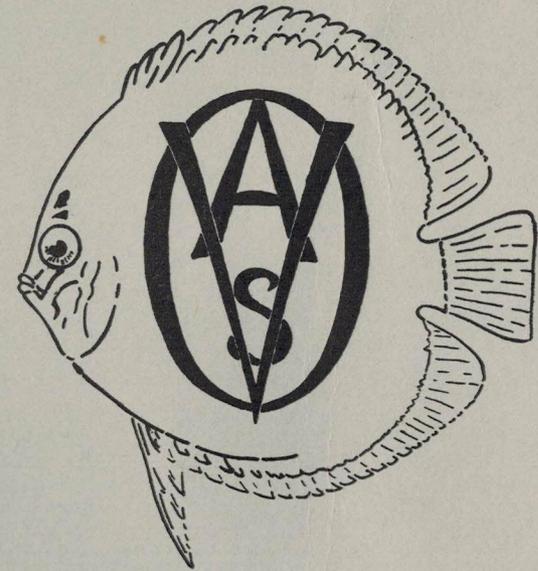


OVAS NEWS



OFFICIAL PUBLICATION

OF THE

OTTAWA VALLEY
AQUARIUM SOCIETY

OTTAWA VALLEY AQUARIUM SOCIETY
125 CHERAR AVENUE, OTTAWA 3,
ONTARIO, CANADA



THE OTTAWA VALLEY AQUARIUM SOCIETY MEETINGS

Junior Society

Thursday, January 21st 7.00 PM

Thursday, February 18th 7.00 PM

Senior Society

Thursday, January 28th 7.45 PM

Thursday, February 25th 7.45 PM

Regular meetings are held in the Chemistry Building, Room 37, University of Ottawa, 365 Nicholas Street, Ottawa, Canada.

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MAILING ADDRESS

Ottawa Valley Aquarium Society, Post Office Box 3143, OTTAWA 3, Ontario, Canada.

EDITOR: Harvey J. Wittenberg, [redacted], OTTAWA 3. ([redacted])

CONTENTS MAY BE REPRINTED

OTTAWA VALLEY AQUARIUM SOCIETY
1960 OFFICERS

SENIOR SOCIETY

PRESIDENT: Mr. Wilf Doucette Phone: [redacted]
[redacted]
Ottawa 3.

VICE-PRES: Mr. Don Thompson Phone: [redacted]
[redacted],
Ottawa 2.

SECRETARY: Mrs. Thelma Williams Phone: [redacted]
[redacted],
Ottawa 3.

TREASURER: Captain Jack Fraser Phone: [redacted]
[redacted],
Ottawa 2.

JUNIOR SOCIETY

PRESIDENT: Chipper Vickers Phone: [redacted]
[redacted],
Ottawa 3.

VICE-PRES: Gordon Worden Phone: [redacted]
[redacted],
Ottawa 1.

SECRETARY: George Ward Phone: [redacted]
[redacted],
Ottawa 3.

TREASURER: Frank Jones Phone: [redacted]
[redacted],
Ottawa 3.

IMPORTANT NOTICE

Our Committees: Membership, Magazine, Programme, Social, Show and Junior Society require members. If you have one evening each month (yes - only one) to give to your Society then contact your PRESIDENT

1960 MEMBERSHIP FEES

Every attempt is made to draw up a suitable budget for each committee in order to plan the various activities, programmes, etc, for the year. YOU can help your Society to do this by renewing your membership NOW.

Membership fees may be paid to the Society Treasurer at the regular meetings or forwarded by mail to:

Senior Society

Captain Jack Fraser

[redacted], Ottawa 2
(Phone: [redacted])

Junior Society

Frank Jones

[redacted], Ottawa 3
(Phone: [redacted])

(All money orders or cheques should be made payable to "The Ottawa Valley Aquarium Society").

MEMBERSHIP FEES ARE AS FOLLOWS

Senior Society

Married Couples - \$4.00

Single Membership - \$3.00

Junior Society

Junior Membership - \$1.00

SPECIAL NOTICE TO ALL MEMBERS

Each 1959 member (Senior and Junior) will receive a copy of the OVAS News and Notice of Meeting for January and February 1960. If you have not renewed your membership by February 29th, 1960, we will have no other alternative but to delete your name from our mailing list.

THE PH FACTOR OF WATER AND IT'S IMPORTANCE TO SUCCESSFUL AQUARIUM
by Hal Haney, "Colorado Aquarist",
Colorado Aquarium Society, USA.

1. WHAT IS pH?

A. Roughly the percentage of Hydrogen. It involves Hydrogen ions, proton donors and acceptors. Hydrogen ion transfer basic to chemist, but complex to non-chemist.

