



London Aquaria Society

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BELOW THE WATERLINE

BELOW THE WATERLINE



Barry McKee
& Doug Chesell
on their
trip to South
America.

The Fish Hobbyist vs. Algae

By: Rene Dignard

Submitted by: Annette & Ron Bishop, London Aquaria Society, February 2011.

Article was from the London Aquaria Society, June 1967

It seems to me that ever since I became interested in tropical fish, one out of every two hobbyists I have talked to has complained about this problem of Algae. I had always been fortunate in never having had to face this cancerous problem, while yet the thing that bothered me most was not knowing why I was so fortunate. After contemplating on this problem, I resolved to find out why by conducting an experiment which lasted for 6 months. What I am about to write are the results and observations I have obtained through my experimentation.

First, we must understand what Algae is; it is a plant which is found by the thousands in every body of water in the world. It has no roots, stems, leaves or flowers and some 14,000 species ranging from the smallest plant in the world to the largest which obtains a length of 900 feet (seaweed) thrive. In a well balanced aquarium, though the Algae may not be visible, it is one of the most important

diets for numerous species of fish. Now that we understand a little of what we are dealing with, we can proceed with the experiment.

The problem of course was to get what is called a serious Algae condition. This I did in the following manner, using a 15 gallon tank, large food and aged water, I then placed a 60 watt bulb at one end about one inch off the water. In the tank I had nothing but rocks and artificial plants. The fish involved were Swords and Guppies. In three weeks time I had obtained the desired condition—a coating of slimy Algae in the tank especially at the end where the light was. It was on the glass, gravel and all through the filter, giving the tank a foul odour as well. Now began the ordeal of ridding myself of this curse.

First, I tried scraping it off but soon learned that this was in vain. The next step was to introduce into the tank two Algae eaters and some snails. Both fish and snails thrived but the algae got worse. By now the Algae was so thick that in some places it was turning black and the tank smelled like a well polluted pond. I then tore down the tank, washed the gravel and tank itself.

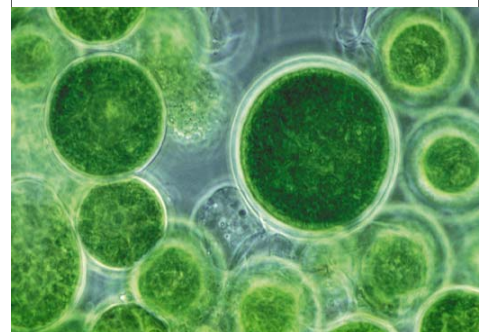
This time when I set it up again, I added live plants (Corkscrews and Duckweed). The

Duckweed being a floating plant, I hoped it would cut down light and therefore cut down the Algae. Also, I replaced a 60 watt with a 25 watt bulb.

Within a week, the monster had again arisen and before long the rooted plants were covered with a slimy coat while the Duckweed formed with the algae to make a sticky, slimy matter at the top of the water. Completely bewildered, I wondered if I had condemned myself to a tank I would never be able to use again.

Out of desperation, I again tore down the tank, throwing away all the gravel, plants and rocks. I then cleaned the tank and filter out well with a salt solution. This time when setting up the tank, I used new gravel, new rocks and a much greater quantity of live plants. I also moved the light from the end to the middle of the tank and raised it about 1/2" more. The tank has been set up approximately one month now and there is no trace of Algae present.

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Upcoming Events

April 12, 2011: Barry Mckee & Doug Chessel on their trip to South America.

April 16, 2011: Sarnia Aquarium Society Spring Auction has been cancelled.

May 1, 2011: Spring Auction

May 10, 2011: Klaus Steinhaus will do a talk on Tropheus

June 14, 2011: Elections

July/August: Summer break

September 13, 2011: To be announced

September 25, 2011: Fall Show & Auction

October 11, 2011: To be announced.

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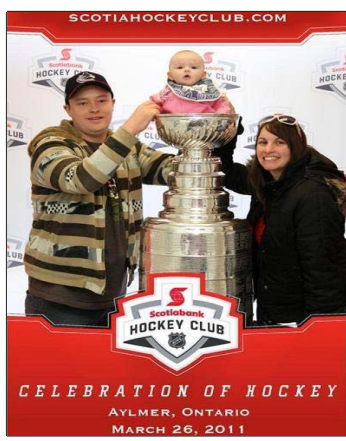
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President's Message

First of all a big congratulations to Bob and Laurel for their efforts in taking most of the big prizes in the Brantford fish show. They even walked away with the Best of Show and Top Aggregate (most points in the show). A wonderful job, don't stop, get it going, you may be successful with the C.A.O.A.C. club award if you continue with your work.

