



April 23, 2008

# tideline aquatics Newsletter

## Tideline Aquatics Store Hours

Monday – Friday 11am-7pm  
Saturday 10am-6pm  
Sundays 1pm-5pm

## WHAT TO EXPECT WHEN YOUR AQUARIUM OR POND IS CYCLING

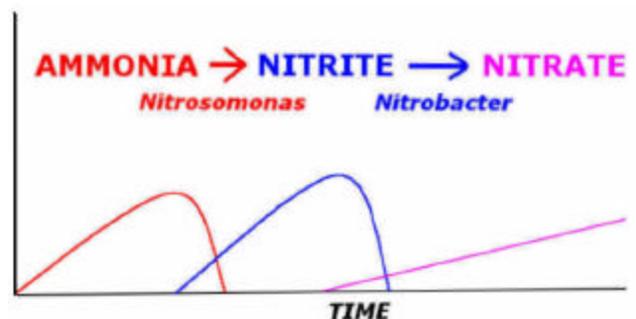
New tank syndrome, the nitrogen cycle, cycling, biological filter establishing, these are all common names given to the condition your aquarium or pond goes through during the first 2-6 weeks of being set up with live animals. The biggest mistake newcomers make is setting up their aquarium or pond and filling it with live animals! When a new aquarium or pond is filled with treated tap water, there are no bacteria established to keep the water in a stable, healthy condition. There are good bacteria that eventually colonize in a new system that keeps ammonia and nitrite levels at zero. But in the beginning, the aquarium or pond is sterile. Once live animals are placed in the system, they begin to excrete ammonia in the water.



## TESTING THE WATER WILL LET YOU KNOW WHEN IT IS SAFE TO ADD NEW ANIMALS!

With no beneficial bacteria present, the ammonia begins to accumulate often reaching dangerously high levels. Only a small number of hardy fish should be placed in a new system. With a small number of fish, ammonia is excreted in smaller amounts giving the biological filter (the good nitrifying bacteria) time to multiply and colonize in the system and the fish time to acclimate to the

less than favorable water conditions. For this reason, only hardy species should be chosen to cycle a new aquarium or pond. During this break-in period, you can expect the water to become hazy, often looking as if clouds of dust particles are floating around in the water. This is referred to as a bacterial bloom and is completely normal for new aquariums and pond. View this graph for what is happening to the water during this period.



You can see that the ammonia level (in red) rises until enough ammonia converting bacteria are present to keep up with the amount of ammonia being released by the fish. The ammonia is converted to nitrite (in blue) which also peaks to dangerously high levels. As nitrite converting bacteria become established, they convert the nitrite to the least toxic end product, nitrate (in pink). If the fish you chose to cycle your system were hardy species and in very small numbers, the ammonia and nitrite levels peak slowly allowing the hardy species to acclimate to these dangerous conditions. If during this period you only feed the fish very small amounts, quite often you will not lose any of the fish. The bacteria develop naturally in your system and will stabilize the water parameters often within 2-6 weeks. By testing the water during this break-in period, you will be able to determine when it is safe to add new fish to the system. NEVER add new animals during this unstable period. They will be unable to acclimate to the adverse water

conditions and will die. However, the fish you added at the beginning will appear to remain healthy. Once the aquarium or pond has finished cycling (tests for ammonia and nitrite read at zero), small numbers of new animals can be added safely. As the load of livestock increases, the bacterial colonies will grow to keep up with the amount of ammonia and nitrite being produced by the organisms. The water conditions will remain stable from this point forward **as long as you do not:**

1. Add too many fish at one time.
2. Overfeed your fish.
3. Clean your biological media (bioballs, biowheels, etc) with tap water.
4. Allow the pH to drop below 6.5 (very important).
5. Allow dead fish or even plants to remain in the aquarium or pond.
6. Use a medication that destroys your biological filter (harms the good bacteria).

There are means of speeding up the cycling process in an aquarium or pond. Bottled bacterial additives are the most commonly available choice though you can also use media from an already established aquarium or pond.



Gravel, plants, driftwood, biomedica, live rock and even filter media from an already established system can be added to your new system to inoculate it with good bacteria. This often will speed up the cycling process by half. The use of water from an established system can help but actual media (like mentioned above) is much more efficient. Only by testing the water for ammonia, nitrite AND pH will you know when it is safe to add new livestock to your system.

