DELTA TALE

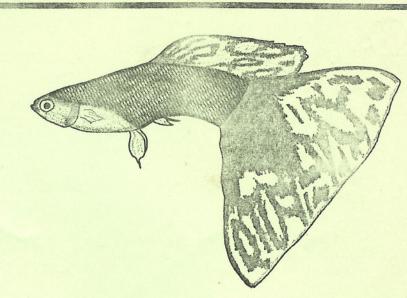
OFFICIAL PULICATION OF P.V.G.C. 1970 SEP

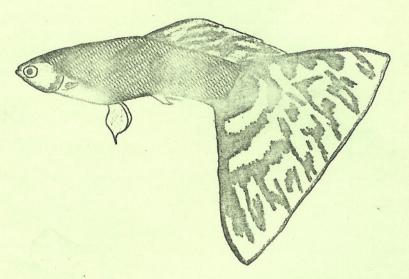
P

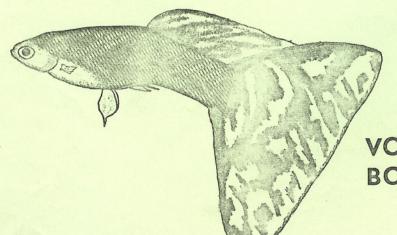
V

G

C







VOLUME NO 1 BOOK NO 3

TABLE OF CONTENTS

SHOW DATESPage	1
CLUB LETTERPage	2
MESSAGE FROM THE PRESIDENTPage	3
THE BACTERIA THEORY	4
"THE HARDENED AQUARIST'S DICTIONARY"	5
WHY GUPPIES?Page by B. Fisher, GAT	9
FISH BLOCK PUZZLEPage	11A
THE CASE OF THE ELUSIVE FANCY GUPPY	12
TABLE SHOW STANDINGS	14
ESTABLISHING A STRAIN OF GUPPIES	15
DID YOU KNOW?	18
PVGC MEMBERSHIP APPLICATION	20
************	k * *

FUTURE EDITION

Starting in the October issue of "DELTA TALE" there will be a six part series on the Beginners Mannual, taken from Guppy Gossip a publication of the Guppy - Associates of Greater Cleveland. If there is anyone in the club who would like to write an article for "DELTATALE" please contact me.

George W Turner Secretary, PVGC 671 - 6850 OFFICERS

PRESIDENT
VICE PRESIDENT
SECRETARY
TREASURER

EUGENE T ALDRIDGE DAVE CULVER GEORGE W TURNER HEINZ LENZEN

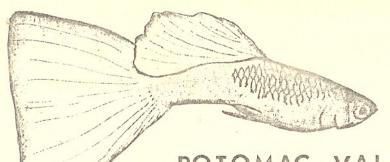
BOARD OF GOVERNORS
PAUL CORNELISON
DAN DE SOUZA
CLARENCE LUDLOW
CECIL MOORE
PAUL SHAW

EUGENE T ALDRIDGE DAVE CULVER GEORGE W TURNER HEINNZ LENZEN

Delta Tale is published for the benefit of Potomac Valley Guppy Club members, a non-profit organization established in 1960 for the purpose of furthering the Aquarium Hobby by promoting good fellowship among its members, encourage the improvement of the art, to disseminate information to all wishing it, encourage friendly competion, and solicit participation in its shows. Correspondence should be addressed to George Turner, 821 So Florida St, Arlington, Va 22204. 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.

SHOW DATES

SEPT 6 & 7	SOUTHERN CALIFORNIA GUPPY ASSOC.
SEPT 12 % 13	COLUMBUS OHIO GUPPY SPECIALISTS
SEPT 26 & 27	TIDE WATER AQUARIST SOC - NORFOLK
SEPT 27	SOUTH JERSEY TROPICAL FISH ASSOC.
OCTOBER 4	GREATER PITTSBURG AQUARIUM SOCIETY
OCTOBER 11	CINCINNATI GUPPY CLUB
OCTOBER 18	NORTHEASTERN INDIANA AQUARIUM SOCIETY
OCTOBER 24	POTOMAC VALLEY GUPPY CLUB - ARLINGTON
OCTOBER 25	SWANESA OF CANADA
NOVEMBER 7 & A	INDIANAPOLIS AQUARIUM SOCIETY



September 14, 1970

POTOMAC VALLEY GUPPY CLUB

The 129th meeting of the Potomac Valley Guppy Club will be held on Monday, September 14th at 8:00 P.M. in the Hospitality Room, Coca Cola Bottling Plant, 5401 Seminary Rd Alexandria, Va.

The Table Show for this month will be Guppy - Open, Guppy - 1/2 and 3/4 quarter Black, and Other - Carps and Minnows. Remember only five combined Guppy entries and five Other class entries, for a total of ten entries per person.

The September program will be a slide program "Fancy - Guppies". This program has some very beautiful guppies from Europe and America. This is the program we missed having in June.

This is the beginning of a new <u>quarter</u>. Everyone has a chance to start out with a clean slate.

In this months edition of "DELTA TALE" you will find a FISH BLOCK puzzle containing 25 different named Fish. Circle the 25 Fish listed and mail the puzzle to me by October 1st. Everyone completeing the puzzle will be given one additional door prize ticket.

George W Turner 821 So Florida St Arlington, Va 671 - 6850

MESSAGE FROM THE PRESIDENT

The last meeting was very good and I was very glad to be able to attend after saying I would not come. Give some thought to whether or not the club should be in the FLOWER SHOW. If not we must figure out some ways to earn money for the Treasury. I know the FLOWER SHOW is a big project and takes a lot of time. If you feel several smaller projects will net the same amount bring them up.

There will be a Board meeting on Monday 28 September at the home of Dave Culver. Any member who wants to can come, just call Dave at 548 - 5746 and let him know.

Remember, there are two close by shows on 26 September.
Norfolks and New Jersey .

THE BACTERIA THEORY

by J. E. Wooton Stafford, England

The similarity between the split finnage conditions of Guppies and Bettas are startling indeed, especially so when one remembers that these are both man-made fishes carrying finnage far in excess of their compliment intended by nature. One only has to look at the wild betta or Guppy to see what I mean.

Another great similarity between these two fishes is their habit of spreading this finnage repeatedly to its full extent when they see another fish of their own species, be it male or female. This, I believe, in a tank of male Guppies, especially to be the cause of a great number of the ordinary splits. This is more noticeable when one takes into consideration the fact that it is usually the ones with the largest finnage which are the first to develop this trouble. The same applies to Bettas which can see one another, though each is in his own jar. I find that the majority of these splits heal in the case of Guppies by isolating them in a small tank of their own, and in Bettas by placing them in an opaque jar.

