

Cold Weather Pond Care

Drs. Foster & Smith Educational Staff



When temperatures plummet, you may need to step up your winter pond care methods to ward off winter kill. Frigid temperatures make it more difficult for you to keep an area of your pond ice-free, but the health and survival of your pond fish depend upon it. The following tips help you sustain your pond's health during frigid periods.

Use A De-Icer

Properly install one of these devices before freezing temperatures hit. A de-icer helps keep a section of your pond open to allow oxygen and gas exchange. It does not, however, warm the water temperature of your pond. In order to maximize its efficiency, install it in the shallowest part of your pond and shelter it from the wind as best as possible. Some pond owners lay down a piece of plywood over a section of the pond bank where the de-icer resides. This helps keep warmth from escaping too quickly. Depending upon the size of the pond, its depth, and overall volume, more than one unit may be needed to keep a section clear.

Aerate

An aerator keeps your pond well oxygenated and can help keep a section of your pond open in the winter time. An aerator works under the premise that moving water resists freezing. When using an aerator, you must remember a few things. An aerator is capable of hyper-cooling your water, if used when air temps are below freezing. To keep this from happening the aerator should be kept in an insulated chamber (outside the pond) in order to pump in less frigid air, or the pump should be kept indoors with just the airline and airstones being used outdoors. This will allow warmer air to be pumped into the pond and eliminate the risk of hyper-cooling altogether. Keeping the pump in the insulated chamber or indoors will also aid in keeping condensation from forming in the airline and subsequently freezing, shutting down the aeration device altogether. You should also avoid installing airstones at the bottom of the pond. This will eliminate stirring up sediments and will prevent colder and warmer water layers from mixing and hyper-cooling your pond.



Winter pond photo courtesy of Sayer Seely

Thawing Out

If you are responding to a frozen pond emergency, you'll need to first thaw a shallow section of your pond. To do this, use boiling water to melt the ice. Do not whack your ice with a chisel or any other tool, for the shock to your fish can kill them.

Remove Snow from the Pond Surface

Microscopic aquatic plants continue producing oxygen as long as light penetrates the ice. However, a blanket of snow over the ice prevents light penetration, making it impossible for the microscopic plants in your pond to produce oxygen. Combined with the decomposition of vegetation and fish waste, there may be insufficient oxygen for fish, causing them to suffocate. Snow removal, from at least a portion of your pond surface, will help reduce the likelihood of this happening.

Prepare For the Unexpected

During severe winter storms, power outages often result. Keep a plan in place for how you will power de-icers and aerators if this happens. Investing in a generator or a UPS (Uninterrupted Power Supply) will help protect the investment you've made in your pond. Depending on your pond's fish load, a complete freeze can deplete the available oxygen in a relatively short time.