This month's guest speakers will be Doug Chassell and Barry McKee doing a talk about their trip to South America and collecting their various aquarium fish. These fellas have been in the hobby a long time and their knowledge is vast when it comes to the tropical fish hobby. I hope everybody will enjoy this presentation.

Last month's meeting we had Udo Rohmann doing a presentation about the Hamburg Matten Filter. It seemed everybody really enjoyed the evening. I could see everybody watching with the intention of building one of these for themselves. Thank you for a great job.

The C.A.R.E.S. program has taken off quite well so far with over ten people filling in their paperwork. Please submit it to Annette as she can get it forwarded to the powers to be.

The jar show for this month will be Characoids (tetras, hatchet fish, silver dollars etc.) with the open class and as usual there is the plant class. As a bonus, we will have the Family Class with an extra gift certificate offered to the winner and as always, we will have the auction. We have had an average of over one hundred items for the last three months. Please bring out your extra fish and plants. Who knows, you may pick up a bargain or two.

Happy Easter to All, Ron

The **London Aquaria Society** is a non-profit organization, established in **June 1956**. Its main objective is to promote interest in breeding and raising tropical fish and also to provide a means through which hobbyists may exchange ideas, gain information and display their fish, sharing them in the public in the London Area.

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The Fish Hobbyist vs. Algae

cont'd from front page

This time when setting up the tank, I used new gravel, new rocks and a much greater quantity of live plants. I also moved the light from the end to the middle of the tank and raised it about 1/2" more. The tank has been set up approximately one month now and there is no trace of algae present. Therefore, in conclusion, if one wants an Algae free tank, I would strongly advise the following rules:

1. A clean tank is a must
2. Too strong a light or too close a light contributes to algae.
3. Live plants are a great help in combating Algae because they compete with it for food and light. Floating plants cut down light at the bottom, therefore, also helping.

What's New In Characoid Studies: Part 1

www.calgaryaquariumsociety.com/archive.php?path=47

Author: Dale Speirs **Publisher:** *The Calquarium* **Volume:** Volume 42, Number 10

Date Published: June 2000

FEEDING TIME: Characoid fishes make up 30% of the fish in the Amazon [3] and get most of their food from phytoplankton floating in the water. Many of them feed on fruits dropped by trees during annual floods, so perhaps you might like to experiment with a few small pieces of raspberry or strawberry. Plants that produce fruit do so because the herbivores that eat them pass the seeds in the fruit out the other end, usually a distance away from the source. This helps the plant disperse itself through habitat.

An example is the characoid *Brycon guatemalensis*, which eats figs dropped into the water. The advantage to the fig tree is that the seeds have a chance of being redistributed upstream [4]. It is easy enough to float seeds downstream, but the fish provide a useful service getting them against the current. As the flood waters recede, the fish are gradually re-confined to the river channel, but the little packages they left behind over now dry land can germinate on a freshly fertilised seedbed.



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What's New In Characoid Studies: Part 1

cont'd from page 4

Granted that you can't reproduce annual floods in your fish room, or at least you hope not too, but it might be an interesting experiment to see what types of fruits and vegetables your characoids might take. Starve them for a day, use small chopped pieces appropriate to the size of the fish, and be sure to siphon out any uneaten food. If you do try such experiments, be sure to write them up for your club bulletin.

SPAWNING BEHAVIOUR: One thing any aquarium writer soon learns is to never say never. There are all kinds of recipes for spawning fish, but no guarantee that any of them will work, although in most cases they will certainly help. What is often forgotten is that fish are not locked into an unvarying life style. They can't be, since their habitat varies too much, and they must be able to quickly adapt. Those that don't will soon be eliminated from the gene pool. Many aquarists go to a lot of trouble to set up water chemistry and aquascaping to get their fish to spawn. The catch seems to be to get them in the mood and try to simulate (and stimulate) their spawning season. While it is true that most fish spawn seasonally, it is not necessarily because it is compulsory for them, only that the habitat regulates when they can go. If the habitat allows continuous spawning, most commonly in hydroelectric reservoirs, then the fish will take advantage of that. An example is the Brazilian piranha *Serrasalmus spilopleura*, which changes its behaviour to spawn continuously in reservoirs [2].

