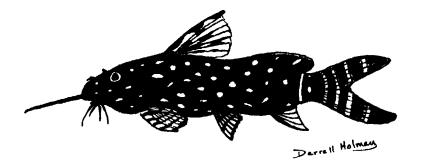
*DELTA TALE * AUGUST, 1981 * DELTA TALE * AUGUST, 1981 VOL. XII, ISSUE 8

potomac valley aquarium rociety

Fifty Cents



THE LACEY ACT OF 1981 Details Inside

August is MINI-AUCTION Month See You There!!!

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 dissemination of information, encouraging friendly competition, soliciting participation in its shows, and promoting good fellowship. Correspondence should be addressed to: Secretary, P.V.A.S., P.O. Box 6219 Shirlington Station,

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MEMBERS OR NON-MEMBERS HAVING QUESTIONS ABOUT FISH. AQUARIUM KEEPING. AND BREEDING CAN CALL ONE THE THE OFFICERS LISTED ABOVE, WHO WILL BE GLAD TO ASSIST YOU, OR REFER YOU TO SOMEONE WHO MIGHT.

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MINUTES OF THE BOARD OF GOVERNORS MEETING, July 6, 1981

The July BOG Meeting was held at Pat and Maggi Mahoney's residence and was called to order by the president, Woody Griffin, at 8:00 p.m. In attendance were Ruth Brewer, Woody and Nancy Griffin, Wayne Hilburn, Pete Tietjen, Kenny Warren, and the Mahoneys.

Plans for PVAS' Annual Picnic are well under control, with approximately sixty people having said they would attend. Woody thanked those who had helped him with the arrangements, including Nancy Griffin, Maggi Mahoney, and Jim Hajdics.

Federation of American Aquarium Societies, known throughout the hobby as FAAS, has sent an award to PVAS to be given for some meritorious effort amongst the many efforts which serve to keep PVAS rolling along. It was decided that a "Member of the Year" be chosen, based on best all around club participation, and given the award at the annual Christmas party. The members will vote by blind ballot, and the criteria will be drawn up by Woody Griffin by September.

The discussion of the fall banquet was tabled until the August meeting.

The August meeting will be held at Wayne Hilburn's, with the September meeting at the Griffin's, October at Pete Tietjen's and November at Kenny and Sandy Warren's.

A nominating committee for next year's board and officers was selected, and will be led by Pete Tietjen. Wayne Hilburn, Gerry Hoffman, Carol Kawecki, and Tom Wright will constitute the committee, pending acceptance. Alternates will be Gil Baldwin and Kay Thompson. A vote was taken to accept this committee.

Woody suggested that current officers and board members, as well as members at large, think in terms of what they would like to do next year, and let Pete or a committee member know if you're interested in an office, a board position, or a committee position.

Woody reminded everyone that the American Cichlid Association is in two weeks in Indianapolis, Indiana, July 17--19.

The meeting was adjourned at 8:45 p.m.

Respectfully submitted,

Margaret E. Mahoney Recording Secretary

NEWS and NOTES

PVAS' 2nd Annual Picnic was held on Sunday, July 12, 1981, at Sligo Creek Park in Silver Spring, Maryland, and proved to be a very enjoyable time for all who attended. We had a nice turn-out and enough food for about twice as many people as showed up, thanks to the efforts of Woody Griffin and Jim Hajdics. For reasons unknown, a number of people who were planned for just didn't appear, though their intentions to attend had been expressed, according to Woody. Well, those of us who did attend had a ball, volleyball, that is, and badminton, and lots and lots to eat and drink on a beautiful summer day. We'll have to draft more members next year, so we can field a softball team (or two).

Having just returned from the A.C.A. Convention, in Indianapolis, and looking forward to next year's convention, in Milwaukee, Wisconsin, I would urge that some of our newer members who haven't been to such a fish convention plan your vacation schedule to include either the A.C.A. (to which I'm partial) or some of the other fish shows around the country. There's a lot of fish talk, but also a lot of information to be found in exchanging experiences and tales with other hobbyists like ourselves. Some of the speakers are experts in their respective fields, and others are respected hobbyists who have tried and proven ways of making this hobby more enjoyable for all of us. Seeing old friends, and making new ones, are just two of the many reasons for attending the national conventions, weekend workshops, and our own affairs, including the monthly meetings. Like any other venture, we will usually get out of it something proportional to our input. So join in the fun....

