

# Setting up a tropical freshwater aquarium

In this article, you will find a few helpful suggestions for the beginner aquarist. Downloading our e-book and reading it before you set up your first aquarium is a really good idea, since it will provide you with much more comprehensive information about how to set up and maintain a freshwater aquarium. You can find the e-book in the e-book section in the forum here at AC Tropical Fish.



## Basic equipment, from Air pump to Timer

### Air pump

Many mechanical filters need an air pump to work. If you use other types of filtration and only want to keep the oxygen levels up, an air stone may be enough.

### Air stone

An air stone will help you keep the oxygen levels up. If you have a filter with an air pump, an air stone is normally not necessary.

### Algae scraper

The algae scraper will help you remove algae from the aquarium glass.

### Aquarium

Despite popular belief, a big aquarium is easier to care for than a small one. Beginner aquarists should therefore ideally stay away from tiny aquariums.



### Aquarium stand

A filled aquarium is really heavy and your normal furniture may not be able to cope with the weight.

### Background

A nice aquarium background will hide unsightly cable cords and make the aquarium look better.

### **Buckets**

You will need one bucket to catch the dirty water in during water changes and another one in which you prepare the replacement water.

### **Dechlorinator (water treatment)**

A dechlorinator capable of removing chloramines is necessary if you use chlorinated tap water and do not wish to spend a lot of time letting replacement water rest before you can use it.

### **Food**

If you start out with easy and durable beginner species, a high-quality flake food for omnivores will work well. You can then deepen your knowledge by reading the food articles here at AC Tropical Fish.

### **Heater, thermostat and thermometer**

A heater will help you keep the water temperature up. Even if your heater comes with a thermostat, you should always get an independent thermometer and place it in the opposite corner of the aquarium.

### **Filter / filters**

Three types of filtration can take place in the aquarium: mechanical, biological and chemical. A strongly suggest you read one of the beginner articles about filtration here at AC Tropical Fish before you set up the aquarium since this will prevent you from buying expensive filter systems that you may not really need. Learning more about cycling and of how biological filtration works will also prevent the dreaded New Aquarium Sudden Fish Death.

### **Lid**

If you are a beginner aquarist, a lid where the lights are included is the easiest solution.

### **Siphon**

Using a siphon is one of the easiest ways of carrying out water changes. A siphon can also be attached to a head and used for vacuuming the substrate.

### **Substrate**

The substrate will soon be colonized by beneficial bacteria that help you keep the water quality up. It will also make it possible for you to plant plants and many fish species appreciates aquariums with substrate since it makes them feel more at home.

### **Test kit**

A basic test kit will allow you to monitor the levels of ammonia/ammonium, nitrite and nitrate in your aquarium. You can also use your test kit to check the pH-value and water hardness, but these factors are not as important if you go for sturdy and adaptable fish species.

### **Timer**

Fish appreciates a steady rhythm of day and light and connecting your lights to a time is therefore recommended.

## **Setting up the aquarium**

Before you acquire any fish you should set up the aquarium and make sure that everything works according to plan. Once you have filled the aquarium with gravel, water and plants and installed all the gadgets, you should keep it running for at least 24 hours before you add anything else to the water. You can read more about how to set up the aquarium in the e-book named Tropical Fish that you can download for free by going to the e-book section in the forum at AC Tropical fish.

## Cycling

Many aquarists skip this stage, but if you devote some time to cycling your aquarium you increase your chances of keeping your fish alive dramatically. During cycling, colonies of beneficial bacteria will grow strong enough to handle a lot of the nitrogenous waste that your fish will produce. If you simply toss all your fish into a non-cycled aquarium, the levels of nitrogenous waste will sky rocket and this will injure as well as potentially kill your fish. Cycling the aquarium is certainly not difficult, but it will take at least two weeks. There are several ways of cycling an aquarium and you can learn more about the details by reading the cycling articles in the abovementioned e-book.

One easy method is to purchase a group of small and sturdy schooling fish from the fish store (e.g. Danios) together with a bottle of nitrogen converting bacteria. Add the fishes and the bacteria to the aquarium and make sure that there are suitable media for the bacteria to colonize in the aquarium, e.g. bushy plant leaves, gravel and a sponge filter that you never wash with detergents or hot water. Use your test kit and regularly check the levels of ammonia, nitrite and nitrate. They will spike after a while, but sooner or later they will hopefully decrease down to lower levels again. You need to carry out frequent water changes during the cycling process and only give your fish small servings of food. Do not lose heart if the water gets a little foggy during cycling; it is perfectly normal. When your aquarium is stable, gradually start adding more and more fish. Do not overload the bacteria by suddenly tossing ten big fishes into the aquarium. Once you have added a few fishes, wait a few weeks before adding any new ones. Yes, it is boring to wait, but your fish will stay happy and healthy and your being patient will prevent a lot of potential problems.

## Daily maintenance

Feed your fish 2-3 times a day.

Remove uneaten food, dead fish and plant debris.

Check the thermometer and make sure that temperature is stable.

## Weekly maintenance

For a basic freshwater set up with sturdy tropical fish species, changing roughly 25% of the water each week is recommended. The replacement water must not be cold, since this will shock your fish. If you use chlorinated tap water, use a dechlorinator to treat the water before you pour it into your aquarium. Changing the water can be a little messy and take a long time at first, but you will soon get the hang of it.

Keep the glass clean and remove any algae from it.

Vacuum the substrate.

## Less frequently

Once in a while, the filter media in your mechanical filter (if you use one) will need to be washed. Only remove half of the filter media since this will allow the remaining population of bacteria to continue their work. They will also be able to repopulate the other half of the filter media if something goes bad during cleaning. Rinse out the filter media in water of the same (or slightly lower) temperature as the water in the aquarium. Hot water will instantly kill the bacteria. Never use any type of detergent.

## Aquarium safety

Unplug the electrical equipment before you carry out maintenance work. The combination of water and electricity is dangerous, and unplugging your equipment is therefore recommended. You can also chose install an ELCB (core balance Earth Leakage Circuit Breaker) to make it safer to stick your hands into the water while equipment is still plugged in. It should also be noted that if a running heater is exposed to air during a water change, it can crack and become useless. Unplugging it is therefore a very good idea.

*This article belongs to the website owner of aquaticcommunity.com. All contents stated here were not modified. The owner has the right to remove/edit this article.*

**Direct link:** <http://www.aquaticcommunity.com/aquarium/freshwater.php>