For the aquarist trying to spawn a characoid in the home tank, don't worry about the book saying that a species will only spawn once a year under specialized conditions. Try to think things through for your fish. Is it big and healthy? Eating well? Not in a too-small tank? Many aquarists are actually already spawning their fish but never see the results because the eggs are quickly eaten within minutes or a few hours because the tank was too small and the aquascaping lacked hiding places for the eggs and fry.

AVOIDING BEING EATEN : Alarm pheromones are chemicals given off by many species of fish if their skin is broken, such as when the fish gets chomped through (or nearly so) by a predator. Other fish detect the scent of the chemical and react accordingly. This may be redundant if the predator was seen by the rest of the shoal to which the unfortunate victim belonged, but it never hurts to be certain. In any event, pheromones are useful in conditions of poor visibility such as muddy water or nightfall.



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THE CARE OF AIR PUMPS

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A second important adjustment of piston pumps is found in the bolt connecting the pump to the motor. A loose belt with consequent slippage may mean that the pump stops operating on the compression stroke-when we need it the most. The motor should be moved on its supports until the slack in the belt is taken up-but not so tight as to hinder a smooth operation. The motor must be permitted to operate the pump without labouring (and subsequent overheating). A slight slippage of flat belts is to be expected and is desirable for, should the pump jam or "freeze" through neglect, the motor may continue to operate without burning up or short circuiting. Do not add to your problems by careless oiling. Oil falling on the contact surfaces of pulleys or bolts decreases the required friction. Even a tight bolt will then slip and fail to deliver power. Keep these surfaces clean.

Probably every hobbyist concerned with air pumps, plastic tubing, release valves and air stones or filters knows that release valves need to be adjusted nearly every day. At times no air is released from one or more stones and the valves must be opened slightly or the whole line of valves adjusted. This will always be a problem of maintenance since our air stones and filters are not nicely balanced. Some stones and filters release air easily; some require more air pressure. Further more, as our president, Doctor Priestly has suggested, changing temperatures in the aquaria and in the fish room affect the long column of air that we confine in the system. Sometimes air stones accumulate algae and clog, throwing the whole system off balance. One thing should be remembered, clogged valves, releases or tubing means an increase of pressure which builds back to the pump and motor. In extreme examples a pump may be unable to force more air into the line while the motor may labor to do so. That is one good reason for installing a small compression tank on the line; to absorb these inequalities. It is also an excellent plan to add a two way valve at the end of every air line. A pump may furnish more air than the aquarist can use (without blowing fish out of the tanks) and this extra valve is used to bleed excess air from the line.

Leather washers do not last forever, particularly in the common single piston pump operating from a crank on the disk flywheel. The continuous shifting of the piston within the cylinder is rough on the washers. Always keep a supply of washers for your particular pump on hand. Also an extra belt or two is good insurance. When all adjustments have been made in the system and air is still in low supply, change the washers. This may be necessary three or four times during the year. Apply a thin coat of vaseline to the new leather washers and to the cylinder walls before reassembly.

A noisy pump usually indicates excessive wear on the crank pin and connecting rod head (lack of lubrication). This may be temporarily alleviated by using a heavy oil such as SAE 40 motor oil for this connection. A lighter grade oil should be used for your motor, however, and at intervals recommended by the manufacturer. Too much oil in the motor is almost as bad as too little. Usually a drop of oil in each oil cup every week is sufficient. Keep the ventilating apertures free of dust and dirt. An old toothbrush may be used to advantage here-or a pipe cleaner.

Reprinted from THE BOSTON AQUARIUM NEWS—February 1962

OUTDOOR PONDS

By: Roger Van Der Aa, London Aquaria Society, September 1970

Outdoor fishkeeping is one of the oldest and perhaps the best method for raising tropical fish. It not only adds beauty to your premises but increases size and colour in your fish as well. Species such as barbs, angels, swordtails, mollies, cichlids, etc., can be placed outdoors without any problem, however livebearer species will thrive especially well.

