



All About

Water and Aquarium Care

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Water and Aquarium Care

About Water and Aquarium Care

Setting up an aquarium is not difficult, but does require some care and planning. Remember that you should decide which species of fish you wish to enjoy, and plan your set-up accordingly. Some questions to consider include:

- Fresh or saltwater?
- Aggressive or peaceful fish?
 - Do you want a tank with lots of "stuff" in it? Consider this when choosing your fish – some fish need nearly-bare tanks, while some aren't happy unless that have thickets to hide in.

Some other things to consider when you choose your fish is how much room they will require (or prefer), how much work you are willing to do, and how much you can afford to spend immediately and on an ongoing basis. Some fish are just less expensive to maintain. Be sure you don't get more fish or aquarium than you can handle. Fish aren't fluffy, but they are living beings with personalities, tastes, and quirks.

Once you have decided the direction that you wish to go, set up your tank well in advance of introducing the occupants. At least 3 days is a good start, but if you can have the set-up in place for a week beforehand, you will be sure the environment has stabilized and will be safe for your new pets. Choose a spot for your aquarium where you will be able to keep it at a consistent temperature – no drafts or direct sunlight.

Establishing A New Aquarium

Many sources mention "cycling" the aquarium, but do not explain this. Cycling is the process that begins once you populate your aquarium. Aquaria are miniature biospheres. The animals in them live, breathe, excrete, and amuse themselves in it. The water in an aquarium is equivalent to an atmosphere. The water will need to be conditioned in a way that is appropriate for your tank and water supply. One example is treating your city tap water for chlorine, or well water for chemicals or minerals.

A well-established aquarium has naturally-occurring bacteria that assist in breaking down waste products. However, these bacteria do not yet exist in new tanks; the process takes anywhere from four to six weeks. During that time, the ammonia and nitrates in the water will spike, often dangerously, before settling down to the set point of a healthy tank.

The rule of thumb for most tanks is to put in no more than one inch of fish per gallon, but this does not account for fish that need additional space. Don't squash the poor fish! For example:

Tank: 50 gallons
Fish: Big goldfish – about 4"-5" each with tails

So you have 50 gallons divided by 5 inch-long fish (assume bigger so you don't stress your system or your fish).

$$50/5 = 10 \text{ fish}$$



[Marina Gravel](#)



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You will not start with that many fish, however. Rather than having a 10-inch fish per 10 gallons, you'll want to start with 2- to 5-inch of fish per 10 gallons. This will provide enough of a bio-load to kick off the cycle, e.g., instead of a total of 50 inches of fish in our example, you will want to start with 10 to 25 inches of fish length total.

While you are cycling your tank for the first time, be sure to feed the fish sparingly and be vigilant about removing extra food. Extra food is taxing on the system at any time, but particularly during set up.

Water Care

When to Change Water

Once your aquarium is established, you will not want to ever change the water completely at one time, or you will have to cycle your tank again. Bad idea, bad for the fish. Do NOT ever give your tank a complete wash/rinse/cleanup unless you want to kill your fish. It will change the water too drastically for them to handle it. Instead, change a small percentage of water (even as little as 5% of the tank volume and up to 25%) once a week to once every two weeks. If you overfeed your fish (most of us do), you'll need to be sure that you are pulling out uneaten food frequently. There are some fish that mess up the joint a lot – for them, you'll need to do the same small changes, but every few days.

Water change frequency and amount is also dependent on the environment you've established. A heavily-planted tank may have different water-change needs.

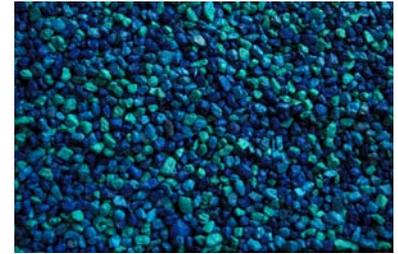
Water Testing

Now you have a tank, you have fish, the tank is going through its cycling process, you are changing out your water in small amounts at frequent intervals... how do you know that things are going great? The answer is water testing! There are often multi-test kits available for the beginner aquarium hobbyist. You should purchase kits to test for the following:

- Ammonia
- Chlorine/Chloramine
- Nitrate
- Nitrite
- pH
- Water hardness

Other things that you may wish to test for if you suspect other water problems or if you have a more complicated set-up (lots of plants or a saltwater tank, for example) are:

- Copper
- Phosphate
- Salinity
- Specific gravity



You'll need these basics for water and aquarium care. Click the items below to go to CheapPetStore.com to find the best prices for online pet supplies.

- [Crystal-Clear Water Treatment](#)
- [Ammonia and Chloramine Eliminator](#)
- [Water Conditioner](#)
- [Water Hardness Treatment](#)
- [Quick-Cure](#)
- [Visi-Therm Heater](#)
- [Complete Water Conditioner](#)
- [Whisper Regular Bio Bag](#)
- [Siphon Kleen](#)
- [Freshwater Master Test Kit](#)
- [Fish Net](#)
- [AM Quick Dip Test Strip](#)
- [Aquarium Scraper](#)



[pH Down](#)

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You can find additional information on these topics on the Internet. Be sure to do some research first and you'll find that maintaining your tank will be much easier and involve a lot less guesswork.

Conditioning

Tap water is often the best choice, but can't go directly into your tank. Most municipal water systems add something to kill bacteria – usually chlorine and/or chloramine. These additives will kill your fish. You can purchase conditioning agents that remove chlorine and heavy metals and protect against ammonia in a cycling tank.

