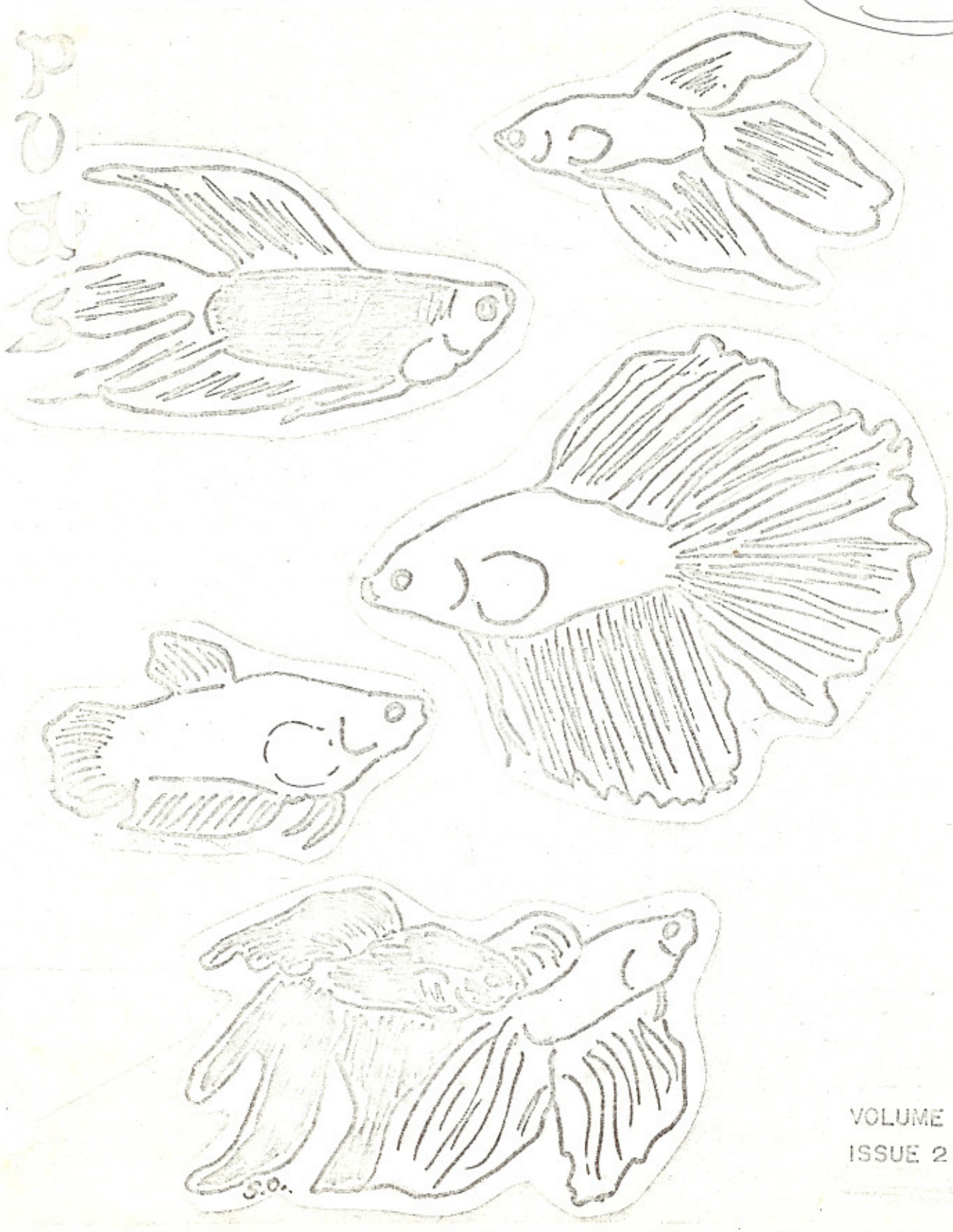
DELTA TALES

OFFICIAL PUBLICATION OF F.V.A.S. FEB. 1973



VOLUME 4
ISSUE 2

DELTA TALE is published for the benefit of the Potomac Valley Aquarium Society (formerly the Potomac Valley Guppy Club), a non-profit organization, established in 1960 for the purpose of furthering the aquarium hobby by disseminating information, encouraging friendly competition, soliciting participation in its shows, and promoting good fellowship. Correspondence should be addressed to Secretary, P.V.A.S., P.O. Box 6067, Shirlington Station, Arlington, Virginia, 22206. Original articles and drawings may be reprinted if credit is given the author and DELTA TALE. Two copies of the publication in which the reprint appears should be sent to DELTA TALE which will forward one copy to the author.

All materials for inclusion in the DELTA TALE must reach the editor no later than the 10th of the preceeding month.

* *

OFFICERS FOR 1973

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Vice-President	John Wolcott
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Corresponding Secretary	Richard Baker
Treasurer	Gene Sergent

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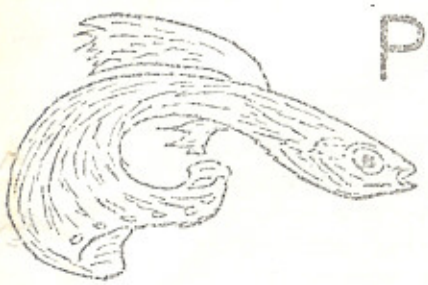
Eugene Aldridge Kenneth Raab Susan O'Meara

1973 MEETING DATES

Jan 8	Apr 9	Jul 9	Oct 8
Feb 12	May 14	Aug 13	Nov 5
Mar 12	Jun 11	Sep 10	Dec 10



POTOMAC VALLEY AQUARIUM SOCIETY

FROM THE PRESIDENT

At this juncture there are two major issues facing the Society. The first is promulgation of a new constitution and by-laws, and the second is the future of the DELTA TALE.

