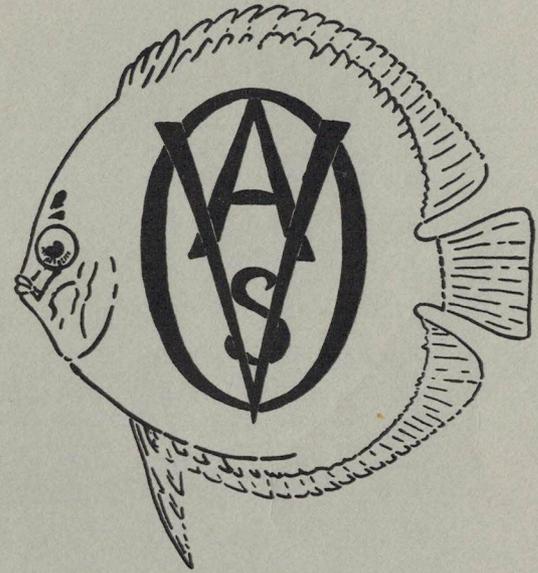


OVAS NEWS



OFFICIAL PUBLICATION

OF THE

OTTAWA VALLEY
AQUARIUM SOCIETY

OTTAWA VALLEY AQUARIUM SOCIETY
P.O. BOX 3143 STN. "C"
OTTAWA, ONT., CANADA



THE OTTAWA VALLEY AQUARIUM SOCIETY MEETINGS

Junior Society

Thursday, November 17th ... 7.00 PM

Thursday, December 8th ... 7.00 PM

Senior Society

Thursday, November 24th ... 7.45 PM

Thursday, December 15th ... 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 Aquarilum Society, Post Office Box 3143, Station C, Ottawa, Ontario, Canada

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

OTTAWA VALLEY AQUARIUM SOCIETY
OFFICERS AND DIRECTORS
(SENIOR SOCIETY)

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Dr. Herbert Axelrod, Jersey City, USA

President: Mr Wilf Doucette
Vice-Pres: Mr Don Thompson
Secretary: Miss Diane Fraser
Treasurer: Captain Jack Fraser

Membership: Captain Jack Fraser
Programme: Mr Weldon Hodges
Social: Mr Gerry Lalonde
Magazine: Mr Harvey Wittenberg
Show: Mr Charley Anderson
Junior Soc: Mr Harvey Wittenberg

TIFAS Rep: Mr Don Thompson

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Father Romeo Legault, O.M.I. University
of Ottawa.

OTTAWA VALLEY AQUARIUM SOCIETY CONSULTANTS

Area No.1 Mr Edgar Parisien
Area No.2 Mr Peter van der Brugh
Area No.3
Area No.4

The OTTAWA VALLEY AQUARIUM SOCIETY was founded on the eleventh day of March, nineteen hundred and fifty-four.

The object of the Society is to further the study of aquarium life, the spreading of information regarding it, and the promotion of good fellowship among fanciers of aquarium life.

The OTTAWA VALLEY AQUARIUM SOCIETY is a Charter Member of The International Federation of Aquarium Societies, (T.I.F.A.S.).

Membership is open to all persons wishing to acquaint themselves with this hobby.

CONTENTS OF THE OVAS NEWS MAY BE RE-
PRINTED

COLOUR MECHS

Reprinted from The Canadian Aquaria Publication. Written by E. Green

Aquarists everywhere have wondered how they can best display their fish so that they will show up to their ultimate advantage. Usually a long "trial and error" period takes place before the aquarist is satisfied.

The following is an attempt to shorten this frustrating trial and error period in regards to the color of background. Let us begin by saying that before anything can be seen it must have light, coming from it, reflecting from it, or from the object itself; in this case the object will appear black. Black is an absence of light reaching the eye.

Colours on the other hand are: Light waves of varying length reaching the eye and if the light intensity is bright the colours are bright but should the light be diminished, the colours will have a tendency to grey-out until the object though still visible, will lack colour - anyone doubting this need only look outside their window some evening and see how the colour has vanished.

I do not wish to be too technical but the foregoing should be understood and kept in mind when setting up your aquarium for display purposes. Unfortunately if we brightly illuminate our aquarium to make the colour more visible there is a strong possibility of scaring the fish and in no time at all an undesirable growth of algae may appear.

However, we can use a reasonable amount of light and as the human eye is able to distinguish objects most easily when they are seen in relationship to a background which differs markedly in hue, the following table may help the aquarist to

decide which colour of background to use. This table has been adapted from Le Courier's table of the order of legibility of colour combinations.

Colour of Fish	Background
1. Black	Yellow
2. Blue	Yellow
3. Green	White
4. Red	White
5. Blue	White
6. White	Blue
7. Black	White
8. Yellow	Black
9. White	Red
10. White	Green
11. White	Black
12. Red	No
13. Green	so
14. Red	good

Multi-coloured fish such as guppies, platies, barbs, etc., will show well against a neutral background, this type of background is also a better choice for a community aquarium when a mixture of fish with varying colours are displayed.

