

JAN., 1977

25¢

THE

DARTER



THE PUBLICATION OF THE
MISSOURI AQUARIUM SOCIETY INC.
ST. LOUIS, MISSOURI

AQUA-WORLD

ONE OF THE LARGEST, MOST
BEAUTIFUL AQUARIUMS IN THE
MID-WEST.

TWO CONVENIENT LOCATIONS
TO SERVE YOU :

3910 GRAVOIS
ST. LOUIS, MO. 63116
772-0100

1473 MANCHESTER RD.
ELLISVILLE, MO. 63011
391-0100

LARGE SELECTION OF MARINE AND TROPICAL FISH

COMPLETE LINE OF AQUARIUMS
AQUARIUM SUPPLIES
PET SUPPLIES





THE DARTER

PUBLICATION OF
MISSOURI AQUARIUM SOCIETY, INC.

Officers

President

Ralph J. Wilhelm
4756 Milentz Avenue
St. Louis, Missouri 63116*
481-7061

Vice President

Carl Berry
12482 Alswell Lane
St. Louis, Missouri 63128
842-4780

Secretary

Barbara Pozaric
404 Gabriel Drive
Kirkwood, Missouri 63122
965-4078

Treasurer

Tom Hopfinger
9407 Tilles Drive
Brentwood, Missouri 63144
962-1505

Executive Council

Larry Allbright
3852 Neosho
St. Louis, Missouri 63116
832-7991

Rich Crabtree
209 Eastmoor
East Alton, Illinois 62024
[618] 254-4979

Klaus Bertich
9525 Caravan Drive
St. Louis, Missouri 63126
849-2164

Dave Masters
48 Estates Drive
Arnold, Missouri 63010
296-0386

Ken Cope
2640 Midland Ridge Drive
St. Louis, Missouri 63114
429-0364

Paul Powell
1211 Claytonia Terrace
Richmond Heights, Missouri
644-3812

Frank Simmons
124 Huntleigh Forest Drive
Kirkwood, Missouri 63122
966-2893

Committee Chairpersons and Appointed Positions

ANNUAL & SUPER BOWL SHOW	Larry Allbright	832-7991
AUCTIONS	Ray Kuster	644-6147
BREEDERS AWARD PROGRAM	Dennis Donahue	524-7376
CORRESPONDING SECRETARY	Barbara Pozaric	965-4078
HISTORIAN	Kenneth Cope	429-0364
LIBRARIAN	Frank Simmons	966-2893
MEMBERSHIP	Bill Miskelly	521-2112
MONTHLY BOWL SHOW	Kenneth Keim	838-2630
POINTS TABULATOR	Carol Willemin	966-4259
PUBLICITY	Steve Pozaric	965-4078
REFRESHMENTS	Joy Bogacki	781-9545
TELEPHONE	Thelma Cope	429-0364
ROOM SET UP	Pat Jones	894-1648

DARTER Staff

Editor

Charlotte Hopfinger

Advertising

Joy Bogacki

Layout & Typing

Barbara Pozaric, Barbara Powell
Pat Donahue, Sue Kuster, Sharon
Bragga & Tom Hopfinger

Artwork & Design

Frank Bayne, Charlotte Hopfinger
& Rick Bragga

Staff & Feature Writers

Carl Berry, Charlotte Hopfinger, Klaus Bertich, Ralph Wilhelm, Barbara
Powell, Marilyn Waterson, Ken Keim & Rick Smith [Also The Raven]

Collating

Bogackis, Kusters, Hopfingers, Carol Willemin, Klaus Bertich, Frank
Simmons and Ralph Wilhelm

TABLE OF CONTENTS

January, 1977

Volume 3 Number 1

President's Message	Ralph Wilhelm	6
January Meeting Notice		7
December Bowl Show Results		7
December General Meeting Minutes	Barbara Pozaric	8
Treasurer's Report	Tom Hopfinger	9
Coming Events		9
Editor's Message	Charlotte Hopfinger	10
Member Of The Year		13
What Is This World Coming To?	Frank Simmons	15
Poem	Ola Sommerhauser	16
Plecostomus Can Be Spawmed		19
The Native Corner	Rick Smith	21
For Sale		23
Just Down The Street	Marilyn Waterston	24
Sharks! In St. Louis	Jim Thale	27
As The Water Bubbles	Ken Sommerhauser	29
Siphoning The Exchanges	Ken Keim	31
Visiting Our Members	Klaus Bertich	33
Book Reviews	Marilyn Waterston	34
Bionic Jaws Member Analysis	Reprint	36

EXCHANGE PUBLICATIONS: The Darter will exchange with other clubs' publications. Please send exchange publications to:

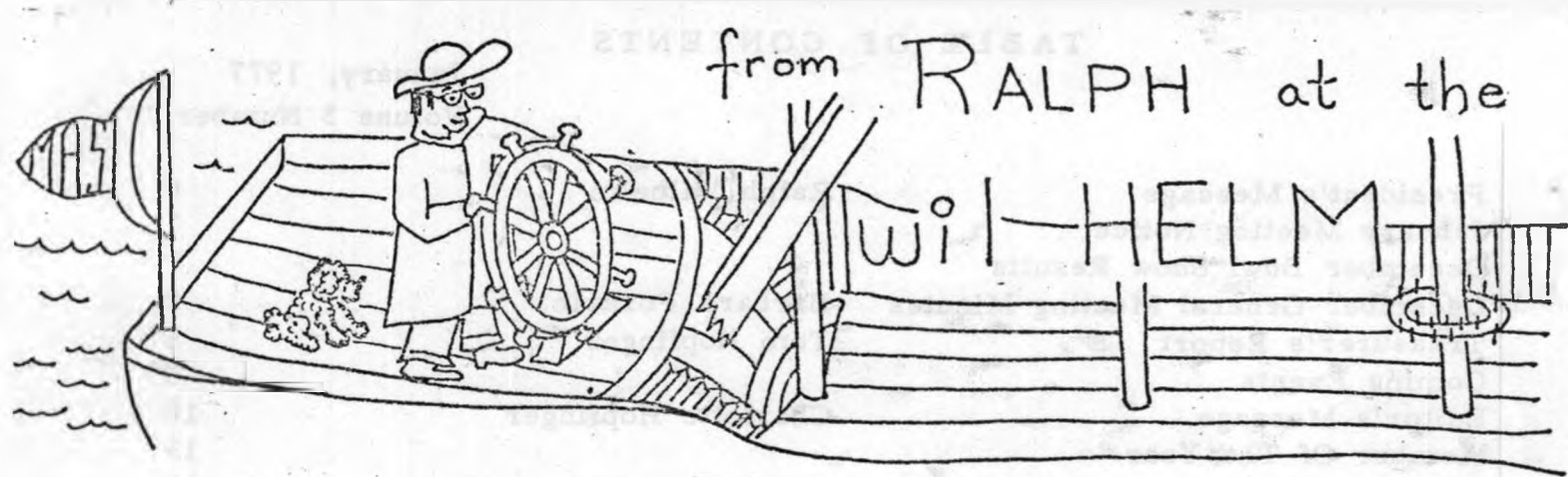
The Darter - M.A.S.I.
 9407 Tilles Drive
 Brentwood, Missouri 63144

Failure to receive three consecutive issues of a club's publication will be considered as a termination of our exchange with that club, unless advised to the contrary.

Permission is granted to reprint any article appearing herein. Please send two copies of any publication in which a reprint appears, one of which is to be provided to the author of the reprinted article.

Monthly issues of The Darter are part of membership consideration.

The Darter is published monthly by the Missouri Aquarium Society, Inc. at 9407 Tilles Drive, Brentwood, Missouri 63144. Controlled Circulation Postage paid at St. Louis, Missouri



What are we going to do in 1977 to match and improve on our accomplishments of the past year? The first thing that comes to mind, and the next big event on the M.A.S.I. calendar, is the annual show and workshop in April. The show committee is hard at work studying and revising rules and classes, and lining up an impressive list of speakers. Hopefully we will have our new show racks built in time.

How about your effort? Starting now, in the next three and one-half months you should be able to get your entries in top condition. There will be raffle tickets to be sold, plans to be made, work to be done. If you want to help your society, there is plenty to do.

It's time to sell ads again, Charlotte always needs original articles for The Darter ----- but I don't need to list everything. If you are willing to work, the jobs will find you.

Speaking of work I wish to thank all of you who worked to make our last auction the success it was. We needed you, and you came through, all of you from those who brought items to be auctioned, the ones who worked and the ones who purchased fish. Thank you again.

Here's looking forward to a super year, with increased participation in all of our activities.

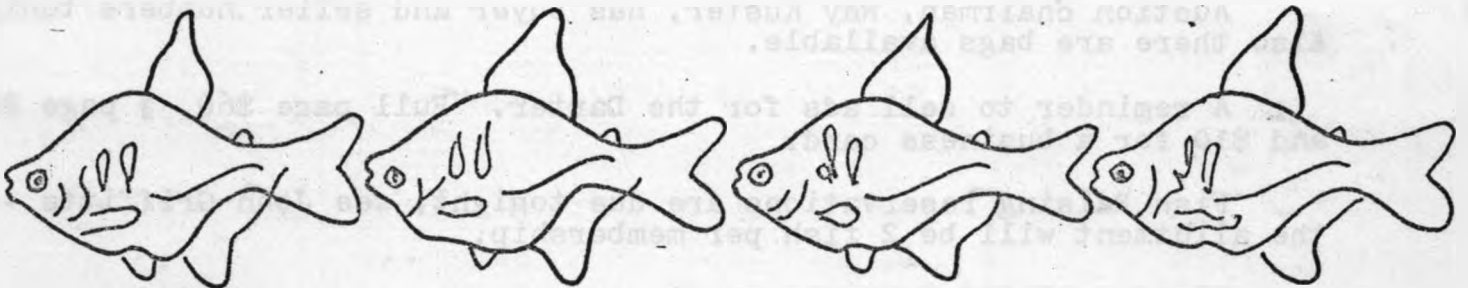


JANUARY MEETING NOTICE

Time and Date: 8:15 P.M. Wednesday January 12th

Place: Prudential Savings and Loan
Community Room 6th floor
8020 Forsythe, Clayton, Missouri
Park in garage - lower level

Bowl Show: Catfish - all varieties except Corydor
Anabantids - excluding Bettas
Open



DECEMBER BOWL SHOW RESULTS

	<u>Hobbyist</u> (No Entries)	<u>Novice</u> (3 Entries)
Barbs		1. Larry Allbright 2. Ken Sommerhauser 3. Ola Sommerhauser
Tetras	(3 Entries) 1. Bill Miskelly 2. Alden Joice 3. Rick Smith	(2 Entries) 1. Ken Sommerhauser 2. Ola Sommerhauser
Open	(5 Entries) 1. Alden Joice 2. Rick Smith 3. Ken Sommerhauser	

January - Catfish - ALL VARIETIES EXCEPT CORYDORAS
Anabantids - EXCLUDING BETTAS

February - Killifish - ALL VARIETIES
Sharks and Loaches - ALL VARIETIES

GENERAL MEETING MINUTES

The regular monthly meeting of the Missouri Aquarium Society, Inc. was called to order by the President, Ralph Wilhelm, Wednesday, December 8, 1976 at the Prudential Savings and Loan.

Mr. Wilhelm extended the clubs thanks to the Pozarics for again hosting the Christmas Party.

A note was read from the Scouts of Pack 129, Den 7 who attended the November meeting thanking the club.

The raffle tonight is free, one ticket per member.

