

About The St. Catharines & Area Aquarium Society

Meetings of the St. Catharines & Area Aquarium Society are held on the first Monday of each month at 7:30 p.m. at the Seafarers & Teamsters Union Hall, 70 St. David's Rd. E. Thorold, Ontario. Meetings are not held on holidays; if the first Monday of the month is a holiday, the meeting will be held on the second Monday of the month. There are no meetings held in July or August.

The Society was established in 1958 and is a non-profit, educational organization that is dedicated to the task of promoting interest in the breeding, raising, maintenance and study of aquatic life, both at the beginner and advanced levels.

The St. Catharines & Area Aquarium Society is a charter member of the Canadian Association of Aquarium Clubs, Inc (CAOAC - www.caoac.ca). The St. Catharines & Area Aquarium Society is also a member of the Federation of American Aquarium Societies (FAAS - www.faas.info). More news and information about the St. Catharines & Area Aquarium Society can be found at - www.scaas.info.

Our next meeting will be held on Monday, June 3rd, 2013 at the Seafarers & Teamsters Union Hall, 70 St. David's Rd. E. Thorold, Ontario. Meetings start at 7:30 but feel free to arrive early to enter items for the auction or to "talk fish". All are welcome!

June's Meeting Is A Barbeque – Please bring a treat to share!

Upcoming Events

June 23 - CAOAC Executive Meeting, General Meeting, President's Barbecue and Awards Presentation in Waterdown.

June 30 - Brant Aquarium Society Annual Barbeque

2012-2013 Executive

President	Tom Hillier	(905) 227-5008	tom.hillier@hotmail.com
1st Vice President	John Verhage	(905) 735-7776	
2 nd Vice President	Joe Krawchuk	(905) 325-5562	drummers_secret@hotmail.com
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Treasurer	Roman Haljkevic		romanhaljkevic@gmail.com
Past President	Ken Brady	(905) 935-4716	kbrady2@cogeco.ca

2012-2013 Committees

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Horticultural Awards	Joe Krawchuk	(905) 325-5562	drummers_secret@hotmail.com
Archives	Tom & Pat Bridges	(905) 735-3352	tp.bridges@sympatico.ca
Auction Coordinator	Tom Bridges	(905) 735-3352	tp.bridges@sympatico.ca
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Library	G.O		

In This Issue:

- Meeting Minutes
- Breeding Corydoras napoensis
 - Coldwater Corner #6
- Breeding Melanochromis auratus
- Pat's Basic Guide to a Successful

Freshwater Aquarium

- Trivia



Jar Shows

June Goldfish & Koi

BAP Achievement Award

Presented At May's Meeting

Dave Furness

Thorichthys maculipinnis	10	pts
Ilyodon xantusi	10	pts
David David Jia		

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Endlers livebearers	5 pts.
Cyprinnis carpio (Karasu koi20	pts.
TO I TT 11	

Bob Hayslip

Pseudotrop	heus acei		10	pts
Cynotilania	sp Blue	Reef	10	nt

Congratulations!

Tom Bridges, BAP chair



Membership Fees

Family - \$25 Single - \$20 Junior (Under 16) - \$10 Student (With I.D) - \$10 Senior (Over 65) - \$10 Senior Couple (Both Over 65) - \$15

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Monthly Meeting Minutes

Minutes of the May 6, 2013 General Meeting

- The meeting was Called to Order at 7:45pm by President Tom Hillier. He welcomed the membership and guests.
- Executive Present: President T.Hillier, 1st VP J.Verhage, Past President K.Brady
- Executive Absent: 2ndVP Joe Krawchuk, Treasurer R.Haljkevic, Secretary (vacant position)
- There were no Secretary's Minutes or Treasurer's Report.
- Tom Hillier announced that the **June 3rd** meeting will feature our annual **BBQ.** We will begin at **6:30pm.** The club will provide hot dogs, hamburgers, (sausage?), and pop. Members are asked to bring a salad, dessert, or munchies to share. This is also our annual Election meeting.
- BAP certificates were presented to 3 members by Tom Bridges.
- Steering Chair, Tom Bridges, announced the slate of nominees for the 2013-14 Executive.