While in Indy, several of us did a little shopping around the local fish stores and came up with some nice fish, in addition to those which were available in a very large auction. Fish which are rare in some parts of this country are sometimes plentiful in other areas, so it pays to look around when traveling around from place to place.

We picked up a new "exchange" or two and had a lot of fun with Mike "Hidey-Hole" Sheridan, Ginny and Charlie Eckstein, Bobby and Sandy Copperman, and others from the New York-New Jersey contingent. Poor Charlie Eckstein was up to his ears in water changes a few nights ago...Ginny's got a broken ankle, thanks to a hole she stepped into on the motel grounds, and hasn't been quite as active as usual since her return home...She says that they'll be coming this way in October for our Fall Banquet

Speaking of the Fall Banquet, plan now to attend...we have a guest speaker in the wings who's sure to please...details next month....

PVAS authors who've received mentions are Woody Griffin, for his Lamprologus brichardi article, in the Youngstown Aquarist, April, 1981; John Jessup, on the Red Devil, in Tank Topics, April, 1981; and Pat Mahoney, same issue, on Half-Beaks, and Pat Mahoney again in Fishy Facts, January/February, 1981, on Apistogramma steindachneri; in the Tropiquarium, January, 1981, Mahoney's A. steindachneri article, Ron Thompson's The Krib..., Garland Neese's Aequidens curviceps, Darrell Holman's Geophagus pellegrini, and John Mangan's The Unthought of Livebearer are mentioned, along with Gene Aldridge's Cichlid Notebook-Labeotropheus. Mangan's reviewed again in the February, 1981, Ashco Skimmer. A reprint of a reprint, "How Good A Club Member Are You?" appeared in the February, 1981 issue of Fins 'N Tales.

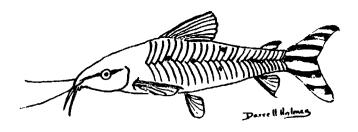
Keep writing, please, so that I can keep writing....

POTOMAC VALLEY AQUARIUM SOCIETY

*****TREASURER'S REPORT - 7/1/81

BANK BALANCE - 5/11/81			\$ 1,275.38
PLUS: Revenues:			
Membership	\$	21.00	
Raffle Monthly Meeting		22.25	
Tee Shirt Sales		30.00	
Proceeds Spring Show		3,877.88	
			3,951.13
			5,226.51
Plus: Deposit Refund Spring Show			25.00
(Check Voided)			
			\$ 5,251.51
LESS: Expenses (See below for de Bank Balance; 7/1/81	etail		(3,410.21) \$ 1,841.30

PAYEE/DESCRIPTION	AMOUNT	
V. Edmondson-Postage DeltaTale	\$	21.00
C. Baldwin - Postage Exchange		35.75
Fed. of America Aquarium Societies		15.00
Shirt Art - Tee Shirts & Collar Shirts		495.25
Top Cat Printing - DeltaTale		32.50
Spring Show Expenses		864.57
Proceeds Sellers Portion Spring Show Auction		1,632.94
Beltway Movers - Storage Show Equipment One Year		115.20
V. Edmondson - Postage DeltTale		35.00
U. S. Post Office - Annual Rental P. O. Box		45.00
Top Cat Printing - DeltaTale June & July issues		68.00
V. Edmondson - Postage DeltaTale		50.00
TOTAL PAID OUT EXPENSES	\$	3,410.21



A PRIMER ON PHOTOGRAPHY, PART IV
by T.C. Hodgson, II, <u>Tank Topics</u>
Greater Akron Aquarium Society, <u>March</u>, 1980