The January Executive Council meeting will be held at the Copes on the 15th.

The next show meeting will probably be held the Tues. following the Jan. regular meeting.

Auction chairman, Ray Kuster, has buyer and seller numbers tonight. Also there are bags available.

A reminder to sell ads for the Darter. Full page \$60, $\frac{1}{2}$ page \$40 and \$10 for a business card.

Fish Raising reservations are due tonight, see John Griffiths - the allotment will be 2 fish per membership.

Minutes of the November meeting were approved as printed.

The Treasurer's Report was received and filed subject to audit.

Larry Allbright, Show Chairman, announced that the rules for the Annual Show will be published in the Jan. Darter.

Ken Sommerhauser, Breeder's Award Chairman, reported that the revisions are started and should be finalized by the end of February. Fish should still be brought in now.

After discussion, it was moved, seconded and approved that the club give approval to the Executive Council's approved motion to expend funds for the building of racks for show use.

Annual Awards to be presented at the Jan. meeting - Best Article written for the Darter, Novice Bowl Show Winner, Hobbyist Bowl Show Winner, Novice of the Year and Hobbyist of the Year.

The Following names were placed in nomination for Member of the Year Ralph Wilhelm, Tom & Charlotte Hopfinger and Jim & Joy Bogacki. the nominators must have their articles on the nominees in to the Darter by Dec. 18, 1976.

The question was asked whether an individual may offer cash prizes at the Annual Show for such things as fish entered from the farthest distance or most fish entered, etc. No objection was raised and the question was referred to the Show Committee.

Mike Shye made the donation of a number of trophies to the club.

Frank Nischbach noted the rising cost of fish food.

TREASURER'S REPORT

Balance as of November 21, 1976	\$2342.80
	Income \$ 714.56
	Expense <u>\$ 150.70</u>
Balance as of December 22, 1976	<u>\$2906.66</u>

Income:

Auction	\$666.49
Membership	
Bernstein \$10.00	
Moreschel \$ 7.50	\$ 17.50
Interest - Prudential Svgs	\$ 15.57
Trophy donation	<u>\$ 15.00</u>
Total Income	<u>\$714.56</u>

Expenses:

Bozzay Morley flowers	\$ 11.50
Ace Office - Dec. Darter	\$ 41.28
St. Louis Post-Disp. ads	\$ 60.06
U.S.P.O. Dec Darter Postage	\$ 10.36
Auction Post-Cards	\$ 4.50
General Postage	<u>\$ 23.00</u>
Total Expense	<u>\$150.70</u>

Cash on hand	\$ 41.82
Deposit - Prudential Savings & Loan	\$1515.57
Deposit - Hampton Bank	\$1329.27
Deposit - U.S. Postal Service	<u>\$ 20.00</u>
	<u>\$2906.66</u>

COMING EVENTS

January

- 12th - M.A.S.I. general meeting - Prudential Savings
- 15th - M.A.S.I. Executive Council meeting - Cope's - 8 P.M.
- 23rd - M.I.B.B Auction - Holiday Inn North
- 28th 29th & 30th - Lewis & Clark show and auction - Holiday Inn North

February

- 9th - M.A.S.I. general meeting - Prudential Savings
 - 18th 19th & 20th - WINTER WEEKEND WORKSHOP - MEMPHIS, TENN.
- We have not received any additional information as we go to press -
 You can contact their Show Chairman - Pat Austin - 33745 Raleigh
 Millington, Memphis, Tenn. 38128 Phone 901-386-7584

EDITORS MESSAGE



Happy New Year from The Darter staff. May all of our fish remain healthy in the new year, and may all of the expensive ones reproduce often. With the arrival of the new year we face another interesting schedule of coming events. The workshop season is quickly approaching. Two big fish dates are creeping up on us, and will be with us in no time. On February 19 to 22, The Winter Workshop Weekend (WWW) will be held once again in Memphis, Tennessee. The distance is not that far to go, and I know from past attendance that you will have a very enjoyable weekend. The workshop is always well attended, and there is hardly a better time (except for our show/workshop weekend) to exchange hobby ideas, and experiences and gain a better understanding on many species of fishes. See the coming events portion of this Darter for more information.

The other and most important date that will be arriving in no time at all is coming the weekend of April 22 to 24 at the Holiday Inn North. Once again M.A.S.I. will host it's 3rd Mid-west hobby workshop and 17th annual show. No masi-ite should be among the missing. We need all the support and workers that are available to once again successfully handle such a large an exciting endeavor. Show and workshop plans are in the works. The weekend should be outstanding.

Darter ads will be running out soon. If you have secured any ad that is currently being run each month please make another contact with the advertiser and encourage him or her to renew the ad again. We do need the revenue, and I honestly feel that for the price and the monthly circulation rate our advertisers do get good publicity. Let me repeat our ad rates which run for one year from the month they are published. A business card ad costs \$10.00; a half page ad costs \$36.00 and a full page ad is \$50.00. Also please try to secure some new advertisers. We have some new business cards that could be run if we had more cards to fill the page. We must have a whole years advertising page printed at one time in order to come out ahead and make a profit. For more information contact me or our advertising chairperson, Joy Bogacki.

See you at the meeting,

Charlotte

D&E TROPICALS

Formerly SOUTH SIDE TROPICALS

Huge selection of tropical and marine fish with 126 freshwater tanks and over 1500 gallons of saltwater.



We carry a complete line of aquariums and aquarium supplies and many hard to find items including our new custom aquarium stands. Come see us.

2645 GRAVOIS

ST. LOUIS, MO.

HARVEY RAY HULL - OWNER



664-5452

**TROPICAL FISH
BIRDS**

**SMALL ANIMALS
TERRARIUMS & PLANTS**

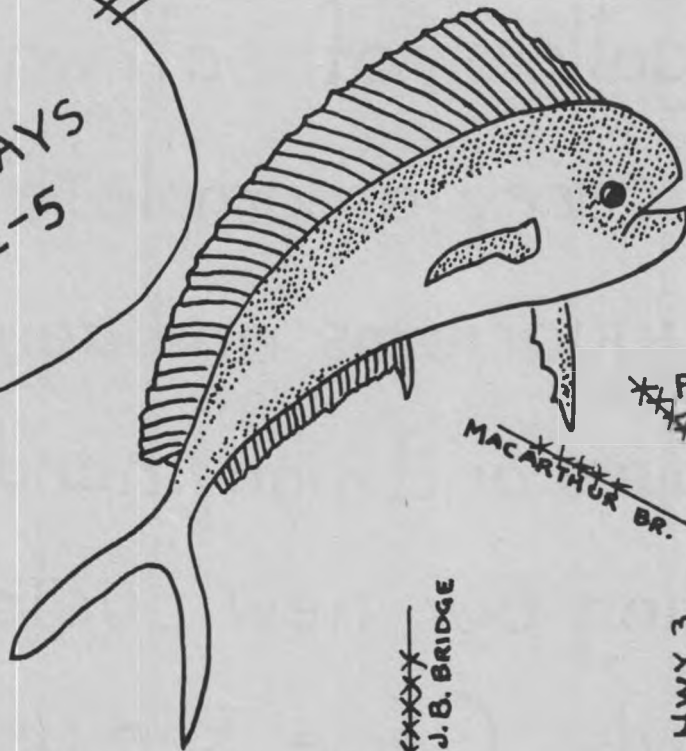
ALWAYS A
FINE SELECTION
OF TROPICAL
FISH

BLUE DOLPHIN

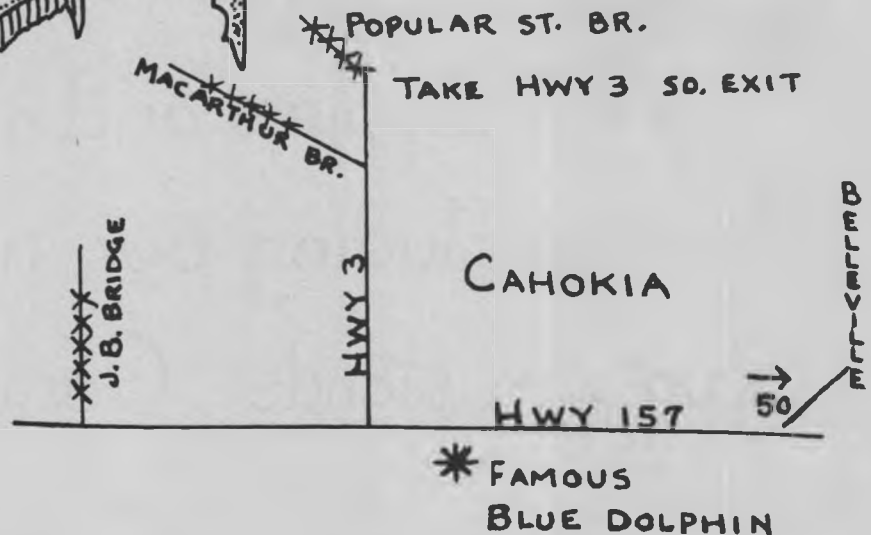
Nova Plaza

1238 Camp Jackson Rd.
Cahokia, Ill.
Ph. 332-1818
AC.(618)

OPEN
SUNDAYS
12-5



#1



**FULL LINE OF PET SUPPLIES
FAMILY OWNED & OPERATED**

COME VISIT US



MEMBER/MEMBERS OF THE YEAR

This month at our meeting, January 12, 1977, the general membership will be asked to chose the person or persons it feels deserve the most outstanding yearly club award. Many trophies and honors have been earned and bestowed by MASI throughout the year in conjunction with the many functions sponsored by the society. MEMBER OF THE YEAR is the most outstanding yearly award which can be presented. Those receiving this award can truly feel no greater honor because it shows the appreciation and heartfelt thanks given by a body of people who respect the efforts and responsibilities exerted by the individual or individuals who have given so much of their time, talents and energy on behalf of the society.

Nominations of candidates were made at the December, 1976 general meeting. The persons who made the nominations have composed a brief summary stating their feelings as to why their candidate or candidates were selected. Please come to the January meeting and cast your support for the candidate(s) who you feel have made 1976 a particularly good year for MASI.

Nominee names are in alphabetical order.

JIM AND JOY BOGACKI

In the past year, since I have become more active in MASI, I have become more aware of the real workers in the club. While Jim and Joy Bogacki are always seen "up front" at all club functions, I would like to familiarize the members with some of their behind-the-scenes work.

Jim and Joy are regular members of the collating group which meets every month to put together the Darter. Jim also delivers the Darter to the retail stores all over the St. Louis area. These are much appreciated but little recognized jobs. They also serve on several committees, such as the Breeders Award and the Show committees. In addition, Jim helps carry the library books each month and Joy helps with the refreshments. More important, without Joy's help last year's raffle wouldn't have been much of a success. She not only sold the most tickets individually, but she also sold over a dozen books for the club at the dance.

I think that hard workers like these two should get the recognition they richly deserve; and that is why i nominated them for "Member of the Year".

Carl Berry

TOM AND CHARLOTTE HOPFINGER

Again this year I am writing about the people who I believe deserve the Member of the Year Award - Tom and Charlotte.

The continuous performance of high achievement of these two is amazing, there are few phases of MASI that hven't felt their helping hand.

As president, Tom led us through another highly successful Show and Workshop, taking the experience gained the previous year and using it to our advantage in 1976. Now he is serving the club as treasurer and doing a fine job. Many contacts have been made to the club's

MEMBER OF THE YEAR - con't.

advantage through Tom and Charlotte's good will ambassadorships.