Although the table lists the colour of fish and background in order of visibility this does not disqualify the dramatic effects possible in other colour combinations such as blood-red moon against a background of black.

Another aid in selection of aquaria background is to have the background colour a different light intensity to that of the fish, in other words, in a display of black mollies, the yellow background colour should be pale yellow, with fish of a dark green colour, light red or pink should be used - there are two reasons for this, one is for contrast, light against dark, the second delves into the realm of biology.

Very few fish can actually change their

colour but Mother Nature has provided most of them (except the heavily pigmented types like black mollies) with the ability to change their colour intensity to that of their natural surroundings. For this reason we should try to have the background colour intensity as great as possible to that of the fish so that even Mother Nature's wonderful gift to the fish will not cause them to become less visible.

.....

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Good supply of Tropical Fish, plants and aquarium accessories

"OPEN UNTIL 9.00 PM FRIDAYS"

In New London, Conn., they're telling about the nearsighted whale who fell in love with a U.S. submarine and followed it clear around the world. Every time the sub fired a torpedo, the proud whale passed out cigars.

Are you buying your Christmas Cards from the Society? When you help the Society you are helping yourself.

.....

OVAS NOMINATIONS AND ELECTIONS

Now is your opportunity to nominate the member of your choice for:

- PRESIDENT
 - VICE-PRESIDENT
 - SECRETARY
 - TREASURER
- for 1961

- Q. When do we hold the nominations?
- A. At the November meeting.
- Q. How many members may be nominated for each office?
- A. Any number.
- Q. Why do the Membership Committee present a list of members for each office?
- A. The Membership Committee acts as the nominating committee and are required to nominate at least one member for each office. Nominations may also be made from the floor at the meeting.
- Q. Why ask the membership for further nominations?
- A. You have the right as a member to nominate anyone of your choice.
- Q. When do we hold the election of officers?
- A. At the December meeting - by secret ballot.
- Q. When are the Directors of the various committees elected?
- A. The Directors are not elected by the membership but appointed by the officers elected.
- Q. Why do the elected officers appoint the Directors?
- A. This permits the officers to appoint a Director:
 1. For any period of the year.
 2. To change his or her duties if

required.

3. Possibility of re-appointing a Director who has done an exceptionally good job during the past year.
 4. Consider the appointment of any assistant directors.
 5. A free hand in obtaining the best qualified members to carry out the duties of the committees.
- Q. Can I offer to serve as a Director or a member on any committee?
 - A. YES. Only one evening each month would be required to successfully carry out the work of the committee.
 - Q. If I am unable to serve on a Committee how can I help the Society?
 - A.
 1. There is always the need for a helping hand at the regular meetings.
 2. Support your Society OVAS News by writing an article.
 3. Help to increase the membership by bringing a friend to the meetings.
 4. Offer your suggestions and comments.
 5. Support the Society in any fund raising project.

.....

NOTICE TO ALL SOCIETIES

Aquarium societies who are exchanging bulletins and magazines with Mr. James C. Hopgood of Cuba are asked to send them to:

James C. Hopgood
 % Mr. Max Reno
 2412 Andros Lane,
 Ft. Lauderdale, Fla., USA.

The ACUARIO and GAMBUSIA published by Mr. Hopgood will now be issued from the USA.



HAVE YOU HEARD

THE LATEST?

By: H.W.G.K.

...during the last month there was a tropical fish show held in New York and they were practically giving the fish away...

...Blue Discus (4-5 inches) just \$149.
...Piranha (12 inches) \$200.00...Black Fin (didn't get the last name) \$39.98 each...

...DID YOU KNOW that there was a fish society in Ottawa a number of years ago ...this society was known as "Ottawa Gold and Tropical Fanciers' Association. The Secretary was J.R. Agar, [redacted], Ottawa...meetings were held on the first and third Mondays...

...a young man who was out of work, and broke, read in the Gazette about a good job with a famous aquarium company. He sent the personnel Director a collect telegram. "Am hitch-hiking from Vancouver to accept vacancy. Please deduct cost of this wire from first weeks salary" ... he got the job...

...there is another way that you can help your society financially and that is collecting IGA register tapes. IGA will pay cash direct to our Society at 1% of gross receipts...turn your IGA register tapes over to Mr. Edgar Parisien...

...there is no greater support to the hard working officers and directors of our Society than to see a well attended

meeting...surely TV and other activities can be set aside for one evening of the month...we had no less than half of our membership attending the meeting last month which is very discouraging...TV, like any other luxury, should be limited - at least allow yourself one night in the month to meet your friends and to support an organization that is trying to help you.

....

...a good rear bumper sign: "Careful. I Drive Like You."...

...In an interview, a friend confided the secret of his trim figure. "Every morning when I wake up, "he boasted, "regardless of the time or how I feel, I touch my shoes 25 times. Then, gentlemen, I get up out of bed and put them on."...

...see you at the next meeting (I hope)... REMEMBER: The meetings for December have been advanced one week so that they will not conflict with the Christmas holidays:

Junior Society - 8 December
Senior Society - 15 December

.....

