

# So You Want to Start an Aquarium?

Written by Bailin Shaw

Friday, 25 December 2009 18:15 - Last Updated Sunday, 03 January 2010 01:57

---

Raising and keeping fish can be both fun and easy, but many people give up the hobby in the first few weeks when they have trouble keeping fish alive for extended periods of time. This is often the result of misinformation provided by the store selling the equipment and fish. By following a few simple steps provided in this brochure, you will be able to maintain a healthy tank with fish that thrive and you'll enjoy the benefits of fishkeeping.

So what will you need to get started?

## The Basic Equipment

Fish tank - glass or acrylic

Lighting - how much and what kind of lights

Filtration - biological, chemical, and mechanical

Water Conditioners - which kind to use

Heater - what size do I need

Stands - what are the best types to use

Food - what types and amounts to feed

The best part! Fish - size, numbers, compatibility

## Step 1: Setting up the Aquarium

## So You Want to Start an Aquarium?

Written by Bailin Shaw

Friday, 25 December 2009 18:15 - Last Updated Sunday, 03 January 2010 01:57

---

So what is the proper way to set up the aquarium? Do I just add the gravel, water, decorations, and dump the fish into the tank? Setting up the aquarium is often the hardest part of the hobby, and it isn't that hard. There are a few basic steps to follow before fish can be added to the tank, but aside from that it is pretty easy. It just requires a little muscle and imagination. Otherwise, patience is the key, especially in the first week or two depending on the size of the tank that is being put together. The outline below will give you a good reference to follow in putting together that perfect tank.

### Cleaning the equipment:

All of the equipment must be thoroughly cleaned before any water is added. This includes washing the tank, gravel, filter, heater, and any decorations that are to be placed in the tank. To clean the tank and filter, fill the tank with a diluted solution of bleach-water. Let it soak for a minimum of 1 hour, then remove the bleach-water and rinse the tank and heater until the smell of bleach is no longer present. The decorations can be boiled for approximately 20 minutes to sterilize them prior to introduction into the tank. Gravel can be added to a pail and water run over it until it clears. Swirl the gravel during this process to remove any dirt particles or debris.

### Stand and the weight of water:

If you are choosing to place the tank on a stand, then the proper stand to hold the tank is extremely important! Water weighs about 10 pounds per gallon. So a standard ten gallon tank would weigh about 100 pounds! If the stand isn't capable of holding the tank up, then VERY bad accidents can occur. Custom made or prefabricated stands can be found at a number of pet stores. Be certain that they are designed to withstand the stress of fully set up tank.

## So You Want to Start an Aquarium?

Written by Bailin Shaw

Friday, 25 December 2009 18:15 - Last Updated Sunday, 03 January 2010 01:57

---

### Decorations for your new tank:

This is where you can let your imagination run wild. Whether you want a tank that mimics the fish's natural surroundings or a tank with castles, colorful gravel, or plastic plants to let your fish play in, personal taste dictates the way your tank will be set up. Prior to adding any of these items to the tank, the decorations must first be sterilized to prevent nasties from being introduced into the tank that might harm your fish. Sterilization can be accomplished by soaking artificial decorations in a diluted bleach solution or boiling durable items for 10 to 20 minutes. Taking these precautionary measures will ensure the health of your fish.

### Water treatments:

By this time, you have found a place for the tank and stand, cleaned the gravel and added it to the tank, and sterilized the decorations and placed them where you would like them in the tank. So all there is left to do is add the water. City water normally contains chlorine that is harmful to both the fish and the important bacteria (to be discussed below) essential for the tank. Therefore, various chemical additives can be purchased and added to the water to neutralize these harmful compounds. Products such as, Amquel or Novaque (sold in many pet stores) can be added to the water to treat it prior to addition in the tank. Once the water is added, slowly pour the water into a large bowl placed on the bottom of the tank. This will disperse the water into the tank without disturbing your carefully placed decorations.