Light enables the Light is the source of all photography. photographer to see and record the image upon the film. Light is a This energy is similar to radio, form of electromagnetic energy. All are composed of waves that television, heat waves, and x-rays. spread, bend, interfere with one another, and react with obstacles much as waves in water. Light is also matter. Just as any solid object is matter light rays are composed of individual particles called protons. These protons travel in streams just as droplets of water from a hose. When a photon hits something it delivers a noticeable jolt just as the water droplets do. Einstein's famous equation E=mc proves this where E refers to energy and m to the mass of matter. The wave characteristics of matter such as houses are rarely discernable and can generally be ignored: ordinary matter usually acts as if it were made up of particles. When it comes to light the situation is quite different. In most part the characteristics of light are those of waves yet in some instances the particle characteristic reveals itself. For example an image is recorded on film by the light proton, or particle, striking a molecule of silver bromide or silver iodide disrupting its balance and composition.

There are three major characteristics of a light wave that concern the photographer. First, its <u>intensity</u> which is related to the height of the wave crests and indirectly determines the light's brightness. Second, the <u>wavelength</u>, which depends on the distance between crests and largely <u>determines</u> color. Lastly its <u>polarization</u>, which is the angular orientation of the crests. This can be exploited for photographic purposes. All three characteristics are influenced by what happens when light waves interact with ordinary substances: air, water, metal and glass surfaces, clouds, or photographic filters. It is this light- matter reaction, beginning with the actual generation of a light wave inside an atom in the sun or a light bulb, that creates all of the effects we see -- and the different effects we sometimes photograph.

This electromagnetic spectrum is composed of waves with the only physical differences being their length. Radio waves are the longest waves with some as great in length as six miles. At the other end of the spectrum of electromagnetic waves we have gamma rays of less than .000000004 of an inch. Visible light is a very small section of the middle of the spectrum, from about .000016 to .000028 of an inch. Within the narrow range of visible light, each individual wavelength is emitted by the sun, but greenish wavelengths are emitted in greater intensity than others. This mixture registers in the brain as white.

Electronic flash produces wave combinations not complete in all wavelengths but color balanced to produce this greenish wave priority and simulate white light. The greater the temperature of light emitting reactions the whiter the light. Tungsten lighting is warmer or longest in red wavelengths. Even sunlight however is not always what it seems. It includes wavelengths that are not visible light, yet they do affect film. Any of its wavelengths, visible or invisible, may be absorbed, separated, re-mixed and re-emitted on their way from source to camera.

Last month we began a discussion of light. I was reluctant to quit, but due to previous commitments it was necessary. You were, however, given the outline for this paragraph and I hope some of you have researched the facts given in paragraph two of last month's article. As Julius Caeser reflected: "All light is divided into three parts."

The intensity of light is developed by the height of the light waves. At different points on an continuum the intensity of a series of light waves will vary. As photographers we must determine the intensity of the light reflected from our subject, or subjects, and match this intensity with the emulsion speed of our film. speed you may remember is the index of the light sensitivity of the film. We have two controls on our camera to regulate the intensity of light reaching the film. The first is shutter speed; the second is aperature. As we measure the intensity of a light source we convert this meter reading to f/stops at a certain shutter speed. We have already discussed the creative possibilities of shutter speed and f/stop -- called blur and depth of field. I am certain that all of you can buy a roll of film, place it in your camera, set the ASA in your meter, go outside and take a meter reading on a subject, decide what shutter speed is necessary to stop action, set the aperature at the indicated setting from the light meter, and push the shutter release. What do you do if you don't have the facilities for metering the intensity of the light used for exposure. I don't imagine many of you have a flash meter in your camera bag! It is with flash lighting we are concerned in fish photography. The flash unit you are using will have an exposure index somewhere which will probably go as low as five feet. This will give you the basis for experimentation. Two problems One, you are closer to your subject than five feet; two, you need less light than you have. The first problem is created by the constant drop in intensity of light from your flash unit along the continuum of light travel. To enable you to take pictures at twenty or more feet at the flash setting on your focal plane shutter of say 1/60 of a second too much light must be emitted from the flash at say ten inches than can be compensated for by f/16 or f/22. By now you see this is the same problem. The answer is not what the lazy photographer wants to hear for there is no secret formula! You must cut the amount