I have examined carefully some hundreds of Guppies and Bettas with split finnage and can find no evidence of bacterial infection in a newly split fin; however, a fish left in an ordinary tank with a split tail can very soon, and usually does contact a bacterial form of fin rot, which, it is true, is difficult to cure. I feel that Mr.Cook has rather got the cart before the horse, so to speak, and that the true picture in this case is that the splits become affected by bacteria rather than the bacteria being the cause of the splits.

This, of course, from one point of view, answers the question put by Mr. Cook about why this particular form of infection only affects males and not female Guppies and Bettas. The reason being, of course, that the males happen to be the overfinned showoffs.

Having put forward a theory as to one type of tail splitting, let us now consider the other type of tail splitting in which pieces start to come off the tail, and which is very definitely an infection of bacterial nature.

A peculiarity of this disease is that Guppies and Bettas, according to statistics I have at hand, it is more common in fishes which are fed, when fully developed on newly hactched brine shrimp, a habit which all Guppy breeders seem to have. Another peculiarity of this disease is that it is normally accompanied by an infection of the gills called "balantidiosis" which is an infection associated with the feeding in excess brine shrimp. This, of course, weakens the constitution of the infected fish and renders him much more liable to the infection of tail rot which he could normally ward off and heal as a normal split.

Admittedly, this does not answer the case completely, but, like Mr. Cook's article, gives even more thought.

THE HARDENED AQUARIST'S DICTIONARY by Ronald Hood

AERATION: Little bubbles that are supposed to double the fish capacity of your tank - this may not work for the average aquarist (who has doubled the capacity of his tanks on sheer "guts" alone).

ACID SODIUM PHOSPHATE (SODIUM BIPHOSPHATE): A white powder sold to aquarists at enormously inflated prices (and backed by similar claims of its usefulness) that is mainly good for turning the water milky.

ACRIFLAVINE: Cures fish while turning the aquarists figers yellow. AIR PUMP: A clever device that makes unbearable noise when it works and kills fish when it doesn't.

ALGAE: The most popular aquarium plant.

ALGAE SCRAPPER: An instrument designed to remove excess algae if used daily.

AMAZON SWORD PLANT: A beautiful water plant that everyone else can grow.

ANACHARIS: There's no such thing anymore (see Elodea)

ANCHOR WORM: Useful for keeping fish still for observation.

AQUARIUM: Something we'd all be better off without, but wouldn't get rid of for anything. Extremely dangerous and habit forming. A highly contagious cause of moral degeneration and mental lassitude.

AQUARIUM CEMENT: A type of putty that holds aquariums together firmly while allowing them to leak freely.

AQUARIUM GLASS: Just like ordinary glass, with added scratches.
Good for growing algae.

AQUARIUM SOCIETY: A gang of proven idiots who like nothing better than keeping dozens of smelly old fish tanks, spilling water and talking about goopies.

ARGULUS: Fish have no lice.

ARTEMINA SALINA: Latin brine shrimp.

AUREOMYCIN: Medicine you buy with a 25% chance of curing fish that are worth no more than half the cost of the aureomycin in the first place.

BALANCED AQUARIUM: A tank set up on a steady stand.

BLOOD WORMS: Adolescentmidges.

BRASS: A shiny metal that is good for killing fish.

BREEDING: What your fish won't do.

BREEDING SEASON: "When in the Spring a young fish's fancy...."

BREEDING TRAP: Prevents big fish from eating little fish, you hope. BRINE SHRIMP: Darned expensive critters supposedly good for those darned expensive fish.

BULLIES: What all my fish become. CABOMBA: A South American dance.

CARBON DIOXIDE: What fish breathe out and plants breathe in (except at night, when plants breathe it too).

CATCHING FISHES: It looks easy when they do it in the pet shop.

CHANGING WATER: What we all should do, but we don't.

CHILL: A misfortune that can cause all sorts of icky problems.

CHLORINE: A gas put in tap water to kill bacteria, algae and tropical fish.

CONDITIONING: Feeding for breeding.

COMMUNITY TANK: A collection of tropical fish carefully selected for their mutual compatibility. (see "bullies")

COPPER: Slang for policeman who keeps fish.

CORAL: A material with sharp edges (that can cut fish) and alkali that will dissolve in tank water. Often used in freshwater tanks by aquarists who don't know better. Belongs in the ocean.

CORKSCREW VALLISNERIA: Used to open liquor bottles.
CROOKED BODIES: What you hope your Guppies don't get.
CRYPTOCORYNES: Plants ideal for wealthy, patient people with dimly lit tanks and soft water.

CUTTING GLASS: A method for making small, crooked pieces of glass out of big, square ones.

DAPHNIA: Exlax for fish. A shell that swims and lives an smelly places, there tp be persued by aquarists in turn persued by mosquitoes.

DISEASES: If my fish don't have them, the'll get them. So will yours! DROPSY: When your guppies suddenly become puffers, guess what.

DUCKWEED: A pest introduced into aquariums by those who don't realize how a little plant like that can grow so fast.

ELODEA: A cheap plant, but what good does that do when it dies?
Only good for decorating tanks in pet shops.

FEEDING: A sure fire method of polluting the water. Much less beneficial to fish than most people think.

FILTERS: Aquarists persist in dreaming that these will clean the water without being cleaned themselves.

FIN ROT: Why your fish don't have fins anymore.

FISH: Slimy creatures of low intelligence commonly found on floors behind aquariums, in filters and in dealers shops under signs marked "rare- \$25 a pair". Often cause divorces, suicides, murders and riots (particularly at aquarium meetings).

FISH FOODS: Organic materials worth roughly 1/10 of what you pay for them. Probably of little nutritional value for fish.

FLAT WORMS: What you get when you step on roundworms. (see roundworms) FUNGUS: It's always among us. Causes cute fuzzy white fish.

GOLDFISH: Pets that require three times as much room for their size as guppies. Why people think they will thrive in small bowls is a mystery.

GYRODACTYLUS: A fluke of Nature.

HAIR GRASS: An aquatic plant used to make wigs for balding mermaids HEATERS: Electrical devices used in aquaria for cooking fishes. HOLLOW BELLY: IF you don't know what it is, look at the swordtails in the next fish shop you visit.

HORNWORT: Lovely green floating plants that shed lovely green needle-like leaves all over your tanks when subject to fresh tap water.

ICH: Causes many white spots on tropical fish and, eventually in aquarists hair. Usually brought on by chilling (what the dealer says you did when you got your new fish home). Many remedies will eradicate ich, along with a few of your favorite fish.

ICHTHYOPHTHIRIUS: Latin ich.

LEAD: What your wife will say is in your head when she sees those expensive new fish. Also used to keep rooted plants from being floating plants.

LEAKS: See the water seeping out from under that tank.

LEECHES: Bloody little beasts that become quite attached to your fish.

LIGHT: Good for growing algae and frightening fishes.

