

## POND MAINTENANCE BY THE SEASONS

Here is a summary of how we keep our water clear and our pond clean through the spring, summer and fall, and what we do for winter. The main goal is to create a balanced ecosystem which controls algae and provides a healthy place for plants and fish to grow. In a balanced ecosystem, the plant material and bacteria in the pond work together to remove nutrients so that there are not enough nutrients left for algae to thrive.

**SPRING:** We start the spring with a pond cleanout, preferably in late March or early April. The purpose of the cleanout is to remove as much as possible of the organic matter, which if left in the pond, would tend to make your water dark and would feed the algae. Leaves and other debris are removed, the pond is sprayed down, and any silt and sludge is pumped out. (A complete guide to doing a pond cleanout is available on the Ponds page of our website.) Before we fill up the pond, we sprinkle EcoBlast all over the pond and stream floor if there has been a lot of string algae in the pond. This will help break up any organic matter that the cleanout missed. If there was quite a bit of string algae in the pond when we did the cleanout, we fill the pond with fresh water, wait 48 hours, and treat with S.A.B. The one-two punch of EcoBlast and S.A.B. should go a long way toward getting any string algae problem under control.

Right away, we also start adding Beneficial Bacteria to the pond, according to the directions on the container. We usually use the dry form, but it also comes in liquid.

If your pond is short on plants, get some planted as soon as you can find some. Our plants arrive in early May. We would be glad to recommend some good, hardy plants that can stay in the pond all winter, as well as some fun tropical plants, most of which can be overwintered indoors as houseplants.

**SUMMER:** Continue putting bacteria in the pond on a regular basis, and make sure you have plenty of plants in the pond. We always float some water hyacinths in the BioFalls. Wedge a stick of bamboo, or some other sort of stick, about a third of the way back from the front, and place the floaters in the back two-thirds. The stick will keep the plants from going over the waterfall. (Use water lettuce if your BioFalls is in more shade.)

New ponds often have problems with green water because the plant material is not very mature. Owners of new ponds need to be religious about their use of bacteria, and try to get plants going as soon as possible. More established ponds with mature plant material usually don't have much problem with green water. However, if you start having green water, use Beneficial Bacteria in higher doses, the way the instructions say to get the pond going in the spring. Do **not** take the filter pads out of the BioFalls and spray them off. This is only destroying a lot of the bacteria that has been growing there. You can spray off the pad in the skimmer occasionally if it gets slimy green from filtering out the algae. Also, do **not** pump most or all of the water out and replace it with fresh water. This fresh water will contain nutrients that will feed the algae, and make it even worse. Be patient, add plants, use bacteria, and your pond will eventually clear up, especially as the sun gets lower in the sky in August.

Most ponds get some string algae during the year. Often, it starts in the stream, if you have one, and spreads to the pond. A monthly treatment of S.A.B. may control the string algae quite well. If you start getting a bad case of string algae, use the one-two punch of EcoBlast followed by S.A.B. Physically remove what string algae you can. Then shut down the pump for a few minutes while you sprinkle EcoBlast right on the string algae. Wait 24 hours, and then treat with S.A.B. You are not using enough S.A.B. unless it turns your water milky for a while, perhaps even for 24 hours.

For those who are interested in barley bales as a more natural method of controlling string algae, we would suggest using EcoBarley instead. It is a pelletized form of barley that will act much more quickly than actual barley straw, and without the mess.

**FALL:** If you stay on top of any string algae problem in the fall, you will have little or no string algae problem in the spring. Be sure to treat with S.A.B. during some warm weather in late September or in October. If you have a fair amount of string algae in the fall and do nothing about it, you could have a real explosion in the spring. The string algae grows even in cold water. So in the spring, it can really put on a lot of growth before the plants start growing, and before the water is warm enough for the bacteria to survive and start multiplying.

By the end of August, we have usually quit putting any more Beneficial Bacteria in the pond. The plants are doing a good enough job by themselves, and the sun is lower in the sky, so suspended algae is no longer a threat.

Leaves are always a problem in the fall. It helps to remove what you can from the pond. Some people put netting over their ponds. We shut down our pumps in October so that they quit bringing leaves down from the stream. But we don't worry too much about leaves. We know that we will do a cleanout in the spring, at which time they will be removed.

**WINTER:** Some people leave their pumps running all winter, which is fine. You get the look of a Colorado stream in your yard all winter. In the worst weather, the top of the BioFalls and the stream will actually freeze over, but the water will continue to run underneath. The water in the skimmer will not freeze, and it is here that the water will pick up oxygen for the fish.

The problem with leaving the pump running is that you can get a fair amount of ice built up along the stream. The longer the stream, the more water is removed from the pond and made into ice along the stream. If the water level goes down too far because of ice build-up or for any other reason, the skimmer might go dry, the pump may burn up because no water is going through it, and the check valve can freeze and crack.

Instead of leaving the pump running, you can float a heater in the pond or use a small pump that sits in the pond and shoots water toward the surface. As long as you keep some open water, the fish will be fine. Aquascape makes a nice 100-watt floating heater that does a good job, as well as a special pump designed for this purpose.

We hope this information is helpful. If you have any questions, feel free to email us at [mail@hornbakergardens.com](mailto:mail@hornbakergardens.com), or call us at 815 659-3282. Better yet, we can chat while you are here shopping.

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