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Best In Show



Name	Month	Fish Name	Gift Certificate Sponsor
Bob Steele	March	Green Molly, female (<i>Poecilia sphenops</i>)	Big Al's Aquarium Services

Name	Month	Fish Name	Ribbon
Bob Steele	March	Mollies and Platties Green Molly, female (<i>Poecilia sphenops</i>)	Red
Bob Steele	March	Mollies and Platties Green Molly, male (<i>Poecilia sphenops</i>)	Blue
Bob Steele	March	Mollies and Platties Wag Platy, female (<i>Xiphophorus maculatus</i>)	White
Dorothy Reimer	March	Mollies and Platties Multi-coloured Platy, male (<i>Xiphophorus maculatus</i>)	
Bob Steele	March	open Bristle-nosed Pleco - albino, male (<i>Ancistrus dolichopterus</i>)	Red

OUTDOOR PONDS

cont'd from page 7

By this time perhaps the question has come to mind: why! Tropical fish will thrive better outdoors and of course there are several good reasons. Pools create extra space for the fish to grow in. At the temperature they desire in outdoor pools fish do have a little choice of water temperature, as temperature near the bottom is approximately 10°F different than that near the surface of the water. A certain amount of live food is available in outdoor pools as they contain an abundance of microscopic foods, mosquito larvae, plenty of algae, flies, bugs and the odd worm that falls into the water. All these extras will promote growth and colour in your fish.

Outdoor pools can be made inexpensively and in various shapes and sizes to suit your personal taste. Old bath tubs can be sunk into the ground and with a few flowers, rocks and shrubs as decorations, one can make this an ideal summer home for your fish.

Another rather inexpensive way to make a pond is to dig a hole approximately four x five feet and two and a half to three feet deep, purchase some heavy mill plastic sheets and line the hole with the ends folded over the side. Then secure some patio stones or rocks to hold the plastic in place and fill with water. Keep in mind to remove all sharp objects prior to placing liner into position. Then fill with water.

This method is not expensive and you would be amazed what a little work and imagination with some plants and flowers can do. This could turn into the most beautiful sight you have ever seen.

Concrete pools can also be made to any shape or size you may desire and are perhaps the best pools. All there is required is a little hard work and a few dollars as these pools can be enjoyed for a number of years without any maintenance.

Tropical fish may be placed outdoors as early as June, providing weather conditions permit and can be left there until October. Feeding may be done but keep in mind that a certain amount of food is available in the pond. A water lily can be placed into the water for decoration and to create shade, while in the hot summer days it can also give your fish a place to hide.

You may be surprised to see the increase of growth after your fish have been outdoors all summer and with a little care and initiative you can take your hobby outdoors.

Name	Month	Plant Name	Ribbon
James Kelly	March	open Java Fern 'Windelov' (<i>Microsorium pteropus 'Windelov'</i>)	Red



Angler Fish

www.allthesea.com/Deep-Sea-Fish-Angler-Fish.html

Submitted by: Annette & Alyssa, London Aquaria Society, March 2011.

Alyssa is doing a project on Angler Fish so she went to Annette to see if she had any information on them. Annette wrote to me concerning this fish and here is an article that I found which was very fascinating. I'm sure you will think so too. **Thanks Annette & Alyssa.**

The anglerfish is an incredible example of how living organisms can find a way to survive in even the most inhospitable environment. The Angler Fish lives more than a mile deep in ocean water. There are over 200 species of anglers, which are named for their method of 'fishing' for their food. A spine of the dorsal fin acts as a 'fishing rod', tipped with a fleshy 'bait' which is often luminous. Other fishes are attracted to this lure and get eaten. Most anglerfishes live near the sea bottom. There are four kinds: batfish, goosefish, frogfish, and deep-sea angler.

Angler Fish has a massive head, with grotesque features. It has a large crescent shaped mouth, with numerous sharp pointed teeth. It has a flattened white belly region, with the top half of the body taking a broad expansive posture. Color varies from greenish brown to blackish gray, with speckled and variegated markings.

The head and body have an indistinct outline caused by the presence of numerous small flaps of skin. The gill slits are behind and lower than the base of the pectoral fins. Running along the mid-line of the head and anterior portion of the body, are a series of separate rays. Those above the pectoral fins give rise to the first dorsal fin. The rays on the head section form long spines. The foremost of which normally has a fleshy tip that the fish uses as a lure to entice its prey. The second dorsal fin is composed of 11 to 12 fleshy membrane bound rays.

Another unusual adaptation in anglerfish is their sexual dimorphism. The males are very small in comparison with the females, and live as permanent parasites on the female. The male attaches himself, by biting, to the body of the female. His mouth fuses with her skin, and the bloodstreams of the two fishes become connected. The male is now totally dependent on the female for nourishment. In fact, the male begins to degenerate. His eyes grow smaller and he eventually loses them. His internal organs disappear. The male becomes simply a source of sperm. Breeding for anglerfish takes place from spring to early summer. The egg mass forms large gelatinous sheets 9m by 3m in size, which floats near the surface. Juveniles are planktonic, with noticeably elongated fin rays.