LIME WATER: Lafayette City water.

LIVE FOODS: What all the experts say are necessary for spawning fishes. Maybe that is why my don't spawn.

MARINE AQUARIUM: A "get poor quick" scheme. Good for keeping hermit crabs and dead fish.

METHYLENE BLUE: A remedy for fish diseases that works by turning the water so blue that you can no longer see that your fishes are sick.

MOSQUITO LARVAE: Live food that bites back if not fed to fish in time. Your wife will just love these.

MOUTH FUNGUS: Gives fish bad breath and caises them to lose their "sex appeal".

MUSSELS: Needed by aquarists when lifting tanks, ect.

MYSTERY SNAIL: The mystery is why mine never lay eggs. Also, why they crawl out of the tank and get mashed on the floor.

NETS: Have you ever tried to get a fish in one?

NUMBER OF FISH PER AQUARIUM: Determined by taking the number of fish now in one of your tanks and dividing by three.

OXYGEN: What your fish come up and gasp for.

PARASITES: Have you noticed your fish scratching against the rocks lately? Guess what they have.

PLANTS: Beautiful green things you see growing profusely in everyone elses aquarium.

POP-EYES: What aquarists get when they see that new pair of discus the dealer just got in. Often can be caused

by merely glancing at the price tag alone.

PROFITABLE FISHES FOR THE BEGNNERS: Evidently refers to those fish that die as soon as a beginner takes them home. The profit is what the dealers get when the beginner comes back for replacements.

QUARANTINE AQUARIUM: What everyone should keep newly purchased fishes in until their diseases have progressed far enough to be contagious when introduced into the other tanks.

REGENERATION OF FINS: What guppies seldom do.

ROUNDWORMS: Become flat worms after being stepped on. (see flatworms)
RUST: See the red spots on these expensive stainless steel tank
frames and reflectors - that's rust.

SALT: Good for pickling fish - also for seasoning them.
SCAVENGERS: Creatures introduced into aquaria to make up for
the aquarist's mistakes.

SEX CHANGES IN FISHES: What most guppy breeders say happened spontaneously to their female show guppies so you won't know they treated their fish with hormones.

SHAKES: What I get when I see a sick fish.

SHIMMMIES: Go to a fish dealer and look at the molies this time.

SHOW RULES: Irrational laws used to govern fish shows.

SNAILS: The only things in my tanks that never seem to die and spawn continuously.

SPAWNING MOP: A device used to wipe up water spilled around the aquarium.

SWIM BLADDER TROUBLE: Makes your fish float when they don't want to. Can be cured by flushing (down the you know what)
TAPPING ON GLASS: Makes fish more lively.

THERMOMETERS: Unreliable devices sold to measure aquarium water temperature. Compare a few to an accurate thermometer some time.

TORN FINS: An injury sustained by fish immediately prior to shows. TUBIFEX WORMS: Creatures gathered in Chinese sewers, freeze dried and sold to aquarists as clean, wholsome fish food.

May be found in polluted areas inthis country too.

WASTING: What your wife (or husband) says you are doing with the money you are spending on fish.

WATER: Nasty, smelly wet stuff that fish like to jump out of. I don't blame them.

WATER BEETLES: Do underwater rock and roll.

WATER, CLOUDY: You mean it's supposed to be clear!

WATER, HARDNESS: Refers to the hardness of keeping fish in it.

WATER SPRITE: A plant that is supposed thrive in water that is fit for raising guppies. It invariably dies in my tank.

WHITE WORMS: Dead red worms.

WHOLESALE BREEDING: What guppies seem to do.

WHOLESALE FEEDING: What I have to do to keep my fishes from starving.

by Bob Fisher reprinted from; Guppy Assoc. of Toronto

If one were to take a poll of the "most popular tropical fish" at the present time, without question the results of that poll would show that the guppy ranks number one on the list among tropical fish fanciers.

Now there are many hobbyists who like to keep a variety of tropicals, while others like to specialize and breed one type of fish pnly, some breed Angelfish, others are Killifish fans, some specialize with Egg Layers, and of course there are those whose sole aspiration is to be known as a Guppy Breeder or Fancier. The fact that there are those who will specialze is very good, because this is the way that true progress in the hobby is made. It has been the combined work of many years on the part of ardent guppy hobbyists, which has produced today's guppy and the interest there is in it. All those hours of loving, tender, care have produced a fish so magnificent it has been dubbed "King of the Tropicals", a lofty title admittedly but one which can be claimed by no other fish.

It has been stated that, "good things come in small packages", and this is particularly true with guppies, since they rarely reach the proportions of even a small swordtail. Yet bottled up in such a small package are all the net results of the countless hours of painstaking labour of literally thousands of guppy fanciers who have patiently sought to develop all those beautifull and desirable features which nature has so abundantly bestowed upon this one tiny fish. The results of all this work over many years is a larger and flashier fish, with magnificent finnage, a delight to look at, shimmering and scintillating with myrid hues and colours. Truly today's guppy is the dazzling beauty of the aquarium, and the best part about it is that almost anyone with careful instruction in the right techniques, can not only produce more of the same, but go on to even greater heights of perfection.

Occasionally one chances to overhear remarks such as, "Hmph! Guppies! who wants to waste time fooling around with those little things!" Of course all people have their own personal preferences, it would certainly never do for everyone to be cast from the same mould, or stamped from the same die. But generally such remarks are not based on knowledge, but from lack of it.

Folks who make such remarks are in reality admitting that either their interest for guppies has never been stirred or excited, or they are admitting early failures in attempting to raise fancy guppies ended in failure and discouragement, and they ended up putting the blame for their failure on the fish. However despite the opinions of a few disgruntled or unluckly hobbyists, the popularity of the guppy has continued to climb higher and higher, it is quite obvious that tropical fish hobbyists, keep guppies simply because they like them, and because they present them with a real challenge to their ability to breed and successfully raise fish.

A few years ago the Angelfish presented quite a challenge because breeding them in captivity was thought to be an impossibility, of course as we all know today it is commonplace. Then along came the Discus, here was a definite impossibility said many, but today I know at least a dozen or more successful discus breeders. Patience and research had made the seemingly impossible an actuality. Fancy guppies were once thought to be the private realm of the master breeders, perhaps they were at the beginning but such is no longer the case, and therefore day after day, more and more people are switching from general fish keeping to specialization, it seems that everyone is now climbing aboard the guppy "band wagon". This is of course splendid for the guppies, because the more people who set themselves to the task of working for the improvement and development of the fancy guppy, the faster these developments are likely to happen. It is not pipe-dreaming to look ahead to the near future when the number of guppy societies flourishing in most of our large cities will have doubled and tripled.

"Birds of a feather flock together", so as more people take up the guppy challenge, more guppy clubs will spring into existence, and little wonder, for when hobbyists share knowledge and work to help each other, great things always happen.

