

POND CARE: FALL & WINTER PREP

HARDY WATER PLANTS live in the garden pond year round. They die back like “terrestrial” perennials in the fall. As they do so, clip the dead foliage and clean up the pots. Most hardy plants can winter at the same depth in your pond as you have them during the growing season.

- Marginal plants with leaves that grow up out of the water, “emergents” (e.g. Iris, Rushes & Sedges) can typically freeze solid and come back bigger and stronger if you leave them high where they can get the sun’s early spring rays.
- Exceptions- Pickerel Rush, although rated hardy to Zone 4, winters more predictably if the top of the pot is dropped to 9” or more.
- Water Hawthorn and Water Lily crowns do not want to freeze. Be sure the TOP of the pot is at least 12” below water level.
- Lotus growing ends will dive when the weather gets cool to save themselves from freezing. Be sure the BOTTOM of the pot is between 18-24” below the water level.

ZONE 6 PLANTS include *Thalis Dealbata*, *Marsilea* (all 4-leaf-clovers), Parrot Feather, Golden Club, and Floating Heart.

- These plants stay in the pond for the winter. Clip the foliage as it dies back, clean up the pots and place the plants ON THE FLOOR of the pond, the tops of the pots well below the 12” freeze potential.

TROPICAL PLANTS will not survive in the garden pond through winter. In our area we have two choices.

- Treat tropicals as we do house plants and be sure to bring them inside before the first frost. Many people enjoy setting up a small indoor water garden somewhere in the house to winter their tropical water plants.
- Treat them as annuals; you can replace them each spring.

TROPICAL LILIES are treated as annuals by most people, but can be overwintered in a greenhouse or well-lighted indoor pond – or – by storing the tuber in damp sand or in a plastic bag in a dark, cool (48-60 F) location until it is time to sprout next spring.

COLD WEATHER FISH are kept by most pond keepers in this area. Some examples are *comets*, *shubunkins*, *orandas* and *koi*. If you added tropical fish during the season, they should be moved to an indoor aquarium during the early fall. Assuming that your pond is at least 24” deep in the ground, most cold water fish can winter in the pond giving a little attention to late season clean-up. Fish metabolisms slow down when the water temps fall below 50 F. Therefore, they require less oxygen and little or no food. (It is also true that colder water holds more oxygen than warmer water, requiring less oxygenation). Fish continue to graze on the algae on the walls of the pond, but cannot digest complex foods such as commercial fish food. **STOP FEEDING** your fish when the temp falls below 50F.



DREDGING & CLEANING are important in the winterizing process. Decay of debris uses oxygen and produces gases which are toxic to fish. In the growing season this is not a problem, as these gases dissipate into the air. During the winter, an ice mass can prevent the escape of these gases. **PREPARE YOUR POND FOR WINTER.** This may include full pond cleaning, but most often means netting out accumulated debris and removing the dead and dying foliage. With this in mind, none of the following are always necessary. However, here are a few more fall/winter protection ideas:

NET YOUR POND during heavy leaf fall (around Halloween) to keep added organic material from getting into the pond. Use a bamboo pole or garden stake in a bucket of sand as a "tent pole" in your pond, and net over it, covering the entire pond and securing the sides of the net with bricks or stones. The net will shed the leaves off to the sides of the pond where they can be collected. Netting can usually be removed after you have cleaned up the leaves in your yard (typically between Thanksgiving and Christmas).

TURN OFF your fountain or waterfall for the winter. Freezing and thawing may produce stress on the lines and may cause stone to fracture. Ice buildup may also create dams which re-route moving water out of the system. You can leave the pump and the filter on the floor of the pond, or remove them altogether from the pond. In either case, the pump should **NOT** be stored where it can freeze. Don't forget to give your pump, impeller and hoses a good flushing when you start them up again in the spring. Lower the water below stone level to prevent sprawling and fractures caused by freezing.

WINTER BUBBLERS make a nice alternative to waterfalls and fountains. A small pump with a PVC riser will create a gurgling effect at the surface of the pond and for the most part keep the pond open for the winter, allowing toxic gases to escape. This adds winter interest and also provides a water source for birds and other "critters." A winter bubbler pump should be positioned so that:

- The intake pulls water from the mid-depth area (e.g. 9-16" below the surface) leaving the warmer bottom water undisturbed.
- You can easily reach the intake screen/filter for periodic cleaning without treading on the ice.

FLOATING DE-ICERS are another option to keep part of the pond open. Although they use much more electricity than a small bubbler pump, you do not have to clean them.