Every month more good words come back to the club about the Darter. Charlotte deserves all the credit for these compliments. As the editor she put in many hours of gathering, editing, lays outs, printing arrangements, collating plus beating the bushes for original material. Tom's typing doesn't hurt either.

All aspects of the club's activities interest these two people from helping people become active in the hobby to arranging meetings and leading the way for a better club. All of this and more point the way to the Member of the Year Award.

Barbara Pozaric

RALPH WILHELM

Ralph has not been in the club long. But from the very start he has been right in there working.

This year he has been advertising chairperson, Show Chairperson (and that's not an easy job), he works at the auctions and collates, and he's president. If there's a job to be done, Ralph will be there helping.

His house is always open to help with any fish problem you might have, and if he can't help, he'll find someone who can.

Ralph's done a lot for the club. He works hard at being President.

Joy Bogacki

WELCOME NEW MEMBERS

Stuart & Brenda Bernstien
7305 Lindell
University City, Missouri 63130
726 - 1493

THANK YOU TO OUR DONORS

The Missouri Aquarium Society, Inc. greatly appreciates the generosity of the following members and manufacturing firms for their donations in support of our society and it's activities:

Kordon Corp.
Golden State Aquatics
Penn Plax
Lustar
Rila Products
Marineland Aquarium Products

Pride of Suffolk
Ralph Wilhelm
Beldt's
Mardel Laboratories
Frank Simmons
Dow Corning



WHAT IS THIS WORLD COMING TO?

or

There Must Be More Money In Fish In The Cleveland Area

by Frank Simmons

The following article was printed in The Cleveland Plain Dealer and forwarded to me by a friend.

FISH WAR?

BULLETS, BOMB, BEATINGS MARK AQUARIUM BATTLEFIELD

by Mairy Jayn Woge

Since late June, more than \$30,000 worth of tropical fish have been killed, two men have been shot, another has been charged with felonious assault and another with receiving stolen fish, threats have been received and a tropical fish store has been bombed in Wickliffe.

Everyone involved claims ignorance about the reasons for all this violence.

But they are all wondering whether the great tropical fish war of Greater Cleveland is under way.

The latest incident took place late Sunday night when a bomb exploded at the rear of the Tropical Fish Distributing Co., 29013 Euclid Ave., Wickliffe.

The owner, Joseph Lora, 30, told The Plain Dealer he does not know why the store was bombed and hopes that it was a mistake.

He also said he knows one of the fish dealers who was shot and the man accused of shooting him.

Lora's store is in the same Lake County community where Nancy Fabian operates the Lakeland Tropical Fish Co., 29649 Lakeland Blvd.

It was here, Mrs. Fabian said, that on June 23 a number of her expensive tropical fish were poisoned at a loss of about \$2,500. One week later, she said, there was a break-in at her store and more fish killed for a loss of \$1,100. She said she has since learned that liquid fertilizer was poured into her tanks to kill the fish.

Monday Mrs. Fabian received a threatening phone call. She said the caller, a man who she could not identify, told her: "If Richard Clayton comes on your property, you'll be next."

FISH WAS? CONTINUED

Clayton is charged with felonious assault in the wounding September 30 of Carmen Zagaria, 34, of 4275 W. 180th St., owner of the Denison Wholesale Tropical Fish Co., and a friend of Zagaria, James Dove, 28, of 3428 W. 90th Street.

Mrs. Fabian said she has done business with both Lora and Zagaria and that she was briefly a business partner of Clayton more than a year ago. She said Clayton had been in her store on Saturday.

Clayton, 25, operates the Variety Aquarium at his home, 8625 Denison Ave. SW. Police said he had accused Zagaria of throwing a rock through the store window, smashing a 130-gallon tank and killing several prize fish.

The shooting followed a fistfight involving all three men, police said.

Zagaria lost \$26,000 worth of tropical fish August 10 in a burglary at his store, 7508 Denison.

A week later, Kenneth Copley, 22, of 3215 Barber Ave. SW, was charged with possession of stolen property when police armed with a search warrant found about \$2,000 worth of fish believed to have been taken from Zagaria.

Also, Marie Fortner, operator of Marie's Aquarium, 9849 Lorain Avenue, said that within the past month about \$500 worth of tropical fish have been killed by poison in her store.

"I can tell if it's a disease making the fish sick," said Miss Fortner, who has been in business for nine years. "But these fish had been poisoned."

EDITOR'S NOTE - I am sure that all of our readers would be interested in any further developments relating to the incidents related in the article above. The Darter will be happy to print any additional information received.

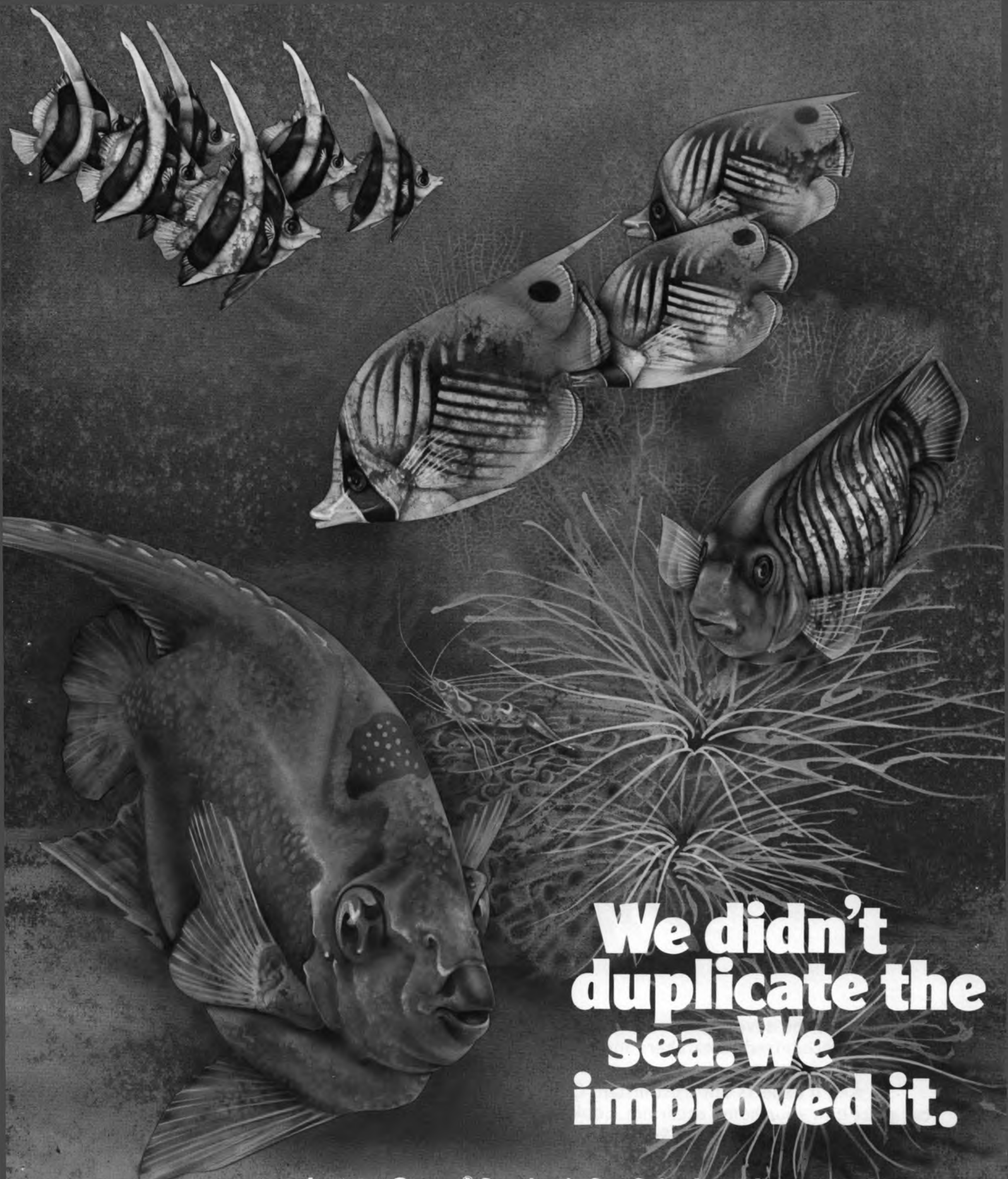
We wish you a Merry Fishmas,

We wish you a Merry Fishmas,

We wish you a Merry Fishmas,

And a Happy Bluegill.

Ola Sommerhauser



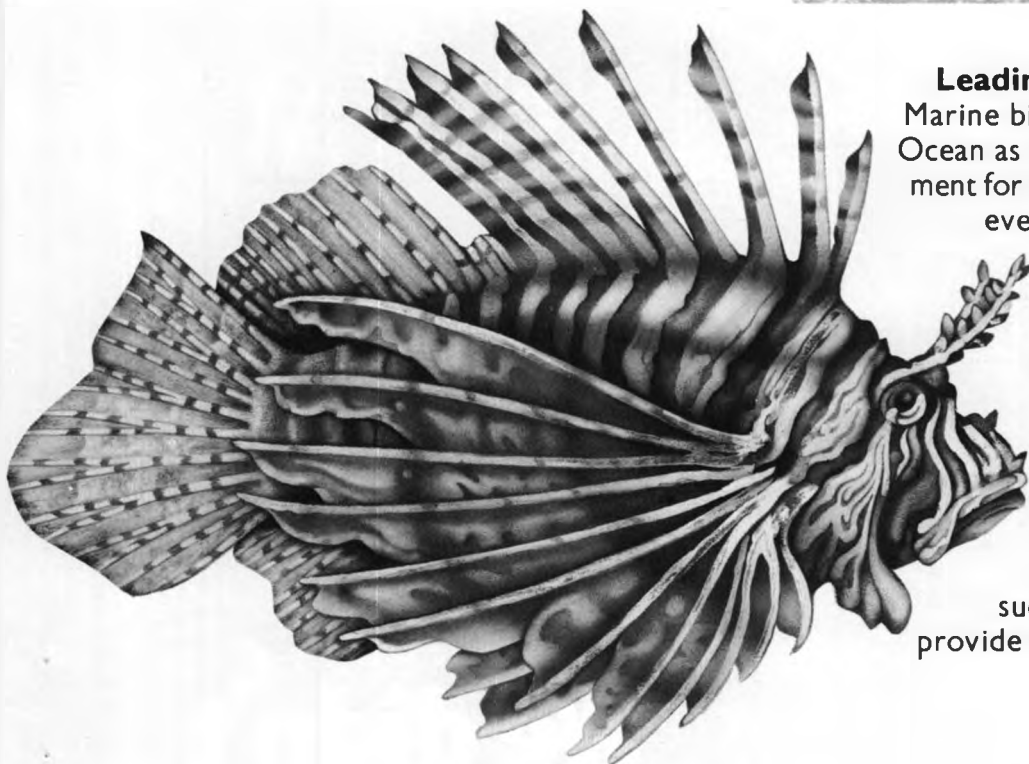
**We didn't
duplicate the
sea. We
improved it.**

Instant Ocean® Synthetic Sea Salts from Aquarium Systems.

A unique solution to an old salt water problem.

For years, synthetic sea salt manufacturers have been trying to duplicate nature's formula for sea water. It's not surprising they haven't succeeded because this formula is one of nature's most complex.

At Aquarium Systems, we took a different approach. We didn't try to duplicate sea water because it's a marginal medium. We developed Instant Ocean, an artificial sea salt that meets the demand of artificial systems. It's a consistent formula that's better than the sea at keeping captive marine life healthy and active.