The Board of Governors, at its January meeting, studied a proposed revision of the constitution and by-laws that incorporated all the amendments voted in during the last year and those other changes necessary to prescribe the operation of the Society. After lengthy discussion and several changes a draft document was approved for presentation to the general membership. A copy of the proposed draft is a part of this issue and should be studied prior to the February meeting so that discussion of its merits can be held at that time. If there are no major changes developed or if the there is general acceptance then steps can be taken to finalize the action.

At the Board meeting, the other major topic was the future of the DELTA TALE. The former editor, Morris MacGregor, pointed out to the Board some of the difficulties in getting the DELTA TALE published. Primarily, these problems center on the lack of support in the layout, preparation and distribution of the bulletin. Another problem mentioned was the lack of interest, on the part of the general membership, in preparing original articles for the DELTA TALE. It was acknowledged that those reprint articles used in past issues, because of careful selection, were well worthwhile, but it was also agreed that original contributions from members is the mark of a successful publication and Society.

The matter of getting the DELTA TALE out was the prime problem, however, and Mr. MacGregor specifically pointed to the efforts of Sue O'Meara who, on numerous occasions worked all night to collate, address, and mail the issue in time for its delivery before the next meeting. This has also added to the expense of publication thru the need of using first-class mailing.

What is needed is two things, participation in preparation by members writing original articles, and volunteers to help in the assembly and mailing of the finished product. I intend to talk on this at the

FROM THE PRESIDENT

February meeting, so be prepared. If everyone pitches in and helps we can keep the DELTA TALE going. As it stands now and without this additional support and help our only recourse will be to consider a monthly newsletter with only quarterly production of the DELTA TALE. I don't think this is a good solution, but it's up to you.

JOHN E. JESSUP, JR., Ph.D.

EDITOR'S NOTE

Because of its considerable length, the draft constitution referred to in Dr. Jessup's letter is being included as a separate document mailed with this edition of the DELTA TAIL.

MEMBERSHIP AND THINGS

Greetings from your new corresponding secretary and membership chairman. I have received all the paraphenalia of my two jobs from Sue O'Merra and have been spending some time figuring out all my tasks. I want to thank Sue for all the help she has given me in getting started in my new job. I am looking forward to an interesting and busy year as secretary and membership chairman.

One of the ways we can make this a good year for the P.V.A.S. is to increase our membership. If each of us invites one friend to join the society we will double in size. I'm sure you know someone who is interested in the hobby, so why not bring him or her to our next meeting and encourage them to join our society. Now for a few items of business.

Please make the following changes in the membership list published in the January, 1973, DELTA TAIL.

ADD: Eileen R. Peach
7109 Valley Crest Blvd.
Annandale, Va. 22003
560-3809

Terry & Barb Wasylink
3231 Solar Lane, NW
Warren, Ohio

CHANGE ADDRESS FOR: William Wittman
3521 Leesburg Ct., Apt 103
Alexandria, Va 22302

CHANGE TELEPHONE NUMBER FOR: Robert and Dineen Smith
559-3096

The memberships of those listed below expire in February and must be renewed.

FINK, G.	PATTERSON, A.
GOODMAN, J.	SHAW, A.
MONTGOMERY, V.	VENTURI, C.
OLIVER, T.	WAKEFIELD, R.

Please fill out the membership application (printed in Jan. 73, DELTA TAIL) and bring it with your dues to the February meeting or mail both to P.V.A.S., P. O. Box 6067, Arlington, VA. 22206.

From the "Welcome Corner" the P.V.A.S. extends a big hello to Eileen R. Peach who joined the society in December. Miss Peach has been in the hobby for two years and presently has three tanks. She is interested in livebearers and has spawned guppies and swordtails. Miss Peach lives in Annandale and is employed as a school teacher. Again a harty welcome to Eileen Peach.

Thats all for this month. Remember to invite those prospective members. See you at the February meeting.

Dick Baker

Secretary's Letter

Those of you who stayed snug and warm at home January 8, missed a really delightful meeting--little business, an interesting slide show put on by Gene Aldridge on the various corydoras catfishes, and an unusually large turnout for the bowl show.

We are trying to activate the guppy sub-group on the 4th Tuesday of each month. The January 23 meeting will be at the Poulsens' in Springfield. The guppy club will be as effective and interesting as you make it. Whatever questions, ideas, problems or helpful hints you have should be shared with the rest of the club. Call 451-7294 for directions.

The cichlid sub-group will continue meeting on the 3rd Wednesday of the month. The January 17 meeting will be at Will Downing's in Arlington at 8:00pm. Call 578-4162 if you have any questions.

John Wolcott has agreed to be the May Show chairman. If you can help him or have any suggestions to offer, John would like to hear from you.

Last, but not least of all, I'd like to thank all of you who made our January bowl show such a success--in spite of the freezing weather. It looked like a mini-Winter Show! Apparently many of us made the same New Year's Resolution--to support the monthly shows. Check your January 1973 Delta Tale for a list of each month's bowl show categories.