HYDRA - THE ENEMY

By: Mr. Edgar Parisien, Ottawa Valley Aquarium Society.

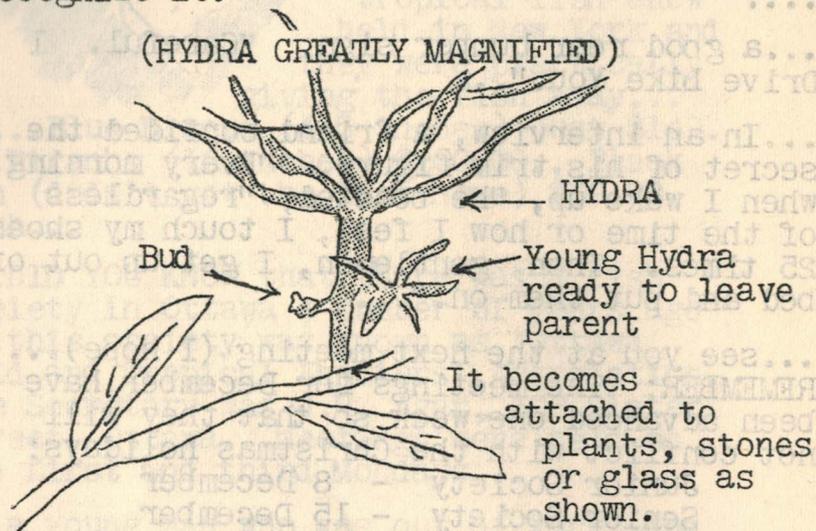
I have never said much about Hydra because I have not had trouble with it in all my many years in this hobby.

Recently, while reading a very well written and amusing article in the Aquarium Journal, by Donald A. Simpson on the subject, the thought occurred to me that something should be said about it in the OVAS News.

Twenty years ago, most hobbyists in this area were very much afraid of Hydra that they were reluctant to collect and feed

daphnia to their fish. At that time, daphnia and tubifex could be found almost in every ditch and water hole around Ottawa. Today, it is nearly impossible, because of pollution, to raise even a few mosquitoes.

It seems that everyone has read about the dreaded Hydra. In case you have never seen one, the sketch will help you recognize it.



They are quite small, usually not more than 15 mm in length. Hydra is a plant like animal, belonging to the coelenterates, that can be found in fresh water streams all over the world. It catches its live food from the water by means of long tentacles and shoves the small water animals into its mouth. The Hydra multiplies by budding and by the formation of eggs and sperm. The regenerative powers are such that a piece will develop into complete Hydra. This makes their extinction in the aquarium quite difficult.

Mr. Simpson says that blue gouramis will eat Hydra, but only if they are half-starved. Many have tried chemical means

of destroying Hydra including ammonium nitrate, ammonium sulphate, copper sulphate. Mr. Simpson says that, after everything else failed, he spent a dime for a copper sponge and put a small piece in his aquarium. This worked satisfactorily.

My experience with Hydra has been limited because it has never remained alive in my aquaria. Just six weeks ago, I found three Hydras and put them in a gallon jar. I provided infusoria and cyclopes but they also disappeared.

All the water pipes in my home are copper. But Hydra would never live in the aquaria in my former house with lead or galvanized iron pipes. Also, the water in the gallon jar was rain water.

It appears that the members of this Society do not have to worry about Hydra according to my experiences.

.....

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A TOUCH OF BLUE

Reprinted from Aquatic Researchers of San Antonio. Written by Ernest Beitler, Jr.

To any fish enthusiast who admires beauty and serenity in a fish, a trip to the Olmos Aquarium, owned and operated very successfully by Mr. and Mrs. Gene Weirich, is a satisfying experience. Here the admirer of fishes can see the newest wonder of the aquatic world, the Blue Discus, Symphysodon discus Tarzoo.

The Blue Discus is, as the name implies, a colorful orb. The coloring of this fish is inspiring enough to arrest the attention of a painter of masterpieces. A light, velvety tan which has vertical stripes of dark brown or black upon it forms the major portion of the coloring of the fish. Brilliant reds edge the dorsal, anal and ventral fins. Dazzling blue streaks, trying in vain to reach the center of the body, complete the awing picture of the Blue Discus.

The temperament of this fish is a desirable one. He is not overly shy, but when frightened, he and his tank mate turn their backs to each other. This maneuver appears to insure him and his comrade of unobstructed vision of a complete circle so that they cannot be surprised by an attacker. When he is contented, the Blue Discus glides calmly through his waters and presents a picture of complete serenity.

On what type of foods does this valuable creature thrive? Feeding the Blue Discus is an exacting task. The fish will not descend to the depths of eating dry food. Even young guppies, considered to be choice morsels by many fish, are safe in the same tank with the Blue Discus. Daphnia and blood worms are among the foods that appease the appetite of this fish.

Leticia, Colombia is where the Blue

Discus was first discovered by Mike Tsalickis. This location is hundreds of miles from the points where the other variety of Discus is found.