Here are some good species that are often tough enough to cycle a new aquarium (in small numbers):

**FRESHWATER:** Red Serpae Tetras, Zebra Danios, Giant Danios, Black Skirt Tetras, Tiger Barbs, White Clouds, Trichogaster Gouramis (blue, gold, platinum gouramis)

**SALTWATER:** Damsel fish, Common Hermit Crabs

**REEF:** Cured Live Rock

**POND:** Comet Goldfish, White Clouds, Shubunkins

Please note that during the cycling process, filtration components like UV sterilizers (clarifiers in ponds) should be left unplugged. During this period, you want to encourage bacterial growth at a steady rate to reduce the amount of time your fish are exposed to ammonia and nitrite. Once the ammonia and nitrite levels are at zero, you can safely turn on this component. Also test the pH level to ensure it is not allowed to drop below 6.5 as the biological filter will shut down in extremely acidic water conditions. The use of simple buffers will easily adjust the pH. If you start a pond in the cold winter months, your biological filter may not even establish itself until the water warms up in the spring. Additions of fish to new ponds in winter should be kept at very low numbers. Knowing how to cycle your aquarium or pond properly will not only save you money on dying livestock, but you will understand what to expect of your system during this unstable period. New fish keepers often panic and make the worst mistake with their new system; they break it down, rinse everything and start all over again. And that means the cycling process has to occur all over again!! Now you know!

## **WHAT'S UP WITH ALL THIS FOAM ON MY POND!!**

Goldfish and koi spawn in the spring often just after a warm spring thunderstorm. The males dart about the water chasing the females cornering them and slamming them against the pond walls and plants. As the females release the eggs, the males release sperm into the water to fertilize the eggs. Spawning is something to see but the aftermath on your pond is dramatic. The surface of the pond becomes covered in clumps of white

foam. The surface of the water often appears to have an oily film and the pond itself give off a foul odor. For the garden pond, this is all completely normal just after the fish spawn.



But for your fish, it is a time for you to take action. Just after spawning, the ammonia level in the pond often rises rapidly from the sudden increase in organic material from the spawning. This organic load can also lead to a pH crash if your carbonate hardness (KH, alkalinity) is not maintained properly. Pond owners should perform a 25% - 50% partial water change after spawning to reduce the ammonia level to a point where the biological filter can compensate and stabilize the water parameters. The addition of fresh activated carbon will also speed up the organic reduction process as well as rid the pond of the foul odor. Having a biological boosting additive that contains nitrifying bacteria on hand is a good idea in the spring just for this reason. Spawning can occur two or three times in the spring and you will want to take action after each occurrence. This is a normal cycle that will happen every spring unless you plan on housing either all males or all females in your pond. Remember when you perform that large partial water change; add a water conditioner to the new water to prevent the fish from being killed by the chlorine, chloramines and ammonia in the tap water. Now when you see that foam on the water, you will not think the neighborhood kids sabotaged your garden pond! You'll know your fish are just getting frisky for spring!

## **JAPANESE KOI ARE HERE!!**



The Japanese Koi shipment arrived last week and they are extraordinary!! This shipment has the best mix of koi varieties that we have ever received. These fish will be quarantined until May 12<sup>th</sup>. Why, you ask? We want to ensure that the fish are free of all parasites which requires a 5-7 day treatment period. After that regiment, we expose the new fish to healthy domestic koi to watch for KHV. Though the chance of these fish having KHV is extremely small, we still quarantine them so you can be confident the fish you are buying are healthy and KHV free. That said, beginning THIS Friday, you can pick out the fish you want to purchase, pay for them in full, and pick them up after the quarantine period has expired. We will hold your fish for you until they are ready to go home. If you choose to take the fish home before the quarantine period has expired, you will be required to sign a waiver. This waiver says that you have chosen to take fish from our store before the quarantine period has expired and that you are solely responsible for the fish. That means no warranty, no exchanges and no liability to Tideline if something were to happen. Once again, **you will be responsible for your decision to take fish home before the quarantine period has expired.** See all of you koi folks on Friday!