B. The changes in Hydrogen content produce either acidity or alkalinity in the water.

2. HOW DO WE MEASURE pH OF WATER?

A. Chemists have devised a pH scale which tells us the degree of acidity or alkalinity of the water. These scales are arbitrary because of the uncertainty that still exists in the minds of chemists about the process in estimating hydrogen ion activity.

B. The scale goes from 0 to as high as 13, however we are only interested in the middle section of this scale. The figures from 6.0 to 8.0 indicate the range in which tropical fish can usually survive. While some fish may live in water with a higher or lower pH it is not wise to subject fish to these extremes. The middle of this "middle" scale is best for most fish.

C. There are three basic ways to measure pH of water.

INDICATOR PAPER - This method uses a thin strip of Hydrion pH paper and is available at most aquarium shops for \$1.00. As the paper strip is dipped into aquarium water, it (the paper) changes color. This color is then matched with a color chart supplied with the kit. Manufacturers insist this method is accurate, but my tests

(Cont'd page 5)

indicate the paper is inclined to indicate a little on the acid. The chemists at Fish-Ade Aquarium Research Corp. are now testing this for me, and a full report will be made at a later date.

INDICATOR SOLUTION - This kit is available from several sources for slightly more than \$1.00. It uses an Indicator Solution called Bromthymol Blue which has a pH test range from 6.0 to 7.6 which is ideal for our requirements. One drop of Indicator Solution placed in 20 drops of aquarium water will produce a range of colors from dark blue, through green to yellow. This color is matched with a color chart. Blue indicates alkalinity, green neutral and yellow acid.

WARNING: Indicator solution ages rapidly and will give a false reading. For absolutely true pH reading, solution must be made up fresh and kept for only a limited period of time. If your solution is dark blue it is probably old, for true Bromthymol Blue will be a bluish-green.

pH METER - This is an expensive electrical device which is very accurate in determining the pH of pure water, but is of no use to the aquarist. It measures the pH based on the amount of electrical current that passes through the water. In the aquarium the presence of salts and other chemicals and minerals will produce an inflated reading.

3. HOW DOES pH AFFECT FISH, PLANTS?

A. Not too much is known that can be supported by properly conducted laboratory tests. Much has to be assumed.

B. Since pH is a chemical condition, the fish must adjust their systems to different pH factors. This takes time. A rapid change in pH will seriously injure a fish, or in some cases, kill it.

C. It is believed that Live Bearers generally do best in alkaline water which is

(Cont'd page 6)

slightly hard.

D. It seems Malayn families prefer acid water that is somewhat soft.

E. Plants seem to do best in water a little on the alkaline side.

Don't confuse pH with HARDNESS OF WATER. Hardness involves the amount of certain minerals in the water. Unfortunately, there is no "neutral" to water hardness. Very hard water will cause plants to stop growing and guppies will get hollow-bellied. Other fish will grow very slowly.

F. Denver water tests a pH of 7.5 with a hardness of 9 grains which is too hard and too alkaline for tropical fish use, unless it is treated.

4. HOW DO WE CHANGE pH?

A. Use "buffer solutions". To reduce acidity or build up a alkalinity, you can use dissolved bicarbonate of soda. Increasing to acid is not easy chemically. Sodium biphosphate or Acid Sodium Phosphate, but is usually not necessary. If tank is properly managed, it will automatically go to the acid side.

B. There are better ways to change pH than with chemicals. Use natural water, which is much kinder to fish. If water is alkaline, add distilled water, which is on the acid side. If water is acid, simply add aged water, which is alkaline. Of course, all changes MUST BE MADE SLOWLY. Failing to do this can ruin an entire aquarium.

5. HOW CAN WE CHANGE HARDNESS OF WATER?

A. Again, the best method is through the use of natural water and NOT chemicals. To SOFTEN water, first determine whether the water is acid or alkaline. if ACID, add soft water from a commercial water softener. These are available for home installation. There may already be one in

(Cont'd page 7)

your neighborhood. If ALKALINE, add distilled water purchased from a commercial water company. This water can be bought for about \$1.00 for 5 gal. (plus a \$2.00 deposit on the bottle).

B. Water hardness is determined by the use of an indicator solution somewhat similar to that used for pH.

C. Water hardness should never go below 4 grains hardness for tropical fish and plants. It can go way above that but a hardness of 6 to 8 seems to be best for both fish and plants.

D. Water hardness builds up when water evaporates from a tank and new water is added without removing some of the old water. The minerals will never evaporate. Over a period of eight months to a year, aquarium water in Denver can build up to a hardness of 30 grains which will cause all growth to slow down.

