

## **Aquarium Checklist**

Setting up an aquarium is an easy experience that can be enjoyed by people of all ages. Likewise, keeping and caring for fish in your own home will provide many hours of fun and learning for the whole family. Aquariums not only enhance the aesthetics of a room, but also provide us with a soothing sight-that leads to tranquility and peace of mind. The following guide provides basic information for those new to the hobby, or for those with intentions of setting up a fresh water aquarium.

What do I really need to set up a fresh water aquarium?

### **□ Tank:**

Of course the most obvious piece of equipment is going to be a tank or bowl that not only holds water but lets you have an unobstructed view of the inside. Tanks and bowls come in a variety of sizes and shapes to suit most requirements. Most tanks and bowls are available in either glass or a type of plastic polymer, trimmed in a variety of colors and textures, thus making the choices plentiful.

When selecting a tank, keep in mind that a smaller tank is not easier to care for than a larger one. In fact, a larger tank has the same requirements as a smaller tank, but since it can hold much more water, it maintains water quality more stable over a period of time. Since final size decision should depend on the use and location intended for the tank, consider whether the tank is to be enjoyed by one person or a whole family, or if it will be placed in a small bedroom or in a family room. Select the largest possible size that meets your needs, and select a color trim that matches or compliments the decor of the surroundings.

### **□ Cabinet or stand:**

Most tanks, except for the very small table-top types, have matching stands available. The stands provide a sturdy and flat surface capable of holding the combined weight of the tank, gravel and the water (water alone weighs 8 lbs per gallon). Cabinet type stands can also conceal fish foods, books and equipment most commonly used to care for your aquarium. Common home furniture is usually not built strong enough to support the weight of an aquarium, please exercise caution,

### **□ Light and tank cover:**

Aquarium lights provide the illumination that permits viewing of fish and plants in full color splendor. A tank with lights can be enjoyed at any time of day or night. Lights are available in the form of tungsten bulbs or as fluorescent tubes. Fluorescent tubes are a better choice since they give a more natural colorenhancing light, do not give off excessive heat and have a longer life. Lights can be purchased individually or as part of a tank cover-light combo that matches the tank and stand trim.

### **□ Filter:**

A properly functioning filter is of utmost importance in keeping fish successfully. Filters help maintain the purity of the water by physically removing debris, and by further neutralizing waste products through chemical reactions; or bacterial activity. There are two broad categories of filters, the passive and the power filters. Passive filters (box filters, under gravel filters, sponge filters, etc) rely on water being passed through the filtering media with the aid of an external air pump or by siphoning action. These filters work relatively well in smaller tanks (under 15 gallons) or when used in conjunction with another type of filter. The power filters, as their name implies, have an integrated pump that suctions water from the tank and forces it through the filtering material. Power filters are recommended over passive filters for most aquarium applications, as they more effective in maintaining optimum water quality and are easier to care for. Power filters come in a variety of sizes, always select a filter that will handle your tank water volume with sufficient capacity.

### **□ Heater and thermometer:**

Sudden changes in temperature, as well as prolonged exposure to cooler than a particular fish can tolerate are reasons for stress in fish. To prevent these situations, all tanks require a heater to keep water temperature constant, and a thermometer to indicate such temperature. There are two main types of heaters, the hang-on type and the fully submersible heaters. Fully submersible heaters are longer lasting than the hang-on variety as the glass tube that covers the heating element is rarely exposed to an air-water interface. Most heaters keep water temperature at an acceptable range by means of built-in thermostats. The more modern submersible heaters, on the other hand use solid state technology to electronically control the temperature at the pre-set level, and also offer an auto shut-off feature should the heater be inadvertently taken out of the water. All heaters come rated in wafts, to determine what size heater you need, simply multiply the volume in gallons of your tank by 5 to determine the minimum number of wafts required. As with filters, always select a heater that can handle your tank capacity with sufficient power.

### **□ Air pump:**

Fish breathe oxygen dissolved in the water, and in doing so they release carbon dioxide just as all other animals do. In order to maintain a stable concentration of dissolved oxygen in the water an air pump may be necessary. Air pumps connect with hoses to air stones, or bubbling devices to provide gentle aeration to the water. Always connect a check valve in the main air line to prevent siphoning back if the pump is accidentally turned off.

### **□ Water test kits:**

Test kits allow you to monitor the condition your aquarium water at any given time. A fresh water test kit should include at least reagents to test for pH and ammonia.

#### **□ Water conditioners:**

Since the water coming out of our pipes at home is seldom suitable to sustain aquatic life, water conditioners are needed to render it safe for aquarium use. A good water conditioner should effectively neutralize chlorine, chloramines and heavy metals present in the water. In some areas other conditioners may be needed to correct some local conditions. Avoid using filtered water to fill your tank, as some filters may remove necessary elements present in the water. A different type of conditioner which will greatly improve the water quality of your aquarium are the bacterial additives. These provide much needed beneficial bacteria to help jump start your filters.

#### **□ Gravel, background and decoration:**

An aquarium, just as a picture, should always express who you are or what you like. Gravel, background pictures and decorations come in different colors, designs and motives to help you express your taste and ideas, let your imagination run wild. You will need a minimum of one and a half pounds of gravel per each gallon of tank capacity to achieve an nicely sloped and rich base.

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### **Once at home where should I place it?**

Placement of an aquarium at home is an important decision. To find the right spot you should consider the following factors:

- Locate it in a room where it serves the purpose you originally intended it for. A family aquarium will be best placed in a den or family room, while a decorative piece should most likely stay in the living room or the office.
- Select a site away from windows or where sunlight hits directly for part of the day to avoid proliferation of algae in the tank.
- Always place your aquarium near an electric outlet, in order to avoid having to use extension cords. Remember the filter and air pump must always be left On.
- Place your aquarium away from drafty areas or right next to heat or air conditioning sources, these will cause unnecessary temperature fluctuations that will stress the fish.
- Place your aquarium on a level and well supported floor. This is especially important when dealing with large size aquariums. Remember, a pound of water weighs 8 pounds.