President: open

1st Vice-President: John Verhage 2nd Vice-President: Joe Krawchuk

Secretary: open

Treasurer: Roman Haljkevic

- Elections will be held at the June 3rd meeting. Nominations will also be taken from the floor at that time. Please notify Tom if you are interested in any of the positions.
- Video Presentation by Paul Paradis: Paul is a SCAAS member who specializes in Koi breeding. He presented a video featuring the 13 foot round, and 4 foot deep Koi Pond in his back yard. The 3-tier pond area contains approximately 200 fish. His fish are fed trout pellets. He provides a section of pipe in the bottom of the deep area for the Koi to hide if frightened. Paul also showed video of his 40 gallon endler tank, and 50 gallon angel tank. It was an informative and enjoyable presentation. Thank you, Paul.
- After a short break, Tom Hillier became the Auctioneer for our May Auction Night. Due to the length of the auction, I could not remain to take minutes of the Jar Show or adjournment.

Respectfully submitted, Claudia Carthew

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Breeding Corydoras napoensis

70m & Pat Bridges



Corydoras napoensis

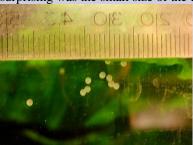
I understand that there are so many species of Corydoras catfish that even a quite prolific fish breeder might happily spend a lifetime breeding nothing else without ever running out of choices. (Estimates range to 180+ with many more waiting to be officially described and lots more being discovered in the wild.) Over the years we have only managed to breed six species and one of those was the C. barbatus which, I know, has been moved to the genus

Scleromystax. The males have whiskers but, so do I. Does that mean I'm no longer a member of Homo not-so-sapiens? Don't answer that! Taxonomically I'm a 'lumper' – less strain on my gradually deteriorating memory.

Corys have a special place in our affections. The pink (albino) aeneus were among the very first fish to breed in our tanks. We broke all the 'rules'. We had just a pair, not the trio that's recommended. We never dropped the temperature of the water. We paid no attention to changes in the weather and used no fungicides with the eggs. In spite of our ignorance, that pair plastered tanks with hundreds of eggs most of which hatched and left us with tank bottoms carpeted with tiny pink creatures all hunting restlessly for food. They were instrumental in motivating a quest for more and bigger tanks. By the way, beginners' luck never seems to stay very long. Over the years we have had to work much harder to get reasonable spawns of Corys and in some cases given up or, at least, almost given up. That brings me to our seventh, the beautiful Corydoras napoensis.

C. napoensis is a fairly recent addition to the hobby, at least as a described species. (The original described specimen, by Nijssen & Isbrucker 1986, came from the Napo River in Ecuador, thus the name.) I know, 1986 seems like ancient history to many of you but, to us, not so much. They're a medium sized Cory, a bit less than 2 inches (5 cm) SL with the males being a little smaller, slimmer and more brightly patterned than the females. Black and dark brown spots on a golden background resolve into horizontal stripes on the sides which stop at the caudal peduncle. Their snouts, (noses to be more polite), are fairly short and blunt and their dorsals have a dark spot. Like most Corys they are wonderfully peaceful with each other and other tank mates and they readily accept almost any good quality sinking food.

Sadly, Dave Unruh is no longer, and we miss him. Over the years we developed admiration and respect for his expertise in breeding and raising a great many species of tropical fish. If they came from his fish room you could be sure the fish had been well cared for and were healthy. When the opportunity came at auction to bid on a bag of his napoensis fry we jumped at the chance and were lucky enough to win out. In our fish room these five young fish were given a ten gallon tank of their own and they matured nicely. I wasn't really surprised when, one day, about a year or so later, I spotted eggs on the front glass. What was a little surprising was the small size of the eggs – about one millimetre in diameter. The barbatus are rather large



napoensis eggs



barbatus eggs

'Corys' so it's not unusual to see that their eggs are a bit more than twice the size but, for a medium sized Cory, the napoensis eggs seemed to us to be remarkably tiny.

