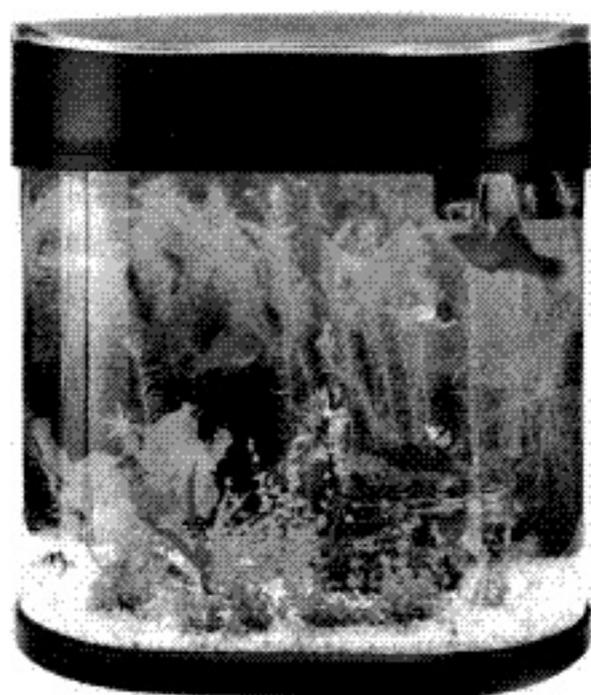




Apistogramma barlowi
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Carla's Comments

Carla MacDonald

Hi Everyone and Happy Holidays!!!

December is such a busy month with Christmas and the New Year both only a stones throw away. First we have our meeting on Thurs Dec 8. It's an important meeting as we get to mingle and enjoy each others' company, as well as pizza, wings and snacks. Bring a snack to share if you can. We are also going to be playing a fishy game with Noel.

Many others are not as fortunate as many of us so we ask that you bring a non perishable food item for our annual food drive for Neighbour to Neighbour. Any money raised through the fish table draw also goes to help others in need. Let's see if you've been naughty or nice.....does Santa have something for you!

The following Thurs Dec 15 some of us are meeting for dinner at Red Maple Chinese Food on Mapleview and Appleby Line. The cost there is \$14.99 plus tax and tipping. Please let me know if you are interested in making it out with all your fishy friends.

I'd like to thank Larry Johnson for his presentation last month. The pictures sure were beautiful. It must be really spectacular actually being in the water with these amazing fish. Thank you for sharing your experience.

January is elections month. If you are interested in joining the executive there is still time, as all positions are open. Charlie D or myself must be notified of your decision by the end of the Dec meeting. The program for January will be about foods we can make for our fish.

Are you interested in taking part in the Annual Home Show? If you haven't signed up please do so at the meeting as well.

I wish you all a very Merry Holiday Season and a Happy New Year!

Carla

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Breeding Norman's Lampeye Killifish

Charles Drew

Aplocheilichthys normani, commonly known as Norman's Lampeye, is a great, hardy, easy to spawn killifish that is a good choice for a person looking for a first fish to spawn. It is widely found across North Africa in savannahs in Sudan, Nigeria, and Uganda.

Males have longer fins, unlike the females' which are rounded. They get the name lampeye from the way the blue on the top of the iris glows like a lamp. They are a somewhat shy and peaceful little fish rarely growing over 3cm. They adapt well to our tap water and they like temperatures from 73 to 78F. Unlike some killifish Norman's Lampeye can live about 3 years. They prefer to be kept in small groups.

I picked my group of 6 at Big Al's in Oakville. It is unusual to find killifish in most local fish stores but never the less they do show up on occasion.

I brought them home and placed them in a 5 gallon aquarium. I added a mop and fed the fish live baby brine shrimp as well as white worms and black worms. Soon they were in good condition and started to spawn in the mop that I had provided. The eggs are very large for such a small fish and easy to collect. I carefully picked the eggs from the mop and placed them in a dish of water from the tank. I added a drop of Methylene Blue to protect them from fungus and set them on a shelf to hatch. After about 12 days the eggs started to hatch. I caught the fry with an eye dropper and moved them to a 2-1/2 gallon tank. There they were fed micro worms and baby brine shrimp. The fry grew, slow but steady, and after awhile were soon big enough to spawn themselves.

If you need a small peaceful killie for a nano tank or an easy fish to breed then try Norman's Lampeye.



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Writing Articles

Adrian Lawler
original to aquarticles.com

We can probably all write articles to share our experiences with fish, plants, tanks, ponds, diseases, etc. with people around the world. Such article writing should be encouraged because different people look at things differently and think differently and may have an observation or knowledge that we do not have. It has been by word of mouth, and then by word of pen, and now by computer that human knowledge has been passed on to others in our human history.