Anglerfish feeds on a wide variety of small and juvenile fish, including those of dogfish, skate, cod, haddock, whiting, sprats, sand eels, flat fish, etc. It is found all around the coastline of the UK, including the Atlantic, English Channel, and North Sea.



Tropheus sp.

www.aquaticcommunity.com/tropheus/sp.php

Tropheus is a small genus within the cichlid family. All Tropheus species hail from Lake Tanganyika, one of the African Rift Valley Lakes, and live nowhere else except in aquariums. This fish can be found in most parts of the lake, from Burundi in the North to Zambia in the South. Breeding Tropheus in captivity is far from impossible if you start out with well kept specimens that are happy and healthy.

Tropheus in the aquarium

Many aquarists adore Tropheus cichlids since they are very beautiful and display interesting behaviors. Believing that Tropheus is almost impossible to keep is unfortunately quite common among aquarists, since Tropheus has gained a reputation of being hard keep alive and extremely vicious. The truth is that if you are prepared to do some reading about the species you are interested in keeping and following the guidelines, Tropheus is not a hard fish to keep. The problem is that many aquarists assume that all cichlids from Lake Tanganyika need more or less the same care, environment, and diet when the truth is that each species come with its own particular needs and preferences.

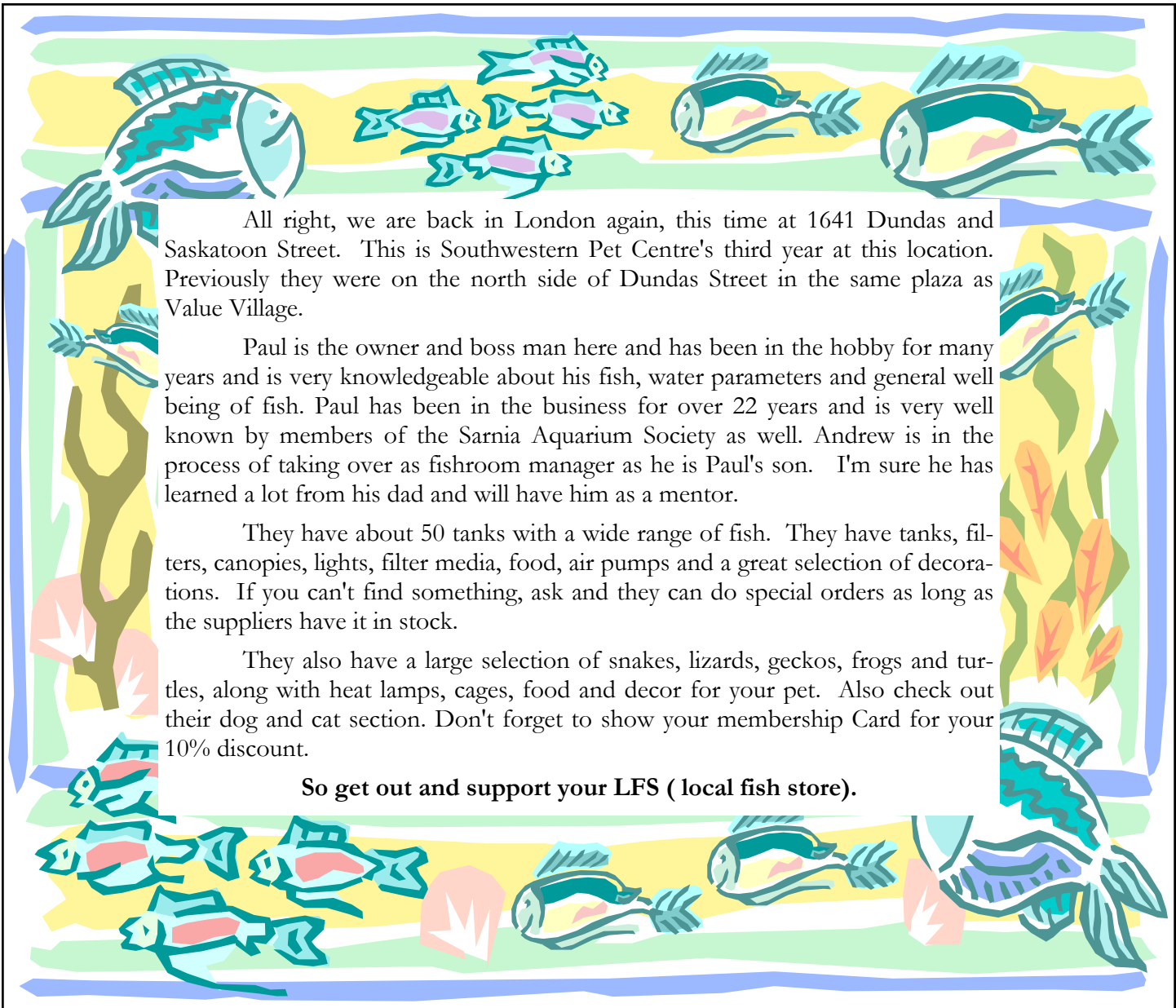
Tropheus species. The genus Tropheus contains five recognized species.

