Fall/Winter Pond Maintenance

Helpful Pond Maintenance Tips to keep your pond ecologically balanced through fall, and winter.

- **Does every pond need preparation for winter?** No, not all ponds need winter preparation. Climate is a big factor when determining whether a pond has a real need for such seasonal maintenance. Debris cleanup from the fall may be inevitable in any part of the country, but only ponds that experience ice cover over long periods of time will require winterization.
- **Add "Beneficial Bacteria" two times per week this fall** (add as directed for your size pond). Once your pond stays below 50 degrees for the winter we recommend switching to a Cold Water Beneficial Bacteria.
- **Reduce your fish feeding regimen** As your water temperature drops below 65 degrees the metabolism of your fish slows down. Start feeding your fish just a couple of times a week. A fish food that is specially formulated for the fall (wheat based) is "a must" at this time of the year. Stop feeding your fish completely when water temperatures fall below 55 degrees. If you don't have a thermometer for your pond, get one!
- **String Algae Prevention** Make pond maintenance easy, use EcoBlast and S.A.B. as preventative pond care to help control undesirable string algae and debris build-up. EcoBlast will assist in the breakdown and reduction of debris in your streams, waterfalls and pond, thus reducing your pond maintenance needs. EcoBlast is not temperature sensitive and can be used during colder temperatures. 100% safe for fish. EcoBlast applications are based on sq.ft. of affected areas. Add as directed on the container for your size of pond. S.A.B. is designed to restore balance to the pond ecosystem by breaking down organic material that creates problems for pond hobbyists in and around waterfalls, rocks, stream beds, plant pots, pumps and filtration systems.
- **Barley Straw Extract** Helps control string algae. Barley straw is an effective and eco-friendly way to reduce algae. It takes 4-6 weeks for barley straw to become effective, so we suggest using a Barley Straw Extract treatment this fall to help control algae over the winter.
- **Also, don't expect your skimmer filter to get all the leaves.** Skimmers are designed to get the occasional leaf or other floating debris.
- **Heavy leaf fall can clog a skimmer several times a day.** It is best to try to minimize the amount of accumulated sludge, decaying plant debris, etc. from the water. Debris left to rot in the pond will eventually decompose, producing gases that can be harmful to fish. Installing leaf netting over the pond will help make it easier to maintain. Using Microbe Lift Autumn Winter Prep will also help accelerate the breakdown of organic debris in the pond.
- **Prepare the plants.** You should have stopped feeding your plants by now. Trim your perennial aquatic plants that begin going dormant as the weather cools. Your aquatic plants aren't dying, but they may turn yellow or brown as they go dormant. You should trim back the yellowing leaves to prevent the fall out debris from building up in your pond.
- **Hardy bog and marginal plants** should have all of the dead leaves and foliage trimmed down just above water level, and hardy lily leaves and stems should be cut back, leaving approximately 2" to 3" at the base of the plant.
- **Place plants in pots deep** in the pond to keep the roots from freezing. While it is true that some marginal or shallow water plants will survive even if their roots freeze solid it is best to lower all of your plants below the ice zone.
- **Tropical plants.** Some tropical water lilies will bloom all winter if kept in a tub container inside and given at least six hours of bright light. You can also winter them over by removing the tuber from the pot after the foliage has died back from a freeze. Place the tuber in a container of slightly damp sand or peat moss at 50 degrees. In the spring you will need to heat the tuber in an aquarium to about 75 degrees to trigger its growth before moving outside. One choice with tropical plants is simply to dispose of them after freezing

weather and replace them in the spring. This way you get to try new plants and colors next season. If you want to try wintering over your tropical plants there are a few methods worth trying. Many tropical plants can be brought inside and treated as a houseplant for the winter. Umbrella Palm, Taros, and Calla Lilies will do very well with medium light levels. If these are in no-hole containers then no special care is needed otherwise keeping the pots in a tray full of water is needed to keep the plants wet. Water hyacinths and water lettuce require more care than they are worth; it is much easier and less expensive to replace them each spring. If you still want to make the effort they require 10 hours of intense light and temperatures above 70 degrees.