Leading the way in marine research. Marine biologists quickly accepted Instant Ocean as the standard laboratory environment for salt water research. Today, virtually every major university and research laboratory uses Instant Ocean.

When the first rock samples were brought back from the moon, NASA researchers chose Instant Ocean as a medium to test for signs of lunar life.

Neptune's Nurseries, an affiliate of Aquarium Systems, is using Instant Ocean exclusively to breed marine fishes. With the success of this effort, a fish farm to provide tank-raised fishes for the marine hobbyist has been started.

The key is expertise.

Behind the development of Instant Ocean is a professional staff, including recognized researchers and published authors. Experts that other experts trust.

And if experts can trust Instant Ocean for their lab work, you can trust it in your home aquarium. Look for Instant Ocean at leading aquarium supply stores. Aquarium Systems, Inc., 33208 Lakeland Boulevard, Eastlake, Ohio 44094. Or call (216) 946-9180 for more information.



 **Aquarium Systems**
The name the experts trust.

"PLECOSTOMUS"
CAN BE SPAWNED

Aquarium Digest International
Reprint from FIN FARE
Victoria, B. C., Canada

Plecostomus are usually found in the bottom of the aquarium. They have a broad, flat underbody, which is not protected by the armor that encases the rest of their body. Although they are omnivorous, they require a large percentage of vegetable matter in their diet. In nature, their food consists mainly of algae and higher plant growths that develop on and in the surface of rotting logs. They are fairly efficient at keeping a number of kinds of algae under control in the home aquarium, particularly soft algae that grows on the sides of the tank and on rocks. A common mistake, however, is to underfeed these fish. They need a much broader diet than algae alone can provide. Conditioning Food, Tetra Min Tablets and Tetra Tips should be used as a regular part of their diet.

Another reason for the popularity of the Plecostomus is its unusual appearance. Its body color is ordinarily a drab dark brown or green. Although a few species do have some attractive colors and patterns, these are not commonly available. A number of species also possess barbels, bristles, or antler-like growths on their snouts. This is particularly known as the "Bristle-Nosed Plecostomus".

Although quite commonly kept, reported spawnings of Plecostomus have been rare. Recently, a young lady from Hayward, California, has produced many successful spawnings of the "Bristle-Nosed Plecostomus" using different pairs and generations. The following description of the breeding conditions in Mary Young's aquarium may prove helpful to others wishing to reproduce this interesting fish.

Sexual differences are not noticeable until the fish become about a year and a half old. At this point the "Whiskers", actually barbels, along the edge of his mouth and up through his forehead. The forehead barbels resemble an inverted "Y" pattern. Individually, each barbel is shaped like a small fork.

The female Plecostomus is easy to distinguish from the male. She has only one barbel on each side of her mouth, and her head is broader and wider than that of the male.

Mary's spawning tank is only five gallons. On the day of one spawning, the water conditions were measured to be: pH = 7.8, kH = 13°, Nitrites = .1 ppm, and temperature = 78° F (25.5° C). These readings seem more alkaline and harder than one might expect. Although Plecostomus species have been found occasionally in the brackish water of coastal areas, their natural habitats are usually soft, acid, "blackwater" areas. They are obviously flexible about their water conditions.

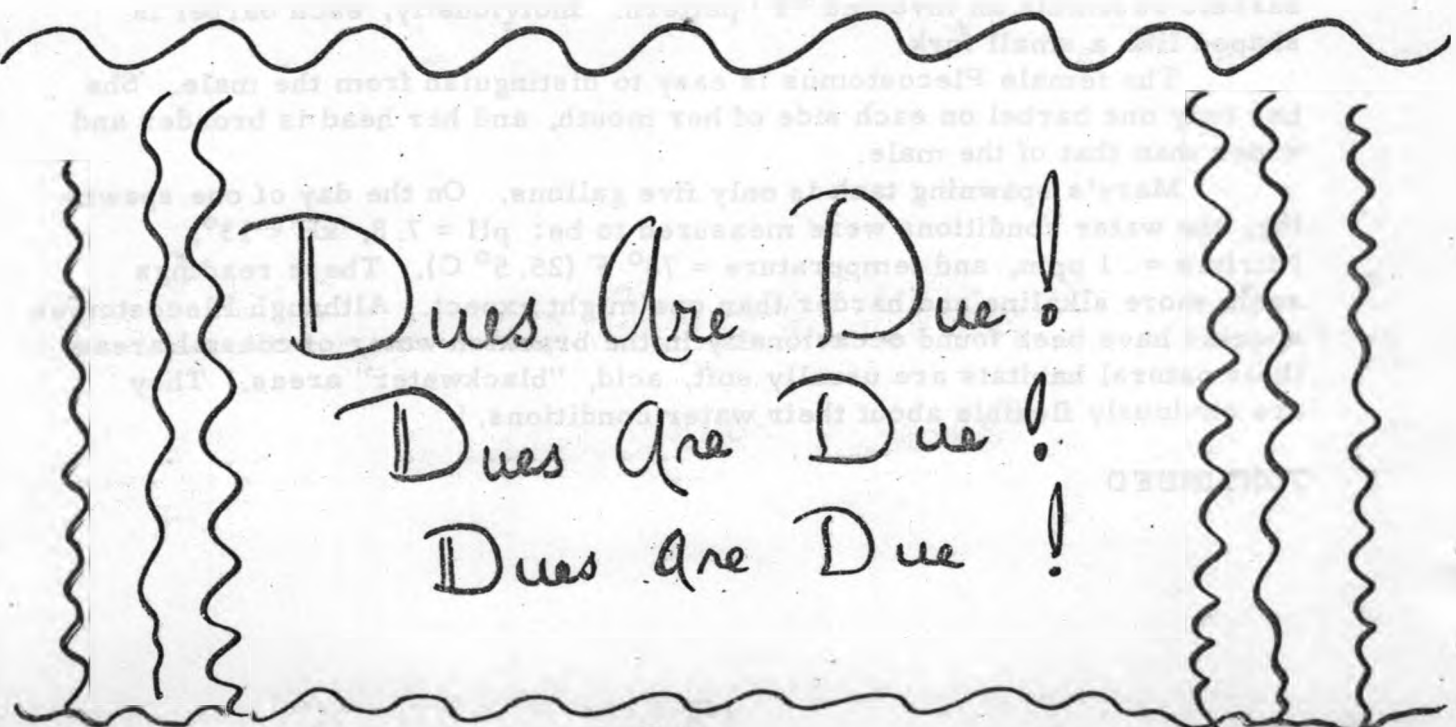
CONTINUED

Plecostomus Can Be Spawned - Continued

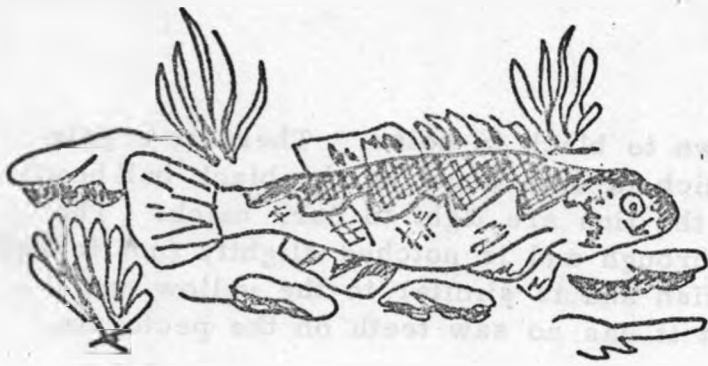
While many fish importers have found *Plecostomus* eagerly eat cut pieces of boiled yellow squash, and spinach and lettuce, Mary Young has found another vegetable that her *Plecostomus* really enjoy. Her fish greedily devour Del Monte canned Green Beans, which she uses to supplement their main course of Tetra Min Conditioning Food. By the way, Mary has tried other brands of green beans, but Del Monte is the only one they like. The beans should be rinsed thoroughly before you put them in the aquarium.

These "Bristle-Nosed *Plecostomus*" use a cave for breeding. The male spends about a week cleaning the prospective area. After this, he will chase the female for several weeks with a lot of nudging and pushing. Finally they enter the spawning site. The male squeezes the female and she deposits the eggs on the side of the cave. Up to 80 eggs may be produced. These eggs are very large, around 2 mm in diameter, and they are a clear, amber color. The breeders are about 4 inches long.

The male *Plecostomus* closely guards the spawn. If eggs become dislodged from the cave, he will return them. While he protects the immediate area, the female patrols the perimeter. This is the opposite pattern of many cichlids where the female drives the male away from the spawn and he patrols the boundary of the breeding site. The male *Plecostomus* will ward off all invaders and should be kept with the spawn. He is an excellent parent and will not eat either the fry or the eggs. The eggs hatch after 4 to 7 days and the fry have a large yolk sac. The male keeps the fry within the cave for another week or two. By the time they are allowed out, they are already between 1/4 and 3/4 inch in length. The *Plecostomus* fry will eat Tetra Min Baby Fish Food and finely crushed Tetra Min Conditioning Food and grow to maturity with little difficulty.



Dues Are Due!
Dues Are Due!
Dues Are Due!



THE NATIVE CORNER

by Rick Smith

CATFISH

family - Ictaluridae

Catfish are gradually becoming an extremely popular Midwest delicassi. It has been said that these easily farmed fishes are prolific and have become a fast growing enterprise. There was an interesting article in the October 5, 1976 Globe-Democrat Sunday magazine on one catfish farm.

But let's leave our stomachs view of catfish, and look at the catfish as an interesting aquarium fish. There are 37 catfish in North America and 15 of them can be found in Missouri. Catfish are nocturnal feeders, but a sudden rise of water or water speed will send them out on a feeding spree. The name catfish refers to the whisker-like barbels on their mouths. These barbels are usually found on the upper jaw to chin. Cats don't have scales, but some have protective armor. Be careful when handling catfish. Their pectoral and dorsal fin spines may contain venom. All their fins except the pectoral and dorsal have soft rays.

Catfish rarely enter brackish water, but it has happened. Catfish are carnivorous (primarily) hunters, but they will consume some plants. They also can be very aggressive tank mates, so be careful.

Catfish are nest builders and do give some parental care to the fry and eggs. Some catfish are tagged, so if you come across the metal tag or surgically implanted sonar tag send them to:

J. Robinson
Fish and Wildlife Center
1110 College Avenue
Columbia, Missouri 65201

I am not familiar with the laws on catfish in Missouri so be careful in what you take.

BLACK BULLHEAD

Ictalurus melas

This darkly colored catfish is found in the prairie areas of Missouri in abundance. They prefer turbid waters, with a silt bottom and especially back water areas.

THE NATIVE CORNER CONTINUED

The black bull is yellow brown to black in color. There is a pale vertical band at the caudal base (which is only found on the black bullhead). Their belly is yellow to white, and the fins are light to dark black. The tail is the same color all the way through and is notched slightly (not forked). The Black bull is a stoutly shaped fish and is similar to the yellow and brown bulls, except for the fact that it has no saw teeth on the pectorals.

The anal fin has 17-21 soft rays. The body sometimes may appear faintly mottled. The dorsal fin is separate from the tail. The mouth has an overbite. Their chin barbels are dark in color, and their barbels on the mouth corner are able to extend up to the pectoral fin bases.

Black bull's are partial to worms and crustaceans and will greedily accept them. They breed in May to June in round nests, which are guarded by the parents. When the fry reach 1 inch they are on their own. The fry will feed in a swarming mass (similar to the ocean cats) until fall.

