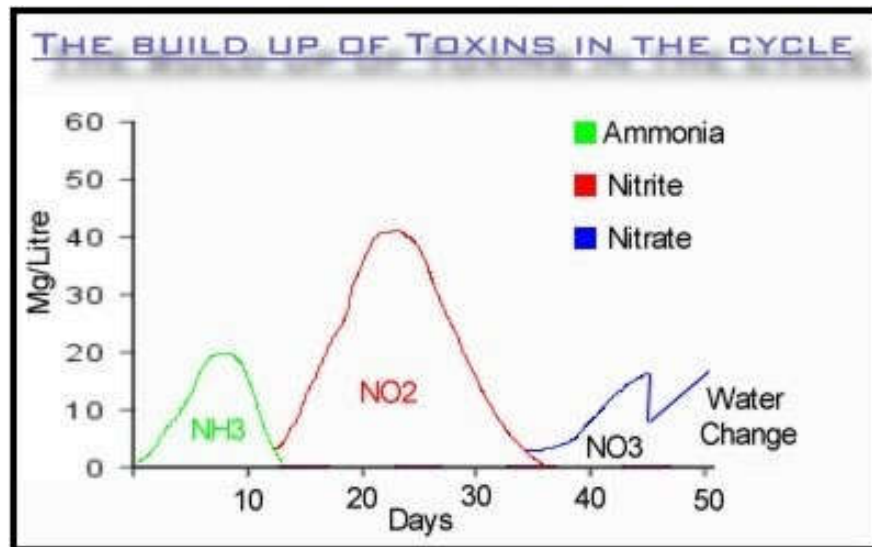


Alamosa Small Animals

Freshwater Aquarium Set-Up “Cycling the Aquarium”



There's almost nothing more satisfying than an established successful aquarium. Aquariums reduce stress, provide a comforting background white noise, require very minimal maintenance once established, and help humidify the environment.

The difference in being a successful and an unsuccessful aquarist boils down to patience and understanding the build-up and break-down of chemicals in an aquarium.

When a fish is introduced to a new aquarium, it is important that the water has been treated to remove the chemicals added to make it safe to drink (chemicals such as chlorine, chloramine, bromine, etc. that make water safe to drink are very harmful / deadly to fish).

After a fish is added to safe water, it begins to add waste, ammonia. As the fish produces waste, the ammonia in the aquarium builds-up until a bacteria establishes that breaks down the ammonia into nitrite. As the bacteria grow and catch up to the ammonia levels, this is known as the aquarium "cycling". If a new aquarist adds too many fish too quickly, before an aquarium is established, all the fish will die around day 10-14 because of an ammonia spike.

This is why one starts with just a couple fish to cycle the aquarium until the bacterial biological filter is established.

It is important to remember that the aquarium goes through two cycles before it is established. The first cycle creates a bacteria population that breaks down ammonia into nitrite, a second cycle allows bacteria to populate that break down nitrite into nitrate.

It takes approximately 40 days for an aquarium to go through both cycles and become truly established. Once an aquarium is established, one needs only exchange 20-30% of the water every 4-8 weeks (to lower nitrate levels in the aquarium).

When starting a new aquarium, follow these steps to avoid mass die-offs and frustrating failures at establishing your aquarium:

- With the exception of betta fish, tropical fish sold by ASA require moving, oxygenated water that is heated. Make sure your aquarium has a filter that moves the water as well as a heater that keeps the aquarium's temperature between 75 and 85 degrees.
- Treat your water with API Stress Coat to get rid of any chemicals that will harm your fish.
- Purchase just a fish or two (no more!) to cycle your aquarium for its first 40 days.
- The build up of food and waste is potentially deadly to your fish as they cycle. Feed your new fish NO MORE than an absolute tiny pinch of food that is consumed in under 3 minutes, once a day. Overfeeding a cycling aquarium ends in total tank die-off. Do not overfeed your new fish.
- After 40 days, the tank's bacteria levels should be established, and an aquarist can begin adding new fish to the aquarium (add one or two fish / week). A general guideline is that an established aquarium can hold no more than 1" of fish per gallon. An established ten gallon aquarium should not have more than 10" of total fish length.
- Every 4-8 weeks, an aquarium should have approximately 20% of its water exchanged with new API Stress Coat treated water. This reduces the overall levels of nitrate, but doesn't affect the bacteria levels. Do not remove and replace more than 50% of the aquarium's water at any one time, as this could disrupt your biological filter and result in a mass die-off.

Betta Fish

- BETTAS are an exception to usual tropical fish protocol. All of ASA's fish are community fish and can be kept together except bettas. Bettas are solitary and MUST be kept alone.
- Bettas are labyrinth fish. Unlike the other ASA fish, bettas do not require filters, moving water, or heaters (although bettas will thrive better if given these options).

- *Bettas can be kept in small cup-like containers, in non-cycled water (safely treated), that are kept clean of obvious waste build-up.*