The scientific name of the Blue Discus, Symphysodon discus Tarzoo, is still unofficial. The word Tarzoo is derived from Mr. Tsalickis' Tarpon Zoo and it is believed that this name will be recognized scientifically when the proper authorities have thoroughly examined the fish.

Although the Blue Discus is now expensive and uncommon, fish fanciers can hope that the development of successful breeding techniques in the future will place this very worthwhile fish within their grasp. Such an embodiment of shapes, colors, and movements in a fish makes the Blue Discus a fish desired by every true collector of fishes.

.....

ALADDIN PET SHOP

"SPECIALS" (November only)

- Male Bettas ... \$1.00
- Veil Angels65
- Neon Tetras35

Now is the time to buy your White Worm Culture. Good supply of frozen foods.

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THE SWAP SALE

By: Gary Zumar, Ottawa Valley Aquarium Society

For the past two years, the programme committee has operated a swap sale at the society meetings. The society keeps 25% of the selling price of each article brought in by a member. This money is used to buy a prize, usually a book, to be drawn for among the sellers and buyers. This has been successful, but we would appreciate your assistance in making the swap sale even more successful.

1. Bring your fish in large jars. A fish folded in half is not a happy fish.
2. Make sure that the top is tight. If the jar is large enough, there is no need to leave the lid off. This insures that there will be no puddles of water and fish around or on the swap sale table.

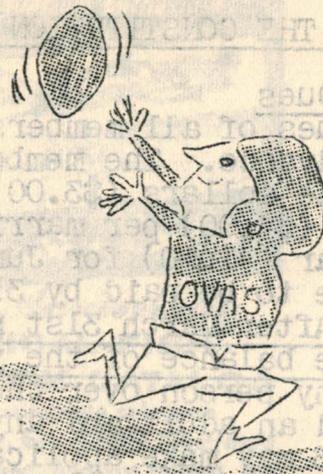
3. Wrap your plants in plastic or wax-paper to prevent their drying out.

4. The matter of price if left entirely up to the seller. But we suggest that you keep it low as this obviously promotes sales. Try to have the price divisible by five, which will ease our change-making.

5. Fill out the form legibly and fully. This will be to your advantage.

6. We do not guarantee anything we are given to sell. It is up to you to insure that what you bring or buy is healthy, in the case of fish and plants, or at least repairable, in the case of equipment. There are no refunds.

7. With these suggestions put into practice, there should be no cause for complaint and we shall continue to provide a convenient way to dispose of your surplus fish etc.



YOU WILL HAVE PROBABLY NOTICED THAT IN ORDER FOR OUR "OTTAWA ROUGH RIDERS" TO WIN THEY MUST PLAY AS A TEAM..

WE ARE NOT PLAYING FOOTBALL BUT THE TEAM WORK IS STILL REQUIRED IN OUR SOCIETY TO OBTAIN SUCCESS

-- so --

LET US WORK TOGETHER TO SELL AS MANY CHRISTMAS CARDS AS POSSIBLE

Phone

Diane or Jack Fraser



CHRISTMAS CARDS WILL BE ON DISPLAY AT THE JUNIOR AND SENIOR NOVEMBER MEETINGS

LET YOUR SOCIETY HAVE THE PROFIT

AMENDMENT TO THE CONSTITUTION AND BY-LAWS

Article 9 - Dues

The annual dues of all members shall be payable in advance. The membership fee shall be three dollars (\$3.00) per adult, four dollars (\$4.00) per married couples and one dollar (\$1.00) for Junior members. Full dues are to be paid by 31 January of each year. After March 31st new members shall pay the balance of the year by quarters. Any person over the age of 18 is considered an adult and any person at the age of 16 may make application for membership as an adult.

The suggested amendment to this article by the majority vote of the Executive is as follows:

Delete (underlined para) "After March 31st new members shall pay the balance of the year by quarters," and insert "After June 30th new members shall pay one half of the regular annual dues."

This amendment shall be published and read at the November meeting. At the December meeting you will be asked to vote on the amendment.

.....

ITEMS WANTED/FOR SALE

(A service for the membership)

John McKinlay-Key (Junior member) is willing to trade fish. Phone [redacted].

18 gallon galvanized aquarium for sale, 24 x 15 x 12, pump, reflector and a few fish. Price \$20.00. Call [redacted], Mrs. White, [redacted], Ottawa.

2 aquaria, 30 x 12 x 17, 29 x 11 x 14, reflectors and stand. Price \$35.00. Mr. Don Thompson, [redacted].



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The most complete selection of tropical fish, beautifully illustrated. Completely revised, and just printed, this 60-page handbook is an encyclopedia of tropical fish information, includes breeding, care, do-it-yourself tips on Only use of aquarium equipment . . . **50¢** hundreds of accessory items. Stop in, or write to our Catalog Dept.