Japanese koi prices:

\$39.99 EACH or 4/\$140.00

## **NOW AVAILABLE AT TIDELINE!**

We just received a shipment of the rarely seen Double Trunk Elephantnose Morymyrid – and these are 1” long babies!! This is about as cute as a freshwater fish can get. These little guys are darting all over the tank even eating flake foods – unheard of with most elephantnose. We have been feeding blackworms, brine shrimp, flake food and even tiny frozen mysis shrimp to these

cool little guys and they are all feeding at amazing zest!



**RARE CAMPYLOMORMYRUS ELEPHANTNOSE**

The long 'nose' is used to locate food items. Due to the small mouth on these fish, frozen food choices like brine, bloodworms, blackworms and mysis should be fed daily for this incredible species to remain healthy. Avoid keeping these fish with aggressive eaters as elephantnose can easily be starved out over time. Though these fish can be territorial, they are completely peaceful with most other species.



Elephantnose are best kept either in larger groups of 5 or more or as singles. Do not house these fish with black ghost knives or other fish that use electrical fields to navigate in the aquarium. Be sure and check this group of babies out during your next visit to Tideline Aquatics. Even saltwater fish keepers will enjoy getting a peak at this rarely imported species of elephantnose.

## **What's New At Tideline**

### **FEEDERS (NEARLY OUT!!):**

Feeder Goldfish, Feeder Rosey Redds, Feeder Guppies, Feeder Crayfish, Feeder Fiddler Crabs, Live Black Worms.

Feeder Ghost Shrimp are still not available!! The supplier received a shipment that was in poor condition causing them to have no ghost shrimp to sell.

### **German Hans Discus (NOW IN STOCK!):**

Red Turquoise Discus, Blue Pigeon Blood Discus, Blue Snakeskin Discus, Marlboro Red Discus, Blue Diamond Discus, Red Scribbled Discus. This spectacular group of discus arrived late last week and are now eating well and completely recovered from shipping stress.

### **FRESHWATER FISH:**

**Livebearers** – Dalmation Mollies, Silver Lyretail Mollies, Fancy Guppies, Assorted Color Platies.

**Catfish/Loaches/Plecostomus** – Gold/Green Corydoras Catfish, Albino Corydoras Catfish, Hoplosternum Catfish, Shovelnose Catfish, Cute Stone Catfish, Colombian Blackfin Shark Catfish, Botia striata Loaches, Small Clown Loaches (few), Otocinclus Dwarf Algae Eaters, Small Common Plecostomus, Tons of Fancy Plecostomus.

**Brackish** – Silver Scatophagus, Green Spotted Pufferfish, Bumble Bee Gobies, Archerfish, Mudskippers.

**Tetras / Rasboras / Barbs / Danios** – Bright Red Cherry Barbs, Rainbow Dace Minnows, Harlequin Rasboras, XL Rummynose Tetras, Diamond Bleeding Heart Tetras, Ember Tetras, Hummingbird Characins, Red Serpae Tetras, White Cloud Mountain Minnows, Golden White Clouds, XL Neon Tetras.

**Gouramis / Bettas** – Male Bettas, Female Bettas, Red Flame Dwarf Gouramis, Blue Neon Dwarf Gouramis, Opaline Gouramis, Platinum Gouramis, Moonlight Gouramis, Pearl Leeri Gouramis, NEW Red Flame Paradise Gouramis.

**Cichlids** (Dwarf, South American, African) – Green Severums, Gold Severums, Assorted

Medium Peacock Cichlids, Jaguar Cichlids, German Blue Rams.

**Other** – Jumbo South American Lungfish, African Baby Whales, Baby Double Trunk Elephantnose (super cool and rare), Tank Bred Black Ghost Knives, Medium Silver Arowanas, Peacock Eels, Olive Nerite Snails, Mystery Snails, Roseline Denisonii Sharks, Turquoise Rainbowfish,

**Goldfish** – Medium Red Cap Orandas, Small Red Cap Orandas, Red Orandas, Calico Ryunkins, Red Ryunkins, Small Assorted Fantail Goldfish, Small Black Moors, Medium Assorted Fantail Goldfish, Medium Black Moors, Red Ranchu Lionhead.