E. Hardness of water can be changed rapidly without any effect to fish or plants.

6. CLOSING THOUGHTS

A. Fish don't apparently change the pH of water. Various tests have proved nothing.

B. pH might well be a symbol of "perfect health" for our fish providing we control it carefully and check it regularly.

C. Try always to use water to change the pH or hardness of water and not commercial chemicals. When the air in a room is stale, we don't spray it with chemicals, we open a window and let clean, fresh, natural air into the room. The aquarium is the only "room" our fish have...open the "window" and give them clean, fresh "air" by giving them the pH and Hardness they need. The results you will produce are worth much more than the little additional effort it may take.

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WHAT CAN I DO FOR THE OVAS?

1. Renew your membership IMMEDIATELY. This will permit your Officers and Directors to make the necessary plans for the year.
2. Bring a friend to the meetings and help to increase our membership. Last year our membership was 107 Senior members - lets raise this to 207.
3. If asked to serve on a committee, as Director or a Member, say YES. At least give it a try. It is understood that there are members who are unable to take on any extra duties but you can still help out at the meetings. In order that our Society functions properly there are a number of duties to be performed and it can not be handled by the elected Officers or Directors without assistance.

(Cont'd page 9)

For example, you could help your Society by offering to help one of the following Committees:

Magazine Committee

- Read the exchange magazines and recommend articles for reprint in our OVAS News.
- Obtain ads for our OVAS News.
- Typing of articles from magazines.
- Addressing of envelopes and magazines.
- Assist in printing of the magazine.
- Assist in editing of articles.
- Write an article for the OVAS News.

Membership and Publicity Committee

- Welcome new members to the meetings.
- Address notice of meetings.
- Assist in setting up the meeting room, tables, chairs, etc.
- Make an effort to bring a friend to the meetings to increase our membership.
- Assist in publicity for the Society.

Show Committee

- Assist in Jar Shows.
- Assist in OVAS Annual Tropical Fish Show.
- Periodic check of aquaria in hospitals, institutions etc.

Programme Committee

- Assist in planning programmes.
- Assist in obtaining speakers.
- Assist in setting up meeting room.
- Assist in swap sales, raffles, auctions, quiz etc.

Social Committee

- Assistance in preparing refreshments at the meetings.
- Planning social functions.

Junior Society Committee

- Supervision at Executive and Regular meetings.
- Assistance to Junior Executive and Directors in carrying out their duties.

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Assist in the Junior Society programmes.
Offer to speak at the Junior meetings.

NOW, if you will turn to page 8 and read this article once again I am sure you will be able to find one job that you would be able to do with little difficulty. Please give this your serious consideration - if we ALL try to help there will be more enjoyment, good programmes, a happy family of tropical fish hobbyists AND a Society which will have accomplished something no other society has been able to do to this day.

The Executive Officers and Directors will do their utmost - let us give them a helping hand.

Editor.

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PERHAPS THIS MIGHT HELP

Reprinted from "The Canadian Aquaria"
Canadian Aquaria Society

If your fish seem to have lost their balance, wag their bodies from side to side as if trying to swim fast but making no progress, are unusually red about the gills, lose their colour, hang around the corners of the tank, will not eat, gasping near the surface, - they are quite likely suffering from chill due to your not watching temperatures when topping or transferring fish from tank to tank.

If all the fish in the aquarium are affected, raise the temperature. If only one or two, move them to a smaller tank, raising the temperature to 85 or 90°. If they do not respond in twenty-four hours, add two level teaspoons of sea salt for each gallon of water, increasing by half a teaspoon every four hours until improvement is noted. Do not, however, allow the concentration of salt to exceed six teaspoons to the gallon. If signs of recovery are not seen after three days, there is little hope.

Generally speaking, however, the remedy is effective. The salt should then be reduced by taking out part of the water and replacing it with fresh, being careful to assure it being of the same temperature as that in the aquarium. When the water has been returned close to normal, fish taken from another tank can be returned.

It will be found this treatment is necessary only in severe cases, when gill congestion is present which affects the fish somewhat similarly to bronchitis or pneumonia in the human. Raising the temperature ordinarily is sufficient.

REMEMBER OUR ADVERTISERS



HAVE YOU HEARD THE LATEST???

by "a member"

...well I do hope you ALL had a very good Christmas and New Years...now we can settle down and pay the bills...

...Have you noticed that there is a change of address for our Society - now POST OFFICE BOX 3143...someone pulled a boo boo...

...Have you heard of a snail that will eat guppies? Ask Ed Parisien...

...I paid my \$3.00 membership fee - have YOU?...

...The Society receives another pat on the back for our OVAS News. Our thanks go to Mr. James Churchill Hopgood, Havana, Cuba, who states in his magazine "Gambusia"

OVAS NEWS

On the 15th of December 1957 I started exchanging with this beautiful made up Canadian bulletin the official organ of "The Ottawa Valley Aquarium Society".