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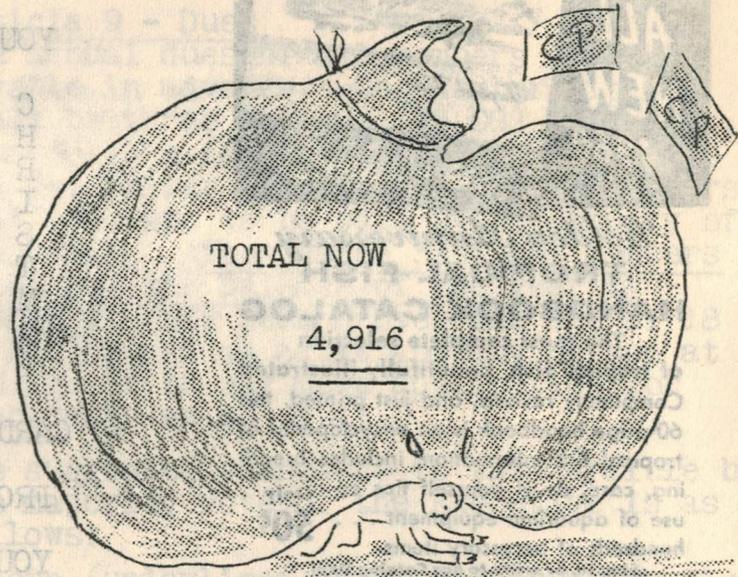
OUR GUEST SPEAKER

At the last Senior Society meeting we were honoured to have as our guest speaker Mr. Bud Peart, member of The Hamilton & District Aquarium Society and the TIFAS Board of Governors. We were also very happy to have Mrs. Peart as our guest.

Mr. Peart's slides on the CAOAC Convention, and show, were excellent. Mr. Peart later gave a talk on Marine Fish which was very interesting and helpful to all members.

We do hope that Mr. and Mrs Bud Peart will honour us with a visit in the very near future, and that we will have the opportunity of hearing Mr. Peart give us another talk.

CANADA PACKERS LABELS



ONLY 1,084 to be collected and we will have our coffee urn paid for. Can we do it before January 1st ??????????????????????

.....

CHRISTMAS CANDY/CHOCOLATES

Mr. Gerry Lalonde, Social Committee Director, has once again kindly offered a 20% discount to all OVAS Members wishing to purchase Christmas candy or chocolates.

Phone Gerry Lalonde at

or

.....

JAR SHOW

STANDINGS

AS OF

OCTOBER 31ST



Charlie Anderson	21 points
Al & Norman Johnson	14 points
Wilf Doucette	13 points
Diane Fraser	12 points
Alice Neumann	11 points
George Bowie	9 points
Ed Parisien	7 points
Alan Griffin	3 points
Claire & Heinz Kroeger	2 points
Marcel Leduc	1 point

Points awarded: First 4 points, Second 3 points, Third 2 points and every member entering the jar show receives 1 point. Prizes are awarded to the three members obtaining the greatest number of points at the end of the year.

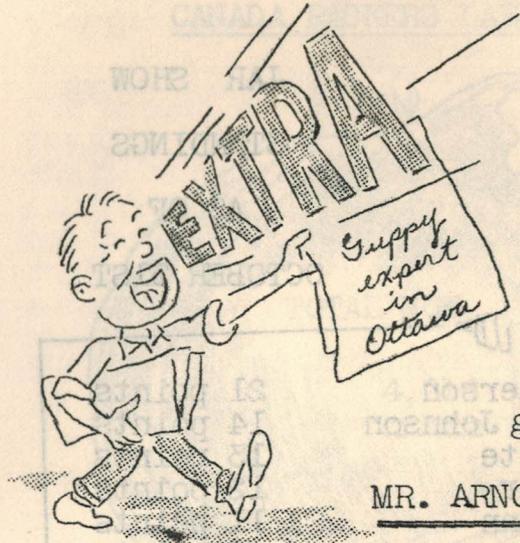
FISH OF THE MONTH 1960

- NOVEMBER - Guppy (pair in one jar)
- DECEMBER - --winners announced--
- JANUARY - Zebra (male or female)

MEMBERS WHO HAVE ANY SURPLUS FISH OR PLANTS, AND WOULD LIKE TO DONATE THEM TO OUR HOSPITAL TANKS, PLEASE PHONE _____, Charlie Anderson

.....

DON'T FORGET OUR ADVERTISERS



The Senior
Society
Meeting
NOVEMBER 24TH

will have
as
guest speaker:

MR. ARNOLD SWEENEY

President of the Hudson-Bergen
Aquarium Society, New Jersey, USA,
and Vice-Chairman of the American
Guppy Association.

Mr. Sweeney will give a very interesting talk on Guppies. He is world famous for his strain of guppies and has won numerous awards in guppy shows.

(Mr. Sweeney is kindly donating some of his guppies to our Society. These guppies will be auctioned or raffled off at this meeting).

JUNIOR SOCIETY MEMBERS ARE
INVITED

"LET THIS MEETING BE A RECORD FOR
ATTENDANCE - BRING A FRIEND"



O.V.A.S.

JUNIOR

SOCIETY.