We cannot know everything about a subject and convey that in a short article to our readers. We may leave something important out, but we should try the best we can and maybe the next person will pick up on something we might have missed. He should not be overly critical of the previous author, because we cannot list everything, we think differently, and he opens himself up for criticism for things he forgot.

No matter how many times (one article I revised 224 times) I go over an article, I usually find something that should be changed to make the article clearer or more correct. Do the best you can in your writing. A true seeker of knowledge will read your article, think about it, apply what he learned new to his needs, and go on. A nasty person will find fault anywhere and everywhere he can, citing errors of commission and omission, and even twisting around what you said to make untrue statements. None of us is perfect; we all make mistakes. In fact, making a mistake can prompt others to thoroughly think about something to arrive at good answers. Mistakes, then updates, are constantly being made in scientific work, in computer programming, in space shuttles, etc., etc., and our base of knowledge becomes larger and larger, and better and better.

So, exercise your brain. Tell (or show) us what you observed, or found out, or think about the natural or artificial aquatic habitats around you.



What is the best way to 'cycle' a reef tank?

Robert M. Metelsky

Cycle the tank with live rock only!

Step 1. Purchase all (or if your budget is low at the time, get at least 1/2) of the live rock you will need, and proceed to step 2. When ready, get the second 1/2 of the rock.

Step 2. When all the live rock is in the tank, test for ammonia and nitrite. You need to get a zero reading, which could take 2 to 6 weeks, depending on the amount of die-off on the rock. Do not proceed to step 3 until steps 1 and 2 are complete.

Step 3. Begin to add inverts (clams, shrimp, starfish, crabs, snails). Add a few at a time, checking ammonia and nitrite. After all inverts are added, and the test results for ammonia and nitrite are zero, proceed to add your corals, a few at a time. Continue to test for ammonia and nitrite until all your corals are added. When the readings are at zero (this will usually take about 2 weeks, possibly longer), proceed to add the fish in the same manner as above, until all the fish have been added.

Cycling the tank with live rock is the simplest, most trouble-free way to start a reef tank.

Step 4. When the test results read zero, and you begin to test and record nitrate, your tank is completely cycled. When you cycle this way, the live rock does most of the conditioning. This is the best way to start your system. It is definitely the safest procedure, because it is hard to know how much die-off the live rock has on it. This way you won't endanger the valuable, delicate specimens you will add later. Remember, only bad things happen fast. You will need to exercise patience, resisting the impulse to do things in reverse. Remember: live rock first, inverts second, corals third, and fish last.

You are now up and running. This will take about 2 to 6 weeks, possibly longer.



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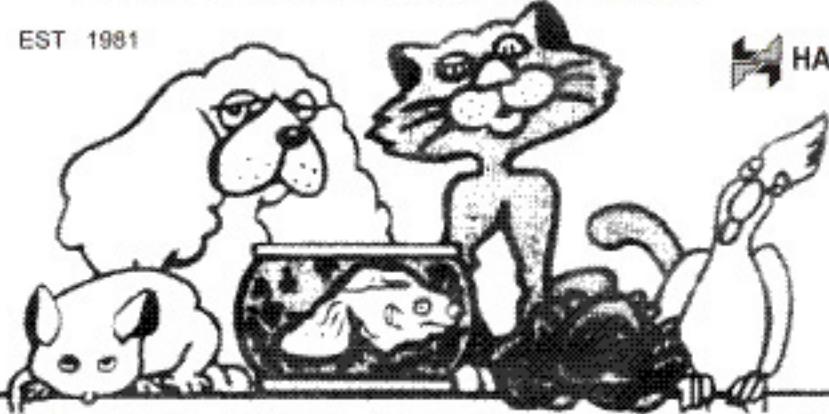
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Once all the rock is in the tank, the cycling of the water will begin. In approximately three days, there should be a measurable amount of ammonia. Test and record the ammonia at this time. Continue to test and record it at three to four-day intervals. The reading will rise and rise, until one day it will drop off and be zero. At that time, begin to test for nitrite.

The nitrite cycle is very similar to the ammonia cycle, so use the same procedure as described for ammonia. Do not become alarmed with the test results! This is the cycling process, and the tank will balance out! As long as you do not have any fish, inverts or coral in the tank, you have nothing to worry about. Be patient, let nature take its course, and the tank will cycle.

When the nitrite test reads zero, you should begin to test for nitrate. You will get only very faint nitrate readings, because the tank is now balanced and has virtually no bio-load (waste products from fish, invertebrates, etc.).