- **Can I leave my system running throughout the winter?** If your waterfall moves at least 2000gph, it can run throughout the winter. You must be careful with ponds that have long, or slow moving streams and waterfalls. Ice dams can form around these areas and divert water over the liner out of your pond. Depending on your climate and other factors you may or may not want to run your pump and filter system through the winter.
- **What do I need to do to run my system in the winter?** Maintenance is usually the determining factor in whether or not a pond owner keeps their pump running. The primary maintenance responsibility at this time is to make sure there is enough water for the pump(s) to operate properly. During the winter months the normal water supply options are now unavailable. Outdoor water spigots and automatic water fill valves are turned off during the winter months to prevent pipes from freezing and cracking. Therefore, pond owners who run their systems during the winter will need to find alternate ways to replenish their pond. Water can be supplied via a hose run from inside the house or multiple trips with a five-gallon bucket. Generally speaking, it's not uncommon to have to go out once or twice a week during the winter to "top-off" the pond. The bottom line for winterization is maintenance. Most people will decide to shut down their system because they don't enjoy tending to their water garden during the bitter cold months of winter.
- **What benefits are there for running my pump in the winter?** Over the winter, if you shut off your pond, all the filtration media in the Biofalls will freeze into a solid block causing delays during the spring cleanout. It will also be to your advantage to keep your pump and filter running through the winter. The bacteria in your biological filter will not be active at low temperatures but it will remain alive as long as you keep it supplied with oxygen-laden water. When spring arrives and the water temperature is rising the bacteria can start to work immediately keeping the water quality good for your fish and helping to control the algae. The aesthetic rewards of the "winter pond" are worthwhile. I would urge you to keep your falls running as long as you can.
- **What about my fish?** With the right preparation your fish will do fine in 2 or more feet of water. During the winter, organic debris in the pond continues to decompose, giving off gasses that are harmful to fish. As long as you keep a hole in the ice to allow the escape of harmful gases and a form of oxygenation is provided to the water your fish will be fine.
- **How do I keep a hole open and oxygenate?** If you let your waterfalls run, this will provide oxygen for your fish and keep a hole open to exchange gasses. You may also need to use a floating pond heater when temperatures drop below 15 degrees. If you turn your pump off, floating heaters are the most common method of keeping a hole open for gas exchange. Unfortunately they won't provide oxygen for the fish and they're fairly expensive to operate (1250-1500 watts) we recommend using a small submersible magnetic drive pump (at least 150+ gph) with a floating heater (pond de-icer). Magnetic drive pumps are very efficient and can save you some money. You can place the small submersible pump on the first shelf of the pond, bubbling at least 1" above the surface. The agitation created by the pump will oxygenate the water, prevent it from freezing, and allow for gas exchange. You should also place the pump in a basket or bucket and surround the intake with rocks to prevent the pump from clogging. When temperatures get really cold, below 10-15 degrees you should also use a floating pond heater. Do not confuse a floating pond de-icer with a water heater. The pond de-icer will simply keep a small hole open in the ice. The heaters are equipped with a thermostat. Be sure to place the heater away from the skimmer box and re-circulating pump to avoid moving the heated water and causing the heater to run constantly. **Never** use a heater alone without

re-circulating water for oxygenation. Fish gasping for air at the surface is a sure sign that your pond lacks sufficient oxygen.

- **Shutting down my pump.** If you choose to shut down your waterfall for the winter, you'll first need to take your pump out of the skimmer and, depending on the type of pump, store it submersed in a 5gal pal of water and in a frost-free location. This will keep the seals in the pump from drying out and cracking.

You can find all of the pond products you will need for your fall pond maintenance at our Landscaping & Garden Center.

The Mustard Seed Landscaping & Garden Center.
952.361.9954