Any individual or club hoping to attract newcomers to the guppy hobby must of necessity be ready, willing, and able to take a persoanl interest in the newcomer, and be willing, to patiently teach the novice his guppy "basics". Helping another budding hobbyist to get started is in itself a rewarding experience, as many of us who have done this can testify, and it has great value for the novice because it helps him over the initial hurdles and steers him away from the pitfalls which can so often lead to discouragement and failure. There are hundreds of folks who would today be ardent guppy breeders if they had received this kind of help at the beginning of their efforts. I feel truly sorry for those who try to "go it alone" without help and without a club connection.

Precious few are able to surmount this obstacle and become sucessful guppy breeders without a club membership or affiliation. Very often when a man is on the verge of quitting due to some discouraging set-back it will be the enthusiasm and help of his fellow club members which will literally drag him back into the clan. So that with renewed interest and encouraged by his guppy breeder friends, he has another stab at that elusive goal of breeding the "perfect" guppy.

If we in the guppy fraternity were capable of producing perfect guppies each and every time, there would be little incentive left for us to carry on out efforts. Most of us have learned by experience that success does not come easy, in fact success only comes if we are lucky, and after a great deal of sheer hard work. Most of us know also that perfection is always one step ahead of our best efforts to date. This then is the challenge that the fancy guppy extends to every would-be breeder. The guppy says in effect "do your best to make me perfect".

I have been asked many times, "Why guppies?" Well the simplest answer I ever seem to come up with is this. First, I like guppies best, second, they present a real challenge to my fish breeding and fish keeping ability. It is this constant challenge to breed and raise the "perfect" guppy which keeps me going in the hobby even when the going gets tough. When you sit down and analyze your own motives for participating in the hobby you get a special in sight into the motives of your hobbyist friends and begin to understand and appreciate them more.

The very fact that guppies are at the top of the popularity scale today is indication enough that many good people have already responded to the challenge of the guppy. Present trends among tropical fish fanciers are that many old timers are taking a second look at the guppy, now that better quality fish are readily available. Guppy sales in pet shops are at an all time high, and most breeders find it almost impossible to keep up with the demand. This alone is sufficient to prove that a movement towards widespread interest in guppies is already under way. "Why Guppies?" Well....

People like them, that's why!

SEE CLUB LETTER FOR RULES
In the alphabetical block below there are 25 fish listed in horizontal, vertical, and diagonal lines. Some of the fish listed are end to end, as you find the fish draw a circle around the names. HAVE FUN!

A	F	G	E	0	P	Н	A	G	U	S	P	E	L	M	A	B	1. ACARA
K	E	I	L	P	L	E	C	0	S	T	0	M	U	S	30	I	2. APHYOSEMOIN
I	L/	A	P	I	G	E	0	N	Y	0	R	K	E	Y	E	T	3. BITTERLING
L	M	X	F	M	I	L	K	Y	0	F	/I	N	K	M	0	T	4. CICHLASOMA
0	A	N	G	E	L	F	I	S	D	E	V	I	L	P	E	E	5. COLOSSOMA
I	T	T	I	L	A	P	I	Ā	0	N	U	0	E	H	X	R	6. EXODON PARADOXUS
В	0	N	E	0	F	I	S	Ή	N	E	L	K	C	Y	0	L	7. FUNDULUS
I	C	A	D	D	Y	D	0	G	Т	L	U	S	Н	S	D	I	8. GAMBUŞIA
R	Н	0	P	E	F	I	S	Н	I	. A	s	0	W	0	0	N	9. GEOPHAGUS
D	R	X	V	L	C	0	L	0	S	S	0	M	A	D	N	G	10. GOBIO
M	0	K	I	L	L	I	F	I	S	Н	Ē	S	, 0	0	P	Y	11 HETERANDRIA
0	M	A	G	A	P	H	Y	0	S	E	M	0	I	N	A	E	12. KILLIFISHES
N	I	С	E	G	P	E	0	P	L	E	S	С	0	(X	R	A	13. LIMIA
0	S	F	I	A	I	T	S	U	A	R	8	I	Т	I	A	M	14. MONODACTYLIDAE
D	0	U	В	М	E	E	T	F	I	S	Н	C	I	P	D	A	15. NANNACARA
A	X	N	U	В	0	R	G	0	В	I	0	Н	A	Н	0	N	16. PELMATOCHROMIS
C	A	D	B	U	М	A	R	A	N	G	A	L	N	0	X	N	17 PIMELODELLA
T	0	U	A.	S	Y	N	0	A	L	0	В	A	E	P	U	A	18. PLECOSTOMUS
Y	E	L	L	I	W	D	I	F	I	S	Н	S	0	Н	S	C	19. RIVULUS
L	I	U	N	A	N	R	D	0	M	0	N	0	D	0	C	A	20. SYMPHYSODON
I	T	S	F	U	N	I	T	0	I	М	E	M	E	R	I	R	21. SYDONTIS
A	Т	L	A	N	T	A	A	C	A	R	À	A	В	U	S	A	22. TETRADONTIDAE
E	T	E	T	R	A	D	0	N	Т	I	D	A	E	3	0	W	23. TILAPIA
A	K	I	T	E	X	E	R	0	X	P	A	P	E	R	T	U	24. UARU
S	W	0	R	D	F	I	S	Н	R	A	Z	0	R	В	A	C	25. XIPHOPHORUS



*aquarist shopper

VOLUME 1 An Independently Published Supplement for Aquarium Society Publications

NUMBER 4

New Things in Aquaria —

Enticing New Products Vie for Aquarist's Eye — & Purse

FISH SHIPPER

So you've been hankering to sell a pair of show guppies, or maybe you want to swap your kissing gouramis for a pair of convict cichlids. If your "deal" has been half way across the country, chances



are you've been stumped by the problem of shipping. Now comes Dr. John's Live Fish Shipper, which looks like the right answer for long-distance sellers and buyers. A

knock-down kit, it provides everything you need but fish and water. Basically, it's a re-usable shipping carton with a stiff foam liner. The box sets up rigid for shipping, folds flat for returning empty. Included are poly bags, shipping labels, sealing tape and return-empty mailers. This handy idea sells for \$1.89 postpaid, or \$5 for three, from Alamo Products Co., P.O. Box 463, Alamo, Ca 94507.

AQUARIUM PUMP

A convenient way to empty fish tanks is the small, ¼"-drill-powered water pump being offered by a New Jersey manufacturer. Reportedly, it will suck your aquarium dry at the rate of six gallons per minute, without initial priming to get it started. Just hook any ¼" power drill into it and, swoosh — or two swooshes, if you have a big outfit — your tank is empty Price: \$14.95 from Gull Mfg. Co., 12 Valley Place, Upper Montclair, NJ 07043.