of light in one of three ways and experiment until your pictures at that distance are acceptable. One, you may increase the distance of the light from the subject. You must be careful here though or you will become like the salesman who sold the high power telephoto lens to the customer who wanted to take good pictures of the moon. day the customer returned to the store to trade the lens for a less expensive and shorter lens stating "The moon looked too big!" salesman flatly stated: "When a subject is too large with a telephoto you just back up till it looks right!" Well remember sometime you're not going to be able to back up your light due to physical limitations, then you're going to miss that picture of a lifetime if you can't correct the problem some other way. The second approach is to limit the light coming from the flash with a white (and I repeat, white) handkerchief. Once again you must experiment to determine what one layer and two, etc., will produce. The third approach and best is the use of natural density filters. They will cut light consistently from time to time and come in powers. For instance a 4x will cut 4 f/stops from your exposure. Once again you must experiment to determine what filter and f/stops to use at a set distance and with different types of background. The type and shade of background will of course dictate the amount of light and its intensity reflected into the camera when the shutter is open during exposure.

The second major characteristic of light is its wavelength; will determine color. We have already discussed the different types of light based upon color temperature. It should suffice to say that the color temperature of the film must be matched with the temperature of the light used for exposure. 6000K is strobe or electronic flash light. 5000 to 5500K is daylight. Both require daylight balanced film. 4000K is the color temperature of most blue flash bulbs. Here you still use daylight film, but this can be a most expensive way to enjoy flash pictures. 3200 to 3600K is th color temperature of most tungsten bulbs made for photgraphic purposes. Here tungsten or indoor film must be used. If you have daylight film in the camera and wish to take a tungsten shot you must filter the light with a 85B filter or its equivalent. This adds yellow to the light. If you are using tungsten film and wish to take pictures outside you need a At this point it's wise to 80A filter to add blue to the light. restate that all exposure problems are solved through the lens camera with Photobulbs and tungsten film. If you don't mind the heat created you can set up your camera for tungsten light and get a fair depth of field at say 1/125 of a second to stop action.

(Continued on page 15)

BAP REPORT

NAME	POINTS AMARDED
Garland Neese	600***
Pat and Maggi Mahoney	445***
Gerry Hoffman	445***
Woody Griffin	405***
Ruth Brewer	305***
Darrell Holman	300***
John Jessup	280**
Vince Edmondson	265**
Sue and Mike Sprague	165**
Kenny Warren	90*
Gene Aldridge	80*
Jim Hajdics	70*
Tom Wright	55 *
Thompson Family	35
Amy Stirman	10

RECENT POINTS AWARDED (as of July, 1981)

Gerry Hoffman ----- Apistogramma ramirezi (Gold Ram) 15 points

Darrell Holman ----- Corydoras hastatus 20 points

Aphyocharax rubripinnis (Blood-Fin Tetra) 25 points

John Jessup ----- Xiphophorus variatus (Platy variatus) 10 points

Pseudotropheus lucerna 15 points+ Lamprologus tetracanthus 15 points Telmatochromis temporalis 15 points Trematocranus jacobfreibergi 15 points+

Garland Neese ----- Tilapia species (Black) 10 points
Pseudotropheus minutus 10 points

+ Fish spawn signed off when these fish were originally in a 15 point category, prior to current BAP point listings.

Program Chairman Gerry Hoffman advises that there will be a Mini-Auction (and possibly a small program) at the August meeting. September's program will feature Norma Newsome, a noted Angelfish Breeder, who has over twenty varieties in her fishroom, which is set up to accommodate the breeding and raising of hundreds of Angels. Norma also supplies most of the local aquarium shops with young Angels. Slides of her fish and set-up by our own Ruth Brewer.

SPAWNING THE LAMPROLOGUS TETRACANTHUS

John E. Jessup, PhD

Lamprologus tetracanthus is an attractive fish that has to be kept to be appreciated. It does not have the glamor of L. brichardi, nor the uniqueness of L. compressiceps. But it is a good-looking Tanganyikan that should not be overlooked, if you are looking for something a little different, and if you are becoming a little tired of Mbuna or other African mouthbrooders.