Linda DeRoze,
Recording Secretary

BUILDING AN AQUARIUM

If you plan to build an aquarium, one question to ask yourself is: "How large should it be?" If you enjoy working with your hands, get a thrill out of completing a project, and money is no object, then build any size aquarium. However, if you are concerned about the cost effectiveness of building your own aquarium, then there is a minimum size, below which, it is cheaper to buy an aquarium.

If you are keeping large fish, or planning a community of medium size fish, then you will need a large aquarium. At this point, a few definitions are in order. Medium fish are 3 inches to 7 inches, large fish are greater than 7 inches for the purposes of this article. A large aquarium will be defined as 30 gallons or larger. Depending upon the shape of the aquarium, it appears as though the 50 gallon aquarium is the break even point. That is, if you build an aquarium in the 50 to 60 gallon range, it will cost you as much as you could buy a 55 gallon aquarium at any weekend sale (approximately $45-$50). Therefore, if you want an aquarium 55 gallons or less and are concerned with cost, buy it and read on for curiosity's sake.

The figures of $45 to $50 depend on where you buy materials, owning your own power saw and cutting your own wood. This brings up the subjects of materials and design. Except to say that the aquariums to be considered here will be rectangular with one side glass, designs will be considered later in this article.

Table I below contains a list of materials, with places the author has found give the best prices and prices paid.

TABLE I

MATERIALS

Material	Place of Purchase	Price	Quantity
3/4" plywood (8'X4' sheet)	Arlington Millwork	$13.59*	1
1/4" plate glass	Vienna Glass	2.50**/sq.ft.	varies
3/8" plate glass	Vienna Glass	5.00/sq.ft.	varies
Silicon Sealer (12oz. tube)	Any hardware store	4.95	1-2
1-1/2" No. 10 brass screws	Any hardware store	6.45	100
Epoxy Glue (10 oz.)	Sears Roebuck Co.	1.98	1
Epoxy Paint	Sears Roebuck Co.	4.59	1 quart
Polyester Resin	Read Plastic	6.50	1 gallon
Polyester Resin Wiring Agent	Read Plastic	.75	2 oz.

* Add $8-$12 for cutting
** $.50/sq. ft. less if you don't want ground edges.

The choice of 3/8" or 1/4" plate glass depends on the depth of the tank. Either epoxy paint or polyester resin may be used as a water proofing agent, they both have advantages and disadvantages that will be discussed later. When you cut the plywood, be sure to account for its 3/4" thickness (See Figure 1 below). For example, if you cut three pieces 4' by 2' as the long sides and bottom of your aquarium, then the short ends should be either 24" by 23-1/4" or 22-1/2" by 24", depending on how you plan to put the other parts together. One long side should have the interior cut out, leaving a 2-1/2" to 3" border of wood around emptiness (See Figure 1 above).

Construction of the wood frame now follows. Using the epoxy and brass screws, attach the short sides to the bottom. Put epoxy on the end of the bottom, be liberal in its application. Use two screws on each end, one at each corner. Place screws every 4" to 6" between the corner screws. Enough epoxy should be used so that it oozes out of the joints when the screws are tightened. Scrape away or smooth out excess epoxy. The screws are used only to clamp the wood together and allow the epoxy to set (approximately 24 to 48 hours) in that position. The author used 1-1/2" no. 10 flathead brass wood screws. (Helpful hint: A drill bit is available, at your favorite hardware store, that is specifically designed for drilling starter holes and countersinking the no. 10 flathead screw.) Construct the remaining pieces in a similar manner. The author found it more convenient to put the bottom and end pieces together first, let that portion of the frame set and cure. The front and back were put on a day later, and the whole construction was allowed to cure for another 48 hours.

After the wood frame is built, the next consideration is how to waterproof it. The author has used epoxy paint and polyester resin. If epoxy paint is used, 3 to 6 coats should be applied as per directions. It is not wise to use spray cans. If polyester resin is used, approximately 1-1/2 to 2 times the recommended amount of curing agent (they come in 2 ounce bottles) should be used to ensure curing. This comes to 3-4 ounce/gallon. Allow 24 hours for curing. If the resin is tacky, add another layer, or sand and use epoxy paint. In any event silicon sealer should be used in the joints. Aside from being less expensive, epoxy paint is easier to work with and less messy than polyester resin. The next tank built by the author will sport an epoxy finish. Six coats will be used to ensure that rocks do not scratch the surface.

The glass should be cut at least one inch larger than the opening in both the horizontal and vertical directions, so that it overlaps at least 1/2" on each side. Silicon sealer should be laid around the opening with the aquarium laying on its front. The glass is then laid