Their tank had a bare glass bottom, sponge and box filtration and rather a lot of plants floating around – mostly

Java Fern and Anubias barteri. (We know it's not supposed to be left floating but we've found that it will

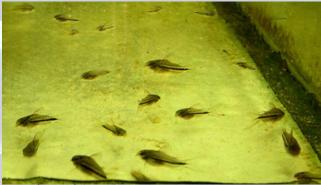
live quite a long time in that state if the leaves don't become suffocated with algae.) The tank was subject to my irregular water changes. (dechlorinated and aged in our barrel), so, I'm sure it became quite acid from time to time. They were fed once a day with a variety of sinking pellet food, flake, held immersed until it was wet enough to sink to the bottom and live white worms as available. Light was provided by a single fluorescent strip and there was no additional heat source other than the fish room temperature. (Please bear in mind that I'm telling this like it was, not necessarily like it should have been.)

I just watched the first couple of batches of eggs. In a few days they began to fungus. It spread to most of them and then they just disappeared. On one or two occasions they disappeared before any noticeable fungus. We wondered if they were actually fertile so I scraped several patches of the next spawn off with a single edged razor blade and, since they were still sticky, attached them to the glass of a hatching tank equipped with an air stone and fresh clean water. I even added a small amount of methylene blue to combat the fungus. In time some hatched and slid down to the bottom where they bobbled about like tiny eggs with wiggling tails. I tried liquid fry food and microworms. Some lasted longer than others but eventually they all died. After a couple more attempts I gave it up. I thought, perhaps because of the egg size, that they were just too delicate.

That might have been the end except that one evening when I was feeding the parent's tank a small napoensis swam out from under a leaf and started nibbling at the food. It was perhaps a third the size of the parent fish and had made it without any help whatever from us. A plan was hatched. We upped feeding to twice a day and began more regular water changes in order to encourage another spawning. Another established tank was cleaned up and made ready to receive the breeding group. The water was roughly matched for pH. Spawning took place and, once there were a few patches of eggs, the breeders were moved to their new digs. Partial water changes were made on the egg tank being careful not let any eggs get exposed to the air. Some plants were removed and as much dirt as possible was siphoned from the bottom. Nothing left to do but wait. I wish I could tell you how many days before hatching but I lost track. There was some fungus but some eggs did hatch and a few wigglers were spied on the bottom glass. They seemed attracted to the sponge filter which we elevated to keep them from getting trapped. These babies were a lot friskier than before. We started adding a little liquid fry food and some microworms to the tank. It was really impossible to observe these tiny creatures actually eating, and a few died – just stopped. We now know that approximately 30 of them did find enough sustenance to survive and grow. After about a month they started eating similar foods to their parents. Growth was uneven with some getting much bigger than others, but after about 4 months that seems to have evened out. For us they were a bit of a challenge but now and then a challenge can be a good thing.



napoensis fry on leaf



a month or so later



latest picture

WOW!



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Coldwater Corner #6

By Dave Easingwood

PAUL'S KOI...

I was very impressed with Paul's Koi video presentation, shown at the May meeting. A nice simple way to show your fish to members using a video camera projected onto the wall. The black koi female spawning in his pond shallows was very neat. It is a big pond that re-circulates water back to a top pond. Congratulations to Paul on his breeding certificate, presented to him by Tom, at the meeting.

MY FIRST BRISTOL SHUBUNKIN SPAWNING, 24th APRIL, 3013.

At Big Al's New Year sale in Mississauga, I bought the bargain of the year - a 35 gallon Bow Aquarium for \$75, sold 'as is'. 36"x18"x15", it makes a nice centerpiece in my fish house; one of 15 aquariums.

Since buying, I set up the tank with mature water, live hornwort (from Ken at auction) and java moss on the bottom. The tank had no fish and was left to mature until the spring when I planned to breed my 'best' pair of Bristol Shubunkins once spring arrived and the water approached 60F.

On April 25th a warm wind blew in and the tank temperature rose to 64F, it was also a full moon. I put in my best 2 year old male Bristol Shubunkin and 24 hours later my best female. On April 28th the female laid eggs, not many maybe 100, and the male 'chased' but not close. I took out the fish, the water was 68F, and eggs should hatch in 7 days.