Black bulls grow 10 to 16 inches and can live 5 years.

CHANNEL CATFISH

Ictalurus punctatus

The channel catfish lives in Northwest Missouri in the prairie streams primarily. They prefer large streams and low gradients. The young prefer the shallow areas on the streams. These fish are highly prized as food fish.

The channel cat is streamlined in shape. Its head is slightly diagonally shaped on the top. The jaws have an overbite. Scattered spots on the back and sides may appear on these fish. The channel cat has the appearance similar to the Blue Cat and is often confused with it (however it is not wedge shaped like the blue). They have forked tails and a free adipose fin. The outer anal fin part is rounded. 24 to 29 soft rays are on the anal fin. The fin color is yellow to dusky in color and sometimes it has a black border. Their overall color is olive-brown to blue with a silver white belly. They grow 12 to 32 inches.

Breeding males have enlarged head "features" (bumps etc.) and a color of dark blue to black.

Channel catfish are nocturnal feeders, eating mollusks, fish, crustaceans and plants, in shallow waters.

In late May to mid July, the male builds a nest in semi-dark light. The male also cares for the fry. Females rarely do this. A golden colored mass of eggs is laid in the nest. The fry hatch in 6 to 7 days, and the fry will be free swimming 7 to 8 days later. At this time the male leaves.

THE NATIVE CORNER CONTINUED

OZARK MAD TOM CATFISH

Noturus albater

This small catfish lives in the Ozark Region in southern Missouri. They prefer clear, strong flowing waters (pools and streams).

This Mad Tom Cat is commonly seen at night feeding up and down the rivers edge. This cat is smaller than the other two growing 2-1/2 to 5 inches in length. They are slim and have a square shaped tail. The adipose fin is in a low ridge shape connected (by membrane) to the caudal. The pectoral fin is saw toothed in the rear of their spines. The fins are colored yellow-white to cream-white with indistinct marks or blotches. The body is mottled (distinctly) with darkish splotches. There is a dark bar underneath the adipose fin. They have a long tail. The back is brown-tan. There are 4 indistinct crossbars on the back. The sides are similar in mottling. The belly is colored like the fins except without the markings.

They breed in mid-summer and live about 5 years.

FOR SALE FOR SALE FOR SALE FOR SALE FOR SALE FOR SALE FOR SALE

Paul Powell - 644 - 3812 would like to sell:

- 1 - 55 gal. tank complete with glass top, fluorescent light and stand - \$65.00.
- 1 - 30 gal. tank complete with glass top and fluorescent light - \$40.00

Frank Simmons - 966 - 2893

Carl Berry - 842 - 4780 both have for sale:

2 inch J. marlieri and J. ornatus

Charlotte Hopfinger - 962 - 1505 would like to sell:

Small mystery snails - \$.20 and \$.30 each (remember her article?)

DUES DUES DUES DUES DUES DUES DUES DUES DUES DUES

We would like to remind you that dues for 1977 are now due. Single memberships are \$ 7.50 and Family memberships are \$10.00. We also have a corresponding membership for \$ 6.00. Dues must be paid by the March meeting to continue the benefits of membership. Please re-join as early as possible.

Just Down the Street
by Marilyn Waterston

This month I had the privilege to visit the newest shop in town, Tropical World Aquarium and Pet Shop, owned by Dave Wiley and Frank Bayne. It is located at 12346 Natural Bridge, in the Bridgeton Oak Shopping Center, in Bridgeton. Phone- 291-7476, hours- Mon to Sat. 9:30-9:30, Sun. Noon-5:00.

I had the pleasure of talking with Dave, who is a discus nut. All you discus lovers are sure to find at least three or four kinds of discus there. Of course there are fish other than discus; Dave stocks quite a variety. One thing gave the shop away immediately as being run and owned by fish lovers; the variety of high quality fish. I was quite impressed, and I'm sure you will be, too.

This is a general pet shop, so you can find more than just fish. The birds are beautiful and well kept. Also, Tropical World has snakes and small rodents. Be sure to take note of the "indoor stream".

I almost forgot to mention a very important point; Tropical World carries salt water fish. At the time I was there, there were not a lot of salt water fish in stock, but what was there was very nice. I especially liked the little clown trigger.

All in all, Tropical World is a fine addition to the St. Louis shops. I might add, MASI members get a 10% discount there. As a good new shop in town and an advertiser in the Darter, Tropical World deserves our support. Good luck Tropical World!!



Please patronize our advertisers
They support us!

"If you don't know Cameras - know your dealer"

Saint Louis Photo Supply

Thirty Four Hundred Lindell
Saint Louis, Missouri 63103
314/535-6040

• PRESIDENT — DELTA KINGS GUPPY CLUB OF ST. LOUIS, MISSOURI

☆☆☆☆☆☆

ELVIS AND MARIE • GUPPIES
BRYANT • BETTAS



☆☆☆☆☆☆

INTERNATIONAL PRIZE WINNING STRAINS

3438 Ashby Rd. • St. Ann, Missouri 63074 • U.S.A.

Telephone: 314 428-5364

• MEMBERS — INTERNATIONAL FANCY GUPPY ASSOCIATION

• MEMBERS — INTERNATIONAL BETTA CONGRESS

PHONE: 638-7440

638-7441

WHOLESALE



RETAIL

9709 GRAVOIS RD. ST. LOUIS, MO. 63123

*PROFESSIONAL GROOMING

*AKC PUPPIES

*PEDIGREE KITTENS

*SALTWATER SPECIMENS

*SPECIALIZING IN RARE & UNUSUAL FISH

**AROUND THE WORLD
PET GALLERY**
"IF WE DON'T HAVE IT — WE WILL GET IT!"

*SNAKES & REPTILES

*SMALL ANIMALS

*BEAUTIFUL BIRDS

*CLEAN & FRIENDLY

*CUSTOM BUILT AND
LARGE AQUARIUMS



434-2022

OPEN
7 DAYS

12676 DORSETT RD. - 2 BLOCKS WEST OF I-244 - IN PASEO SHOPPING CENTER

SIEBERT PET SHOP

Over 100 tanks of healthy fresh-water tropicals. Complete line of Garden Pool Fish, Plants and Supplies. Locally raised Canaries, Parakeets and Finches.

HOURS OPEN:

Thur. and Fri. 9:00 to 8:30
Tue.-Wed.-Sat. 9:00 to 6:00

CLOSED:
Sun. and Mon.

843-4755



12348 Tesson Ferry Rd. at Mattis Rd. One block south of I-270

TROPICAL FISH
MARINE FISH
SUPPLIES
GARDEN POOLS

638-8266
9425 GRAVOIS
AFTTON, MO. 63123

BAYWAY
TROPICAL FISH
SILENT GIANT REPAIR SERVICE

MON. - FRI. 11 A.M. - 8 P.M.
SAT. 10 A.M. - 6 P.M.

SUN. 1 P.M. - 5 P.M., NOV., DEC., JAN., FEB., ONLY

THE



VELVETONES

MUSIC FOR ALL OCCASIONS

JIM
842-4048

CHARLOTTE
962-1505

FREE PARKING REAR OF OUR NEW MALL
DOWNTOWN FERGUSON

LINK PHOTOGRAPHY



PICTURES ARE YOUR
LINK WITH THE PAST

WEDDINGS
ANNIVERSARIES
PORTRAITS

CALL COLLECT
TEL. 376-6210

Hutch's Tropicals
Exotic "Tropicals" Fish, Plants & Supplies

SHOP "C"
110 SOUTH FLORISSANT RD. **Open 9 to 9**
PHONE (314) 522-0788

By Jim Thale

Being a hobbyist and having the opportunity to help Ray at D&E gives me a unique opportunity to enjoy the hobby even more. I am able to talk to more newcomers to the hobby than the average person. This gives one great satisfaction in being able to help someone avoid many of the pitfalls that I have managed to fall into, or in some cases, rushed blindly into.

There is more to being around D&E than just meeting new people. I am able to find out about new products as soon as they are on the market and new fish when they come in. I am one of the first ones to see them, or purchase them if I like.

About four months ago I had the opportunity to see shark eggs listed on an Invertebrate list from one of our wholesalers. Neither Ray or myself expected that these would truly be Real Shark eggs. We thought that this was just another one of the many common names that are labeled to most of the fish and invertebrates we deal with. However, in this case we were wrong because these spiral shaped leathery looking objects were truly the eggs of the Sharks of Port Jackson. This family of sharks known as "Heterodontidae" are one of the many magnificent creatures found on the Great Barrier Reef of Australia.

These sharks move inland to breed during the winter months and the eggs usually take between four to six months to hatch. However, they have been known to take up to nine months in some cases. We have no way to determine exactly how long our two eggs actually took to hatch. What we do know is that we obtained eggs in early August and at that time by holding the eggs in front of one of the aquarium lights, one could see the shark's body development which at that time was about an inch and a quarter long. This dispelled our doubts as to the authenticity of the eggs. I will admit we still did not have much hope for hatching them since we knew very little about proper care for them. As a matter of fact, we really knew nothing about them. By doing some research we were able to determine only the type of egg it was, and that dried up eggs washed ashore were called "Mermaids Pursees". We found this in one of the "Life Science Books". Not much to go on, is it!

We placed the eggs in a fifty gallon aquarium along with fish of various types; shrimps, starfish and other invertebrates where they became quite a conversational item, and without doubt, were handled a lot more than they should have been.

We probably took them out of the water to show 80% of our marine customers that there really was something which resembled a fish floating inside. No one would believe it if you just told them this.

It is obvious that with all this handling we were making every effort to destroy our finny creature before he could burst out into the vast ocean world of the aquarium. This, we decided, was not enough.

The next thing we did was make room for twenty more large salt tanks and shuffled things around a bit. In doing this during the first week

Sharks! - con't.

of November we moved the eggs from their nice 79 tank down to a fark 71 tank which we had moved under the 55 gallon setups in the process of maing more floor room for our new tanks.

Do you know that we could not even do them in with the shock of changeing their environment! Because, lo and behold, on Thanksgiving Day, out popped one four and a half inch shark!

Unfortunately, he only managed to live four and one half days, and he never ate the first bite of food that we are aware of. I just can't understand this after "all the good care and attention" we gave during the long incubation period.

The story does not have to end with complete failure, however, because two days later, the second egg hatched. We got this one to eat fresh live fish from the first day and appears to be developing nicely.

At this writing our "Horned Shark" is two weeks old, six inches long, has a greyish white basic body color with about one hundred eighty black polka dots. He has two very sharp dorsal spines at the front of each dorsal fin and he seems to be quite happy in his dimly lighted home.

HURRAH FOR US ! ! ! ! WE HAD THESE MEMBERS

REPRINTED

Congrats to:

Joy Bogacki	How To Feed Your Fish While Away	<u>Fish Tales</u> - December New Orleans Fish Socieity
Elvis Bryant	How To Select Guppy Breeders	<u>The Glades</u> - November Everglades Fish Society
C. Hopfinger	Ah, Sweet Mystery of Life	<u>Plecostomus</u> - December Black Hawk Aquarium Society

How do you get your name here? First you must write an article. Please do not be afraid to try. The editor will help you. We need to share your experiences and knowledge.

By Ken Sommerhauser

"Eureka!" Ultrahobbyist had cried. "I've got the answer. I'll move the aggie fry to a rearing tank of their very own!"

Alas, this solution to the aquarist's dilemma was better lost. Painstakingly, Ultrahobbyist removed all obstacles from the community 10 and proceeded to net and siphon all surviving fry into a transfer container. This tedious endeavor took a good hour as Agatha persisted in stashing fry beneath the aquarium gravel throughout the entire operation.