Lamprologus tetracanthus is a sub-strate spawner that is very prolific, once some of its required conditions are met. I said "some" because once a breeding pair is established, a wide variety of environmental conditions will suffice. As a matter of fact, once breeding begins, it becomes somewhat ritualistic as long as the pair are kept together. You can literally find yourself knee-deep in fry, if you have the tank space. It is true, however, as pointed out in the literature, that the adults will eat the latest batch of fry, as they clean the tank for the next spawn. Hence, if you want to set yourself up in business, you will need to relocate either the parents or the fry after about two weeks.

My adults were about one year old when spawning began. The male was about 3^n , while the female was about 2^n . These fish eventually achieved about $6\frac{1}{7}$ " and 5" respectively. Spawning took place in a well planted 48 gallon tank of Korean design and manufacture. The adults spent a considerable time "rearranging" the gravel to their requirements and then laid about 300-400 -- the actual number was difficult to estimate, an a flat rock, and on the underside of a half-section of broken flowerpot. The temperature was 74°F. and the pH = 7.4. There were two males and one female in the tank plus a small pleco and Ps. lucerna juveniles. All of the "extra" fish, including the pleco were beaten or killed by the male, and those that survived were moved to other quarters. The eggs were small, less than 1/16", and of a whitish-cream color. The incubation period was five days, during which time ten drops of Aquarosol per gallon were added, five drops/gal. on the first and third days. The fry were extremely small and gave the familiar "cloud" effect as they swarmed about. Both parents guarded at first, then only the male, at which time, the female moved off to the opposite end of the tank, obviously to recuperate and to prepare to spawn again.

The adults were moved after ten days. I believe the male would have protected the fry longer but was not afforded the opportunity. Mortality was high among the fry. Only fifty remained at the 60-day mark, but that really did not matter as I had about four more spawns in between.

SPAWNING PELVICACHROMIS PULCHER

by Tom Wright, PVAS

Kribensis, as this species is more commonly known, is a small African river cichlid. Unlike most Africans, this fish is both colorful and peaceful. The "krib" will co-exist with a wide range of community fish.

As is well known, Kribs display brilliant coloration at breeding time with the females bending and quivering in a "c"shape at the approach of an available male. Actually getting this "EASY" fish to spawn was a trial by ordeal that lasted over 18 months and took over a dozen individuals.

My first group of 8 were young adults which were placed in a ten gallon tank with plenty of rocks, plants, and hiding places. They quickly grew to full size and produced several pairs. The largest pair was placed in its own ten gallon tank with rocks and plants. Pairs in both tanks quickly set up housekeeping in flower pots while the unpaired fish stayed out of their way.

Now eagerly waiting for the spawn, I observed females constantly challenging each other and defending their territory. If a male came near, they quickly lost interest and approached him in full display. Usually the male swam by and ignored the proceedings. After several months of this, it was clear that the males had no interest in spawning. Introducing males from other sources had no effect. Good feedings with live foods had no effect. Changing the water and varying the temperature had no effect. In desperation I placed them in a twenty gallon tank. They liked the tank, but they wouldn't spawn.

After six months in the twenty gallon tank and the gradual reductions in numbers from a mysterious cause (I call this KRIB death), it seemed that there were some fish I just couldn't breed. Three days prior to sending them on their way, I noticed a strange cloud in the tank. This cloud was 70 fry and mama. The parents claimed 70% of the tank and let the rest of the Kribs have a corner. Care of the fry consisted of thrice daily feeding of micro-plankton. Very few young died because the mother was an excellent parent and guardian.

If you want to try to breed this fish, then I suggest not reading this article. I tried everybody's advice with equal success. The only thing that worked was to threaten the fish with eviction. The best guess as to the cause of the problems concerns copper. My house was new with equally new copper plumbing. It's possible that they received enough dosage to suppress the mating urge in the male, but not enough to kill them outright.