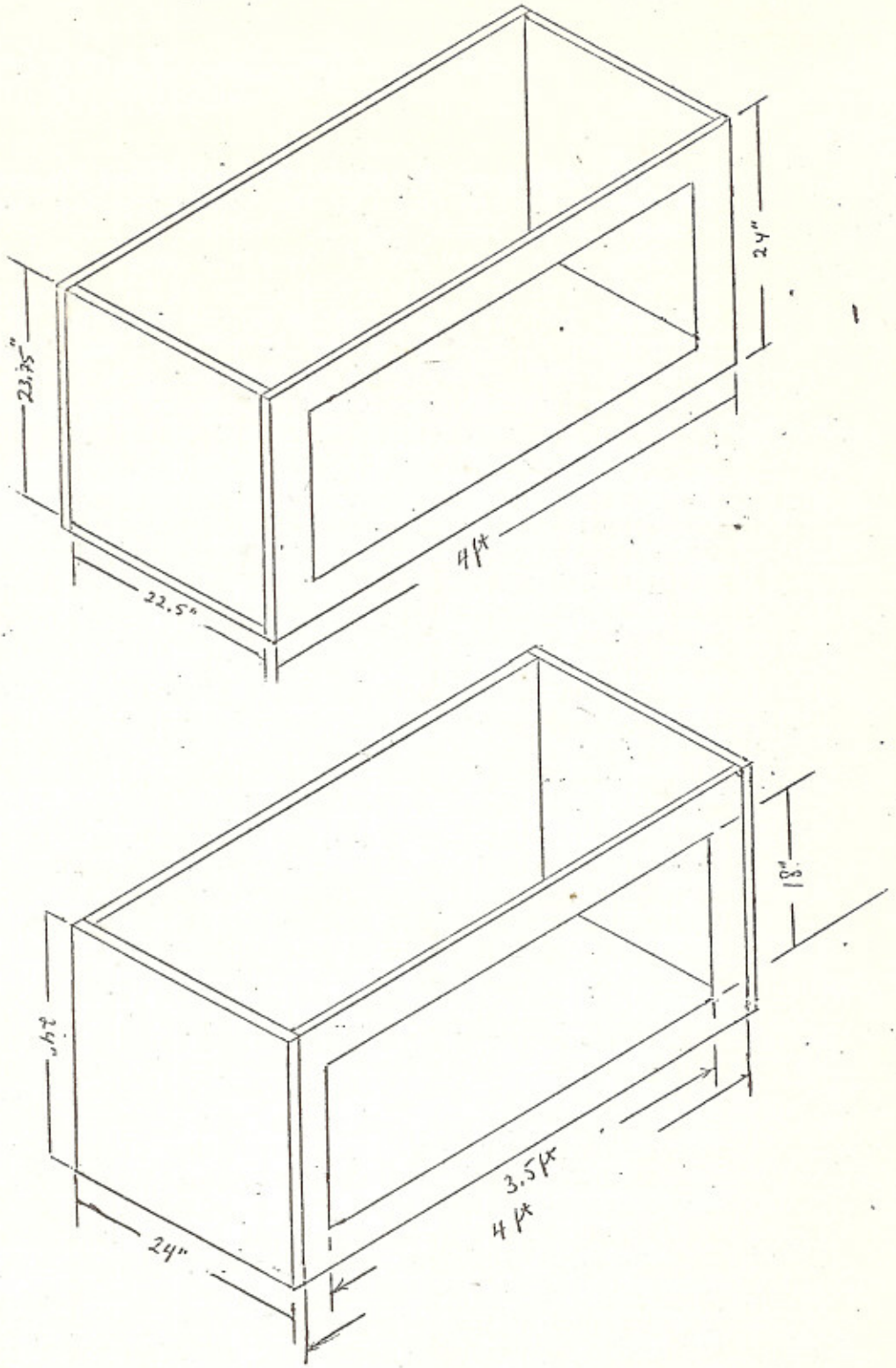


FIGURE 1

RECTANGULAR AQUARIUM

in. The weight of the glass will cause the sealer to spread out and seal. The top edges of the almost complete aquarium should be sealed. Epoxy paint, polyester resin, and/or silicon sealer should be used. The thickness of the glass used is of paramount importance. If the bottom of the unbraced glass is 16" or less from the top of the tank, then 1/4"plate glass is the minimum. Three-eights inch plate glass is needed for 16" to 22" from the top of the tank. Lower than 22", 1/2" plate glass is needed. (You will need good luck to find this anywhere, and large amounts of long green to purchase it.)

Before putting fish in the aquarium, caution should be exercised. The aquarium should be tested for watertightness. A minimum test of two days is recommended. The entire exterior should be examined for wetness. If polyester resin is used, a guppy should be set loose in the new tank to test for poisons in the water, i.e. if the resin has not cured properly. Four days is the recommended test duration. If the guppy dies, check the plastic for cracks; if any, fill them in with silicon sealer. If no cracks, check for roughness. Sand roughness away, clean out plastic dust, and retest. If guppy still dies, sand entire tank and apply epoxy paint as above. The sanding must be done or the epoxy will not band properly to the plastic.

Using 3/8" plate glass will allow you to build a tank up to 24" deep, amply suitable for angelfish, discus, uarau, or other fish that are tall or for a mixture of top and bottom fish such as angelfish, dwarf cichlids, and various large tetras. If you keep Malawis, and want to simulate a rock and gravel bottom, then a 12" to 18" deep tank is adequate. After you decide your tank height, build as large an area as you can afford. This will give a larger water-air interface plus more space for the fish.

Cut windows in as many sides as you desire. However, if you have built the aquarium to save money, too much glass will defeat that purpose. One way to design the tank for maximum volume at a minimum of expense is to slope sides and bottom toward a viewing port. The slope angle should be 45° or less away from rectangular (See Figure 2).

The author has built two tanks; one of which (125 gallons) has been in operation for six months; the second (85 gallons) is currently being tested. For your information Table II shows the cost of the two tanks.