On day 3 there were lots of fungused eggs, so a heater was put in to keep water at 75F, hatch in 4 days? On day 4 there were at least 20 fertile eggs, on day 5 the fungused eggs disappeared and I could not see the fertile eggs any longer. On day 6 there were no fry!

I noticed snails on the java moss - were all the eggs being eaten? On day 7 there were no babies, disaster. The only thing I can think of was the snails ate the eggs; one little snail was a 'hermit' type, with little legs, did he eat the eggs? He must have come either with the java moss or the hornwort.

All this was very disappointing, a phantom spawning; the tribulations of keeping fancy goldfish and a very disappointing start to my 2013 breeding season!

Here's hoping for some success next month!

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Melanochromis auratus

By Dave Furness



This colorful, aggressive little fish is from the Southern region of Lake Malawi. It is particularly from Jalo Reef southward along the entire western coast down to Crocodile Rocks.

The females and the fry, of the Auratus are bright yellow with black and white stripes on the top half of the body. Adult males are either dark brown or black with either light blue or yellowish stripes. Both the male and females are about five inches in length. Young males will keep their female colors for around six months to protect themselves from their aggressive father. You should only have one male to several females in your tank. If you put several males in the same tank, the males will kill each other off until there is only one.

When I purchased the melanochromis, I purchased eight young fry and placed them into a 15 gallon tank, which had some places to hide. I later placed them into a 100 gallon aquarium with a lot of rock work for their own protection, as their aggression increased as they got older. When the males finally colored up, I found that I had three males and five females. But, despite the roomy tank, I was quickly down to one male.

To keep them comfortable, the PH should be between 7.0 to 8.5, and the temperature should be between 72 and 79 degrees F. The auratus can be fed brine shrimp, but they are mainly vegetarian and should be fed spirulina flakes or even some crushed peas or some blanched spinach. The auratus are mouth brooders, and the females hold their eggs and fry in their mouths for a few weeks before releasing the fry. Mine held for 26 days. The released fry can be fed micro worms and newly hatched brine shrimp. Some vegetation should also be introduced to them.





Pat's Basic Guide to a Successful Freshwater Aquarium

Read these notes and maintain a healthy, problem-free aquarium. You won't encounter the usual problems that occur and you won't be among those who ask "Why did my fish die?"

Assuming you have acquired a tank that doesn't leak, and you have installed an adequate form of filtration, a heater, (necessary for most tropical fish), a cover, (preferably containing a source of light), and you've added water, your tank is now starting the process of becoming 'balanced'. This will happen and takes *several weeks*, at the end of which the 'good bacteria', *necessary to support life in your aquarium*, will reign supreme! This process can be speeded up by immediately adding:

- a) half a dozen small fish that will produce waste to feed the bacteria, then feeding the fish lightly once or twice a day.
- b) some water from an already set up, healthy aquarium, which already contains good bacteria.
- c) some gravel from an already set up, healthy aquarium, which already contains good bacteria. OR
- d) adding an amount of a product specifically designed for this purpose, sold at your local

aquarium store.

If you want to know more about this 'cycle' of the aquarium there are many books available on starting a new aquarium that will explain it in detail. For now, suffice it to say that this cycle *will* happen, and unless care is taken, disaster occurs. Your aquarium may develop a new tank bloom (fogginess in the water) while this cycle is occurring. It will clear up.

During this time and as always, regular care and maintenance is **IMPERATIVE** if you want your fish to live long and healthy lives.

Make sure all equipment used for your aquarium is used only for your aquarium.

Fish may be put into your aquarium as soon as the water clears from setting up the aquarium and you are sure that all the equipment is working properly. As stated above, the fish will start that 'good bacteria' in the aquarium that is vital. Too many fish in your aquarium now, may result in losses. More fish may be added in a few weeks. Under NO CIRCUMSTANCES should you add any more fish until then, and even then, add them a couple (if small, schooling fish, add four or five) at a time over a period of a month or so. Try to choose hardy, easily maintained fish to start with. Some good choices are Danios, (they like to swim in schools), Platies and/or Swordtails, (lots of brilliant colours are available) and two or three Cory Cats to patrol the bottom. If you are obtaining your fish from someone who is knowledgeable and reputable tell them about your setup, including the size of your tank, and ask for their advice.