Editor

Larry
Neumann

OFFICERS AND DIRECTORS

President: Chipper Vickers
Vice-Pres: Gordon Worden
Secretary: George Ward
Treasurer: Frank Jones

Membership: Larry Forrest
Programme: Ian Woods
Social: John Manchester
Magazine: Larry Neumann
Show: John McKinlay/Key
Librarians: Larry Neumann
Wayne Moore

JUNIOR SOCIETY COMMITTEE SUPERVISORS

Director: Mr Harvey Wittenberg
Assistant: Mrs Flo Fitzsimmons

PRESIDENT'S LETTER

The October 20th meeting was very successful with a record attendance of 74 Junior members and 5 adults.

Our membership is now 76 - with 3 more members we can establish a record for the Junior Society.

November 17th is Parent's Night. I do hope that the Parents will make every

effort to attend this meeting. Also at our November 17th meeting we will be nominating members for the office of President, Vice-President, Secretary and Treasurer. Further information regarding the nominations will be found on page 6.

We welcome our new members who joined the Society at our last meeting: John Burns, Dudley Browne, John Dunn, John McDiarmid, Rickey Nicholson, Chris Pallett, and Sandra Stevenson.

Our recent auction was very successful. Our thanks to the Aladdin Pet Shop, Dickson's Pet Shop and the Kar Vel Pet Ranch for their kind donations. We would also like to thank the Senior and Junior members for their kind donations of fish, plants and aquarium accessories - thanks everyone for your support.

.....

THE DIGESTIVE SYSTEM

By John Wilson, OVAS Junior Society

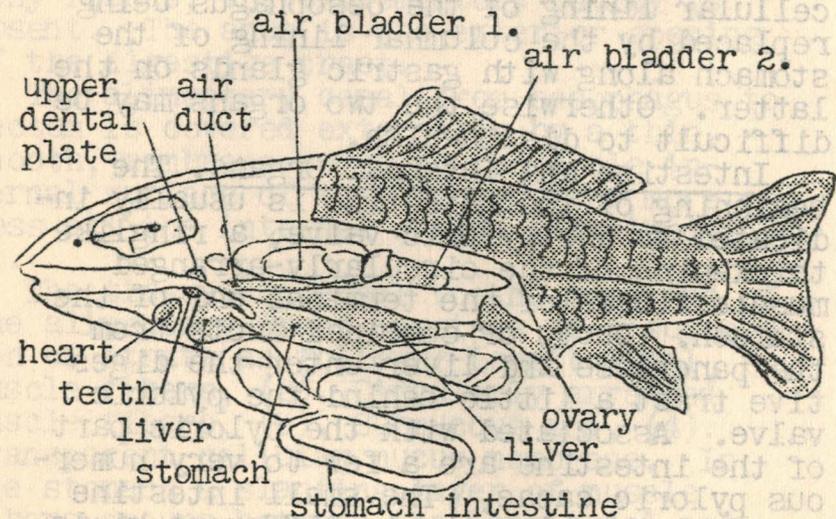
The digestive system of our fish is one of great interest and explained here under three headings, Mouth and Teeth, Pharynx and Oesophagus, Intestine and Internal Organs.

Mouth and Teeth. The chief function of the mouth is for securing food and for aiding respiration. In general there are two types of mouths, those without opposing jaws, the lamprey and hagfishes, and those with jaws, the sharks, rays, carps, etc. The lamprey and hagfish mouth contains teeth used for rasping off flesh or making a hole so they may suck blood or consume the flesh.

Fish teeth are of several kinds and shapes. The commonest is the conical tooth. This kind may be very minute, numerous, and close together, in or bands.

They pass under the name of villiform teeth. Any conical tooth that is much longer than the adjoining is called a canine tooth. Flat-topped teeth are molars, and chisel-like teeth are called incisors. Some teeth have two tips and are called bifid teeth, those with three tips are trifid. Long slender teeth resembling the bristles of a brush are called setiform. The Piranha of South America have triangular teeth with serrated edges, as do some of the sharks, i.e., the great white shark, or man-eater.

Teeth are usually arranged in patches, bands, or in one or more rows. The bones of the mouth bearing teeth are as follows: upper jaw, premaxillary and maxillary in certain fishes; lower jaw, dentary. The tongue may or may not be toothed. In the roof of the mouth, teeth may or may not occur on the vomer, palatines and pterygoid bones.



Pharynx and Oesophagus. The pharynx succeeds the mouth or oral cavity and is perforated by the spaces between the gill

arches. The teeth located in the gill arches are especially noticeable in the carp family. The bones in the carp's pharynx are highly modified and bear teeth in rows or patches.

Among the various groups of fishes in general, the pharynx is followed in succession by the oesophagus, stomach, intestine, the latter terminating in the rectum or large intestine. The anus is the external opening of the digestive tract. The exact boundaries of these various organs are not always obvious, but are indicated by a change in caliber or diameter, the thickness of the lining in the digestive tract, valves formed by circular muscles, and the entrance of ducts from digestive glands.

