

# QUARANTINE GUIDELINES

Quarantining is essential when adding any new fish to a pond with existing fish. You may think you know where these new fin-babies come from, and you may be confident that they are healthy, but it's best to be sure.

## What Type of Tank To Use To Quarantine Koi?

Koi quarantine tubs don't have to be elaborate, but they do need to be reliable. You can many different types of tubs or tanks – large aquariums, livestock water troughs, 45-gallon plastic drums and 'kiddy' pools will all work as long as they haven't been used to carry and harsh chemicals that could leach back into the water during quarantine. We do have large Portable Quarantine / Show Tub for rent that can accommodate many large koi at once if needed. As well, filters don't need to be very complex either, but they do need to be appropriately sized for the tank and number of fish. A large sponge filter or submersible filter like Aquascapes' Submersible Filter will work well. For larger tanks, pressurized filters are ideal. The most important thing to remember is that the filter must be 'cycled' (see below).

## Koi Quarantine Tank Set-Up

A koi quarantine tank should provide the following elements to ensure a successful quarantine period:

- Plenty of Room
- A net or cover
- A cycled biological filter to provide optimum water quality
- Salt (possibly other medications like stress coat and/or a probiotic)

Give the fish room to swim comfortably so they can relax and settle into their new environment, this allows their immune systems to start functioning properly again. A minimum 50-gallon quarantine tank is necessary if you are buying 2 or 3 smaller fish – 6 to 8", larger if you regularly buy bigger fish or more than a few at a time. Bigger is always better – water quality, temperature, ammonia etc can change quickly in a small volume and is more difficult to manage.

It is very important to keep the quarantine tank netted. New arrivals are often very frightened and disoriented, and for some reason their first reaction is to jump. Nothing is more frustrating than seeing a new fish lying dry on the floor. It also helps to provide some sort of 'cover' for the fish to hide under. This helps the fish to feel protected and will help reduce the likelihood of jumping. Artificial floating water lilies or pads or even a few small pieces of styrofoam will do the trick.

Optimal water quality is also a must. You can put a perfectly healthy fish into water with elevated ammonia or nitrite and it will become stressed and most likely sick in a short time. A quarantine tank with poor water quality is worse for the new fish than putting them directly into the pond. The keys to providing good water quality is having good circulation and a large established biological filter. It often takes 2-4 weeks for a biological filter to become 'cycled' and function efficiently, so great way to avoid this 'new tank syndrome' is to have the tank set up with water from the existing healthy pond. Remember to test your water quality daily with a test kit, especially for the first 2 weeks. Adding beneficial bacteria will speed up the cycling process and reduce stress on fish.

Salt is often referred to as chicken soup for koi and goldfish, it reduces stress, helps fight nitrite toxicity, kills many common parasites and more. Use a non-iodized salt at a rate of 3 teaspoons/gallon or 2.5-3Lbs / 100 gallons to reach a concentration of 2-3%.

The water temperature should ideally be kept around 72- 74°F. Depending where and when you are quarantining your fish you may need a heater such as an aquarium heater to achieve this.

## Koi Quarantine Procedure

DAY 1 – Float the fish in the bag to allow the temperatures to gradually acclimate (usually 15-20 minutes). Gently introduce the fish into the quarantine tank – minimize any water from the bag into the quarantine tub, if possible. Let the fish settle in the remainder of the day and overnight

DAY 2 – Newly imported fish may look stressed, sit on bottom somewhat inactive – this is normal so long as water quality is OK. On the other hand, fish that have had a rest period at the dealer will likely be active and look good. Try feeding them a high-quality fish food and see if they take it. If they do not, remove any food they do not eat from the water.

DAY 3 – Continue feeding, no more than what they can eat in two minutes, monitoring water quality and watch the fish closely for any signs of disease or parasites and treat accordingly. Remember, many antibacterial treatments will also kill the beneficial bacteria in your biological filter resulting in the water quality deteriorating. Do partial water changes as needed, usually 10-20% at a time. Continue this for 2 full weeks.

WEEK 3 – If all goes well, you might be ready to put these fish into your pond but wait a bit longer. Every pond and ecosystem has its own set of 'bugs' ie. good and bad bacteria and parasites. All fish co-exist with these bugs in their environment since no pond is ever completely free of bacteria or parasites. Obviously, fish imported from Japan will be used to a completely different environment than your pond's unique environment. One way to help them gradually acclimate to this is to introduce 1 or 2 'test' fish from your pond into the quarantine tank with the new fish. Introduce a fish that maybe hasn't developed the way you had hoped, or at least one that you don't mind losing if a problem develops. This fish will gradually introduce your pond's unique signature into the quarantine tub. Plus, this is a good way to

check to see if the new fish are carrying any 'bugs' that might cause a problem with your fish collection.

## End Of Quarantine

If after 3 full weeks, all fish look good you can get ready to introduce them into the pond. Make sure the quarantine water and pond water temperatures are within a couple degrees of each other. Then carefully transfer the fish into a transfer container (small bucket), place it in the pond and let the fish venture out into the pond at their own pace.

## Summary

- A large tub or tank, 50 to 300 gallons.
- Fully cycled biological filter
- Temperature should be 72 – 78 °F
- Check water quality regularly.
- Dose the quarantine with 3% salt (non-iodized salt at 3 teaspoons per gallon).
- Net to cover tank to prevent jumpers
- Duration -21 days minimum

Some people prefer to take a proactive approach towards new koi and possible diseases or parasites. That is, they treat the koi before they show any symptoms. If you have bought imported koi, especially Japanese koi and they have not been quarantined by your dealer, it is a good idea to do some preventative treatments.