Fishkeeping Essentials - A Beginner's Guide to Equipment

Category : Beginners Articles
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Fk Member Fishy-Fishy runs through some of the essential equipment for successful fishkeeping

Tank

This is obviously the most essential part of your set-up. Buy the biggest tank you can afford and have space for. Small tanks are often recommended for newcomers to the fishkeeping hobby but it's actually harder to keep small tanks, as the water quality is less stable. A tank between 50 and 80 litres is an ideal size for a beginner.
If you are buying a second-hand tank, make sure that it has no significant scratches. If the silicone seal is not intact it can be replaced with an aquarium-friendly sealant.

Filter

All fish need a filter. There are several types of filter.

Sponge filters- made up of a sponge, a pipe and an air pump. Air is pumped into the pipe, which then sucks water through the sponge. Good bacteria grow on the sponge and particles are removed as the water passes through. These are the smallest filters available and are ideal for fry tanks and for fish that like slow water flow.

Internal filters- sit inside the tank, pump water through sponges or other media to remove water particles and give the good bacteria a place to grow.

External filters- work in a similar way but they pump water out of the aquarium and through the filter media before pumping it back in.

Under gravel filters- made up of a plate that sits underneath the substrate and a pump that sucks the water through the gravel. Good bacteria grow on the gravel and particles are trapped within the stones. Under gravel filters are becoming less popular as they are less effective than canister filters and it is difficult to grow plants in a tank with an under gravel filter.

Sump- consists of a large tank that sits underneath the main tank divided into compartments. The compartments contain different filter media to trap particles and give bacteria somewhere to grow. The water passes through and is pumped back into the aquarium. Sumps are mainly used for very large tanks.

The size of the filter depends on the size and stocking level of the tank. Check the manufacturer's guidelines for details on recommended sizes.

Cleaning equipment

Bucket- you will need this for water changes. Buckets with measurements marked on them are useful. Make sure you have a bucket set aside for your fish that you do not use for cleaning as chemical traces can get into the tank during a water change.

Syphon tube- this is used for removing dirty water from the tank. You can get pumps to prime the tube or you can do it manually.

Gravel vac- this is attached to the end of the syphon tube to help remove debris from the gravel. You can buy them from most fish shops or you can make your own out of a clean plastic bottle, just cut the bottom off and put the siphon tube through the neck.

Dechlorinator- you need to add this to tap water before adding it to your aquarium to remove chlorine and heavy metals.

Lighting

This is only essential if you have live plants but it's still a good investment anyway because we all want our tanks to look nice! Aim for 1-3 watts per gallon of water.

Starting unit- the bit with the on/off switch. This normally consists of a box and some wires.

Bulb- there are many different ones to choose from depending on what you need them for. If you have space for more than one bulb then you can have two different ones.

Timer switch- the normal kind you get from hardware shops. These are great for planted tanks as you can control how long the lighting is on for even if you are not home.

Other accessories

Water testing kit- you definitely definitely need one of these! Without knowing what the water quality is like it is impossible to spot any potential problems. Choose from a strip test kit (easy to use but less accurate) or a liquid test kit (more accurate but a bit more fiddly). You will need to test for ammonia, nitrIte (NO2), nitrAte (NO3), pH and hardness at the very least.

Heater- if you plan on keeping tropical fish you will need one of these. The wattage depends on the size of the tank and the temperature of the room you are keeping it in. If you space consider having 2 smaller heaters rather than one larger one. This helps spread the temperature more evenly and if one heater breaks down the temperature will not drop too low.

Nets- because it's tough catching a fish without one! Buy two and when you need to catch your fish, use a pincer movement. This helps prevent injury and too much stress.

Hospital/quarantine tank- this needs to be big enough to house your largest fish. It needn't be set up all the time but you will need a mature filter to go in it.

Spare filter- this is mainly for the quarantine tank but it's always good to have a spare. Sponge filters are usually good enough for this task, depending on the size of the quarantine tank. Keep the filter running in your main tank so that it's mature and ready to be used.

Other spares- heater, filter parts and anything else that could break down.

Battery-powered air pump- this can save your fish in the event of a power cut! Use it to keep a flow of water over the filter media and the bacteria will be saved. Don't forget to buy batteries!

Electric air pump- for your sponge filter. You don't need one to power an air stone but many fish seem to enjoy swimming in and out of the bubbles so it's down to personal choice.

Thermometer- I would recommend a digital one; they are easy to read and are fairly cheap now. Most models have an alarm that sounds if the water gets too hot or cold.

Algae scraper- there are two types available, one is a plastic scraper on a long stick (often coupled with a planting prong), the other is a magnet with a scouring pad on. Scrape once a week and you'll keep on top of the algae problem and keep your tank looking nice. As an added bonus, algae scraping is great for toning your arms!

What you don't need

A lot of shops will try to sell you all kinds of potions and snake oil that are pointless, or worse, damaging. As a beginner it can be hard to know which ones you need and which ones you don't. Here's a list of commonly sold products that you definitely don't need.

Cycling products- these are intended to 'kick-start' the cycling process and some of them claim that you can introduce fish within 24 hours. With the possible exception of Bactinettes, which I have heard good things about, most of these products do little or nothing to speed up the cycling process. Save your money and just be patient!

Activated carbon- many filter manufacturers state that you need this in your filter. They would say that, since you have to replace it every 4 weeks! The only instance in which you need activated carbon in your filter is if you need to remove something from the water, i.e. medication or a pollutant. Buy some to keep handy if you want to but don't feel like you need to use it all the time, especially if you have a planted tank.

Nitrate remover- you only need this if your tap water is too high in nitrate for keeping fish (around 20ppm or more). If this is the case then RO water may be an even better option. If your tap water is not high in nitrate then you should just do regular water changes to keep the level in the tank down. There are no magic potions that do the hard work for you I'm afraid!

Air stone/novelty bubbler- your fish don't need an airstone to survive but many fish seem to enjoy swimming in and out of the bubbles so it's down to personal choice. Many sales assistants will tell

you that you need it to oxygenate the water but as long as your filter outlet moves the water surface and your tank isn't overstocked then your oxygen level will be OK.

Mystery chemicals- there are hundreds of products available in the aquatic industry so it can be really confusing even to more experienced fishkeepers. Don't buy anything you're not sure about and never EVER add anything to your tank if you don't know what it is. Take some time to read up on the product and feel free to start a thread in the main forum if you want recommendations.