New Carbon, New Floss

Two exciting tank filtering products bowed in fish stores in the last 60 days. One is Aqua-Carb, a perforated block of "super activated," compressed carbon. Aqua Research, the maker, claims it has



adsorptive capability for harmful aquarium gases equal to a surface area of two acres. The intriguing stuff comes in a 2" x 2" hard flat cake, about \(^{1}\dagger)'' thick, and is said to keep the

average aquarium "sparkling clear" for six months when used with any type of filter.

Aqua-Floss is a companion product a highly compressed polyester filtering



"wool." You get three pencil-size tubes in a blisterpack card. Break a tube and the compressed wool bursts into instant fluff. The three tubes are described as being the

equal of 230 cubic inches of regular floss material.

Both products are attractively priced at 98¢. WECO, Inc., 2138 W. 17th St., Long Beach, CA 90813, is distributing through national trade channels.

(Continued on page 7)



Save ailing fish, protect thriving ones with MARACYN, the powerful, new, broad spectrum antibiotic proven in public and private aquariums to reduce losses by more than 50%. NON-TOXIC, COLORLESS, completely safe for all fresh and saltwater fish and plants. No need to adjust or change water before, during, or after treatment. Low cost per gallon of water treated.

Formerly only available in bulk quantities to professional aquaria, MARACYN can now be obtained from your local pet shop. Give your fish NEW HEALTH — GIVE THEM MARACYN.



Distribut Kordon

MARDEL LABORATORIES, INC.

New Nyasa Cichlid Group Offers Free Fish Sign-up

A pair of rare Lake Nyasa Cichlids is being offered fish hobbyists who sign up as charter members of a new fish club.

Any of 12 types of the colorful Central African fish may be chosen by new members, reports aquarist Jim Quarles of Sacramento, Calif., organizer-sponsor of the organization. It is named the Lake Nyasa Cichlid Club.

Mr. Quarles is owner of J&J Tropical Fish, a wholesale-retail concern which is concluding an agreement with the government of Malawi for an exclusive export license on live fish from the storied Lake Nyasa. He told the *Aquarist Shopper* that a membership fee of \$10 would include a monthly newsletter.

Institute Appeals for Printed Word

Old society publications, books, magazines, etc., on fish-keeping are still being sought by the Aquatic Research Institute, says its director, Dr. Robert R. Rofen. You can donate, swap or sell to this non-profit organization. Write the Institute librarian at P.O. Box 648, Stockton, CA 94201.

TetraCare Contra Ick Cures Ick-Flukes Shimmy-Itch and Costia CAUTION Keep out of reach of children AQUARIUM REMEDY Contents 3 Ft. Oz Distributed in the United States by Kordon Corporation, Hayward, Ca. 94545 SYMBOL FOR QUALITY Tetra

The publication reportedly will rely substantially on hobbyist-contributed articles which will be paid for at standard editorial rates.

Management of the club will rest with its members. Mr. Quarles said, adding that J&J Tropical Fish is merely subsidizing initial organizing expenses.

Some specimens of fish being offered new members are described as having a regular retail price of over two times the membership cost. How long the free-fish offer stands was not immediately made clear.

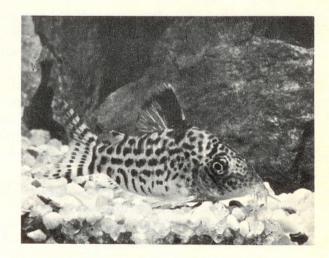
Inquiries should be addressed to the Lake Nyasa Cichlid Club, 3628 Willow St., Sacramento, Calif. 95838.

CAMERA CORNER CAMERA CORNER RULES

Best photo personally taken and submitted by a fish hobbyist will be published in this space. Prizes: \$10 each to winning photographer and his society. Black-and-white prints only considered. Prints should be captioned with name and address of the photographer and of his society. Fish and other detail in photo must be fully identified. Provide data on camera make, film type, shutter speed and f-stop, if possible. Pictures will be returned only if accompanied

by self-addressed, stamped envelope. Mail photos to Camera Corner, c/o The Aquarist Shopper,

815 East 14th Street, Oakland, Calif. 94606.



A beautiful shot of a leopard catfish skimming the tank bottom is the work of Michael Davis of Brooklyn, N.Y. He reported that he uses a Mamiya/Sekor 100DTL with an automatic extender (2x) on a 55mm fl.8 lens. Exposure was on Plus-X film at f.8 for 1/60 sec. with electronic strobe—a standard formula he reports using in all his fish photography.

What the Aquarist Gets in —

EURGEASE CUARRANGEES

A Report on a National Survey

By F. S. Adams

ONE LARGE U.S. APPLIANCE MANUfacturer has 80 factory-staffed service centers across the country in major cities, plus a small army of franchised service men in outlying areas who stand ready to fix your flatiron, washer, toaster or radio if it goes on the blink. If your appliance can't be fixed, it can be replaced. Most owners of this company's products aren't more than a short toll call away from an authorized repair agent.

Something quite different applies to the guarantee of aquarium products.

This is a report on a national survey made of fish hobbyist goods and their manufacturers by the *Aquarist Shopper*. All producers of products for keeping fish were sent a questionnaire. The *Shopper* visited retail stores and wholesale establishments. We checked actual goods on dealer shelves. And we read the fine type on as many written guarantees (not many) that we could lay our hands on.

Making the headlines these days is the socio-economic race to coddle the con-

sumer. What we found out won't qualify the industry for a blue ribbon or, except in a few instances, even honorable mention. Here's what we learned:

Except for mechanical devices—pumps, filters, operating cleaners, etc.—the written guarantee is virtually unknown in the aquarium products field. No manufacturer maintains service or repair facilities outside of the factory. For all practical purposes, "making good" on a guarantee is apt to be up to the dealer from which the item was bought.

Technically, a guarantee (or a warranty, for it's the same thing) has a dual function. It spells out the manufacturer's liability, and what recourse the customer has if the product proves faulty. Let's see how that works out in the world of aquaria.

We checked a well-known mechanical motor filter, taken from a dealer's shelf. A slip inside the package stated it would be guaranteed against "original defects" for six months. It it were discovered at the factory that the filter was "abused" or that other than a "special synthesized oil" had been used in it, we were informed that the guarantee was off, and that we would be told how much would be

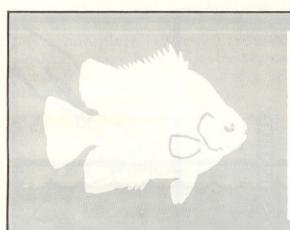
charged to make repairs. In the lingo of consumer marketers, such exceptions are called protective clauses. In any case, to claim repair under this guarantee, the buyer would have to pay freight back to the factory, and send along the "original" sales slip plus \$1 to defray the factory's postage and handling.

