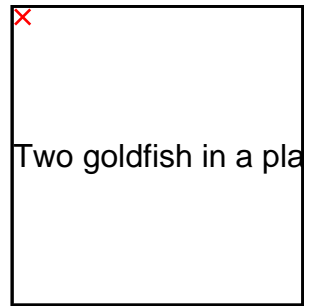


A Guide for Goldfish Care

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Goldfish hold the title of being number one in several aquarium categories. They are the first domesticated fish to be kept in aquariums. They are number one in popularity of domesticated fish, and they are the first fish most aquarists own. Unfortunately, they are often not number one in the care they receive. While the tropical fish hobby has made great strides in understanding the needs and improving the quality of care for almost all species, myths regarding goldfish still abound.



Common myths about goldfish

Myth 1. Goldfish will thrive in a goldfish bowl.

One of the most common myths is that goldfish can thrive in goldfish bowls. The reason people think goldfish can live well in bowls goes back to the very earliest days of fish keeping. Goldfish were originally domesticated in China. These fish were kept by nobility in ponds and viewed from the top much as their relatives the koi are today. Over time, people began to move these fish indoors to be viewed in glass containers. The bowl-shaped container with two flat sides was one of the best containers for viewing fish. While the bowl provided great viewing, it was never designed with the health or welfare of the fish in mind, and is actually one of the worst possible designs in which to house fish. Because of the round, tapered sides, there is very little surface area for oxygen exchange. In addition, the bowls are much too small, difficult to clean, and provide no place for needed equipment, such as a filter.

Myth 2. Goldfish are short-lived.

In one sense, this statement is partially true: if goldfish are improperly housed and cared for, they will be short-lived. However, if goldfish are cared for properly, they will often live twenty years or longer. The oldest known goldfish lived 43 years.

Myth 3. Goldfish are small and do not require much space.

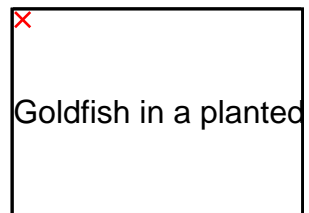
Goldfish grow fast and become large, and they grow in relation to their environment. As healthy adults, goldfish are not small fish, and in fact, many can grow to be a foot or longer when fully mature. Even the smallest of species reach a size of six inches at maturity. Juvenile goldfish are 1-2 inches in length; if they remain that size as adults, they have not had proper housing or nutrition.

Myth 4. Goldfish are inexpensive and replaceable.

Goldfish are one of the most common aquarium fish, and the common types are relatively inexpensive and readily available. Some owners may have the attitude that 'if it dies just get another one.' However, if provided the proper environment and care, goldfish can be magnificent aquarium fish of which the owner can be proud. Fancy goldfish can actually be more expensive than many tropical fish.

Choosing the right tank

Once we understand the truth about goldfish, we are quick to realize that we need to provide the proper-sized tank for these fish. A 20-gallon tank is about right for one fish, but if you want more than one, you are going to need at least 10 additional gallons per adult fish. Many people are shocked at the thought of a 55-gallon tank for 3-4 goldfish, but that is the minimum that they need. If you really want to see them reach their full potential, they should be in a 90-gallon tank. Remember, these fish get big and they produce a large amount of waste, so they need a large quantity of water. Also remember that these fish can live twenty years or longer, and will soon become a cherished pet if treated properly, so do not skimp in the tank size department.



Providing correct filtration

Many people are surprised when I ask them what type of filtration they have in their goldfish tank, and they usually respond that they did not think goldfish needed a filter. Goldfish need a filter for the same reasons that all tropical fish do, and because they produce so much waste, it is actually more important to have heavy-duty filtration with goldfish. Goldfish love to root around in the gravel and they eat a lot of food, so mechanical and biological filtration are very important. Either a full-sized canister or hang-on filter makes a great goldfish filter. Remember that these filters need to be cleaned at least monthly to keep the mechanical portion working properly.