Mr. Harvey J. Wittenberg, Editor, was kind enough to send me as many of the back issues as he could in spite of lacking some in their own Library.

I have made several articles for them and they have been constantly giving details on ACUARIO and calling the attention to their friends to see if by any chance they would like either to sell or exchange back copies. To this date I

(Cont'd page 13)

have Vol. III #12. Vol IV #1 to #12 (complete), and Vol. V #1 to #7 (October 1959).

This bulletin has 29 pages on a very fine and excellent gazette paper made out in black ink. It is printed in such a way that you cannot even see "errors" as poor little "Gambusia" has now and then. The pages are well margin on all four sides. The articles are many, of various members, others are taken from other colleagues bulletins. Gives lots of details on its Club and interesting data on their families, in other words, it is a TRUE bulletin for the "inside and outside" of its members. The cover is made of a thin cardboard paper that varies in color each month. The name of OVAS NEWS is printed in black and in the center its emblem which is the DISCUS fish, with the word OVAS inside and on the bottom the name of the Club.

In binding I can say even a blind man cannot make a mistake as due to its perfection you have no trouble at all.

I can say it is one of "THE BEST" bulletins I have in MY LIBRARY and am indeed very proud of it not only for the bulletin itself but also because it comes from my Dad's country "Canada".

To Mr. Wittenberg and those that have helped me get back copies my sincere thanks and I only hope that soon some of the "Old Timers" might surprise me with the missing copies and thus be able to complete this Canadian Tropical Fish Bulletin.

To my readers of the various Clubs and/or Societies I duly recommend them to exchange with OVAS NEWS and maybe some will take a hint how to do a good job of a bulletin. Please do not take this as an offense to some bulletins but it is only as a "small recommendation to the person in turn" as I have noticed great changes, sincerely great changes when the next elected person takes place and turns out his bulletin that seeing it you can

(Cont'd page 14)

believe what you see, something far better than before. It is better to "stop" for a while than put out something to fill in your term.

...well friends what do you think of that? Our thanks to you Mr. Hopgood for your kind words and support to our Editor...

...Sorry to hear that our good friend Weldon Hodges is ill. Hope you are in good health real soon Weldon...

...Father Legault's article "Mass and Controlled Production of Zebra Danio Eggs", with pictures, appears in the January issue of the Tropical Fish Hobbyist. This is an excellent article by Father Legault and a copy should be available in our Library...

RAILCAR FOR FISH

by Mr. Don Swenson, Minnesota Aquarium Society. Reprinted from "Aquarium News Letter", Tacoma Aquarium Society, USA.

It's no "fish story". A private railroad car owned by Chicago's famed John G. Shedd Aquarium is transporting a great variety of live salt water fish across land with much the same elegance as is provided for people in a plush Pullman.

Believed to be the world's only railroad car for fish, it is called the NAUTILUS II and replaces an earlier car, NAUTILUS I, which had been bringing fish to Shedd Aquarium for 28 years.

The new Nautilus was built by the Thrall Car Manufacturing Co., Chicago Heights, Ill. It weighs 179,916 pounds loaded and 148,500 pounds empty and is equipped with General Steel Casting 70-ton passenger trucks having Timken roller bearings. It is capable of travelling with the fastest passenger trains.

Indeed, the piscine parlor car resembles equipment in a streamlined passenger train with most of the windows blocked in. Besides providing accommodations for rare fish on their trip to the aquarium tanks, the car has living quarters for the collecting teams who travel from Chicago to coastal cities for specimens ordered by Walter H. Chute, Director of Shedd Aquarium. Shedd boasts one of the largest collections of salt water fishes of any inland aquarium.

Six men can live comfortably aboard the car. Their quarters are at one end of the car; at the other end are the tanks for the fish. Twenty small metal tanks with 20-gallon capacity are arranged on shelves to carry tiny tropical varieties of fish. Below the shelves, big wooden tanks are reserved for larger fish ranging in size up to 60 pound sharks. Wood was selected as the material for

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these larger units because it is inert and does not add impurities to water.

When the car heads for home with its catch, water is circulated constantly thru both the large and small tanks by two pumps. The water is oxygenated by an air compressor. Five-foot baggage-type doors are located at approximately the center of the car to permit loading and unloading by the large tanks from either side. Fish travel best if they don't eat en route, so they are not fed from the time they leave the collecting ground until they arrive at the aquarium.

When the fish pull into Chicago in their private car, the car is switched to a track near the lake-front site of the aquarium. A truck picks up the tanks and carries them to the aquarium, where they are winched up from the basement to the exhibit floor.

THE TROPICAL FISH HOBBYIST MAGAZINE

by Don Thompson, OVAS TIFAS Representative

It is a great pleasure for me to be appointed as the O.V.A.S. TIFAS Representative. During the year I will attempt to keep you informed as to the various activities of the Federation and at the same time, with your help, we may be able to assist the Board of Governors in carrying out such a difficult task.