When the bacteria “catch up” (multiply to process the waste in the tank), you will get zero readings of ammonia and nitrite. The tank has now had its first and largest cycle. When you add more livestock, this will increase the waste load, and the bacteria will have to multiply and catch up with the increased load. You will get mini-cycles of ammonia and nitrite when you add livestock. These small cycles will be insignificant as long as you don’t add too many creatures at once. Begin by adding inverts, two to three at a time, until they are all in. Do the same with the corals (possibly slower because of the cost). Test for ammonia and nitrite a few days after each addition. If the test results are zero, proceed to add creatures as described until all inverts and corals are added. Give them a week or so to acclimate. Test for ammonia and nitrite. When they register zero, and the inverts and corals appear to be well adjusted, you are ready to add fish in the same manner as described.



December 1991 – In his President’s message, Tom Tota reminisced about the club’s recent trip to the University of Guelph to view the Axelrod fossil collection, and tour the Zoology building which had been renamed the Axelrod Building. The guest speaker at the December meeting was to be Tom Mason from the Toronto Zoo, speaking on Arachnids. Articles this month included “As Nasty As They Wanna Be” (Snakeheads) by Norm McEvoy, “Keeping and Breeding the Kribensis” by Peter Vanderboom, and the following from Charlie Drew:

Spawning the Cardinal Tetra

Charles Drew

The Cardinal Tetra is one of the most colourful and popular of aquarium fishes. The main difference between them and Neon Tetras is that the red colour runs all the way through from head to tail. They also grow slightly larger than Neons.

I have spawned Neons on many occasions and have had them going for six generations but I was never successful with Cardinals. I decided that now that I have a reverse osmosis system that I would give them another try. I set up a five gallon aquarium with RO water that had been made dark and acid with peat moss. The bottom was covered with mops made of orlon fibre. I set the water temperature at 78°F and put in two pairs. I checked daily for eggs and on the third day I saw some – not too many but enough to make me move the breeders to another tank.

The eggs hatched in twenty four hours and the fry clung to the sides of the tank for several days before they became free swimming. Their first food was infusoria, supplied by adding water from a snail tank. The fry grew at a good pace and in three weeks were quarter-inch long replicas of their parents. At present, I have two dozen fry, three quarters of an inch long. Not super by my standards as I look at my tank of three hundred Diamond Tetras from one spawning, but what the heck...it’s a start.



Culturing White Worms (Anonymous)

White worms (*Enchytrae albidus*) are a good, rich source of live food for your fish. It would be advisable however, to feed it more as an occasional food instead of as a staple diet. They can bring many fish into breeding condition.

White worms prefer cool, moist surroundings where there is plenty of humus. They can be cultured in wooden boxes, plastic shoe boxes, or Styrofoam boxes into which you have put a rich soil, such as potting soil (no fertilizers added), that is kept slightly damp.

They can be fed a variety of foods but the one we have been the most successful with is plain yogourt (1 tablespoon) or white bread (1/2 slice) soaked in milk. It is best to place their food on the surface of the soil and a piece of glass placed over the food, or better yet the entire surface. This helps keep the moisture in. The worms will collect all around the food and can easily be collected from there.

They are best stored in a cool place, 55 to 70 degrees. With just a little attention, White Worms can be a very good source of food for your fish.



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Gallery



Aplocheilichthys normani, top
Paracheirodon axelrodi, bottom



Odds 'n' Ends

EVENTS

<i>December 18</i>	CAOAC General Meeting, Waterdown
<i>January 15</i>	CAOAC General Meeting, Waterdown

MEETINGS

<i>December 8</i>	Holiday Meeting
<i>January 12</i>	January Meeting - Elections and DIY Fish Foods

Submissions

Articles are needed for every month's bulletin. Topics can include breeding, nutrition, water quality, do-it-yourself techniques, and amusing anecdotes. We have kicked off a new practice of using a hobbyist's photo for the cover of the e-bulletin. Hobbyist photos are needed for future months' bulletins. They do not need to be show quality fish or professional quality photos. Please send submissions to bulletin@hdas.ca



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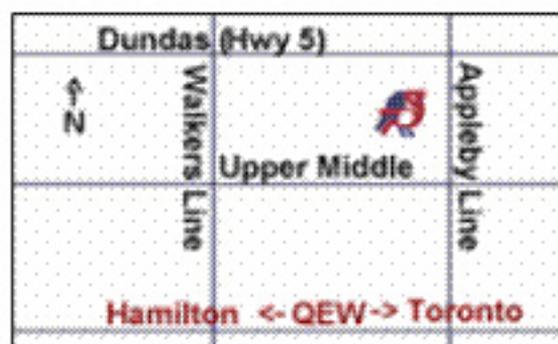
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