Most aquarium tanks carry no written guarantee. Generally, you buy the tank with the manufacturer's identification sticker on it—and that's it. If it leaks, the buyer has to apply to his dealer for a replacement. If the dealer has changed his supply source, or has gone out of business, the aquarist is probably left holding the sack. Crystal Manufacturing Co., maker of an all-glass aquarium, improves this situation somewhat by issuing a written guarantee for one year against

cracks or breaks when you are taking it out of the box (or if you belatedly discover it is already cracked in the box) you are at the mercy of the local dealer. Aquarium decorative items are likewise guarantee-less for the most part. If the color fades or chips off, if the item warps, wrinkles or shrinks, it's got to be a hazard of the hobby, the way most sales policies operate.

But not always. Glass Aquarium Crystals made by Emix Mfg. Co. are guaranteed a "life time" with exchange being made by the dealer. Wonder Rock, an epoxy-coated pebble, carries the implied guarantee of being "Non-Toxic."

One of the most interesting guarantees is offered by Framar Industries. For its Jiffy Aquarium Cleaner the guarantee is void if the product is "damaged beyond



TERMS AND CONDITIONS

"TIME: Usually the life of a guarantee during which the stipulated repairs, replacement or service will be accomplished, is stated as so many days, months or years. A 'lifetime guarantee' is virtually meaningless unless it states whose life. Neither does 'extended' or 'unconditional' mean much unless more specifically defined."

From What You Should Know About Guarantees,
© 1969 The Brooks Sterling Co.

leakage. It authorizes the dealer to make exchanges "on the spot" and the company absorbs the freight costs between the dealer and themselves.

Hot competition between brands tends to improve the terms of guarantee. For years the Silent Giant air pump has been sold with a two-year guarantee, which has been voluntarily renewed year after year. The maker asserts that its pumps, even 15 years old, are still protected by the extensions, and proudly advertises that fact. The manufacturer of the "Oscar 2000" pump counters this offer with a published guarantee "til the year 2000."

Few non-mechanical products carry any guarantee at all. Filtering media, often elaborately described, are seldom guaranteed for any specific performance. Plastic accessories—tubing, clips, filter boxes, etc.—usually must be purchased on an as-is basis, and if the brittle stuff

repair" or "worn out with age." But the maker asserts he will replace any part or sub-assembly if the buyer will simply state its age and the reason for his dissatisfaction. This promise is made "regardless of age" of the cleaner.

Guarantees ought to be viewed in their proper perspective. The aquarist should not simply buy because of the maker's vow to fix the product if it goes haywire. All things being equal, the promise may be important, of course, ranking just a tetra tail below the attitude of the dealer from whom the purchase was made. In the scheme of aquaria marketing, and in the practical business of getting a guarantee honored, the dealer, more often than not, plays the key role. A good rule might be:

Buy first for functional capability, second for dealer reliability—then look for the guarantee.

Wonder & Water

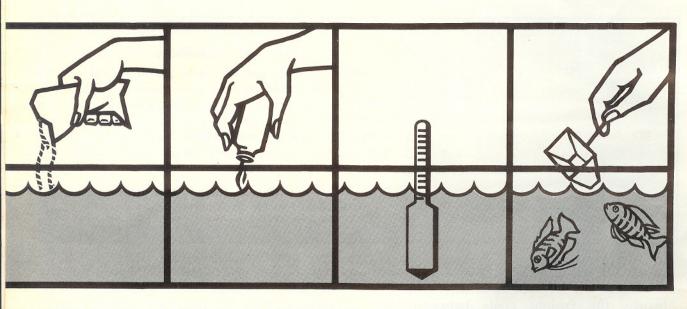
Yes, you can keep salt-water and fresh-water fish together! It's Fun!

Any serious fish hobbyist can do it!

et a Free booklet giving comlete instructions in every Wonler Water package.

You use basically the same aquaria equipment as for regular fish-keeping.

See your dealer today for a new adventure, for more fun, in the wonderful world of Wonder Water!



Pour in Wonder Water powder.*

After 24 hours, add Wonder Water liquid.*

Measure temperature and specific gravity of the water.* After 3 days or more, place fresh and salt-water fishes directly in Wonder Water.*

*As explained more completely in Free instruction booklet.



Ask for it at

Aquarium Supply Dealers Everywhere!

JONCO MFG. CO. 21393 Curtis Street Hayward, CA 94545

A RAKOWICZ-ROFEN ENTERPRISE



More New Things in Aquaria

(Continued from page 1)

SALT-WATER FISH KIT

The surge of interest in keeping saltwater fish has triggered the introduction of a combination outfit that brings the hobbyist everything he needs in ocean fish equipment, except the aquarium, the fish and their food. Bearing the hefty name of Instant Ocean Salt Water 20-Gallon Aquarium Kit, it comprises a package of essential supplies and equipment. In it are two AquaFilters, Marine Filter Mix (a calcareous gravel to condition marine life environment), Synthetic Sea Salts, a heater, an air pump, an hydrometer-thermometer and instructions. The kit comes from the people at Aquarium Systems, Inc., 33208 Lakeland Blvd., Eastlake OH 44994, who built and manage the aquarium at Niagra Falls. The price complete is \$70.70 from local dealers. A more knowledgeable keeping of ocean fish by hobbyists is the idea behind the kit, the manufacturer says.

• FROM:

The World's Largest

Mailorder Fish Exchange

J & J TROPICAL FISH INC. 3628 Willow Street Sacramento, California 95838

Fancy Stock -

Hi Fin Swords, Breeder Size 7.95 pr.

Hi Fin Lyretail Swords.

Breeders - 9.95 pr.

34 Black Delta Tail

Guppies – 10.95 trio

15 Types of Dwarf

Cichlids – 6.00 pr.

Show Vailtail Mollies

Now only – 14.95 trio

9 Types of Killies 8.95 pr.

Hi Fin Platy's, Breeder Size 7.95 pr.

11 Varieties of Lake Nyassa (Lake Reft)
Cichlids Available

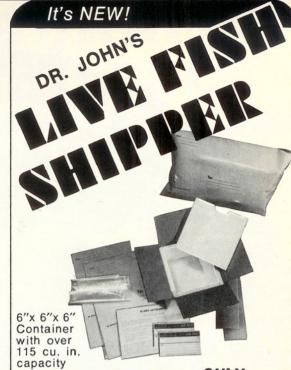
Golden Naja Angel Fish & New Strain of Green Angel Fish Available.

(Live Delivery Guaranteed)

Send for our 17 page catalog -

Save up to 75% on some items!

We buy from you - The Hobbyist
Tell us what you have!