My first duty is to obtain subscriptions for the TIFAS Official Organ "THE TROPICAL FISH HOBBYIST MAGAZINE". You have received information about this magazine a few months ago at the meetings but for those who were absent, and the Junior members, I shall explain very briefly.

The International Federation of Aquarium Societies (TIFAS), in addition to assisting

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the aquarium societies with programmes, shows, membership etc, publish a TIFAS Digest and Report every two months concerning the activities of the Federation. To bring you further information regarding every phase of the hobby, the Tropical Fish Hobbyist Magazine is published as the Official Organ of The International Federation of Aquarium Societies. This magazine is now considered as the best tropical fish magazine published, the only aquarium magazine in the world illustrated inside with color photographs.

The Tropical Fish Hobbyist Magazine is published by Mr. Herbert Axelrod, who also serves on the TIFAS Board of Governors as the Publicity Director.

In the past, subscriptions were mailed in bulk to the Society and it was the responsibility of the Society to distribute the magazines to the members. This practice did not prove to be successful so now your magazines are mailed direct to your home.

The Tropical Fish Hobbyist Magazine sells for \$3.25 for 12 issues, of which .35¢ per subscription is given to the Society Treasury.

If you are unable to attend the January 28th meeting to order your subscription of TFH Magazine, please phone

Mr. Don Thompson, _____, Ottawa 2

NOTE: Order for subscriptions will close Saturday, January 30th, 1960.

WE NEED OUR ADVERTISERS
TO HELP US PAY OUR WAY.
THE ADVERTISERS NEED OUR HELP
TO MAKE THE ADS PAY.

VITAMIN REQUIREMENTS OF FISH

by S. Peters. Reprinted from "The Splash", Milwaukee Aquarium Society.

In common with many other animals, fish require a certain amount of fats, carbohydrates, and proteins in their diets; they also require inorganic substances like salt, calcium, and iron. These minerals are as necessary as fish foods. Also, as do higher animals, fish require a variety of vitamins, no matter how minutely.

Another observation to be made is this: all the essential foods fed to fish should be made palatable to the fish. A fish diet, no matter how well-balanced, will not produce large, colorful, and vigorous fish. If you have wondered why some apparently good foods have such miserable results, it is unpalatable. You can be sure fish will suffer from partial starvation from such a diet.

Well, now, what about these fish-vitamin requirements? In spite of all the research that has been going on in this field, only a few vitamins have been identified as required for fish health and well-being. There is no contradiction that fish do not require the same vitamins that all vertebrates need. Proliferation (budding) of various tissues may result in the fusion of filaments in an erratic way. In other words, there may be dietary types of gill and other breathing difficulties and pathologies. Liver and skim milk (dried) are the best sources of the vitamin needed here. It is called Pantothenic Acid. Death results without this vitamin need.

Fish cannot get along without Thiamin, or B1. Fish will be convulsive without this vitamin. Yeast must be added to the diet or the fish will contort unto death.

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Senior Society
FISH OF THE
MONTH
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28TH
"WHITE
CLOUD"
(male
or
female)

Loss of balance is one of the earliest signs of this vitamin deficiency. Death is not sudden but also certain for want of Thiamin. Again, liver is right on the job; plant meals are also quite good.

For the normal use of fat, choline is necessary.

Fish-culturists also speak of a hypothetical factor H as necessary in a fish-diet. This factor H is said to represent a vitamin-complex. Raw meat supplies this factor H.

Other probably essential vitamins are vitamins A and D, that is, folic acid and biotin. Codliver is your happy answer here.

(Cont'd page 20)

The results are excellent for growth and color. And, your fish won't look so anemic. These vitamins should be joined with the H factor of meats. It is my opinion that many of the velvet and fungus diseases of fish are due to a deficiency of vitamin D, C and H working with D. Beef liver is rich in D, that is Biotin. Dried yeast is also rich in D.

While it is necessary to remember that the nutritional needs of the various species of fish differ, it is also safe to presume that diets which give good results with one species of fish will prove quite satisfactory with other kinds of fish.

BOYS AND FISH

Reprinted from "The Tropical Breeze"
San Diego Tropical Fish Society, USA.

I have a teenage son who is quite a fanatic on tropical fish. He started out with one tank, and as time elapsed he acquired two more tanks, then not having enough room, he purchased five tanks from a young man going into the service. Still, the old story, "Dad I haven't a big enough tank." So, in desperation for fear his fish were going to bruise themselves, I purchased a 40 gallon tank. Still, believe it or not, he needed more room! At this point I was about convinced that he should build a lake or line the rooms in the house and make a great big aquarium.