Change approximately one-quarter of the water in the tank weekly, making sure that the dirt in the bottom of the aquarium is disturbed and sucked out with your syphon. The replacement water must be very close in temperature to the water that you removed and ABSOLUTELY MUST BE DECHLORINATED WATER. THIS WILL AVOID ANY POSSIBILITY OF GILL DAMAGE. Also, if you buy the dechlorinating solution, it usually has other 'stuff' in it to reduce stress and maintain the slime coat.

Continue regular maintenance, once a week. It should take no more than 15 minutes.

Keep an eye on the temperature from time to time. A drop in temperature will encourage stress-related diseases, e.g.: 'Ich', and enough of a rise in temperature would cook the fish **and** the good bacteria, resulting in the loss of your efforts.

When changing water, the best advice is to unplug your heater and power filter. Failure to unplug your heater and possibly exposing it to the air could result in cracking of the heater glass. The important thing here, is to remember to plug everything back in after!

Keep the glass clean, both inside and out. This can be done with a razor blade type of scraper, or bunched up white paper towels. Keeping the glass clean is necessary for aesthetic reasons, obviously, but also so that you can quickly notice any changes in the behavior of your fish that will alert you to the fact that something might be amiss.

If you are using a power or box filter, ALWAYS leave half of the dirty filter floss, (if that's what you are using), in the filter, leaving some of those 'good bacteria' to continue their valuable work. (Change your filter floss when it is really dirty and/or the flow rate from the filter has slowed down noticeably). Rinse out the sponge in the power filter, if you are using one, under TEPID water - never hot. Using hot water will completely destroy the good bacteria that you are striving to establish and maintain. Charcoal, if used, can be rinsed each week,--,tepid water again. Replace at least once a month. In between times, when it looks really dirty, it is o.k. to rinse it under the tap - TEPID water again.

AFTER THE INITIAL PHASE IS OVER, maintain a regular schedule as always, keeping in mind a few important things that will ensure a healthy aquarium:

- 1. It is inadvisable to add store-bought fish to your aquarium unless you can *quarantine them for at least three weeks. Some people may laugh at this because they've never had a problem. However, it takes one unhealthy fish to wipe out your entire population and *it does happen*. Unless you are ABSOLUTELY sure of your source, PLAY IT SAFE. If you do have a quarantine tank, maintain the same schedule of care as your main tank so that when the time comes to put your fish into the main tank, the water will match and there won't be any shock involved (either to you or the fish)!
- 2. When you quarantine, it is essential that you wash ALL aquarium equipment under hot water after any use. Otherwise you run the risk of transferring disease. NEVER USE HOUSEHOLD SOAP when washing aquariums and related

- equipment. Salt can be used as an abrasive/cleaner or a very dilute bleach solution can be used when cleaning equipment. Always rinse well afterward.
- 3. When obtaining fish from ANY SOURCE, never put the water that they came in into your tank. Pour the fish and water into a net and put only the fish into your aquarium.
- 4. When bringing new, healthy fish to your aquarium, check to see if the temperature in the container and the tank is close. A degree or so fluctuation is not harmful. You may opt to float your container of fish in the tank for a few minutes for the temperatures to equalize.

PLANTS: If you use plastic plants, wash them when dirt and/or algae are visible. Live plants can be added shortly after your initial aquarium 'cycle' has finished but once again, unless you are sure of your source, you might be adding disease, snails or other unwelcome guests, unless precautions are taken. If you either don't care, or can't be bothered, plastic plants are for you. If you do care, a brief live plant ***sterilization can be used although this doesn't always get rid of snail eggs. So, sometimes, even though you are careful with new additions, snails may appear in your aquarium. Then the best you can do is to take them out as you see them.