The oesophagus is occasionally separated from the stomach by a slight constriction, but the two may be distinguished more frequently by the scaly cellular lining of the oesophagus being replaced by the columnar lining of the stomach along with gastric glands on the latter. Otherwise the two organs may be difficult to distinguish.

Intestine and Internal Organs. The beginning of the intestine is usually indicated by the pyloric valve, a ringlike thickening of the circularly-arranged muscle fibres of the terminal end of the stomach. Ducts or combined ducts from the pancreas and liver enter the digestive tract a little behind the pyloric valve. Associated with the pyloric part of the intestine are a few to very numerous pyloric caecae. The small intestine is of various lengths in different kinds of fishes.

Bony fishes living chiefly on animal diet usually have short intestines. The latter may have one to three loops,

whereas the vegetable feeders have long intestines with numerous loops, and in some kinds the intestine is coiled around the airbladder, or coiled upon itself many times. A black membrane frequently occurs in those fishes that are vegetable feeders.

Following the small intestine is the rectum or large intestine, which may be distinguished by its straight course, increase in diameter, and by the rectal gland. The large intestine is variously specialized. It contains a spiral valve in such groups as the sharks, and a few of the more primitive fish.

The spiral valve has the tissues arranged like a spiral stairway. The function is to increase the digestive surfaces without increasing the length of the organ.

The rectum ends posteriorly in an excrementory cavity in sharks, but in most bony fishes, the excrementory cavity is absent. The anus is the exterior opening of the digestive tract.

The alimentary canal from oesophagus to rectum is covered externally by a thin, smooth, membrane covering the whole internal surface of the abdomen, and more or less all the internal organs contained in it.

The tissues internal to the membrane of the alimentary tract consists of a succession of strata as follows: Longitudinal muscle fibers, (2). Circularly arranged muscle fibers, (3). Submucous and, (4). Transparent cellular mucus membrane. In the stomach a slanting layer of muscle fibers occurs between the longitudinal and circularly arranged muscle fibers.

The muscular layer varies greatly in thickness in various species of fish.

.....

JAR SHOW STANDINGS

Jar Show standings as of October 31st are:

Larry Neumann	-	16 points
Eric Bowden	-	7 points
John McKinley-Key	-	7 points
Andy Holdham	-	7 points
John Manchester	-	6 points
Jack Keaney	-	6 points
Wayne Moore	-	4 points
Gordon Worden	-	3 points
Ron Ensom	-	3 points
Paul Francis	-	3 points
John Janzen	-	3 points
Stuart Butts	-	1 point
Bob Olsen	-	1 point
Danny McLean	-	1 point
Laurie Walker	-	1 point
Carl Juneau	-	1 point
Peter Rubec	-	1 point
Shawn MacKenzie	-	1 point

Points awarded: First 4 points, Second 3 points, Third 2 points and every member entering the jar show receives 1 point. Prizes are awarded at the December meeting to the three members obtaining the greatest number of points.

FISH OF THE MONTH FOR:

NOVEMBER	-	RED SWORD (male)
DECEMBER	-	ZEBRA (male)
JANUARY	-	SCISSOR TAIL (male)

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SPECIAL NOTICE

All Junior Society members are invited to attend the Senior Society meeting, Thursday November 24th.

THE FASCINATING ZEBRA

By Jack Keaney, OVAS Junior Society

"The horse of the aquarium" is what I call him. This cute striped little fellow is forever on the go, jumping, frolicking, and playing tag with his brothers and sisters.

This little fish is from the danio family and comes from India and Pakistan. They grow to a very large size for their species. I have seen only a few, some very recently, in the Ottawa vicinity.

The zebra does very well from 72-80 degrees temperature and can tolerate a much higher temperature than most danios. The zebra fish is very peaceful and never nips at other fish. They do tend to jump, so a cover should be placed on the aquarium.

When breeding these fish you should cover the bottom of the fish tank with marbles, or the parents will eat the young no matter how well fed they are. Also you should let no light penetrate the tank. I tried breeding my zebras a little while ago but failed as I did not turn the lights off. The next morning I found that the female was dead.

They are a very lively fish and live to the ripe old age of two and a half years. When they start to show signs of spine curvature it indicates that they are getting on in years, so you should not worry or fret because there is nothing you can do.

I hope you enjoy your fish as much as I enjoy my little zebras.

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NEWS

SIX AQUARIUM PLANTS

By Wayne Moore, OVAS Junior Society

These are the six most common of our many aquarium plants:

CABOMBA: This plant is the most easily purchased of all aquarium plants, usually sold in bunches. It has prettily cut foliage of a deep green. When planting, separate stalks slightly for proper rooting. Cabomba does well when given lots of light and if your fish don't pull it to pieces.

SAGITTARIA: This plant comes in three principal varieties. Natans, which is 5 to 8 inches high; subulata, which is slightly taller than natans; and sinensis, which is 10 to 12 inches high with wide, somewhat blunt leaves, are most readily available. Sagittaria is a sturdy plant which propagates by runners.

VALLISNERIA: This is the plant for deep aquaria for it grows 8 to 20 inches high. The leaves are silken light green and grow in gently waving lines. This plant also propagates by runners.