A friend of mine gave me a 9 cubic foot refrigerator that was no good so my boy took the liner out and made an aquarium of it and it is now in my shop. It looks like the fish are taking over our house.

Still, I think it is great for him to be as interested as he is. It keeps him

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occupied and off the streets and I'm all for it.

A Father who lives in an Aquarium.

EDITORIALLY

by William Vorderwinkler, "Tropical Fish Hobbyist Magazine"

Our newspapers, radio and television stations are constantly bombarding us with requests for donations to help fight one of man's worst enemies - cancer. The time may not be far off when this dreaded killer is conquered, and medical science is hard at work.

In order for this work to proceed successfully not only large amounts of money are required, but also materials with which the laboratories can work. Frank Alger, whose popular "Guppy Corner" needs no introduction to TFH readers, recently handed me a letter from Dr. K. Kenneth Hisaoka, Assistant Professor of Biology in Loyola University, 6525 North Sheridan Road, Chicago 26, Ill. Dr. Hisaoka is doing research work on cancers and tumours and requires as many living specimens of living Siamese twin Guppies as he can get. Frank has already sent him several, and Dr. Hisaoka needs more. He is, of course, aware that living Siamese twin births are a comparative rarity, but I felt that by making an appeal here that Dr. Hisaoka might get at least a few. Your little Siamese twin Guppies may provide the necessary facts in helping to find the value of "X" in the complicated equation that is cancer. Your Siamese twin Guppies are certainly not ornamental; at best they are a conversation piece.

Why not put them to work?



O.V.A.S.
JUNIOR SOCIETY
SECTION

Editor:
Larry Neumann.

PRESIDENT'S LETTER

Once again we are beginning a new year for our Society. A year which I do hope will be very successful for the O.V.A.S.

We, the Executive, are very pleased to announce that the Directors have been appointed for 1960:

- Ian Woods - Programme
- John McKinlay-Key - Show
- Larry Forrest - Membership
- John Manchester - Social
- Larry Neumann - Magazine/
Library

Our first Executive meeting was held January 14th and we are now really ready to do our best for the betterment of our club. The budget was discussed, the duties, programmes, and agreed that each Director would appoint an Assistant Director to assist in the work of the Committees. We will welcome your suggestions and comments.

It was noticed that the Junior members are contributing more articles for the OVAS News, however, we can still do much more and each Officer and Director will attempt

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to write an article which we hope each member will do the same.

Remember that our dollar membership fee is now due and you can help your Society by paying this fee as early as possible to our Treasurer, Frank Jones.

Let us work together, everyone help to do their share of work, and make every effort to bring a friend to our meetings to increase our membership.

Chipper Vickers
President.

JUNIOR SOCIETY
OFFICERS AND DIRECTORS

Officers

President: Chipper Vickers
[redacted], Ottawa 3

Vice-Pres: Gordan Worden
[redacted], Ottawa 1

Secretary: George Ward
[redacted], Ottawa 3

Treasurer: Frank Jones
[redacted], Ottawa 3

Directors

Programme: Ian Woods
[redacted], Ottawa 3

Show: John McKinlay-Key
[redacted], Ottawa 1

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Membership: Larry Forrest
[redacted], Ottawa 3

Social: John Manchester
[redacted], Ottawa 3

Magazine/
Library Larry Neumann
[redacted], Ottawa 4

THE INTERESTING EGYPTIAN MOUTHBREEDER
by Master Sergeant Don Hewitt. Reprinted
from "The Aquarium" July 58.

HAPLOCHROMIS multicolor, more popularly known as the Egyptian mouthbreeder, is a fish that comes and goes in popularity. Although not one of the most colorful of the tropical fishes, its amazing breeding habits and interesting antics make it a desirable fish.

When larger, this fish is not exactly suited for the community aquarium, as he is apt to be a little rough on some of his tank mates, although when smaller, they don't seem to do any harm.

H. multicolor is a member of cichlid group of fishes but do not grow as large as most cichlids, usually not over $2\frac{1}{2}$ inches. Usually one male and female spawn together, chasing away all intruders. However, there have been cases of group spawning.

They are not hard to spawn. It is good policy to separate the sexes and condition them, until the female is fat with eggs. When kept together, the male pays more and more attention to the female as she fills with eggs, dressing in his finest colors

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and flitting and dancing around her. At times he turns almost black with excitement. In this period of initial courtship he is also busy digging a nest in the sand. During this time many plants are liable to be dug up as he prepares his nest. Sand is scooped up in his mouth and spit in all directions until a deep hole is made. The depression is also fanned smooth with his body.