Finally, the owner had them all and counted heads once again. There were 41 living fry. The tetras had indeed taken their toll and ever worse, Agatha had made them pay for it dearly.

Fighting back gross frustration and self-directed anger, Ultrahobbyist cleaned up the carnage, reassembled the shattered community and went to seek a home for his precious aggie fry. In parting the owner laughingly observed Agatha beating the dickens out of old August. That old male was playing the comic relief in this tragedy. Now he was being blamed for the vanished fry by his dynamic little mate! Figuring August to be in no immediate danger of death, the aquarist resumed his quest.

An old established 10 gallon tank was chosen as a new home for the aggie babies. This particular tank was a natural set-up with neither filtration nor aeration. It had been a "green water" (*Euglena* species) tank in months past, and now was overgrown with Java moss and crawling with rotifers, a perfect parturage for the hanging aggie babies.

Unfortunately, such was not the case at all! The new 10 in use was one of a brace maintained by the aquarist, in sunlight, as holding tanks for feeder, fathead minnows. These, in turn, provided necessary live food for the large cichlids and nitrogenous byproducts for propagating live plants. Ultrahobbyist had emptied this particular unit of minnows one week past, so thought only of breeding awards as he eased the aggie fry into their new home.

His time temporarily occupied with other considerations, it was several hours before the hapless aquarist looked in again on the babies. Fully expecting to see the fry chugging around joyfully with full green tummies, the owner was sharply alarmed to see absolutely no movement in the 10. He dropped to his knees in apprehension. Slowly, then ever faster, he removed thick clumps of Java moss from the tank. With the last large bunch of moss the answer was revealed, Fathead! Overlooked at feeding time for a solid week, he had eaten all 41 surviving aggie fry in one meal!

Breaking water in a tricky rollover, his distended belly pleating silver in the late afternoon sunlight, the nefarious minnow performed a splendid pas de un for the stunned aquarist. All was silence save for the sound of falling tears.

Bubbles - con't.

Sometime near sundown, Ultrahobbyist calmly arose, netted out the fathead and fed him to a young oscar, who burped happily on receipt of this prize.....

THE PRINCIPALS TODAY

August Agassize - Expired blissfully of natural causes within a month of spawning. Buried in the tomato patch with ceremony befitting a family pet.

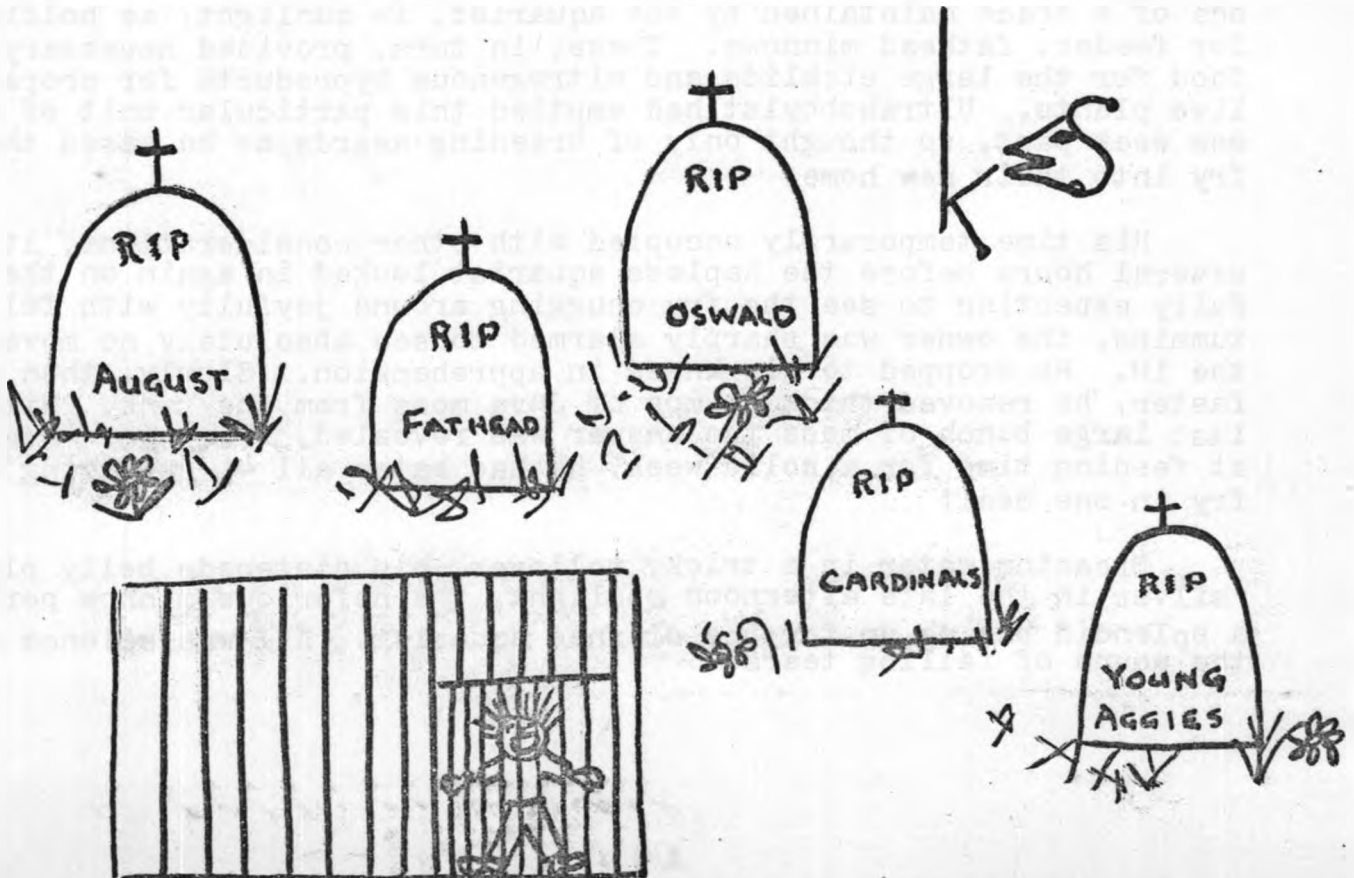
Agatha Agassize - In her prime now, Agatha is lovely and lonely. Receives amorous overtures from Nestor Nannacara occasionally, but doesn't seem to turn on to his chunky bod.

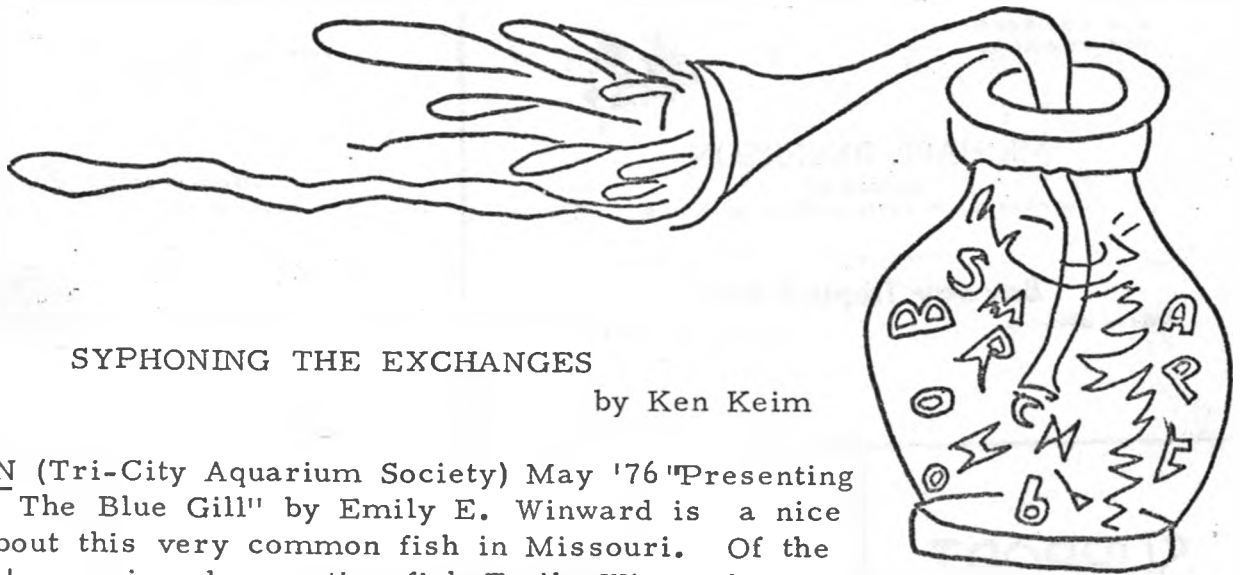
Aggie Fry - Principally devoured by Fathead minnow #1862 (or thereabouts) who was fed to young Oswald Oscar, who, in turn, later jumped into the tank of Snake Ricropaltes (4 lb. fish) and was, of course, eaten. Gets ridiculous, doesn't it?

Surviving Cardinal tetras - Lost in a bacterial blitz shortly after August's death.

Surviving Harlequin Rasboras - Living happily with other tetra friends. Still refusing to spawn, even in soft water the color of coffee. (the jerks)

Ultrahobbyist - Still trying to care for more fishes than "State Fish and Game". Seriously considering feeding himself to the stock as live food. Hopelessly insane.





SYPHONING THE EXCHANGES

by Ken Keim

FISH FUN (Tri-City Aquarium Society) May '76 "Presenting a Native: The Blue Gill" by Emily E. Winward is a nice article about this very common fish in Missouri. Of the articles i've reviewed on antive fish Emily Winward presents one of the finer ones. By the size of her Blue Gill she had better watch it, or someone, heavens forbid, will have it in a frying pan.

THE FALLEY STREAM (Edgewood Valley Aquarist Society) September '76 Brian Newman, as usual, has another beautiful article, and this one doesn't hurt a bit in "Every Little Bit Hurts". He talks about characteristics or failings or certain groups of fishes that makes winners or losers of them. Not only is this a valuable article on showing fish, but also one that should help you choose which fish to breed. In the May '76 issue this same fine writer, wrote a likeable bit on "Likeable Loaches". This is a gem on Cobitidoes, a family of everything from kihli loaches to the genus Botia.

THE SCAVENGER (Louisville Tropical Fish Fanciers) September - October '76 Art Hayley has a lot for you in "Baby Discus" why not read it and find out what to do with the Discus you bought at our auction. With your Discus in one hand and Art's advice in the other you'll be way ahead of the game.

GOLDEN GATE AQUARIST (San Francisco Aquairum Society, Inc.) August '76 Allright all you killie lovers, hop on this bulletin. "Maintaining and Breeding Aphanius mento" by Jim Hirsch and "Killifish myths and magis" are a couple of great articles on this gem of a fish.

TROPI-TOPICS (Great Plains Aquarium Society) "Spawning the Julicichromis Ornatus" by Don and Carol Sutton is well worth looking at, but keep looking because all the parts are somewhat difficult to find. This is a beautiful fish that indeed would light up any aquarium.

CALQUARIUM (Calgary Aquarium Society) April '76 "Tilapia Mossambica" by Natalie Douglas is a well written essay on breeding this cichlid. I'm always amazed at the quality of breeding articles in monthly bulletins. Really folks, the information is here, use the books for related references, but start with the bulletins.

AQUARIUM NEWS - Rather than review specific articles of this fine monthly publication, I thought I'd talk about its general philosphy; mainly that you and aquarium societies are important and are treated as such. Try a publication really geared to the hobbyist and one that is getting better every month.