TABLE II

AQUARIUM COST

Material	125 gal. (24"X48"X24")	85 gal. (12"X96"X18")
3/4" Plywood (cut)	$20.00	$22.00
Glass	29.50 (3/8")	30.00 (1/4")
Silicon (12 oz. tubes)*	9.90	9.90
Epoxy Glue	1.98	1.98
Epoxy Paint	4.59	---
Polyester Resin	---	6.50
Extra Curing Agent	---	.75
100 1-1/2" No. 10 Brass Screws	6.20	6.45
	$72.17 **	$77.58 **

* Actually only 1-1/2 tubes were used per tank
** Plus Tax

You now have as much information as I do. Design your own tank and good luck.

ADDENDUM

It has come to the author's attention that if the polyester resin is heated it will, release the keytones faster. Those keytones are what will poison the fish. The procedure involves filling the tank with hot water. Start with lukewarm water from tap and after water is in contact with the glass, turn off the cold water. Fill the tank to the brim and allow water to cool. Drain tank and repeat at least once. Don't forget to test afterwards.

However, in view of these problems, epoxy paint is the recommended tank lining.

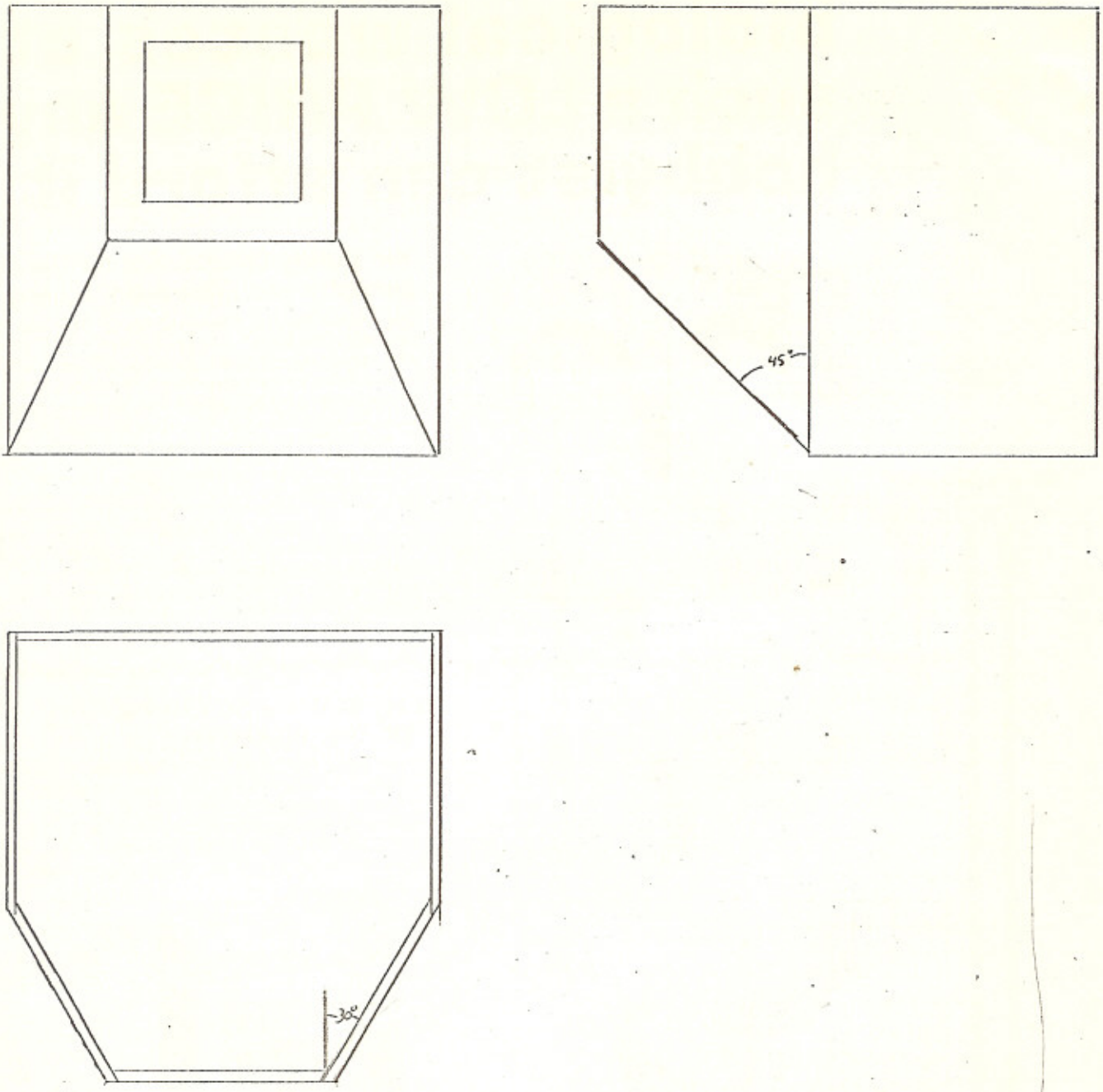
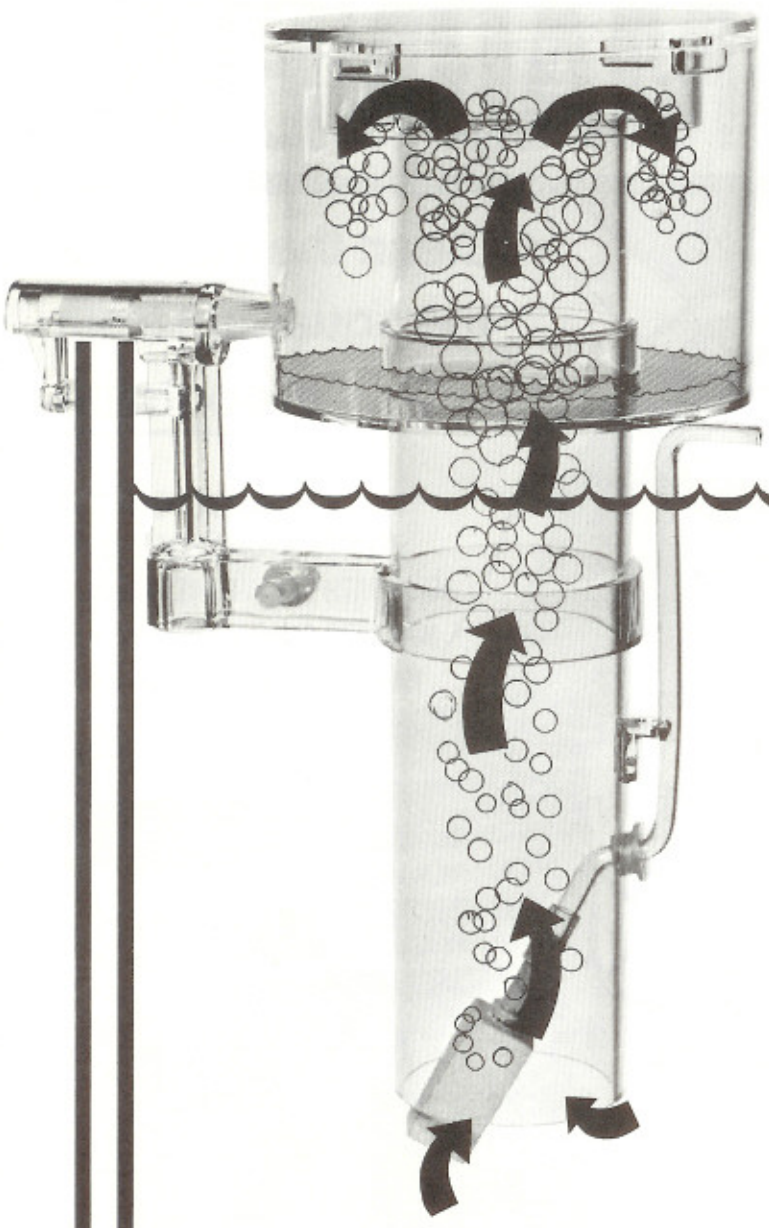