After much coaxing, the female is lured into the nest and actual spawning begins. They assume a position with the male's nose touching the body of the female above the anal fin, and with much quivering, they rotate around the nest. Often the positions reverse with the female's nose touching the body of the male. It seems at times that one fish is pushing the other around. The eggs are dropped and fertilized in this manner and the female scoops them into her capacious mouth. Spawnings of 60 or 70 eggs are not unusual. The eggs are large and easy to see.

The spawning may take place in the community tank or special breeding tank, but in any case separate the female from the male after spawning. After the spawning is complete the female will take refuge, but the male will seek her out and bother her.

The Egyptian mouthbreeder will not usually swallow her eggs as readily as some of the other types of mouthbreeders but may do so if bothered too much. I believe that the longer they hold the eggs, the less chance that she will eat them.

I had one female who had been carrying eggs about a week that had a very rough time but never ate the eggs. First of all, I had quite a job catching her, chasing her all around the aquarium. I then put her in a small plastic bag and carried her 30 miles.

During the trip my small son got hold of the bag and dropped it to the floor of the

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car. At our destination while transferring her to a tank, she flipped out onto the floor again and was finally picked up by hand and tossed into the aquarium.

She and the eggs survived, and the young grew into fine healthy specimens. She has given me many fine spawnings since, although twice she ate the eggs on the first day.

The eggs remain in the female's mouth for almost two weeks, during which time they hatch and the young's egg sac is absorbed. While she is carrying them her jaws are constantly chewing as she cleans and turns the eggs and fry. They can be easily seen through the skin of her jaws.

She eats nothing while carrying the eggs, and it is not wise to tempt her with food. Her body shrivels up and her head appears abnormally huge. At the end of this period, if no danger threatens, she lets the young out for a brief swim, but at the slightest suggestion of danger she sucks them back into her mouth to safety. After another day it is safe to feed newly hatched brine shrimp and large brine shrimp to the female. I have never seen a female mistake one of her young for a fat brine shrimp. She constantly watches over them and keeps them herded together. If one of the young swims beyond the area she has chosen, she sucks it into her mouth and chews it madly, like a child getting a spanking, then spits it out into the middle of the group.

It is amazing to watch the young seek protection in her mouth. As she scoops them up one by one, occasionally she misses one. The baby gets very excited and pecks at her mouth and lips until she opens her mouth and sucks it in. After 4 or 5 days the babies get a little larger and it is good policy to remove the female before she does eat them. At this point there should

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be no difficulty in raising them.

As an experiment the young were divided into two groups. One group I fed only dry foods and the other group got dry foods and newly hatched brine shrimp. Many of the first group died and the remainder did not grow as fast nor as large as the second group.

The color of the Mouthbreeder is difficult to describe, being generally a yellowish-brown with metallic glints of green and blue, as its name *Haplochromis multicolor* would seem to indicate. There are hints of red on it, and the male is identified by the red-tipped anal fin.

The courtship of the male is always interesting and at time amusing. There was a time when I was forced to put a large female into a community aquarium which also contained one immature male less than half her size. The male immediately got very excited and swam circles around her and did all sorts of gymnastics. For all practical purposes she ignored him and slowly swam away. Not to be deterred, he dashed madly to a spot where he chose to build a nest.

In a frenzy he grabbed a piece of sand, spit it out, and dashed quickly back to the female seemingly to give her the news that he had just built a nest. She would still have nothing to do with him. This process kept up for an hour and a half and the female repulsed him many times.

Each time he was cast aside the male would take after the fish nearest to him and chase it all over the aquarium. As his anger dissipated, he would swim back to the nest and the story would repeat again.

Finally the female was lured to the nest, and the male set out to make the best of it. But alas, although the female was willing, nothing resulted, and she finally swam slowly away...completely bored!

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There are many amusing incidents which could be quoted, but the biggest thrill is witnessing them yourself. If you have never kept *Haplochromis multicolor* you are missing a bet.

FISH LOVER

by Donna May Janzen - Junior Society

If you were to visit our aquarium more likely than not you would see, not only everything from guppies to gold fish, but a blue budgie bird sitting on the side of the aquarium apparently holding an avid conversation with our fish.

Since we are convinced that this will do his character no great harm he carries on his antics in peace. He sits on the side of the aquarium and talks to the fish, in truth he is only telling his reflection what a beautiful creature he is, then he daintily takes a drink.

Last night as he was trying very hard to get a drink the inevitable happened - you guessed it, he fell in! He screamed and fluttered. After some grabbling by my Mother we detached a very wet, and we hoped a much wiser bird, from our tank. But not our little nut he's back at it again.

Recently we have entertained the notion that he has been having sardines for lunch, baby guppy sardines that is. Impossible you say, nothing is impossible to our little fellow.

THIS IS A TRUE STORY...

HAVE YOU READ "TROPICAL FISH HOBBYIST MAGAZINE" ON PAGE 16?

JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY

THE AQUARIST'S CALENDAR

"The Aquarium"

JANUARY is a month in which it pays to be specially careful with new fishes. No matter how long some of us have been in the hobby, there is always that terrific temptation to hurry things up a bit when it comes to getting the newly acquired fishes into our tanks. There is no difference between the urges of expert or amateur, the results are the same, in the end it simply spells "trouble".

This is a time of year when many of us are bringing in "strangers" to our tanks, so let us pause a minute and check the temperatures between the container and the tank. Are they equal?

Sudden changes at this time of year, whether they concern temperatures or pH, are well worth investigating and avoiding if possible.

In times past, during mid-winter months, it was customary to move all tanks as far back from drafty windows as possible. This of course cut down the lighting to the point where both plants and fishes suffered unless artificial lights were provided.

Today, by simply fastening a sheet or two of clear, moisture-proof "Cellophane" either directly to the inside of a window frame or to the cold side of an aquarium, the effect is double insulation with no light reduction. In addition the trouble of moving the tank is eliminated. "Cello-glass" is another trade-named commercial product easily obtained, that will serve equally well as a mid-winter insulation.

AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER

THE LUDWIGIAS

Reprinted from "The Canadian Aquaria"
The Canadian Aquaria Society, Toronto, Ont.

Probably the two species of this plant do not receive the recognition, as a beautiful aquarium plant, because so many aquarists have difficulty in maintaining these plants in an aquarium. These plants either grow long and straggly or the stalks shed the leaves.

For decorative purposes within an aquarium, either of the two species cannot be beaten. The beautiful shade of light green and the underside of each leaf being a reddish tint.

Of the two species, *Ludwigia mulertii* is the most often obtainable. The leaves are oval in shape, tapering to a point at each end. The leaf colouration is a bronzy-green on the top surface and the underside being crimson-purple.

The *Ludwigia microcarpa* has a leaf that is slightly more rounded and not so pointed at each end, with a leaf colouration on the top surface of reddish-bronze, the underside being a deeper reddish colour.

The reason that these plants do not grow well for the average aquarist is controlled by two factors - One, the water is too acid, they prefer a neutral and very soft water; and Two, that they will not survive if planted in just a sand medium.

The water condition should be a pH of 7.0 and not more than 6° of hardness. As they require sufficient nutriment for growth, which a sand medium will not supply, it is a very simple method which is required to remedy this situation.

Purchase some leaf loam compost, positively without any chemical fertilizers, and place a quantity of this into a piece of coarse cheese-cloth. Bring the ends of

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the cheese-cloth to the top centre. Place one stalk of either of these plants only in one of these cheese-cloth containers, then fasten the ends with a small elastic or rubber band. There should be no water in the aquarium when the planting is done, otherwise, the coarseness of the cheese-cloth will permit the leaf loam to dissipate into the water.

The plants should be positioned directly under a light bulb in the canopy, because they do require a slightly brighter light than most plants.

Once the single stalks have reached a length of 6 to 8 inches, the two top leaves should be nipped off, and this repeated as each additional stalk grows from the original stem. It is possible that within a few months a beautiful bushy plant will be produced, adding a great deal of decorative value to the aquarium.

Occasionally, underwater aquatic plant nurseries have the seeds available, and this is actually the best method to adopt to get strong healthy plants acclimatized, from the beginning, to your type of water conditions.

JUST RAMBLING

by Rex Merritt - The Canadian Aquaria Society

The Daphnia, or Water Flea, is not a flea, but derives its name from the fact that while swimming through water it moves in a series of jumpy motions similar to an ordinary flea.

For a change feed your white worms a slice of bologna or a small pat of hamburger - they will love you for it.

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One of the important things to remember if you want to raise nice Guppies, is to change a portion of the water frequently.

There is nothing as frustrating as too small a net - use one that is, at least, two inches longer than the fish.

Use two nets to catch a fish in a planted aquarium - one as a "chaser" and one as a "catcher". You will often find your nets have reversed their roles and you have caught the fish in the "chaser".

Oral gestation or buccal incubation is a characteristic of the *Tilapia macrocephala*. That is the hard way of saying "It is a mouthbreeder".

You need about two pounds of gravel for each gallon of water in your tank.

THINGS TO FORGET

From "Michigan Legionnaire", Reprinted from "The Scalare" Dallas Aquarium Society, USA.

FORGET the slander you have heard

FORGET THE hasty unkind word,

FORGET the quarrel and the cause

FORGET the whole affair because

FORGETTING is the only way.

FORGET the storm of yesterday,

FORGET the chap whose sour face

FORGETS to smile in any place

FORGET to ever get the blues

BUT DON'T FORGET TO PAY YOUR DUES!

The "mystery" of the Mystery Snail is where it got its name.