Tropheus annectens *Tropheus brichardi* *Tropheus duboisi* *Tropheus moorii* *Tropheus polli*

There is also a subspecies of *Tropheus moorii* named *Tropheus moorii kasabae*.



Tropheus Moorii



All right, we are back in London again, this time at 1641 Dundas and Saskatoon Street. This is Southwestern Pet Centre's third year at this location. Previously they were on the north side of Dundas Street in the same plaza as Value Village.

Paul is the owner and boss man here and has been in the hobby for many years and is very knowledgeable about his fish, water parameters and general well being of fish. Paul has been in the business for over 22 years and is very well known by members of the Sarnia Aquarium Society as well. Andrew is in the process of taking over as fishroom manager as he is Paul's son. I'm sure he has learned a lot from his dad and will have him as a mentor.

They have about 50 tanks with a wide range of fish. They have tanks, filters, canopies, lights, filter media, food, air pumps and a great selection of decorations. If you can't find something, ask and they can do special orders as long as the suppliers have it in stock.

They also have a large selection of snakes, lizards, geckos, frogs and turtles, along with heat lamps, cages, food and decor for your pet. Also check out their dog and cat section. Don't forget to show your membership Card for your 10% discount.

So get out and support your LFS (local fish store).

Month	Plant		Fish Categories	Class
September	open	open	Loaches, Suckermouth, Catfish,(Corydoras, Brochis, Plecos)	
October	open	open	Cichlids – substrate spawning (Angels, Kribs, Rams, etc.)	Family
November	open	open	Cyprinids (Goldfish, Koi, Barbs, Danios, Sharks, Rasboras, White Clouds, etc.)	Pairs
December	open	open	No jar show due to Christmas Party.	
January	open	open	Guppies (Fancy, Trinadadian, etc.), Swordtails	
February	open	open	Bettas, Gouramis, Paradise Fish,	
March	open	open	Mollies, Platies	
April	open	open	Characoids (Tetras, Hatchetfish, Silver Dollars, etc.)	Family
May	open	open	Cichlids -mouthbrooding (Guentheri, Aulonacara, etc.)	Pairs
June	none	none	Due to awards night	

PET PARADISE SUPERSTORE



Here we are this time at 1080 Adelaide Street North. at Huron Street which is the location of Pet Paradise Superstore. The store is owned by Margret and run by her for 16 years, she has 12 employees at present.

Tony is the fishroom manager, and has been keeping fish for 32 years and has been working here for 15 years. He has a great knowledge of fish and he specialises in cichlids. They have about 130 freshwater tanks, and 6 saltwater tanks in the saltwater dept.

I'm told that Mark, also a great fish guy and was a long time Member of the London Aquaria Society, is more knowledgeable in saltwater fish and set-ups. They have a wide selection of aquarium supplies such as; heaters, filters, food, lights, tanks, hoods, gravel and decorations. If you are looking for a specific fish or item, ask, as they can order in what you may need. Along with fish they also have cats, dogs, rabbits, snakes, hamster and other small animals as well as food and supplies for all your pets needs. Don't forget to show your Membership card to get your 10% discount. I believe for Mays newsletter I will be in Brantford at The tropical fishroom.

Bob

© JJPhoto.dk



Aulonocara

www.aquaticcommunity.com/cichlid/aulonocara.php

Aulonocara is one of the genera that make up the family Cichlidae. Aulonocara cichlids are native to Lake Malawi in Africa. Due to historical reasons, Aulonocara cichlids are often referred to as "Haps". The numerous cichlid species living in Lake Malawi are usually divided into two major groups: Mbuna cichlids that live among the rocks and Peacock cichlids that inhabit the open water regions. Earlier most non-Mbuna cichlids were counted as parts of a genus named Haplochromine, and the name "Haps" is an abbreviation of Haplochromine. Today, a lot of these species have gone through reclassifications and many of the earlier Haplochromine species have been moved to the genus Aulonocara. The old name, "Haps", is however still often used in every day speech.