ANACHARIS: This is one of the fastest growing plants. It does well in moderately warm aquaria with strong light. This is another of the plants sold in bunches.

MYRIOPHYLLUM: The remarks about cabomba largely fit this plant. The leaves are much finer in the myriophyllum. This characteristic makes it popular for breeding fishes with adhesive eggs.

LUDWIGIA: As a decorative addition to aquaria, this plant has its values. It is really a bog plant but does quite well submerged in water if it receives strong light. If the lower leaves fall off, start new plants with the top part.

EMERGENCY BABY FOOD

Reprinted from the Fish Culturist

During the winter months it is often difficult to obtain Daphnia, and as we sometimes, unexpectantly, have fish to spawn for us during this time we are at a loss to know what to feed them. As all tiny, newly hatched fish should have microscopic or almost microscopic insect life to start them off with, it is recommended that a culture of Paramoecium be kept on hand at all times. These small water creatures which can be easily seen by using an ordinary magnifying glass, will multiply in vast numbers if the proper conditions are given them.

A gallon jar filled with water should be placed where it will be fairly warm, about 75 degrees F. About a half teaspoonful of cracked corn or the equivalent in weight of dried lettuce, dried duck weed, hay etc., should be placed in the water and allowed to stand for a few days, uncovered. The small creatures will appear and multiply so rapidly that within a few days they will crowd themselves out, unless some of the water is drained off and replaced with fresh. More of the dried vegetation should then be added.

While this culture is not objectionable to the aquarists, it does throw off a most objectionable odor and should be kept from other members of the family who could honestly find it very unpleasant. Beware of a too unpleasant odor which may indicate your culture may not be working, in that case it is better to start all over again.

Another system that has been used with success. In small tanks of a few gallons capacity, have immersed at one corner, tea balls filled with dry lettuce. These have been placed directly in with the young fish and as the insects multiply, they will

be seen near the tea balls and the young fry will be attracted to that corner. The tea balls are of aluminum and may be bought in the five and ten cent stores. They have the advantage of being able to be lifted out every few days to be replenished. Some fry can be started out with newly hatched brine shrimp.

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QUIZ

By Wayne Moore, OVAS Junior Society

Here are the names of eleven tropical fish with the spelling of each mixed up. What are they? Score: 11 excellent, 8 good, 5 fair, under 5 poor. Answers on page 31.

1. rasdipae hsif
2. ckinaorg grumaio
3. ordsiatwl
4. niboraw hfsi
5. wljee sfih
6. ezarb
7. outmhrbeedre
8. rfaična killihfsi
9. acsrrale
10. ssortasciil
11. siducs

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ANSWERS TO QUIZ ON PAGE 30

1. Paradise Fish. 2. Croaking Gourami.
3. Swordtail. 4. Rainbow Fish. 5. Jewel Fish.
6. Zebra. 7. Mouthbreeder.
8. African Killifish. 9. Scalare.
10. Scissortail. 11. Discus.

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QUESTIONS AND ANSWERS

Reprinted from The Boston Aquarium News

My Catfish keep my tank stirred up. Do you want them?

I'll take them any time. They provide the best janitor service that you can obtain, stirring up and siphoning the sand for each forgotten morsel of food.

I would keep the Catfish if I were you. Each aquarium should have a pair. Attach a filter to your tank and filter out the fine suspended silt. If the aquarium is in good condition, the small clouds of detritus raised by your catfish will soon settle. If the mulm is too thick, siphon off some of it.

I bought some new fishes and some plants for my community tank. Since then I have lost most of my fishes.

This is a very old story. One should never add new stock to an aquarium until it has undergone quarantine. A wise hobbyist maintains a "hospital tank" for this purpose. Newly purchased fishes are placed in it for a week or two. If at the end of that period the fishes have no visible ailment, "ick", fin-rot, rust or fungus, they may be assumed to be in good

health. (Of course, the hobbyist should be able to recognize an ailment, and should own an aquarists' manual which describes the various diseases and their treatment).

New plants may be soaked for 24 hours in a diluted salt bath - water containing three to four teaspoonsful of dissolved salt per gallon.

Although dealers sometimes are accused of selling diseased fishes, or plants from infected tanks, it is not always a just accusation. The very process of netting fishes often results in the removal of some protective slime from the bodies, and the areas so exposed may be infected by parasites that exist (undetected) in the hobbyist's own tanks. Also, the danger of chilling, of transportation, and of changing from water of one pH to another, are contributing factors. We are fortunate indeed if any one of our aquaria provides the same environment and water chemistry that existed in the original quarters.

Reprinted from Gambusia

Too many new hobbyists, and quite a few of the experienced ones too, insist upon raising, or attempting to raise, young fishes in a community tank. Are you one of the guilty ones? They laden the surface of the tank with unsightly floating plants, and limit their selection of fishes to those who supposedly, do not eat the young. The result is an unsightly tank with a poor selection of fish. The results of such attempts are usually quite disappointing. A community tank is no place to raise young fry.

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The longest odds in the world are those against getting even...