FIGURE 2

DESIGN TO MINIMIZE GLASS SURFACE
AND
STILL MAINTAIN VIEW OF ENTIRE AQUARIUM

For the first time: An Aquarium Skimmer for biological wastes at such a LOW PRICE any hobbyist can afford it.



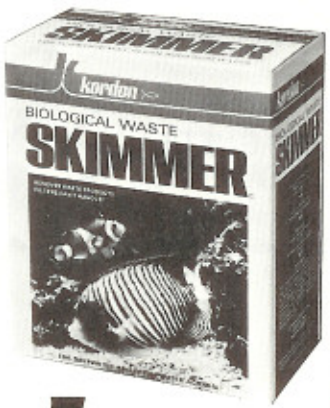
Top Quality Construction for Use in Both Saltwater and Freshwater Aquaria

The sturdy Kordon Biological Waste Skimmer is so simple any beginning aquarist can use it. Yet it does a very technical and necessary job automatically—the removal of ammonia, urea, nitrites and nitrates. These dangerous by-products occur in the build-up of decaying foods, decaying plants, and from the natural wastes of healthy fish. No ordinary aquarium filter eliminates such chemical pollutants, but they must be removed to avoid their toxic or lethal effect on aquatic life, particularly for the marine aquarium. The main other method is by using ion exchange resins—an expense that may be escaped entirely with this new, low-cost Skimmer.

Note: The Biological Waste Skimmer is a Must for every saltwater aquarium. Also it is especially useful in the crowded freshwater display aquarium where the water is changed infrequently.

Easy to Use — No Wearing Parts One Year Guarantee

The Kordon Biological Waste Skimmer fits most aquariums. it comes complete ready for use. Just fasten to the aquarium wall, attach an air line—and it's working! There are no moving parts, there is nothing to wear out, and the buyer gets a full year's guarantee on quality. A genuine hardwood airstone won't break or get brittle and promotes better foaming action for removing pollutants.



Maintenance-Free, Too!

There is nothing to service, adjust or repair on the Biological Waste Skimmer. Only the foam container needs to be emptied — a matter of a few seconds' time.