A male Aulonocara is typically remarkably colourful, while the female Aulonocara is silvery or brownish. Aulonocara fry share the more camouflaging colouration of the female. Aulonocara cichlids are often kept together. They are generally much less aggressive than Mbuna cichlids, and a 150 litre aquarium with a length of 100 cm is usually enough. Try to make the aquarium décor resemble the natural habitat of your Aulonocara cichlids. A majority of the Aulonocara cichlids inhabit the region of Lake Malawi where rocky cliffs meets the sand bottom. Some Aulonocara species, e.g. *Aulonocara gertrudae* live only on the sandy bottom and stay away from the cliffs. The opposite is also possible; the *Aulonocara jacob-freibergi* prefers the cliffs and will rarely venture into the sandy bottom areas. For most Aulonocara species, an ideal aquarium set up should include a bottom covered with sand and an abundance of rocks and caves. To arrange plenty of places for hiding and sheltering is very important. You can usually include plants in the setup if you wish, since Aulonocara cichlids aren't very fond of digging.

cont'd on page 13

Aulonocara

cont'd from page 12



Keeping different Aulonocara species will usually result in interbreeding. You can minimize this risk by choosing Aulonocara species where the females have very different looks. Aulonocara species where the female is brown can for example be combined with Aulonocara species that has silver coloured females. If you want to keep several male Aulonocara cichlids, it is very important that you decorate the aquarium in a way that makes it possible for each male to claim his own territory. Male Aulonocara cichlids are usually only aggressive when defending their own little territory. As mentioned above, a lot of hiding places are also important, particularly during spawning. A lot of aquarists combine Aulonocara cichlids with peaceful Malawi cichlids from the genus Haplochromine. More aggressive cichlids, like the Mbunas, should be avoided since they will harass your Aulonocara cichlids violently. Keep in mind that some Haplochromine species are very aggressive and thus unsuitable companions for Aulonocaras.

Cover the bottom of your Aulonocara aquarium with fine sand, and use plenty of rocks and stones when you decorate. An abundance of hiding places should be created for the fish. You can usually include plants in the set up without any problems, since Aulonocara cichlids aren't very fond of digging.

Aulonocara cichlids are carnivore, and hunt during the day. One feature shared by all Aulonocara cichlids is a sensor system that makes them highly aware of even tiny movements. They used this to notice small movements caused by tiny crustaceans hiding under the sand. When a Aulonocara cichlid hunts for prey it will hover right over the sandy bottom, and make a quick attack as soon as they notice any movements. The large Aulonocara mouth will dig down into the sand and trap the crustacean as if in a cage. The Aulonocara will chew on the prey as well as on the sand, but the sand will be conveniently deposited through the gills of the fish. Your Aulonocara cichlids will happily eat most food types, but they are carnivore and require meaty food to sustain. Cyclops, Artemia or similar food is recommended. Aulonocara cichlids kept in aquariums will usually grow much larger than they would in the wild, since they are provided with more nutrition in captivity. An overfed Aulonocara cichlid is less likely to spawn. Female Aulonocara cichlids in Lake Malawi are typically smaller than 7 centimetres, while the males reach a maximum size of 11 cm.

All Aulonocara species are mouth brooders. Sand-dwelling Aulonocara cichlids will usually deposit their eggs in a pit dug in the sand by the male Aulonocara. The size and depths of the pits vary a lot and the diameter can exceed 60 centimetres. Cliff dwelling Aulonocaras will usually pick a cave or a crevice as breeding site. The distinction between sand-dwellers and rock-dwellers is however not at all sharp, and a sand-dwelling Aulonocara can choose to deposit the eggs in a cave and vice versa. One batch will typically consist of 30-90 eggs. When the eggs have been deposited and fertilized they will be picked up by the female Aulonocara and protected inside her mouth.

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Aulonocara

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In Lake Malawi, larger groups of brooding female Aulonocara cichlids can often be seen since they like to stick together. Aulonocara fry are released while they are still comparatively small and must be given food small enough for them to consume.