There is debate on whether a "slime coat protector" is needed; we assume that it is overprotective, but your particular fish may need that assistance sometime. Basically, test your tap water and treat it as needed for your fish tank. In addition, be sure that the water you are adding to the tank is very close to the same temperature as the tank itself. Don't forget that rocks and decorations can change your tank environment, too.

Clarity

The most frequent causes of cloudiness are grubby water and white or green bloom.

- White bloom is most common in tanks that are cycling for the first time. It is an overgrowth of bacteria that should normalize as your filter begins to compensate. This can also happen when you introduce too many new fish at once, and your tank is effectively mini-cycling to accommodate the additional bio-load. This problem will generally resolve itself.
- Green bloom is most frequently algae run amok, caused by nutrient-rich water (too much food), too much light, and/or too many fish. To correct the problem (assuming you've been doing regular, smaller water changes), you can feed your fish a bit less changes up to 25% of the water daily, and turn off your tank light for a few days. Once the bloom subsides, you can ease back into your normal tank maintenance routine.

There are also products which will clear up the algae by killing them, but they are short-term solutions for a long-term problem. In addition, algae are usually not harmful to your fish, so why bring an algacide into the environment you have carefully created?

Aquarium Care

Lighting

Your tank lighting serves two primary purposes-- keeping your tank healthy, and letting you see what's going on in there. There are a variety of tank lighting sets available. They are rated by watts and in Kelvin (Kelvin is a measurement expressing intensity of light, and is useful for comparing light quality). They fall into the following categories:

- fluorescent lights



[Algae Destroying Liquid](#)



[Crystal-Clear Water Treatment](#)



[Florescent Strip Light](#)

- regular(15-40 watts; 3,000-10,000 K)
- compact (10-100 watts; 5,000-10,000 K)
- high output [ho] (20-60 watts; 6,000-11,000 K)
- very high output [vho] (75-160; 10,000- 20,000 K)
- metal halide (175-1000 watts; 5,000-20,000 K)
- actinic lights (blue light)

Incandescent lights (like regular light bulbs) are not usually used for aquaria.

Some guidelines for your lighting:

Tank Type/Contents	Lighting Recommendation
Freshwater/Fish only	Regular fluorescent light (18-40 w)
Freshwater/Fish and Plants	Varies depending on plants, but needs to be better than a low-wattage fluorescent. One rule of thumb is 2-5 w per gallon
Saltwater/Fish only	Full-spectrum regular fluorescent light (18-40 w); some tanks do well with the addition actinic lighting
Saltwater Reef/Fish and Plants	VHO or metal halide lamps More lighting can be added on timers to simulate the day/night cycle

All of these lights can be run on timers so you don't need to remember to turn them on and off. While it's okay for some tanks to leave the lights off for a few days, leaving them on all the time is not a good idea. Finally, don't forget that you are mixing water and electricity – be sure to follow all safety guidelines!

Plants

There is a range of plastic and natural plants available for your aquarium. Plastic plants are recommended to the beginner, as natural plants change the aquaculture balance. As you get more comfortable with maintaining your aquarium, you may wish to research some plants that will work with your fish, your tank, and your maintenance habits.

Never put an item into an aquarium that is not specifically designed for aquarium use. There could be any number of chemicals that are not good for your fish on these items..

Heaters

Heaters help you maintain your tank at a consistent temperature. Remember, it's easier to heat up a tank than cool it down, so proceed with caution with your heater. You'll also want thermometers in a couple of places in your aquarium so you can monitor the temperature throughout the tank..

Pumps and Filters

These two items work together to help maintain the health of your fish and aquarium.

Essentially, the pump moves water around and aerates your tank, and the filter helps reduce the waste and ammonia in the water. A water filter helps convert



[Aqualight Mounting Lights 4-Pack](#)



[Plant Multi-Pack](#)



[Whisper 101 In-Tank](#)



[100W Radiant Heater](#)

ammonia into less toxic pollutants, while other filters also absorb waste with filter cartridges. Live plants and regular partial water changes assist your filters in keeping toxins down to a manageable level.

Additional Equipment and Accessories

While we have covered most of the basic here, there are always additional items that can be useful for you. These include things like:

- aquarium stands
- fancier hood and light setups
- gravel, rocks, sand, marbles, glass chips (a filtered system can use as little as a ¼" layer of substrates like these, while an unfiltered bowl needs additional depth to catch waste)
- driftwood, ornaments, rocks
- feeders
- various nets and scoops
- additional smaller tank for quarantine or spawning



[Aquarium Insert Kit](#)



[Wrought Iron Aquarium Stand](#)

Popular Water and Aquarium Care Products

- [Millionaire Air Stone](#)
- [Medium Shale Ledge](#)
- [Special Red Gravel](#)
- [Freshwater Master Test Kit](#)
- [Complete Water Conditioner](#)
- [Aqua Glo Bulb](#)
- [Net Breeder](#)
- [Glass Aquarium Canopy](#)
- [Cyprus Drift Woods](#)
- [Glass Cleaner and Scraper Stick](#)
- [Gravel Vacuum Cleaner](#)
- [Ultra Faucet Adapter](#)
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[Algae Cleaner Scraper Stick](#)



[Atlantic Anemone](#)



[Eclipse System 12-Gallon Tank](#)

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