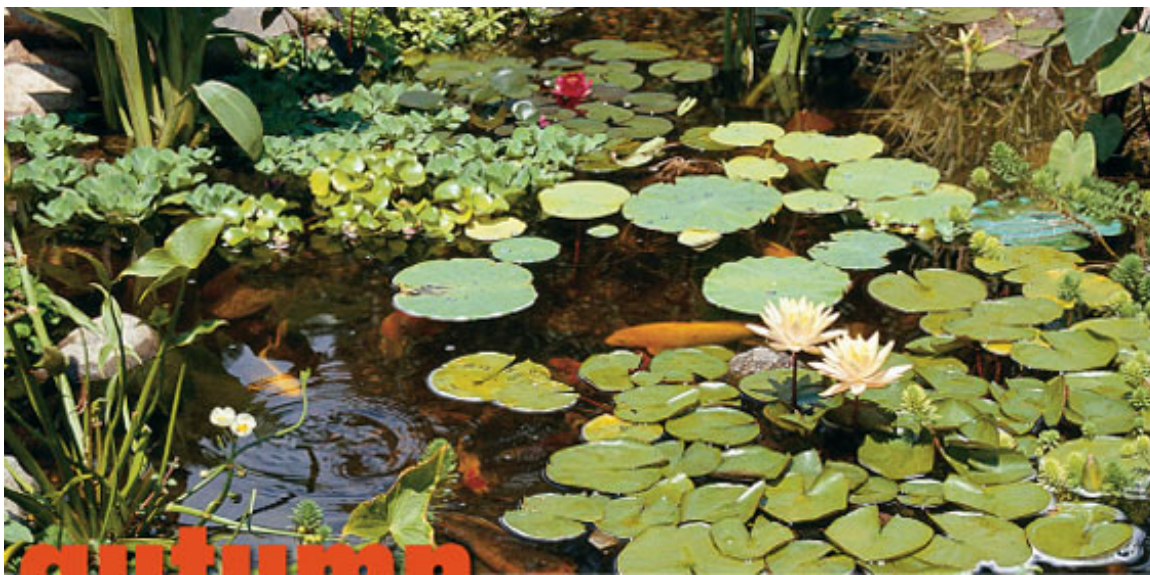


# Fall Pond Maintenance Guide

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## autumn preparations for overwinter success

For many of us, the summer water gardening season is fleeting, and the changing leaves mark the approach of winter. Our focus is drawn towards the inevitable maintenance projects. Prepare and condition your water garden for the coming winter to guarantee over-wintering success with these simple tips:

### Remove Excess Debris

The quantity of debris that makes its way into your pond increases during autumn, placing extra burden on [pumps](#), [filters](#), skimmer filters, and other equipment. Remove excess organic materials such as leaves on a regular basis to prevent accumulation. This not only allows your filtration to work more efficiently but also prevents potential equipment damage due to clogs. A little bit of effort alleviates extra burden placed on costly pond equipment and ensures years of proper operation. Pond rakes and [skimmer nets](#) are ideal for removing small or manageable amount of leaves and debris.



### Install Pond Netting

The best way to maximize leaf-removing efforts is to prevent leaves from falling into the pond in the first place. Drape pond netting over the entire pond surface to keep the majority of leaf litter and debris out. Once the immediate threat of falling leaves has passed, unfasten the pond netting and remove the few remaining leaves with a pond rake or net. For those who like to get down and dirty, a pair of lightweight waterproof waders lets you stay dry while performing pond maintenance.

### Water Change

Perform a seasonal water change to maintain proper water conditions vital for the health of your pond. By summer's end, the water can become dirty, low in oxygen, and in need of a refresh. A substantial water change, up to 50%, is important to remove contaminants and help maintain improved water conditions throughout the winter. The water change can be performed anytime



during fall, but best if done before the water temperature drops below 60°F. This is also a great time to remove organic materials built up on the bottom of your pond.

### **Bacterial Additives**

Condition your pond with bacterial additives specifically formulated to work in cooler water temperatures. Beneficial bacteria will help process organic materials more efficiently, reduce buildup, and eliminate unpleasant odors. Bacterial additives help accelerate the decomposition of leaves, scum, and sediment during the fall and winter months, reducing the buildup of both organic and inorganic particles to create a healthier environment. Add bacterial additives during autumn to fortify the population of beneficial bacteria and condition the pond for the coming spring.



### **Monitor Water Temperature**

Measure and monitor water temperature instead of air temperature. Measuring water temperature is the most accurate way to determine when to change diet, stop feeding, and start feeding your koi again. Remote digital units are now available so you can monitor water temperature without having to step foot outside your home.

### **Wheat Germ Food for Cooler Water Temperatures**

Switch fish foods and gradually reduce feedings as the water temperature falls. When water temperatures drop below 70°F, begin mixing your koi's diet with an easier-to-digest, wheat germ food. At below 60°F, switch to wheat germ food completely. These foods are fortified with vitamins and minerals to help boost the immune system, offer high nutrition, and help reduce fish waste. At below 40°F, you should stop feeding altogether. This gradual process is important not only to reduce the amount of organic waste in the water, but also for the health of your fish.

### **De-Icers**

In regions that experience freezing winters, keep an area free of ice to allow proper gas exchange. Without an opening in the ice, harmful gasses such as carbon dioxide remain trapped. The supply of dissolved oxygen slowly dwindles, creating a toxic environment for koi and other fish. Thermostatically controlled de-icers are the best way to provide an opening in the pond surface essential for proper gas exchange. They are easy to use, energy-efficient, and maintain an opening even in below zero temperatures. NEVER use physical force to break open the ice. Fish are very sensitive to vibrations, and hitting the ice can stun or severely injure fish.



Though it may seem laborious, follow these simple tips and you'll be able to enjoy your water garden year after year by approaching autumn preparations in a sensible, hassle-free manner.

#### **WE RECOMMEND:**

- **Pond Netting** - Keep leaves from getting into your pond and lowering the water quality.
- **Microbe-Lift Autumn/Winter Prep** - Helps accelerate the decomposition of leaves, scum, and sediment during the fall and winter months.
- **Foster & Smith Spring & Fall Koi Food** - Maximizes nutrient absorption during cooler pond water temperatures.
- **Laguna Power Heat 500W Pond De-icer** - Stainless steel constructed de-icer effectively maintains a open area on the pond surface for vital pond gas exchange.

#### **RELATED INFORMATION:**

- **[How to Transition Your Water Garden from Fall to Winter](#)**
- **[Pond Winter Survival Guide](#)**
- **[Fall and Winter Feeding Tips](#)**