Water changes

Most people that keep goldfish in bowls are aware of the need for water changes, but are unaware of how often the changes should be made. In reality, what these fish in bowls really need to remove the waste they produce is a complete water change every day. (Yet another reason to not use goldfish bowls.) Even when we get the goldfish into a properly-sized aquarium, water changes are still needed. In a properly-sized tank, a minimum of a 25% water change weekly is required. Water changes

remove waste, ammonia, nitrates, and phosphates, as well as provide oxygen and nutrient-enriched water.

Setting up the tank

Goldfish tanks should be set up like freshwater tropical tanks, with a layer of medium-sized substrate on the bottom. Rocks and woodwork to provide hiding and resting places are a must, as is a tight-fitting glass lid and a fluorescent light. While a heater is not necessary for temperate species like goldfish, I like to include one and keep it set on a lower setting to help prevent temperature fluctuations. Cooler temperatures are okay for goldfish, but rapid changes in water temperature of more than several degrees in a twenty-four-hour period can be very stressful for all fish.

Plants are always a great addition to any tank, but goldfish are notoriously hard on them. If you choose a tough species of plant such as Java Fern, and provide at least one watt of light per gallon of water, you may be successful. Because goldfish love to eat plants, providing bunch plants like Cabomba from time to time will give them something to graze on and they might leave your Java Fern alone.

Tank mates for goldfish

Goldfish are usually housed only with other goldfish, because as a temperate species they prefer slightly cooler water, and tropical fish will not do as well with the lower temperatures that goldfish thrive in. Some owners will add small channel catfish, but be aware that these catfish can grow very large and will need a tank of their own as they age. Mixing breeds of goldfish usually works fine, as long as you do not mix shy or vision-impaired species with the more active ones like shubunkins or comets. Goldfish seem to do okay as solitary fish in a tank, but they will also do well with multiple fish in the tank and may be more active.



Feeding goldfish

Goldfish are omnivorous, which means they consume both animal and vegetable matter. Omnivores generally need a mix of both plants and animals in their diets and goldfish are no exception. One very important fact about goldfish is that they are continual feeders. Goldfish spend their days looking for food and should be fed small frequent meals. There are many commercially available dry foods on the market that can provide the basics of their diet if fed carefully. Be sure to use goldfish food, not tropical fish food. Very small amounts of dry food should be fed several times a day to prevent the fish from gorging themselves. If a goldfish eats too much dry food at one time, it can develop gas or constipation problems that can be very severe. Soaking the dry food before feeding can help prevent some of these problems. Adding frozen vegetables, spinach, live plants, and other plant material like Spirulina flakes or pellets is very beneficial to goldfish and will help meet their dietary needs. Hard boiled egg yolk, earthworms, and brine shrimp can be added to help supplement their animal protein needs as well. If your fish does develop digestive problems, stop feeding immediately until the condition improves and then readjust your feeding strategy. Remember that most fish are over fed and when we feed frequently the tendency to overfeed is increased, so make the portions small but frequent and your fish will thrive.

Keeping your goldfish healthy

Goldfish have been unfairly criticized as being disease prone, particularly when it comes to ich. Actually, goldfish are quite hardy and if they are cared for properly, are much less likely to develop health problems than most other species. Goldfish will respond to the same treatments for ich, parasites, and bacterial infections as tropical freshwater fish and should be treated accordingly.

Purchasing feeder goldfish (these are also the ones commonly found at fairs) to raise as aquarium fish is not recommended. These fish are often kept in very poor, crowded conditions, and are very likely harboring disease and parasites. They therefore suffer a very high mortality and should not be considered potential pets. Instead, purchase goldfish from a reputable source, and do not purchase any fish that appear sick or are in a tank with sick fish.

Goldfish are truly a magnificent aquarium fish. If fish keepers provide their minimum requirements, they will discover a fish that is hardy, colorful, interactive, and sure to provide them with a lifelong friend. So if you get the urge to keep goldfish, throw out the fish bowl and provide the proper tank, maintenance, and diet that they need and you and your goldfish will spend many happy years together.