BUS. 638-8266
RES 752-2896



MICHAEL JINKERSON

MEMBER OF
GATEWAY GUPPY ASSOCIATES OF ST. LOUIS

MANAGER OF

Bayway Tropical Fish

9425 GRAVOIS

AFFTON MO 63123

EXPERT EXTERMINATION
GUARANTEED SERVICE

TERMITE CONTROL

Seng Service Exterminating Co.

2530 DRESDEN DR

FLORISSANT, MO 63033



HOMER N TUTTLE, JR

PHONE
831 3415

SUPPORT

OUR

ADVERTISERS

CANDID COLOR PHOTOGRAPHY
WEDDINGS — GROUPS — CHILDREN

Arment

649 MILLWOOD DR
ST CHARLES, MO 63301

PHONE
447-3418

THEY

SUPPORT

M.A.S.I.



HAGEMEIER
PET SHOP INC.



509 S. Hanley Rd., Clayton, Mo.

FISH • PLANTS • SUPPLIES

AQUARIUMS • PUPPIES • KITTENS



BIRD AND CAT BOARDING



725-7757



This month we visit with another of our good members. I traveled out to Woodson Terrace to visit with Everett Gold. Oh, what a nice visit it was.

First Everett said, "Well, I'm a little low on fish right now." I should be that low. He is of course into Guppies, and is doing well too. He has quite a few awards for showing his Guppies all over the country. He also is very proud of his awards. He displays them in the living room on top of a book shelf along with his ribbons. I have never seen a neater display of awards.

Yes, but down in the fish room the real trophies are doing well. I could mention the color he has, but he has so many. I also saw some Africans, Angel fish, and my favorite catfish. Ralph look out! He has my two favorite: bronze and albino corydoras. Just one thing though about all his catfish, they are bigger than mine. Oh, well, I'll just keep going. Being as diversified as Everett is he still has time to make his own tanks, most of which are 20 gallon or better. He has covers on most of his tanks, and he keeps plenty of light on his fish. For the real treat of the evening I got to view his plants. He grows them in bare bottom tanks.

I'll talk about this a little for those of you who are like me. I buy plants, bring them home, and slowly but surely kill them. I can't even get water sprite to grow.

Nonetheless, Everett pots his plants in gravel. He uses plastic pots, the see through kind. This gives the plants lots of light. He puts them into the tanks and seems to have instant success. Now that's not so hard is it? He uses the see through cups so that when the gravel turns black on the bottom of the pot he can change it. Everett says when the gravel turns black it is wour, and the plant will die if you don't change it. He also doesn't throw this gravel out. He keeps it in a plastic bucket, and after he has a good amount he bleaches it and lets it sit a while. Then he washes it and uses it all over again.

As this was Thanksgiving day and knowing that I would have some bird later, I might as well eat some crow here. Some time ago I said in an article on filters that you couldn't use hox filters on real small fry. I was wrong and Everett had the proof. Now, I said that the fry would get caught in the box. Well, they do if you have a top on the box. If you leave the top off they can swim in and out of the filter. You don't need the top on the box. You weigh down the box, put floss in it, hook up the air, and let it go. The fish in this way can also get into the box and eat food that the filter has collected. With the top on this food would have been wasted, but now it is not.

Well, we leave Everett with a big Thank you for the evening, and of course for the "Crow". It didn't taste as bad as I thought.

Book Reviews

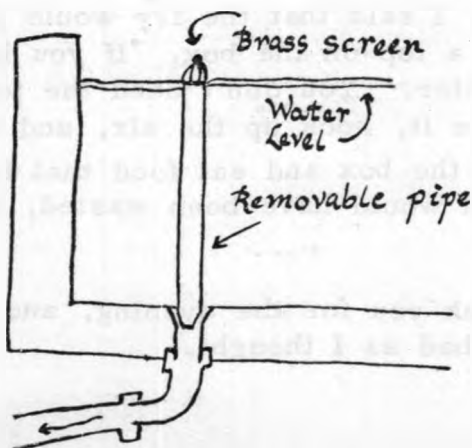
For my first review this month I have chosen Goldfish Pools, Water-Lilies, and Tropical Fishes by Dr. G.L. Thomas, Jr. Generally, this is a very informative and useful book, especially on the topic of building your own pool.



The author divides pools into two groups; formal and informal. With any pool he reminds us to keep the shape simple for ease of construction and maintenance. Of course a plan must first be drawn up, and the cost estimated. Also, a site should be chosen with great care. The author says that the pool should not be located under a tree because of the maintenance problem from falling leaves. (Boy, can I testify to that!)

More decisions concerning your pool also need to be made. Building materials range from brick to concrete to pre-fab plastic. The author recommends reinforced concrete for any large pool, but for quick and easy installation the pre-fab plastic pools are really nice.

When you decide to build your own pool there are other things to decide upon too. One very important one is how you are going to clean and drain your pool. In our climate you probably should drain your pool every fall. This is where the pre-fab pools have disadvantages; they have no drainage system. That means along with the problem of draining it in the fall, there is an added problem--every time there is a big rain storm the pool will overflow. Even fish that seem too big to be washed out can easily float out of a pool if the rain storm is heavy enough. But, if your pool has its own drainage system, a sudden rain will not wash away your fish, and your cleaning chore can be minimized. Of course if your pool does not have drainage, be sure to set it on high ground so when you drain you can use a hose and siphon the water out. This still will not help the problem of rain storms washing out fish. (I have drawn one of the author's suggestions for drainage for a



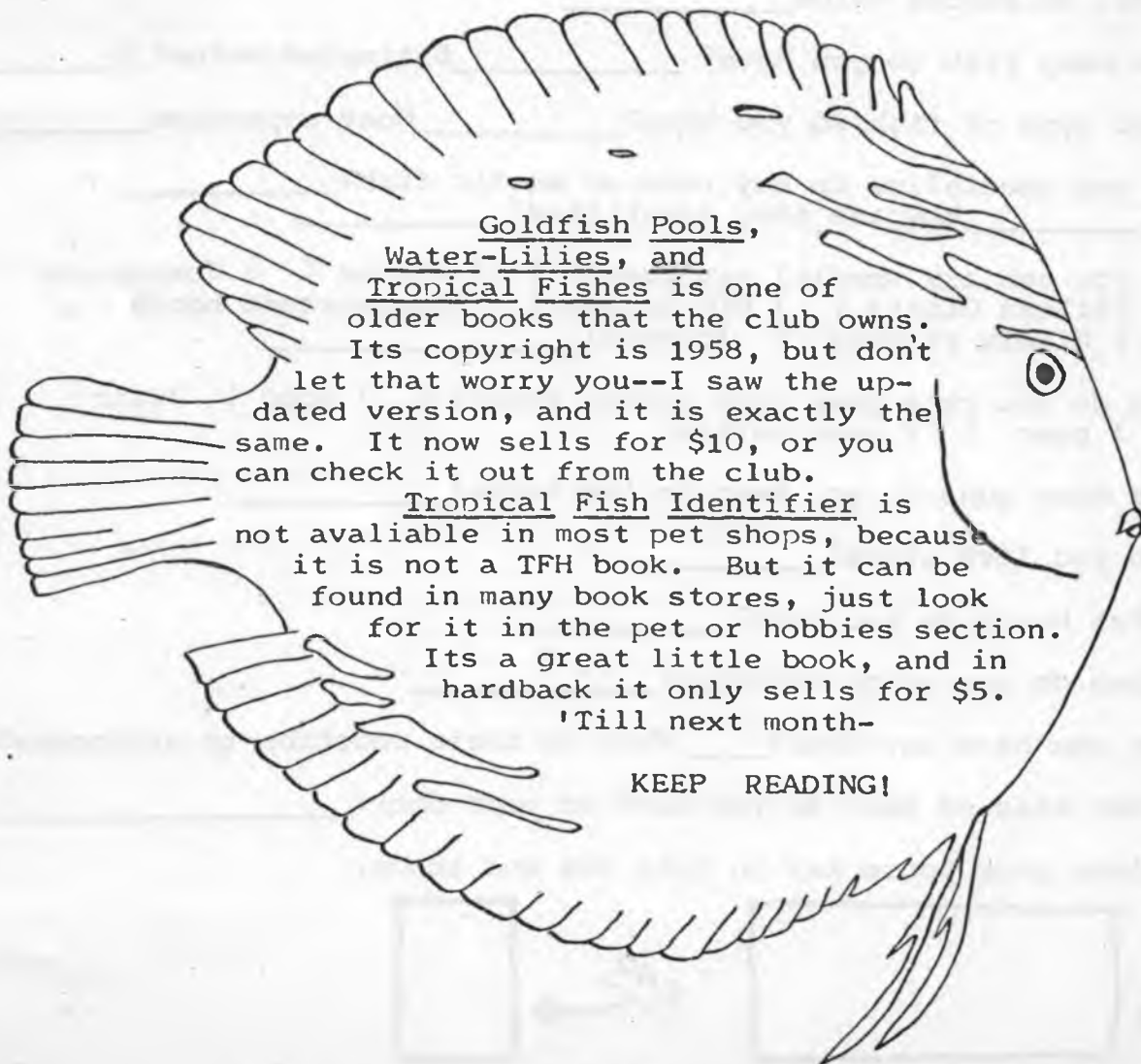
pool. Taken from p. 36 of his book, the slight alterations are my own.)

This book includes much more than what I have written about here, but I felt that the author's discussion on pools to be the book's strong point. Also included were sections on Water-Lilies, farm pools, "all about goldfish", and tropical fish.

The other book for this month is the Tropical Fish Identifier by Braz Walker. The club does not own this book. I decided to review it because I feel it is a first rate book for the novice or young aquarist. Each fish listed has a good color picture, usually of male and female on the opposite page from its description. The information given on every fish includes its: order, family, scientific name, popular name, range and habitat, description, length, care, feeding, and breeding. All information is easy to understand without being too shallow. More than 100 of the more popular tropical fishes are included in this book.

This book falls in the general category of encyclopedias, but unlike so many which tend to be shallow in one place and abstruse in the next, this book is consistent throughout. I would recommend it to anyone who knew little or nothing about tropical fish, and were not ready to specialize. I still use my copy when I want fast information without having to plow through pages of text.

This book is only concerned with fish, nothing is included on how to set up a tank, what equipment is needed. Plants are not mentioned either. It is strictly a book to help one identify tropical fishes that are commonly sold in pet shops.



Goldfish Pools,
Water-Lilies, and
Tropical Fishes is one of
older books that the club owns.
Its copyright is 1958, but don't
let that worry you--I saw the up-
dated version, and it is exactly the
same. It now sells for \$10, or you
can check it out from the club.

Tropical Fish Identifier is
not available in most pet shops, because
it is not a TFH book. But it can be
found in many book stores, just look
for it in the pet or hobbies section.
Its a great little book, and in
hardback it only sells for \$5.

'Till next month-

KEEP READING!