LIGHTS: If you have live plants in your aquarium, they won't survive unless they have enough light. This usually means at least 10 hours per day. A timer is invaluable for this. (A timer is only usable on lights that are 'quick start' or incandescent). They are inexpensive and a *must* if you ever spend a day or two, or more, away from home. *Be sure to plug only your lights into the timer*. The heater must be on all the time during the cooler weather, and the filtration *must be non-stop* all the time. If you have only plastic plants, then the length of the aquarium 'day' will be up to you. Try to keep the 'day' uninterrupted if possible. If the aquarium is in an otherwise dark room, the on and off of lights is stressful for the fish. Keep in mind that incandescent lights produce more heat than fluorescent lights. During hotter weather, this might be a problem.

Keeping the temperature between 75 and 78°F should work well for most tropical fish.

So -- minimal care *of the right kind* can keep your aquarium in top shape. Your aquarium should be good for many years of uninterrupted enjoyment.

Anytime you are away from home for a day or more: don't overfeed your fish just before you leave. Food they can't eat will rot, grow fungus and smell. Your adult fish will be o.k. for a weekend, even a week, without feeding. If you are going to be away longer and someone else feeds your fish, TELL THEM TO FEED ONCE EVERY OTHER DAY, while you are away and ONLY ****SMALL FEEDINGS. SHOW THEM HOW SMALL! More tanks have gone bad due to overfeeding by well-meaning fish-sitters! Your fish will survive longer unfed, while you are away, than they will if they are overfed.

Smell: your aquarium will *never* smell -- unless you have overfed or a fish has died. Eyeball your aquarium for dead fish or other problems, once a day -- before lights out is a good time.

Algae: sometimes, due to a number of circumstances, algae will become a nuisance. Regular maintenance will get it off the plastic plants and interior of the glass, but if its growth becomes rapid and unsightly between weekly cleanings, too much light **might** be the problem, so reduce the duration of your light period slightly. Keep in mind that if your aquarium is near a window, algae will grow more rapidly even if there is decorative paper on the back of the tank. Plants are attractive so if algae continues to be a problem, adding more live plants might also help.

Quite often no matter how many helpful hints are listed, there are more questions, so don't forget, call a more experienced aquarist if you need help!

Winter is a time when some real emergencies can happen due to power outages. This doesn't happen often, but if it does, the aquarium will be fine for a couple of hours, as long as it isn't overpopulated. If it's any longer and *if the temperature starts to drop*, do a small (dechlorinated) water change using slightly warmer water for as long as warm water is available. This will be necessary every two or three hours thereafter while the power is off. Wrapping the tank with a blanket or taping styrofoam pieces on all four sides could be done to reduce heat loss for an extended period of time, but the water would still have to be changed every few hours due to lack of filtration and oxygen.

When the power is back on, uncover the tank and check to see that everything is working and the fish are o.k.

TO CALCULATE THE SIZE OF YOUR AQUARIUM (in gallons): Width x height x depth (inches) $\div 231$ = gallons. (For example 12 in. X 12 in. X 24 in. = 3456 cubic inches. 3456/231 = 14.96 (15 gallons)

TO CALCULATE APPROX. HOW MANY INCHES OF FISH YOUR AQUARIUM CAN SAFELY HOUSE: Width x length divided by 30 equals inches of fish. (For example 12 in. X 24 in. = 288 square inches (of water surface). 288/30 = 9.6 (inches of fish) This is a very rough guide. You could have considerably more than this if the fish are tiny, such as Neon tetras but perhaps less if the fish is large and full bodied such as an Oscar.

TO CONVERT degrees Fahrenheit to degrees Celsius subtract 32 from the number of degrees F. and divide the result by 1.8. (For example 80° F is 80 - 32 = 48. $48/1.8 = 26.7^{\circ}$ C)

Patience is important when you start up an aquarium. It always pays off.

* Quarantining: Use a small heated and filtered tank, with a lid. (Use a **'dirty' filter.) Take some of the floss from a filter that is in use, put it with some fresh floss in the filter in the quarantine tank. At least this will guarantee that your fish won't suffer as much stress from the tank going through the 'cycle'. The dirty floss already has some of those precious 'good bacteria' in it.