### Lighting:

## So You Want to Start an Aquarium?

Written by Bailin Shaw

Friday, 25 December 2009 18:15 - Last Updated Sunday, 03 January 2010 01:57

---

Most lights provided with the tanks are fluorescent lamps. Although incandescent bulbs (ones most often found in the tabletop lamps) can sometimes be found with purchased tanks, these lights are not ideal because of the amount of heat generated by the bulbs. In addition, the lights are poor for anyone wanting to grow live plants in their tanks. Therefore, fluorescent lighting is recommended for low heat, lighting capacity, and ease of use. Generally rules of lighting are 1.0 - 1.5 watts/gallon for fish only tanks, and 2.0 - 4.0 watts/gallon for tanks with live plants.

### Step 2: "Cycling" The most important part of setting up the aquarium!

So, what exactly do hobbyists mean by "cycling"? Cycling is a natural process by which beneficial bacteria are able to colonize surfaces of the tank and aid in the breakdown of waste by-products that may be harmful to the fish. Water, aside from containing chlorine, also contains ammonia. Ammonia is very harmful to fish and can lead to the quick demise of your newly purchased pets. The bacteria, which colonized the surfaces of the tank or filter, is capable of breaking down ammonia into nitrogenous waste that is less harmful to the fish. It is the process of allowing the bacteria to colonize surfaces of the tank and filter that is referred to as "cycling".

So, how do you go about cycling a tank?

There are two methods that can result in the tank being cycled.

1. The first method uses natural fish waste to aid in the process of cycling. Fish secrete waste and this waste contains the ammonia needed to establish the first colony of bacteria in the cycling process. The trick to getting your tank to cycle is to add fish slowly, a few at a time, and monitor the ammonia and nitrites using test kits. When the levels of either the ammonia or nitrite get elevated, it is time to do a 25-50% water change to dilute the concentration to a level that isn't harmful to the fish. Over time, the bacteria will colonize the surfaces of the tank and filter media. Eventually, both the ammonia and nitrite produced will be eliminated by the

## So You Want to Start an Aquarium?

Written by Bailin Shaw

Friday, 25 December 2009 18:15 - Last Updated Sunday, 03 January 2010 01:57

---

bacterial colonies to the much less harmful nitrate waste.

2. The second method of cycling is done by adding pure ammonia to the fish tank and letting the colonizing bacteria start the breakdown of the ammonia to other nitrogenous products.

When is the tank cycled?

To ensure that the tank has been cycled, two test kits are needed to test for ammonia and nitrite amounts in the water. In the first phase of cycling, the ammonia levels will peak as shown by the test kits. As the bacteria that breaks down the ammonia colonize the surfaces, ammonia contents will decrease. The next phase will be an increase of the nitrite amounts in the tank. The levels of the nitrite will eventually drop and the process of cycling will be coming to an end. When both ammonia and nitrite levels are undetectable, the cycling is finished.

### **The Best Part! Adding the fish to your tank.**

Now the fun part. Once the tank has been setup and the cycling process complete, you can add the fish that you want to the tank. The general rule of thumb for the number of fish per tank is 1 inch of fish per gallon of water. Although this is the general guideline, it is better to keep the fish levels below this number to ensure the health of your fish. Another thing to consider is the compatibility of your fish. Most of the clerks selling the fish will be able to give you an idea of the types of fish that can be placed together in a tank. Other resources are the internet, especially many of the fish related websites.

## So You Want to Start an Aquarium?

Written by Bailin Shaw

Friday, 25 December 2009 18:15 - Last Updated Sunday, 03 January 2010 01:57

---

Research the fish before purchasing. When you bring the fish home, float the fish in the bag for about 30 minutes adding small amounts of the tank water at regular intervals. Then open the bag and release the fish into the tank. This will allow time for the fish to acclimate to the temperature of the tank and adjust to the water conditions. Once the fish adjust to the tank, you can enjoy this hobby. Periodic water changes and good food will ensure the health of your fish and ensure the enjoyment of the hobby.