



Putting Your Fish & Pond to Bed for the Winter

by Larry & Pat Christensen, Northwest Koi & Goldfish Club, Oregon

The leaves are now starting to turn from green to gold and soon another summer will be over. With the first frost of the fall season, our pond temperatures will be cooling and our fish hopefully will be getting ready for dormancy.

There are a number of items that we should all be looking out for to make their wintering as comfortable as possible, whether you are going to be heating their water or not. Let's go over these from our experiences:

YOUR POND:

As leaves fall, many will find their way to your pond from overhead trees or blowing wind. Keep your skimmers cleaned out and remove all leaves from the bottom, as they will plug sumps and suction lines. If allowed to stay, they will collect feces and start decaying which will deteriorate your water quality.

Plants like lilies, iris etc. should be cut back so dying stocks, stems and leaves will not foul the water. Also, rotting vegetation robs valuable oxygen needed for the fish and creates excessive bacteria beds that fish could be in contact with.

PIPING:

Check your piping over thoroughly. Covering exposed piping is good, but wrapping is even better. Our winters have been fairly mild the last few years, but even the slightest hard freeze can burst a line and possibly cause your pond to drain dry. There are a few types of insulation and bubble wraps on the market, as well as electrical heat tape that is commercially available for this purpose.

YOUR FILTERS:

These should be checked out for channeling and sediment build up and if necessary, cleaned out. Sumps should be drained and cleaned of contaminated water. If filters start plugging up now they will really be in poor condition by spring.

Some people have bypassed their filter during winter. I cannot say whether this is right or wrong. It depends on the pond load, volume of water and location. One thing that should be noted is to drain the filter if bypassed. If freezing was to occur, it could do considerable damage to the unit, rendering it useless in spring. Should the filter have stagnated water in a dead bed of bacteria during the winter, flush it out before allowing any of the bad water to get back into the pond in spring.

If you elect to keep your filter running during the winter (as we do) but find it dirty and want to clean it up before the long duration from November to April, try to flush it out with pond water. You will be removing the debris but not killing off the good bacteria that are destroyed when flushing out with chlorinated tap water.

FISH:

Thoroughly check them for any problems. If you do not want to pan and turn them over, use a plastic bag with water. Put them in it and raise the bag high enough to check out the head, belly and tail regions. Treat any open sores!

Check out the gills and make sure the color is medium to dark red. If you see streaks, tan or green areas, white spots or a lot of mucus, gill disease is either starting or underway. Consult your local KHA (Koi Health Advisor), dealer or a club member right away for assistance.

Usually by September your fish start putting on more weight than normal. These fat layers will give them something to live on over the winter months while they are not eating. Feeding should continue until the pond temperature reaches around 48 - 50 degrees F. At this temperature feeding should stop as the digestive track is low on bacteria count and problems can begin.

FOOD:

Suggested fall foods should consist of wheat germ, vegetables (greens), boiled wheat, bread (white or brown - **NO**



preservatives), fruit (water melon, oranges & grapefruit).
DO NOT OVERFEED!!!

Pellet food is still okay at 52 - 54 degrees providing it is small to medium in size. DO NOT FEED trout or cat food chow, as it is too hot of a food (too much protein) and not easily digestible at lower temperatures. Use a good quality pellet food with a white fish base or wheat germ and stabilized vitamin C enhanced. Color foods should be stopped, as your main concern should be to growth *not* color enhancement.

We have been feeding a wheat germ pellet for a number of years. The food dissolves very easily in water and will turn to mush if left too long. We have been feeding this as a supplement and see a considerable change with the fish. We'll keep you informed on their outcome this spring, as we will be heating our pond this winter. One thing we should say about wheat germ pellets is they are not cheap, but if you love your fish as we do, we want them to be around in the spring!

COVERS:

With the fall winds about to sweep over us it would be advisable to net your ponds. This will keep a lot of blowing debris out of the water and make it easier to clean up. (The netting we use is the type you would find to cover strawberries.)

WATERFLOW:

With the temperatures dropping your fish's activity will also start to slow. As the fat layers increase for needed energy reserves the water flow in your pond should be decreased also. Why you ask? Well, the more fish have to fight the current the more energy they exert, which uses up more body fats. We personally cut our water flow by fifty percent plus and divert the water over the waterfalls. Why cut off the waterfalls? The more water surface that is exposed to the air surface the faster the temperature will drop or increase. Temperature changes can be just as dangerous on fish as poor water quality, pH or ammonia/nitrite spikes.

If you elect to shut your pump off during the winter - drain the water lines to prevent freezing and cracking. The worst surprise in the spring is to start things up only to find broken lines or cracked castings. We personally would rather see you throttle your pump down by using a valve on the discharge side of your pump and closing it down than to see the system turned off completely.

Should total shut down be your choice, then by all means put a couple of air stones in the pond to keep some water circulating. This will keep an area of the pond open when things freeze up allowing poisonous gases to escape, which can kill our swimming jewels.

OBSERVE YOUR FISH:

Winter is not always the best time of the year for your fish as they can get stressed out. An indication of this is when they lay over on their side at the bottom. An increase in day light temperatures usually corrects the problem. Do not allow the fish to get stuck over the bottom sump grills or suction inlets. As temperatures drop the fish will become very docile. A natural sighting in a wintering pond should show the fish clustered together on the bottom in a dormant state. Avoid quick motion around the pond. This will cause the fish to dart around using up more energy. Try to keep an opening in the ice on top of the pond. Never beat on the ice with a hammer. It would be like you being in a steel drum and someone beating on the outside of it. Instead, pour warm water in an area until a reasonably sized hole is thawed out.

Never bring a fish inside the house from your pond. Remember, sudden temperature changes can kill. Koi can tolerate 5 - 10 degree changes in a 24-hour period, but beyond that their life is in your hands. Even though they may appear to be all right for awhile, they can die for no apparent reason as long as thirty days after the incident.

POND ENCLOSURES:

Many of us in the Northwest are now accumulating some very impressive collections of fish that have taken years to acquire. In the past several years a number of us have started building structures over our ponds. The reason is it keeps the heat inside much like a green house does. The cold harsh winds and debris are kept outside, allowing a better environment from rapid temperature changes and poor water quality.

Enclosures can be built a number of ways - from a wood built framework to PVC pipe and all are covered with clear plastic that is well anchored.

POND HEATERS:

Heaters are another way of assuring that temperatures do not drop too far, which causes freezing to occur. They will range from aquarium heaters, cattle trough heaters, propane units, spa heaters, etc. Your imagination and pocket book are your only limitations.

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Most of these units are thermostatically controlled so as to limit the temperature you select. On large units we would suggest a pressure switch be installed. This way if you have a pipe break or loose water flow, your heating unit shuts down instead of burning up. The pressure switch is relatively cheap compared to the heater, fish and down time.

WATER QUALITY:

Even though you are not feeding the fish they are still urinating and defecating in the pond. Your pond has some algae on the sides, which they will feed from and with the stored body fats for reserve energy sources waste is still created. Therefore, water quality checks should still be made and if necessary, water changes may still be required. Remember not to make sudden temperature changes and only add water within a two-degree temperature variation.

We have covered a lot, but there is always something we can miss. If you have any questions, please feel free to ask a club member, so you do not have to make the mistakes so many of us have had to struggle through and overcome! ❖