**Koi, Pond Fish and Pond Plants** – Our pond area is now open and is filled to the brim with goldfish, Shubunkins, koi, water lilies, oxygenators, jumbo bullfrog tadpoles, bog plants and floating island plants. Japanese Koi are now in stock. **Tropical lilies, lotus, new floating island plants and new bog plants arrive Friday morning!!**

**Live Aquarium Plants** – Micro Sword Clumps, Ludwigia ovalis, Baby Teardrop on Driftwood, Amazon Swords, Cabomba, Red Narrow Ludwigia, Rotala indica, Bacopa, Limnophila, Potamogeton gayi, Dwarf Lily Bulbs, Java Fern Mats, Hygrophila compacta (NEW), Anacharis naja (legal species), Watersprite, Rotala magenta, Hornwort, Dwarf Hairgrass, Dwarf Baby Teardrop.

The list above represents only the most recent livestock shipment. We have MANY other species available at the store!

### **SALTWATER FISH:**

**Angels / Butterflyfish** – Juvenile Annularis Angelfish, Blue Koran Angelfish, Coral Beauty Angelfish, Flame Angelfish, Halfblack Angelfish, Swallowtail Angelfish, Eiblii Angelfish, Asfur Angelfish, Semilavartus Butterflyfish, Kleini Butterflyfish.

**Clownfish** – Ocellaris Clownfish, True Percula Clownfish, Gold Bar Maroon Clownfish, Baby Maroon Clownfish, Baby True Black & White Ocellaris Clownfish, Sebae Clownfish.

**Gobies / Blennies** – Red Trimma Gobies, XL Scissortail Goby, Sailfin Blennies, Bino Dragon Sifter Gobies, Rare Black & White Priolepsis Gobies, Orange Spotted Blennies, Engineer Gobies, Tiger Wardi Watchman Gobies, Yellow Watchman Gobies.

**Wrasses / Hogfish** – Indo Harlequin Tuskfish, Banded Wrasses, Red Slingjaw Wrasse, Paddlefin Wrasse, Basket Coris Wrasses, Red Diana Hogfish.

**Tangs / Rabbitfish** – Orangefin Tominensis Tangs, Yellow Tangs, Powder Blue Tangs, Medium Blue Regal Tangs, Orange Shoulder Tangs, Sailfin Tangs, Clown Tang, Yellow Mimic Tangs, Orange Striped Bristletooth Tangs, Red Sea Purple Tang, Magnificent Foxface, Bluespot Rabbitfish, Foxface Rabbitfish.

**Triggerfish / Eels / Puffers** – Small Humu Triggerfish, Black Indicus Triggerfish, Rectangulus Triggerfish, Clown Triggerfish, Niger Triggerfish, Bluespot Pufferfish, Valentini Pufferfish, Small Snowflake Moray Eels, Chainlink Moray Eels.

**Lionfish** – Fuzzy Dwarf Lionfish, Antennata Lionfish, Volitan Lionfish.

**Other** – Assorted Warty Anglerfish (babies), Purple Rhinopias Scorpionfish, Assorted Damsel fish.

### **INVERTEBRATES:**

**Snails / Cucumbers / Starfish / Urchins** – Sea Apple, Catseye Turbo Snails, Cerith Snails, XXL Nassarius Sand Sifter Snails, Nerite Snails, XXL Sand Sifter Cucumbers, Orange Linkia Reef Starfish.

**Crustaceans** – Cleaner Shrimp, Green Pistol Shrimp, Candy Stripe Pistol Shrimp, Rare Michael's Pistol Shrimp, Tiger Pistol Shrimp, Caribbean Peppermint Shrimp, Coral Banded Shrimp, Evil Mantis Shrimp.

**Corals / Polyps / Mushrooms** – True Pink Zoanthid Polyp Rocks, Super Favia / Favites Brain Corals, Ultra Blasstomussa wellsi Corals, Cultured Toadstool Leather Corals, Lime Green Acropora Corals, Australia Elegant Corals, Candy Caulestrea Corals, Torch Corals, Bright Orange Cactus Pavona Maldivensis Corals, Super Green Trachyphyllia Corals, Super Red

Trachyphyllia Corals, Ruffled Ridge Turbinaria Corals.

**Other** – Bubble Anemones, Dersa Clams, Maidens Hair Algae Rock, Assorted Feather Dusters, White Tip Anemone, Assorted Color Long Tentacle Anemones, Rock Anemones, Blue Spotted Seahares (a couple of them left only).

This list is based on our most recent shipment of saltwater livestock. There are many other species available in the store not included in this list.