***Sterilization of live plants: Use a tablespoon of Alum (available in any drug store) dissolved in a gallon of tepid, dechlorinated water, for five minutes ONLY! Remove from the alum solution and rinse in some clean, tepid, dechlorinated water. (Repeat this treatment several times at intervals over 7 to 10 days and then inspect the plants carefully. If no live snails, even very tiny ones, are found, it should be safe to place the plants in your tank.)

****Feeding: Put A SMALL PINCH OF FOOD IN AND MAKE SURE THE FISH EAT IT ALMOST IMMEDIATELY. AFTER ABOUT 5 MINUTES, THE UNEATEN FOOD WILL SINK TO THE BOTTOM OF THE TANK AND MAY NOT BE EATEN. It will fungus, smell and look unsightly. Feed your fish once a day. Remember, most fish will *always* appear to be hungry. Variety in your fish's diet is a good thing.

READ BOOKS -- YOU NEED TO KNOW!

GOLDFISH ARE TEMPERATE, NOT TROPICAL FISH

ITEMS YOU WILL NEED TO BEGIN:

- An aquarium of your choice (Get the largest you can afford and for which you have space)
- A lid (canopy with light included)
- A suitable stand
- A heater suitable for the size of the tank
- A filter -- many types available -- and filter media
- An air pump (for some types of filters).
- Gravel, (used with an under-gravel type of filter), or for aesthetic reasons if you have another type of filtration.
- A scraper
- A syphon for water changes
- A bucket to prepare water to return to the tank

- A stick-on type of thermometer
- Backing for the tank if desired
- A bottle of dechlorinator for water changes. (Get one that says it removes chloramines.)
- A variety of fish food
- An inexpensive timer
- A site for your aquarium setup where there is an electrical outlet

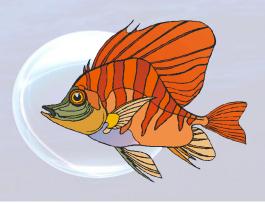
READ BOOKS - WE NEVER KNOW ALL WE THINK WE DO!

If you encounter any other problems, just ask!

A good idea -- keep a dated, detailed list of everything you do in your fish room. If you don't, you'll wish you did!

Have fun! Thanks for reading!

Pat Bridges





let's have a little fun!

May Answers

- 1.) "Epiphytic algae" grow on the leaves of our aquarium plants. Both in the aquarium and in natural waters, they are an essential part of: the biofilm community
- 2.) Only three species of cichlids are native to India and Sri Lanka. They are all members of the genus Etroplus but more familiar to aquarists as: <u>Chromides</u>
- 3.) "Operculum" is an evocative anatomical label in describing fish, because in Latin it refers to the: little lid
- 4.) The floating bubble nest of a gourami serves to: keep the eggs close to a source of oxygen.
- 5.) Most fishes' eyes are all but immobile. One fish that can move its eyes almost as if it were winking, however, is a <u>Corydora</u>.

June Questions

Questions & Answers Courtesy of www.funtrivia.com

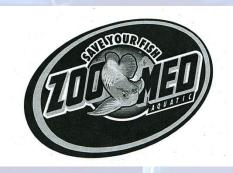
- 1.) What swims in the sea, carries a machine gun, and makes you an offer you can't refuse?
- 2.) Which aquarium resident was the first fish to get its entire genome mapped?
 - Tiger Barb
 - Guppy
 - C Zebra Danio
 - Endler's Livebearer
- 3.) How do you stop a fish from smelling?
- 4.) You know that filtration may be mechanical, chemical or biological. Most filters combine more than one function. Though "redundancy" is a good thing, an example of a purely mechanical filter medium would be:
 - an under gravel filter.
 - hydrogen peroxide.
 - granular activated carbon.
 - diatomaceous earth.

- 5.) Your Harlequin Fish are behaving strangely. One is turning upside-down and quivering under a plant leaf. This is because:
 - It is "flashing" in reaction to gill parasites.
 - It is suffering from dropsy or bloat.
 - It is "shimmying' for lack of electrolytes.
 - Tt is spawning.

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