In summary, it is worth stating that this is an interesting and colorful fish and well worth an effort to breed it, but don't use me as a reference.

LEGISLATION REPORT

by Larry Fella, G.D.A.S.

LACEY ACT AMENDMENTS OF 1981

As John Benn stated in the May issue of F.A.A.S., Senate Bill 736 was introduced on March 19, 1981 by Mr. Chafee and the House version of that Bill (1638) was introduced by Mr. Breaux on February 4, 1981.

If the Bill gets passed, there would be (2) types of enforcement agencies:

- 1. Federal Laws would apply and be enforced in the United States except Indian Territories. (Indian Treaties with the Federal Government.)
- Indian Tribe Laws would apply and be enforced in all Indian Territories by the Indian governing body of each tribe. NOTE: Indian Tribe Laws are or could be different than that stated in the Lacey Act of 1981.

Now a look at the Bill itself and I quote: "To provide for the control of illegally taken fish and wildlife." It means in this country and other foreign countries. The term "fish and wildlife" means any wild animal, whether alive or dead, including, without limitation, any wild mammal, bird, reptile, amphibian, fish, mollusk, crustacean, arthropod, coelenterate or other invertebrate, whether or not bred, hatched, or born in captivity, and includes any part, product, egg, or offspring thereof." End of quote.

My God. The above sounds like a wife's grocery list for the supermarket... Anyway, what it really means is that if you purchase one or several pairs of fish or any other animals and you breed them at home, you would be in violation of the law until the day you get arrested by an agent of the Department of the Interior

or until the day you die, if no one turns you in.

The words "endangered species" do not appear in print in the "Fish and Wildlife" section. Therefore, that section refers to "ALL FISH AND ALL WILDLIFE;" (and would you know the endangered species are also covered in that section?)

Fines range from \$250.00 to a maximum of \$20,000.00 or imprisonment for not more than five years, or both. This applies for 1) violation either (1) fish or

(1) wildlife animal.

Now, if you have more than (1) fish or (1) wildlife animal in violation of the law, well...do your own multiplication. Also, all properties seized are forfeited.

The Secretary of the Interior or Commerce may allow the owner to post bond in lieu of holding such fish, wildlife, property or any other item, or other surety satisfactory to the secretary, if you do not have enough money to post bond.

Any informant, a close friend or someone living by you, will be financially rewarded by the Secretary of the Interior or Secretary of the Treasury. The amount is not stated in that Bill.

Now for the plant section and I quote from the Bill:

"The terms--plant and plants--mean any wild member of the plant kingdom, including roots, seeds and other parts thereof, but excluding common food crops and cultivars, which is indigenous to any state andwhich is either (a) listed on an appendix to the Convention on International Trade in Endangered Species of Wild Fauna and Flora, or (b) listed pursuant to any State Law that provides for the conservation of species threatened with extinction." End of quote. This Bill does show distinctly what type of fine is to be levied against violators in the plant section.

Marking offenses in interstate Commerce refer to container or package containing fish or wildlife. There is no reference to plants. Plants are also

LEGISLATION REPORT (Continued)

subject to forfeiture to the United States Government as are all vessels, vehicles, aircraft and other equipment used to aid in the importing, exporting, transporting, selling, receiving, acquiring, or purchasing of fish, wildlife, or plants in a criminal violation of this Lacey Act. This Bill was originally intended to protect the endangered species. But it is so vague and so poorly written that it now refers to "all fish, all wildlife and all plants (except those used for food)."

If this Bill is passed, our hobby may become extinct or so severely restricted,

that we may no longer enjoy it as we presently do.

This Bill, if passed, would give the Department of the Interior:

1. Increased budget to hire more manpower to watch all ports of entries.

Dicta-orial Powers to control all fish, wildlife and plants ming into or leaving the United States—in fact isolating the United States from the rest of the world.

- 3. Give to the Secretary of the Interior or Commerce the right to assess the amount of a fine, prison term and forfeiture of all confiscated properties to the United States. The Judge in a court of law would read the sentence passed by the Secretary of the Interior or Commerce contrary to the American Jurisprudence. In fact, the Secretary would be Judge and Jury.
- 4. Control Interstate Commerce.

