

WINTERIZING YOUR POND

You've spent the spring and summer enjoying your pond or water features, but now it's time to put them to bed for the upcoming winter. As is often said, a pond is like a living creature and it will suffer or die if neglected. Winter preparation is crucial to the health of a pond and the fish and plants that live there. Read on for some tips and proven techniques to keep your pond healthy over the next few months.

First things first: clean your pond well. Remove as much debris as possible from the bottom of the pond using a plastic rake or any other equipment that will not puncture your liner or hurt any fish. Next, drain about one quarter of the water from your pond and replace it with tap water (be sure to neutralize the chlorine if present). Some have had success adding pond salt at this time to help replenish electrolytes for the fish.

Filtration and aeration

Filtration is not absolutely necessary in the winter, but it's best to maintain some type of circulation to keep a portion of the pond surface open when ice forms. Without an opening, you risk a buildup of toxic gases formed when organic matter breaks down below the surface. Pond heaters and bubblers do a good job of keeping part of the surface free of ice or you can reposition your pump near the surface. If you decide to disconnect your filter, be sure to drain it before storing.

It's not recommended to use a floating heater alone, as it can be deadly to fish. Large fish or heavily stocked ponds require recirculating water for fish to breathe. If you notice them at the surface gasping for air—you do not have sufficient oxygen.

In some areas of the country without severe winters, homeowners will leave pumps running through the season. Just be careful that if ice forms, it does not cause water to flow over the liner. You will also have to keep an eye on your water levels and may need to add water more frequently in the winter. Another option is using your existing pump as an aerator. There is a device available that connects to your check valve and keeps a hole in the ice without requiring an additional heater. Of course, many pond owners just shut the pump down.



Fish

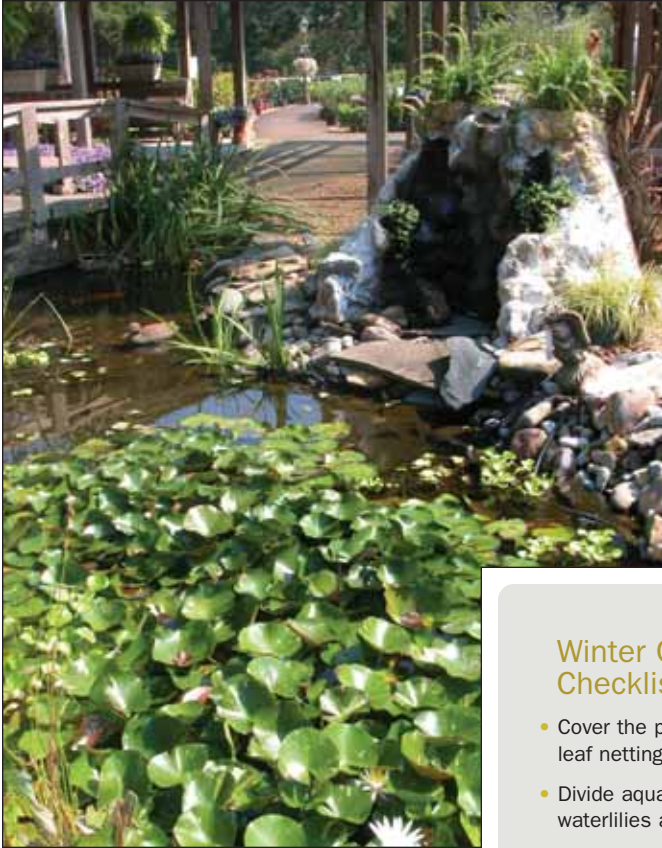
Your fish will be fine in a clean pond prepared for the winter. You will notice their appetites decreasing as the temperature drops and they will most likely cease eating when it drops below 42 degrees F. As long as you've kept the fish healthy and well fed over the summer, they will have plenty of reserves to make it through the winter. Two feet of water is sufficient for fish, as long as you keep an open hole in the ice. You will need a small recirculating pump and a heater in areas that get below 20 degrees F.

Some pond owners have noticed increased predator activity near their ponds as the temperature drops and fish begin to eat less and become less active. Frequently, leaf netting will discourage them from hunting your fish. Koi castles and shelters also provide a good hiding spot for your fish.

If you are moving fish inside for the winter, you can use your outdoor biological filter inside as long as you stay on top of your water testing. You will need to be aware of your water quality on an ongoing basis.



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Winter Care Checklist

- Cover the pond with leaf netting.
- Divide aquatic plants like waterlilies and iris.
- Remove dead or dying tropical plants before they pollute the water.
- Cut back hardy plants and lower them to the bottom of the pond.
- Stop feeding fish when the water temperature drops into the mid- to upper-40s.
- Reduce the circulation of pond water and reduce water flow.
- If you keep your filter running, take precautions against freezing water in your plumbing.
- Add a winter de-icer to keep an area at the surface free of ice.

Plants

For your hardy water plants, remove any dead or dying leaves and make sure they're deep enough in the pond that the roots won't freeze. Although some marginal plants will survive winter even if their roots freeze, it's best to position all plants below the ice zone. Adding a floating deicer will also keep the pond above freezing if your pond is too small or shallow to submerge plants below the ice zone. Some pond owners without fish will build a frame to surround the pond and cover the frame with greenhouse plastic to create a warmer environment, even for tropicals left in the pond.

Some water plants need to be overwintered indoors, packed in moist peat. Others, like *Lobelia cardinalis* (Cardinal Flower) can be planted in the yard until springtime. Be sure to check with your local garden center's pond expert if you are not sure which plants to bring indoors and which ones to overwinter in your pond. Still others can actually be brought indoors and used as houseplants until spring.

Umbrella palms, taros and calla lilies will do very well with medium light levels.

Water hyacinths and water lettuce seem to require more care than most pond owners want to deal with. Your best bet is to dump them and replace the plants in the spring. If you want to save them, they require 10 hours of intense light and temperatures above 70 degrees F.

Think spring

If you take the time to prepare your pond for winter, you will be much happier in the spring. Your fish should have made it through just fine and your plants will be healthy and ready for another season of growing. Also, check out your local garden center's assortment of pond supplies to see if they have additional winter care items. Once you are

finished putting your pond to bed for the cold season, it's time to start planning any changes or additions you will make to it next spring. That's the fun part. 🍀

By Bill Calkins with thanks to Aquascape Designs (www.aquasapedesigns.com) and Pond-O-Mania.com.