what the tiny creatures were, so he took them to the shop to find out. He was quite surprised and pleased to find he had plecostomus continued

Meste .

Don't Starve Your Plecostomus, cont'd

babies. The man stated that one fish was about 6", and the other 5" in length. He was not sure of their ages. The newly hatched fry were very, very tiny, just about the size of new-born, tiny guppies.

There are a number of varieties of plecostomus and a few are attractive, but most are quite homely. They are good scavengers, and if fed properly, they will live in the aquarium a long time. Their exact life span is not known. If you want to keep this fish in your aquarium, feed him right and he'll reward you by staying around for a long time. In other words, don't starve your plecostomus!

#### BRAZILIAN LAND TURPLE SAVED

From Rio De Janiero, Brazil, comes word that through an 11 year campaign, the Brazilian land turtle has been removed from that nation's endangered species list, according to the Brazilian Forestry Development Institute,

The campaign to save the turtle from extinction began back in 1965 by outlawing commercial hunting and the exportation of the species. Nesting zones were established on the Trombetas River, a tributary of the Amazon.

Since that time other nesting areas were established on the Tapajos River in 1968, and ten more areas are to be set up in the Amazon basin in the very near future.

Prom the Riverside Press Sept. 1976

#### GIANT SPONGES FOUND

Just outside the Golden Gate Bridge, in the Pacific Ocean, a new genus of giant sponge has been found. Twenty five years ago 47,500 barrels of radioactive waste was dumped, and this is where the sponge is thriving.

Robert S. Dyer, an oceanographer of the Environmental Office of Radiation Programs discovered the sponges, and describes them as three to four feet tall, and shaped like vases. Ar. Dyer was asked about the possibility of a "giant mutant sponge" growing out of the radioactive dump. "It's a nice science fiction idea, "he said, "but I would have a hard time justifying it."

The location of the sponges is near Farallon Islands, which are a group of uninhabited islands 30 miles west of San Francisco.

from The Herald Examiner, Sept., '76

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#### POINTS (through Nov. 15, 1982)

Special congratulations to Amy Stirman, who has reached the Breeder's Award level this month.

#### Recent Points Awarded:

Amy Stirman Pat&Maggi Mahoney	Cichlasoma-nigrofasciatum	10	
	Cichlasoma nigrofasciatum	10	
Woody Griffin	Cichlasoma nigrofasciatum	10	
	Cichlasoma salvini	10	
	Ameca splendens	10	
Vince Edmondson	Geophagus jurapari	30	(difficult)
Gerry Hoffman	Corydoras trilineatus(?)	20	(dlilloui)
	Apistogramma amblopitoides	15	
Garland Neese	Lamprologus meeli	15	
	Cyphotilapia frontosa	15	
	Geophagus brasiliensis	15	
	Tilapia buettikoferi	15	
	Cichlasoma champanoides	ió	
	Haplochromis spilorynchus	10	
	Cichlasoma cyanoguttatum	10	
	Glossolepsis incisus	10	(pending add'l
			points)

Merry Christman and Happy Fishkeeping to all who have participated in the BAP during 1982. I know there are some new faces in PVAS who are getting started in the program, so 1983 could be a great year for the successful spawning of many more fish. Will it really be that much better than '82? There were 87 spawnings submitted for credit, down a bit from '81, but still plenty of activity going on. Watch for lots of fun in the 9th year of the program--The Year of the BAP.

Yevry



# POTOMAC VALLEY AQUARIUM SOCIETY PO BOX 6219, SHIRLINGTON STATION ARLINGTON, VIRGINIA 22206

		Date	19
	APPLICATIO	ON FOR MEMBERSHIP	
NAME			
STREET			
СІТУ		STATE	
PHONE		ZIP CODE	
Number of tanks			
Type of fish			
What you would lik to do in this Club			
Which sub-group in you? (guppy,cichl	terests id, other)		
How long do you pl	an to be in th	iis area?	
Occupation			
Membership dues fo	r the Potomac	Valley Aquarium So	ciety are:
Family Individual	\$10.00 \$ 7.00	Corresponding Junior (under 18)	\$5.00 \$3,00

Completed applications accompanied by your check or money order should be mailed to P.V.A.S., P.O. Box 6219, Arlington, Virginia 22206.

Please attend our meetings at the Cocoa-Cola Bottling Plant, 5401 Seminary Road, Alexandria, Virginia at 8:00 P.M.

Shirlington Station Arlington, VA 22206 Potomac Valley Aquarium Society P.O. Box 6219

FIRST CLASS MAIL

# 1982 MEETING DATES:

JAN. 11  APRIL 12  JULY FEB. 8  MAY 17  AUG. MAR. 8  JUNE 14  SEPT. The Lecenber 13, 1982 (pristness forty wi	APRIL 12  MAY 17  JUNE 14  ember 13, 1982 (hristmas Far
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12 JULY 17 AUG. 14 SEPT.	12 JULY 12 17 AUG. 9 14 SEPT. 13
JULY AUG. SEPT.	JULY 12 AUG. 9 SEPT. 13
	12

OCT. 11 NOV. 15 DEC. 13★

Falls Church, VA. and Graham Rd.,

Meetings start at 8 p.m. Doors open 7:30 p.m. Bowl Show registration, 7:45 p.m. to 8 p.m.