In my defensive opinion, there is no way: 1) Someone purchasing a fish, wild-life or plants would know it was obtained illegally by a pet shop owner or that a pet shop owner knew it, either. 2) I see a rash of lawsuits across the United States arising from number 1 above. 3) We need new blood (new fish, wildlife) to improve and keep on with our breeding program. 4) There is a vast breeding knowledge in our Aquarium Societies which could be tapped to help with the breeding of fish in the endangered species. So, my fellow hobbyists, voice your opinion and write to:

HOUSE BILL H:R: 1638
Honorable John Breaux, Chairman
Sub-Committee on Fisheries and Wildlife Conservation
House of Representatives
Washington, D.C. 20515

SENATE BILL S 736
Senator John Chafee, Chairman
Environmental Pollution Sub-Committee
4204 Dirksen Senate Office Building
Washington, D.C. 20515 ATTENTION: STEVE SHIMBERG, Maj. Council

BOWL SHOW REPORT for

JULY 13, 1981

CI	CHLI	DS

EGGLAYERS/LIVEBEARERS

New	Wor	id I	4ed i	um

1st Pink Convict - Jim Hajdics

2nd Phase II Jewel - "

3rd No Entry

Guppies

1st No Entry

2nd " "

3rd " '



Haplochromis

1st No Entry

2nd No Entry

3rd No Entry

Barbs

1st Cherry Barb - Michelle Mangan

2nd No Entry

3rd No Entry

0pen

1st Ice Blue Zebra - John Mangan

2nd Zebra Lace Angel - Gerry and Karen Wagner

3rd No Entry

<u>Open</u>

1st A. sjoestedti - Jim Hajdics

2nd A. walkeri - Jim Hajdics

3rd Betta species - John Mangan

CICHLID STANDINGS	MONTH	QUARTER	YEAR
Jim Hajdics	10	10	48
Woody Griffin	0	0	12
Wayne Hilburn	0	0	10
Amy Stirman	0	0	10
Gerry and Karen Wagner	4	4	10
Bill Kent	0	0	6
John Mangan	6	6	6
Leslie Stirman	0	0	4
Garland Neese	0	0	4

EGGLAYER/LIVEBEARER STANDINGS	MONTH	QUARTER	YEAR
Jim Hajdics	10	10	70
Mark and Ruth Prendergast	0	0	30
Wayne Hilburn	0	0	24
Amy Stirman	0	0	16
Woody Griffin	0	0	12
Gerry Hoffman	0	0	10
Leslie Stirman	0	0	6
Michelle Mangan	6	6	6
Bill Kent	0	0	2
John Mangan	2	2	2

Novice Class: No Entry

Members Choice: Ice Blue Zebra - John Mangan

Judges: Cichlids - Kenny Warren

Egglayers/Livebearers - Darrell Holman

August Categories

CICHLIDS

Open.

EGGLAYERS/LIVEBEARERS

New World Dwarf

Killifish

Rift Lake, Non-Mbuna, except Haplochromis

Catfish, Non-Corydoras

Open .

Photography (Continued)

The final characteristic of light is its <u>polarization</u>. This is the total accumulation of light waves and their direction of travel at the time of striking the film plane. By reflection light waves are disoriented from their straight path with the wave crest. This causes reflections. Most all glass reflections can be eliminated or reduced by the use of a polarizing filter, which permits only lined up light to pass through. This filter also acts as a neutral density filter for it does not change color temperature. Try one and your photography will improve.

So much for light. In case you hadn't noticed we just covered the fundementals of exposure in the discussion also. I will discuss exposure more thwartingly in the next month so begin to take your photo contest pictures now!

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

FIRST CLASS MAIL

1981 MEETING DATES:

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Meetings are held at the Coca-Cola Bottling Plant hospitality room, 5401 Seminary Rd., Bailey's Crossroads, Alexandria, Virginia.

Meetings start at 8 p.m. Doors open 7:30 p.m. Bowl Show registration 7:45 p.m., to 3 p.m.