Rugged! Insulated! Re-usable! 189 Postpaid 3 for \$5

Mails flat when empty, sets up rigid for shipping fish. Features 200 lb.-test box and thick TempSeal insulating liner. Included: 4 poly fish bags, 2 box-return mailers, address labels with Live Fish Warning, sealing tape, and complete instructions for shipper and receiver. Empty shipping weight only 8 ozs.



ALAMO PRODUCTS COMPANY P.O. Box 463, Alamo, Calif. 94507

ORDER DIRECT FROM FACTORY & SAVE!

Alamo Products Co. P.O. Box 463, Alamo, Calif. 94507
Please send me Dr. John's Live
Fish Shippers. I enclose \$
You pay shipping charges.
Name
Street
City State Zip





THE CASE OF THE ELUSIVE FANCY GUPPY

by John Lindley reprinted from;
Guppy Gazette, Dec 67

The fancy or show guppy is a real challenge of today. It has taken years for the fancy guppy, with the joint effort of thousands of guppy breeders, to reach its present development. We now have guppies with tails over an inch wide, males reaching the size of yesterday's females, and many solid and multicolored types.

If you do not belong to a guppy society, you may think that I am streching the truth. This is not the case. The problem is that you have been looking in the wrong places. I have at one time or another visited most of the tropical fish shops in this area. In fact, I reguarly visit some of them. The chances of your seeing good fancy guppies in these shops are slim. For good guppies, you will have to go to the guppy societies. Here you will learn who is raising what and how they do it.

You may ask yourself, "Why would anyone want to go to so much trouble for such an elusive fish?" The answer seems to lie not in the giant veil-like tail, nor in the gorgeous color patterns. The answer lies in the fact that the guppy can be changed more easily than any of the other fish. The possibilities for color, size, and shape of tail and dorsal fin are unlimited. A guppy breeder can truly express his individuality by creating his own strain and fashioning it to his own individual specifications.

If he wants to compete with others, he will probably breed for wide or delta tails, approximating an equilateral triangle. If he has some success and is proud of his guppies, then he will want to find out what other guppy breeders are doing. No other fish has had so many societies formed for it, nor shows given for it, than the fancy guppy. There is even an international guppy competition. The excitement of trying to obtain bigger, better and more colorful guppies will keep these societies going for years to come.

You have heard the old fallacy about guppies being the easiest fish to raise and breed; that inbreeding doesn't hurt the guppy, and that no two guppies look exactly alike. I would like to turn these statements around and say that fancy show quality guppies are one of the most difficult fish to maintain and breed successfully. The reason for this is not so much the deviation from the wild type, but rather it stems from the fact that inbreeding is almost a necessity.

In breeding is needed to keep desired characteristics from reverting to their original wild-like forms. Too close inbreeding, however, can result in sterility, susceptibility to disease, lack vigor, and general weakening of the fish. In other words, it can accentuate both positive and the negative qualities.

Fortunately, there is a workable solution to the inbreeding problem. The solution is called line breeding. Line breeding is merely starting two seperate families from an inbred strain, keeping these two closely-related lines seperate for at least four generations, then crossing the two lines together as they are both becoming slightly less related. This crossing will usually restore a certain amount of vigor and generally strengthen the starin. The line breeding procedure can be repeated indefinately.

Another difficulty with fancy guppies is feeding. In order to obtain large showy specimens, it is necessary to "force-feed" several times a day with much live food. Baby brine shrimp is an especially good food. It is almost a must for guppy fry, and the older fish really go for it. It has been said that "force feeding" can shorten a guppy's life span. It probably does to some degree, but guppies have been known to live for seven years, or large fast-maturing guppies that only bless your tanks for three or four years.

One other important factor in raising quality fancy guppies is the water. Salts and other urine from the fish can be detrimental. Magnesium, calcium, and sodium chloride salts remain in the tank as the water evaporates. To keep the hardness and urine content down, don't just replace the evaporated water. Siphon out part of the water and replace it with fresh, unused water.

Another thing to keep in mind is the amount of light. Some guppy breeders, including myself, have noticed partial or total sterility in guppies following a prolonged exposure to constant light. To be on the safe side, it would be advisable to remove all light for a period of at least a few hours during a twenty-four hour cycle.

As for the old saying that no two guppies look exactly alike, maybe this is true under a microscope, but I have seen whole srains that looked as if they had been stamped out by a machine.

In conclusion, there is more to guppy breeding than meets the eye. The rewards of self-satisfaction and knowing that you are a part of creativity make the elusive fancy guppy worth pursuing.

TABLE SHOW STANDINGS

The quality of the entries at our last table show was good, but the quanity was small. The Club standings are listed below:

Blacks	1st Culver	2nd Culver	3rd Culver
Open	lst Walsh	2nd Shaw	3rd Shaw
Other	lst Aldridge	e 2nd	3rd

	Entries	HG	Places	Total	O.T.	N.T.
Aldridge	1 ;	0	5	6	11	17
Culver	3	3	10	16	24	40
Hale	0	0	0	0	6	6
Kratz	0	0	0	0	18	18
Lenzen	0	0	0	0	26	26
Levitt	0	0	0	0 .	3	3
Shaw	4	4	5	13	19	32
Turner	0	0	0	0	60	60
Wolcott	0	0	0	0	26	26
Walsh	1	1	5	7	6	13

Listed below are 1st, 2nd, 3rd and 4th place standings: This is the end of the quarter.

1st Turner

2nd Culver

3rd Shaw

4th Tie - Lenzen - Wolcott

ESTABLISHING A STRAIN OF GUPPIES

Written by George Turner Potomac Valley Guppy Club

A "Strain of Guppies", is any number of fish which resemble each other closely and have similar traits. Traits can be anything from a large tail or body to a briliant caudal color.

The breeding pair is the most important thing in starting a strain of guppies. The only way to be sure of what you are getting into, when you secure a breeding pair is to purchase them from a local breeder if possible. In doing this you can see exactly what the strain is producing.

Let us say you purchase a good pair of guppies, and there is always room for improvement. After you have your guppies home, they should produce fry within 45 days, provided that both parents are fertile. Once you receive your first fry* raise them seperately from the parents. Your pair should drop another brood of fry in approximately 3 to 4 weeks. Raise your second brood the same as the first. Remember to seperate your males and females as soon as you can distinguish their sex.

Continue saving fry from each dropping. Raise them as you have been previously. As time passes you should have young guppies approximately 1 month apart in age. When your first fry reach the age of 4 to 6 months, select a male and female with desirable traits of the parents and breed them.

Watch your other fry as they grow, make a visual check every now and then to see whether they are better than the newly selected pair. If the younger fish from the first pair are no better than your newly selected breeding pair you can discard them.

^{*} See heredity chart on last page.

Take your newly selected pair which are in actuality your Fl generation and breed them, save their fry from their second breeding. I have found that a virgin female usually throws a better brood on her second time of breeding. Raise the fry from the Fl parents to the age of 4 to 6 months. As before you can save all the additional dropings in case the young you have now turn out to be poor fish.