BIONIC JAWS MEMBER ANALYSIS

By

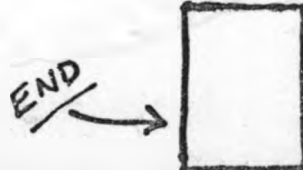
Marlis Beechamp and Joey Schneidewind

(reprinted from The Plecostomus, Blackhawk Aqu. Society, Inc., May, 1976)

NAME: _____ ADDRESS: _____

CITY: _____ STATE: _____ PHONE: _____

1. How did you first hear about the B.A.S.?
() Friend () Relative () Stranger () Strange Friend
or Relative
2. How do you rate the club meetings? () Fabulous () Outstanding
() Excellent () All of these
3. How many tanks do you have? _____ Largest _____ Smallest
Total estimated value _____
4. How many fish do you have? _____ Estimated value? \$ _____
5. What type of fish do you have? _____ Most expensive _____
6. Do you specialize in any rare or exotic fish? _____
types _____ how are they identified? _____
7. Do you own any special equipment? () Diatom () Compressor
() Silent Giants () Microscope () flouorescent hoods
() Eiheim filters () others) _____
8. How do you rate your area police force? () good () fair
() poor () waht police
9. How many guns do you keep in the house? _____
10. Do you live alone? _____
11. What hours do you work? _____
12. When do you go on vacation? _____
13. Do you have any dogs? _____ What is their reaction to strangers?
14. What kind of lock do you have on your door: _____
15. Place your house key in this box and trace.



Thanks you very much for your help. Please notify us if you move,
change your working hours or vacation plans.

2nd ANNUAL TROPICAL FISH SHOW

Sponsored by

LEWIS AND CLARK AQUARIUM SOCIETY, INC.

Friday January 28th through Sunday January 30th, 1977

HOLIDAY INN NORTH OF ST. LOUIS

4545 North Lindbergh Boulevard

Bridgeton, Missouri

63042

CLASSES

- Class 1 Aquarium Beautiful
- Class 2 Novelty Aquarium
- Class 3 Guppies
- Class 4 Bettas
- Class 5 Tetras, Rasboras, Barbs
- Class 6 Common Livebearers (excluding Guppies and Hybrid)
- Class 7 Single Cichlids
- Class 8 Catfish
- Class 9 Goldfish
- Class 10 Angels
- Class 11 Hybrid Livebearers
- Class 12 Anabantids
- Class 13 Sharks, Loaches, Eels
- Class 14 Cichlids
- Class 15 Family Breeders
- Class 16 Open

GENERAL SHOW RULES AND REGULATIONS

1. A. All tanks shall be rectangular, from 5 gallons up, with tanks larger than 20 gallons having their own stand being furnished by the entrant.
B. All drum bowls shall be either $\frac{1}{2}$, 1 or 2 gallons.
2. Filtration and Aeration is optional in all tanks and bowls. No filtration or aeration in the Guppies and Bettas. No box or corner filters are allowed. An air supply will be furnished for all tanks and bowls. (except Guppies and Bettas)
3. Heaters are optional. The Show Committee will make an effort to maintain room temperature of 74 degrees or above. An

electrical outlet will be provided for each tank and bowl.

4. Lighting
Class 1 - Lighting is mandatory. Gro-lux bulbs are allowed.
Classes 3 and 4 - Lighting is prohibited.
All other Classes - Lighting is optional.
5. Decorations
 - A. Tanks - A background and side coverings are required.
 - B. Drum Bowls - A background is required.
 - C. Gravel, Rocks, Real or Artificial plants, etc. are optional, except where stated otherwise.
 - D. All containers shall be covered.
6. Addendum
 - A. Further information concerning any facet of show operations can be had by calling Bill Drewes at 1-618-259-6699.
 - B. Show breakdown shall be announced immediately at the close of the auction on Sunday, January 30, 1977.
 - C. The Show Chairman has the final authority in matters of unrepresentable entries, rules, etc.
 - D. Judging points for all classes except Guppies, Bettas, Aquarium Beautiful, Novelty Aquarium and Family Breeders.

Health, Deportment, General Condition	25 points
Color and Markings	35 points
Fin Formation	30 points
Size	10 points
Total Points	100

CLASS BREAKDOWN

Class 1 Aquarium Beautiful

- A. Container capacity will be at 20 gallons
- B. Lighting is mandatory. Gro-lux type bulbs are allowed
- C. At least 3 species of fish must be present in the container.
- D. Any type of decoration is allowed as long as it complies with the "NATURALNESS CONCEPT".
- E. Judging Points:

1. First Impression	10 points
2. Overall aesthetic impression	40 points
3. Quality and condition of fish	25 points
4. Quality and condition of decorative accessories	25 points
Total Points	100

Class 2 Novelty Aquarium

- A. Container capacity shall be at a 20 gallon maximum with shape that be suitable to the entrant.
- B. Lighting is optional. Gro-lux type bulbs are allowed.
- C. Fish may be present in the container.
- D. Any type of decoration is allowed. Container must have a lid and be covered.

Class 2 E. Judging points:

- | | |
|-------------------------|-----------|
| 1. Originality of Theme | 40 points |
| 2. Set-up | 35 points |
| 3. Fish to Fit Theme | 25 points |
| Total Points | 100 |

Class 3 Guppies

- A. Only the male will be judged. A female may be included at the discretion of the entrant.
- B. Only $\frac{1}{2}$ gallon drum bowls are allowed.
- C. No lighting, filtration, aeration, or heating is allowed.
- D. A solid colored background is required. Mirrors are allowed. No other decoration is allowed.
- E. IFGA judging points will be used.

Class 4 Bettas

- A. Only male will be judged. A female may be included at the discretion of the entrant.
- B. Only $\frac{1}{2}$ gallon drum bowls are allowed.
- C. No lighting, filtration, aeration, or heating is allowed.
- D. A solid colored background is required. Mirrors are allowed. No other decoration is allowed.
- E. IBC judging points will be used.

Class 5 Tetras, Rasboras, Barbs

- A. Only pairs are allowed, if readily sexable.
- B. The general show rules and regulations apply.

Class 6 Common Livebearers

- A. Only pairs are allowed.
- B. The general show rules and regulations apply.

Class 7 Single Cichlids

- A. Only single cichlids are allowed.
- B. The general show rules and regulations apply.

Class 8 Catfish

- A. Only single catfish are allowed.
- B. The general show rules and regulations apply.

Class 9 Goldfish

- A. Only single goldfish are allowed.
- B. The general show rules and regulations apply.

Class 10 Angels

- A. Only pairs of angels will be allowed.
- B. The general show rules and regulations apply.

Class 11 Hybrid Livebearers

- A. Only pairs will be allowed.
- B. The general show rules and regulations apply.

Class 12 Anabantids

- A. Only pairs will be allowed, if readily sexable.
- B. The general show rules and regulations apply.

Class 13 Sharks, Loaches, Eels

- A. Only pairs will be allowed, if readily sexable.
- B. The general show rules and regulations apply.

Class 14 Cichlids (excluding Angels)

- A. Only pairs will be allowed, if readily sexable.
- B. The general show rules and regulations apply.

Class 15 Family Breeders

- A. Parents and 8 or more fry which are $\frac{1}{2}$ grown or smaller per entry.
- B. Fry must have been spawned and raised by the entrant.
- C. Judging points are as follows:
 - 1. Difficulty of breeding and raising - 35 points
 - 2. Color and quality 40 points
 - 3. Deportment and condition 25 points

Class 16 OPEN

- A. Any kind of fish not having a class elsewhere.
- B. The general show rules and regulations apply.

ENTRANCE REQUIREMENTS

- A. Entry is open to anyone. An entry form with entry fee should be submitted to the Show Chairman.

William J. Drewes
440 California Avenue
East Alton, IL 62024
1-618-259-6639

DEADLINE FOR RECEIPT OF ENTRY IS THURSDAY, JANUARY 27, 1977.

- B. The entry fee is \$1.50 for the first entry and \$1.00 for each additional entry. No limit to the number of entries.
- C. Set-up time will be between 2:00 p.m. and 12:00 p.m. on Friday, January 28, 1977. Judging will be on Saturday January 29, 1977 beginning at 9:00 a.m.

AUCTION

An auction will be held at 2:00 p.m. on Sunday, January 30, 1977. Public viewing of auction items begin at 12 noon. Any show entry that is going to be auctioned on Sunday will be plainly marked. Fish, Plants, and hard goods will be accepted between 12 noon and 1:30 p.m. There is a limit of 5 hard goods and a limit of 2 bags of fish per person. Any fish entered in the show is included in the above limitation. There will be a maximum bid of \$200 on auction items. 50% of the final bid will go to the Illinois and Clark Aquarium Society, Inc.

AWARDS

- 1 st Place - Trophy
 - 2 nd and 3 rd Place - Rosette Ribbons
 - Best of Show - Trophy; awarded to entry with the highest number of total points - excluding Classes 1 and 2
- Awards for all classes will be awarded at the banquet on Saturday evening by the President of our club. Place cards will be placed on the table winning trophies and ribbons.

The Lewis and Clark Aquarist Society, Inc. would like to invite one and all to the 2nd Annual Awards Banquet. It will be held at the Holiday Inn North at 8:00 p.m. on Saturday, January 29, 1977. We invite everyone to come and enjoy a fabulous and catered dinner with an SPECIAL GIGANTIDS by HOMER ARMENT. He has some beautiful slides of the commonest and rarest of the African Cichlids. The menu for the banquet will be Roast Prime Rib, Au jus at a cost of \$7.50 per person.

This auction is going to be one of the largest and best auctions of 1977 in the Midwest. We are going to have everything from the commonest African Cichlids to some of the most beautiful and unusual Killifish. We have listed here fish that will be offered for sale at the auction. Anybody can bring fish for the auction, but please obey the bag limit! We encourage out of towners to bring along a couple of bags of fish to help defray costs. A seller may also place a minimum bid on items for sale.

Trematocranus jacobusbergi	OB Labeotropheus Tuelleborni
Aulonocara nyassae	OB Labeotropheus trewavasae
Haplochromis polystrigma	Julidochromis transcriptus
Labidochromis fageali	Julidochromis regalis
Cobalt P. zebra	Julidochromis melanostomus
Red P. zebra	Tropheus duboisi MAYR
OB male x 2 of P. zebra	Tropheus moorii (Orange Band)
White x 2 of P. zebra MAYR	Tropheus moorii (Orange Band)
Pseudotropheus kribia	Pseudotropheus elegans
Pseudotropheus nyassae	Pseudotropheus microstoma
Pseudotropheus plaudum	Isochromis sprengarae
Pseudotropheus "erouti"	
Aphyosemion bivittatum MAYR	Aphyosemion gardneri
Aphyosemion puerzli	Aphyosemion straitum straitum
Aphyosemion waltoni	Aphyosemion filamentum
Aphyosemion celadum	Aphyosemion nyassae blue MAYR
Cynolebias alexanderi MAYR	Cynolebias nyassae
Sail fin Black Mollies	Redfin Albino Swords
Bettas - Many colors and sizes	Bettas - Many colors and sizes

This is just the beginning, there will be many species and plants offered for sale that are not on this list. If you come in from out of town or across the street just for the auction, you will not be disappointed with the quality and variety of fish offered for sale.

DON'T MISS THIS GIGANTIC AUCTION !!!!!!!!!!!!!!!



Beldt's Aquarium, Inc.
7029 Howdershell
Hazelwood, Mo.

1 mile west of Village Square

172 tanks from 5 to 1800 gals.
backed by a hatchery of
over 2000 tanks & vats

If you don't see it, ask,
we may have it in back.
We import fish from
Bangkok, Singapore, Hong Kong
Africa & South America

Watch for our open house
in August

Hours	
Mon - Fri	9-9
Sat.	9-6
Sun.	1-6

Complete
line of
aquarium
supplies

THE DARTER
Missouri Aquarium Society
9407 Tilles Drive
Brentwood, Mo. 63144

Controlled Circulation
postage paid at
St. Louis, Missouri

Ralph Wilhelm
4756 Milentz Ave.
St. Louis, Mo. 63116