A Quality Product from

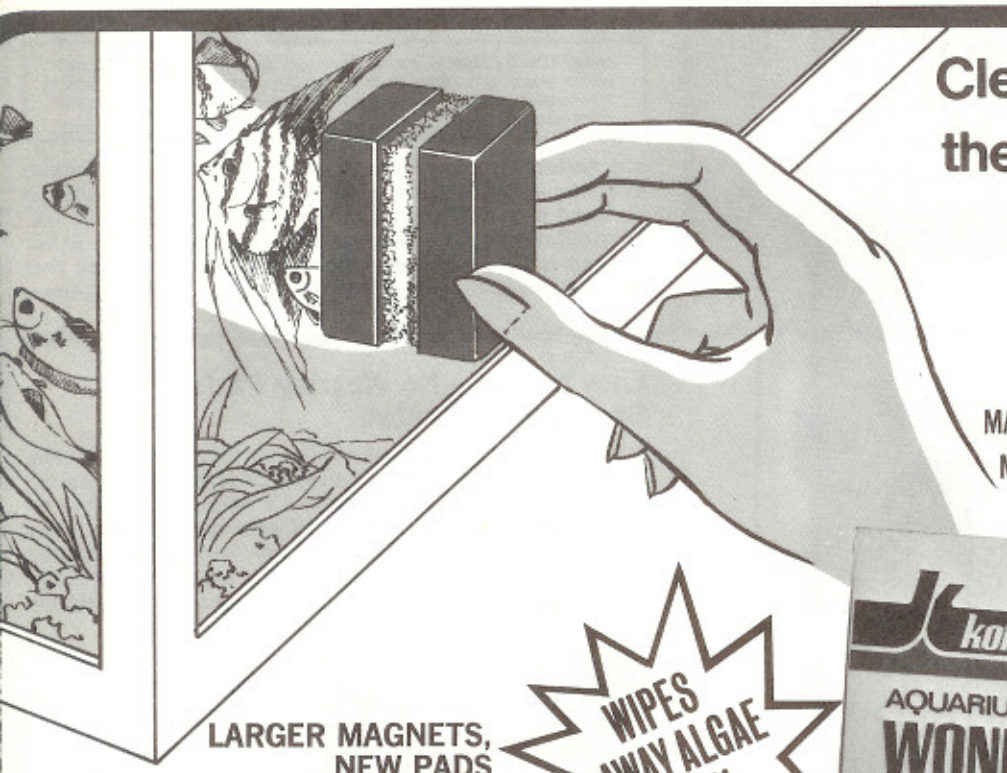
Kordon CORPORATION

21393 Curtis St., Hayward, CA 94545

SOLD IN LEADING PET STORES COAST TO COAST

kordon

AQUARIUM CLEANING WONDER MAGNETS©



Clean the inside of the aquarium from the outside

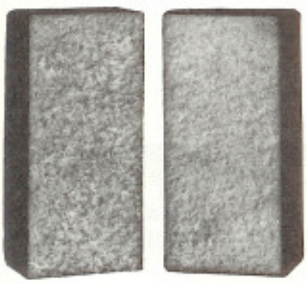
A BOON TO FISH HOBBYISTS!

MADE WITH EXTRA-POWER CERAMIC MAGNETS THAT WON'T RUST OR HARM AQUATIC LIFE IN ANY WAY.

WIPES AWAY ALGAE FAST!

LARGER MAGNETS, NEW PADS

Larger magnets have more strength. Both have scrubbing pads—use either magnet inside or out for more versatile cleaning!



RUGGEDLY BUILT WITH PROTECTIVE CASE

Pads are bonded to magnets. Magnets are fully protected in sturdy plastic case, will never wear out. Use them to hold kitchen reminders on stove, refrigerator, etc. A double use!

POTOMAC VALLEY AQUARIUM SOCIETY

TABLE SHOW RESULTS & STANDINGS

JANUARY 1973

	1st	2nd	3rd
☆ FANCY GUPPY			
a. Green	K. RAAB	K. RAAB	-
b. 1/2 Blk Red	SHIFLETTE, N.	WOLCOTT	WOLCOTT
c. AOC	WALSH	SERGENT	POULSEN
☆ CICHLIDS			
a. Cent & So (Large)	JESSUP, JN.	SHIFLETTE, J.	SHIFLETTE, J.
b. Non Riftlake	HIRSCHMAN, E.	JESSUP, JN.	JESSUP, JN
c. Other	DeROZE, D.	JESSUP, JN.	HARDY, CARL
☆ LIVEBEARER/EGGLAYER			
a. Betta	SHIFLETTE, D.	SHIFLETTE, D.	SHIFLETTE, D.
b. Corydoras	SHIFLETTE, A.	JESSUP, JUNE	HIRSCHMAN, A.
c. Other	HIRSCHMAN, A.	HARDY, DON	JESSUP, JUNE

POINT COUNT

GUPPY	JANUARY	QTR	ANN'L
Wolcott	8	8	8
Raab	7	7	7
Shiflette, N.	7	7	7
Walsh	7	7	7
Sergent, P&G	5	5	5
Melnick, A.	3	3	3
Poulsen, W.	3	3	3
CICHLIDS			
Jessup, JN	13	13	13
Hirschman, E.	8	8	8
Shiflette, J.	8	8	8
DeRoze, D.	5	5	5
Hardy, C.	5	5	5
Aldridge	1	1	1
Hardy, B.	1	1	1
Melnick, S.	1	1	1

EGGLAYER/ LIVEBEARER	JANUARY	QTR	ANN'L
Hirschman, A.	9	9	9
Shiflette, D.	9	9	9
Jessup, June	8	8	8
Shiflette, A.	6	6	6
Hardy, Don	3	3	3
Poulsen, W.	2	2	2
Hardy, Dan	1	1	1