Blue Ram

Veterinary & Aquatic Services Department, Drs. Foster & Smith
www.peteducation.com/article.cfm?c=16+1911+1956&aid=2547

Microgeophagus ramirezi

Quick Stats: Blue Ram	Family: Cichlidae	Size: Up to 3 inches
Range: Northern South America: Venezuela, Columbia		Diet: Omnivore
Tank Set-up: Freshwater: Plant groups, open swimming, hiding places		
Tank Conditions: 72-79°F; pH 5.0-7.0; dH 5-12		
Minimum Tank Capacity: 20 gallons		
Temperament: Peaceful	Light: Medium to low	Swimming Level: Middle to bottom
Care Level: Difficult	Reproduction: Egg Layer	

The Blue Ram is also known as the Butterfly Cichlid. It should not be confused with *Anomalochromis thomasi*, the African Butterfly Cichlid. It is a social fish that will form pairs, which remain "faithful" to each other. The Blue Ram has an orange face, a red/yellow belly, and neon blue towards the back half of the body.

The Blue Ram requires a tank of 30 gallons, minimum. The tank should have several dense plant groups and plenty of open swimming space. The Blue Ram will also need a few caves in which to hide and stones on which to spawn. Being a peaceful fish, the Blue Ram makes a wonderful addition to the community tank, and is compatible with other peaceful fish.

The Blue Ram is an egg layer that prefers soft to medium hardness, neutral pH, and slightly raised water temperatures between 77-82°F. Peat should be added to the water. The female will lay up to 200 eggs on stones, and occasionally, in depressions. Both the male and female share the rearing of the fry, and it has been reported that they will take them into their mouths to protect them like a mouth brooder. Care should be taken so that the fry are not sucked into the filter.

The Blue Ram is an omnivore and will consume a wide variety of foods. Freeze-dried bloodworms and tubifex, flake food, and both frozen and live brine shrimp and worms will make excellent food for these fish.



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C.A.O.A.C. Events Calendar

April 10, 2011: Durham Regional Aquarium Society **SHOW & AUCTION**

April 17, 2011: (Annual reports are due)

10:30 AM CAOAC Executive meeting in Waterdown, ON
 12:00 PM CAOAC General meeting in Waterdown, ON

May 1, 2011: London Aquaria Society Auction

May 20 - 23, 2011: CAOAC annual convention hosted by the Brant Aquarium Society. Best Western Brant Park Inn, Brantford ON Canada (**SHOW & AUCTION**)

June 26, 2011: (CAOAC Meeting / Presidents BBQ)

10:30 AM CAOAC Executive meeting in Waterdown, ON
 12:00 PM CAOAC General meeting in Waterdown, ON

September 25, 2011: London Aquaria Society Show & Auction

October 2, 2011: Hamilton & District Aquarium Society **SHOW & AUCTION**

Blue Ram

cont'd from page 14

Ideal tank mates include similar sized:

- | | | | | |
|-------------|-------------|----------|-------------------|---------|
| • Angelfish | Danios | Discus | Gouramis | Loaches |
| • Plecos | Rainbowfish | Rasboras | Scavenger Catfish | Tetras |

Editor's Note

Okay everyone, it looks like I got what I asked for about Members letting me know about winning at any Show they go to and my goodness, am I impressed and so very proud of Bob & Ron.

This weekend, Brantford had their Annual Show & Auction and some of our Members were present and as always, had a wonderful time.

Our dedicated President helped to Judge the Show with Jim Clark and Bob Steele came home with a mitt full of awards. It's a good thing that Laurel was there to be a shoulder for Bob to lean on because he was certainly dazed & amazed. Here is a list of the awards our own Bob Steele brought home.

Remember now, please let me know if you have won any awards at the Shows you go to. We certainly love bragging rights for this great club. :)

- | | | |
|-------------------------------|-------------------------|---------------------------------|
| First for Male Guppy | Second for Female Guppy | Third for Livebearer AOV |
| First for Mollie | | Second for Angels |
| First for Angels | | Second for Suckermouth Catfish |
| First for Suckermouth Catfish | | Second for AOV Catfish |
| First for AOV Catfish | | Second for Betta Splendens Male |
| First for AOV Anabantid | | Second for AOV Anabantids |
| First for Rainbows | | Second for Rainbows |
| First for Family Egglayer | | Second for Family Egglayer |

Best Catfish

High Aggregate

Best in Show

This was worth getting up at 3:00 A.M. to start bagging fish to take to the Show.

Thanks, Bob

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