Let us say that from your Fl parents you find a desirable trait in their fry. Select a male and female from the Fl young for breeding. This pair will be your F2 generation* Your next step is inbreeding. Mate the F2 female to the F1 male, and the F2 male to the Fl female* To simplify the last sentence, you are breeding daughter(F2) to father(F1), and son(F2) to mother(F1).

When the fry from the parents above are 4 to 6 months of age select a grandson from the mother-to-son brood with desirable traits and breed him back to his grandmother. Select a grandaughter from the father-to-daughter brood with desirable traits and breed her back to her grandfather. Raise the fry from these two pairs seperately as before. When the fry from these parents reach the age of 4 to 6 months, select the best male from the grandmother-to-grandson brood and mate him to his great grandmother. Also select the best female from the grandfather-to-grandaughter brood and mate her to her great grandfather.

The same procedure should be followed for each generation. When one of the original parents die, select your best pair, considering which traits you wish to establish, and begin all over again. As time goes on you will have to introduce new blood in your strain. Since you have in actuality two different strains, or should I say parallel strains, take a male or female from one strain and place it in the other strain. This should be done about every fourth to sixth generation as it will add new blood.

^{*} See heredity chart on last page.

HEREDITY CHART

original pair	M F	
	0	
Step 1 F1	M F	
Male Fl & Female Fl	M. F	
	3 • 0	
Step 2 F2		
Male F2 & Female F1 Male F1 & Female F2	M F	
	• • • •	
Step 3 F3		.
Male F3 & Female F1 Male F1 & Female F3	Mf3 Ff1.	Mfl Ff3
	• • •	
Step 4 F4		•
Male F4 & Female F1 Male F1 & Female F4	Mf4 Ff1.	Mfl Ff4
		• • • •
Step 5 F5	M F	
Male F5 & Female F1 Male F1 & Female F5	Mf5 Ff1.	: 1
	PILO F.L.	Mfl Ff5
Step 6 F6	• • • • • • • • • • • • • • • • • • •	•

THE USE OF HYDROGEN PEROXIDE IN THE CONTROL OF FISH DISEASE

by Robert P. Dempster
Steinhart Aquarium
and
William H. Shipman
Naval Undersea Reasearch
and Development Center

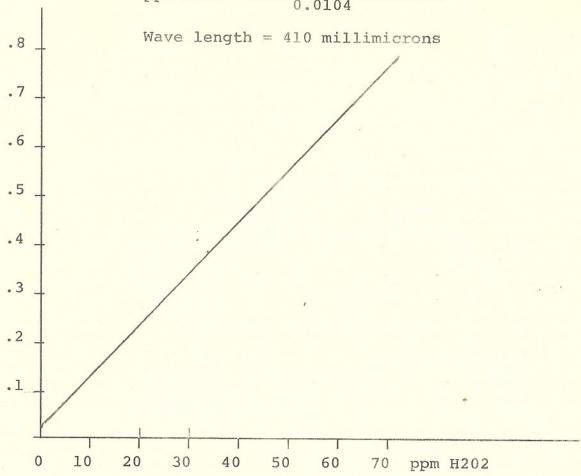
Hydrogen peroxide may be employed as a prophylactic measure for the control of disease in both fresh-and saltwater aquariums and is of value for the treatment of a newly arrived shipment of fish. When it is used at the proper concentration, it will not injure most fish, but will prevent the spread of an indigenous disease by destroying the majority of the bacteria and parasites in the system. Experience at Steinhart Aquarium has shown that at a peroxide concentration of 28 ± 2 ppm there is no deleterious effect on the various species of fishes tested. Fishes that were infected externally with parasitic trematodes were found to be free of these parasites after a 24- to 48- hour treatment with hydrogen peroxide at a concentration of 30 ppm. This same treatment has been found effective against fin rot and related external problems.

In an attempt to measure the bactericidal characteristics of a 30 ppm hydrogen peroxide solution, simple thioglycollate infusions were used. In order to create the necessary concentrations of peroxide, either 3.8 ml of a 3% or 0.35 ml of a 35% hydrogen preoxide solution was added to each gallon of aquarium water. The final concentration was measured by reacting the peroxide in one ml of aquarium water with one ml of 1.4 X 10-3M titanium sulfate disolved in IN sulfuric acid. The absorbance os the chromogen was measured at 410 mu and the concentration calculated from a calibration curve (Fig. 1).

Once the desired concentration of peroxide had been attained at 0.1 ml aliquot was removed from the test aquarium and introduced into the fluid thiglycollate culture medium. A 0.1 ml aliquot from the same aquarium taken prior to the introduction of the hydrogen peroxide served as a control. Both the sample and the control were incubated at 25°C for 24 hours. At the end of this period, the culture tubes were visually compared and it was found that the control tube was extremely cloudy while the sample from the treated tank was completely clear.

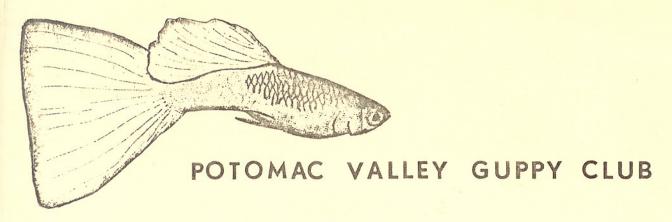
Figure 1. Graph for determing peroxide concentrations in known volumes of water.

ppm H202= <u>absorbance - 0.028</u> 0.0104



After 48 hours of incubation there was a visable growth in the previously clear tube indicating that all the bacteria had not been killed. It is clear however that a very high percentage was destroyed. There was no attempt made to identify the surviving bacteria.

Since the hydrogen peroxide is a strong oxidizing agent, bacteria and organic matter consumes it. This loss of peroxide necessitates analytical surveillance with frequent additions in order to maintain the concentration. At Steinhart Aquarium only clear glass or concrete tanks are used. It was found that the peroxide concentration decays quite rapidly in certain fiberglass tanks. It was also found that sand biological filters removed the peroxide completely. There was no effect on the concentration by aeration.



OFFICIAL MEMBERSHIP APPLICATION

Membership in our club is open to anyone interested in the aquarium hobby.

Dues - \$5.00 per year

NAME	
ADDDEGG	
ADDRESS	
CITY & STATE	*
ZIP CODE	
PHONE	
NUMBER OF TANKS	
WINDS OF TICH	
KINDS OF FISH	Personal Assessment Control of the C

Mail to:

George W Turner Secretary, PVGC 821 So. Florida St Arlington, Va 671 - 6850



DOUG SMITH 5461 SANGER AVE, APT 212 ALEXANDRIA, VA 22311