☆ ☆ ☆

FEBRUARY 12

GUPPY: H/B AOC, FEMALE, AOC

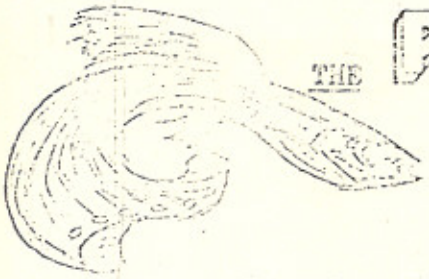
CICHLIDS: CENT & SO AM (MEDIUM)
RIFTLAKE BREEDING PAIRS
OTHER

EGGLAYER/LIVEBEARER: BARBS, ANABANTIDS, OTHER

TOTAL ENTRIES (67)

☆ ☆ ☆

SHOW YOUR FISH



THE POTOMAC VALLEY GUPPY CLUB

of the Potomac Valley Aquarium Society has held its first meeting at the home of Tendell and Vivian Poulsen on Tuesday, January 28, 1973. Many projects of special interest to fancy guppy breeders were discussed: planning and setting up the fish room; feeding formulas; lots of information sharing; training in judging, to name a few.

If you are interested in being a part of this group, in learning more about raising guppies, or in sharing information with others, plan to attend the next meeting at 8:00 p.m. on Tuesday, February 20, 1973 at the Poulsen home.

Meetings will be held on 3rd Tuesdays each month. Look for notices of future meetings to be published in the Delta Tale.

Please be sure to A.S.V.P. if you plan to attend. Call your host member for directions before the meeting. You may call John Wolcott at 262-4213, or Vivian Poulsen at 451-7294 for further information.

Again, anyone interested in guppies is cordially welcome to attend. Hope to see you there.

IS ANY ONE INTERESTED IN BUYING BRINE SHRIMP EGGS?

A LARGE PURCHASE SAVES ALOT OF MONEY. IF INTERESTED

PLEASE CALL JOHN WOLCOTT, 262-4213.

P. V. A. S. TREASURER'S REPORT

JANUARY 1973

Cash in Bank, January 1, 1973	$380.00
Income	77.50
Expenses	65.74
Balance, January 18, 1973	$392.33

Gene Sergent
Treasurer

WHAT'S HAPPENING AT THE NATIONAL AQUARIUM

by Alan Levitt

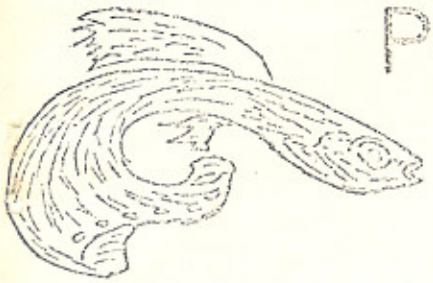
A number of changes took place at the aquarium last month. Most noticeable was a new "dry" exhibit on body armor. The display takes the place of the old stuffed sailfish which had been here for almost 10 years. The Body Armor Display illustrates (with dried specimens and words) the many forms of armor marine animals have developed to protect themselves.

Another touchable exhibit was placed in the public area - a vertebrae from a 90 ft. Blue Whale. The four foot high bone is only one of 63 vertebrae which made up the backbone of the Blue Whale-largest animal that ever lived on earth.

Last month we also received the first Grass Carp (also called White Amur) ever displayed in the Washington area - and probably in the country. Grass Carp are native to China, Siberia and Manchuria but have been transplanted to many areas around the world. These tough carp relatives have become quite controversial in recent years because of their tremendous appetites for aquatic vegetation. Some people see them as a cure to the aquatic weed problem. "Water weeds" have become quite troublesome in many areas of the country and clog up ponds, lakes and waterways. Other individuals fear the carp will become so established in local waters that they will push out other food and game fish. The Department of the Interior has been testing the Grass Carp for a number of years to determine potential impact on the environment. Only after these tests are completed will a decision be made to release the fish into public waters.

To make room for the Grass Carp, the Western States tank was taken down and part of it incorporated into the Silver Salmon tank to make a new display-Fishes of the Northwest U.S. Also received last month was a 17 lb. Channel Catfish. Two local aquarium hobbyists also donated oyster toadfish which they had caught nearby last summer.

The electric eel tank now has a light display along with sound. Now when the eel emits an electrical charge, in addition to hearing a popping sound from the speakers, visitors will see from one to six lights flash depending upon how much electricity the eel puts out.



POTOMAC VALLEY AQUARIUM SOCIETY

DATE _____ 197

APPLICATION FOR MEMBERSHIP

NAME: _____

STREET: _____

CITY: _____ STATE: _____

PHONE: _____ ZIP CODE: _____

Number of Tanks: _____

Type of Fish: _____

Time in Hobby: _____

Fish you have spawned: _____

_____

What you would like
to do in this Club? _____

Which sub-group interests you? (guppy, cichlid, other) _____

How long do you plan to be in this area? _____

Occupation: _____

Membership dues for the P.V.A.S. are $7.50 family; $5.00 individual; $3.00 Corresponding and $2.50 Junior. Completed applications accompanied by your Check or Money Order should be mailed to P.V.A.S., P.O. Box 6067, Arlington, Virginia, 22206. Please attend our meetings at the Coca-Cola Bottling Plant, 5401 Seminary Road, Alexandria, Virginia on dates indicated below at 8:00 P M.

1973 meeting dates

January 8	April 9	July 9	October 8
February 12	May 14	August 13	November 5
March 12	June 11	September 10	December 10

Potomac Valley Aquarium Society
P.O. Box 6067
Shirlington Station
Arlington, Virginia 22206