

## Winterize Your Koi Pond, How to

Drs. Foster & Smith Educational Staff



# HOW TO WINTERIZE YOUR KOI POND

Koi and other hardy pond fish require special care during the fall months. If you live in a region that experiences extended periods of freezing temperatures, pay particular attention to water quality during fall to help ensure over-wintering success.

### Special concerns

Good water quality is the cornerstone of proper fish care any time of the year. However, a renewed focus on [water quality](#) is needed during fall to help ensure over-wintering success. In areas with extended periods of freezing temperatures, winter is a period of rest when [waterfalls](#) and [pond filtration](#) are shut down for the season. Therefore, a concerted effort must be made during fall to reduce the decline of water quality during winter. To provide proper water quality, [change feeding regimen during fall](#) and [maintain high oxygen levels](#) throughout winter.

### Change feeding regimen

The changing seasons affect the dietary requirements of pond fish. Diet and feeding schedules suitable during the summer are not appropriate during the fall and winter months. For koi, the change in seasons means changes in nutritional requirements and feeding frequency. When water temperatures are high, fish need a diet high in protein and should be fed frequently to encourage growth. However, when water temperatures begin to drop, this type of food and feeding schedule is no longer applicable. Fish digestion is influenced by water temperature, and fish are unable to properly digest food at cooler water temperatures. The uneaten or poorly digested food will pollute pond water and affect fish health.

As water temperatures dip into the 60°F range, cut back on feedings and switch completely to an easy-to-digest [Wheat Germ & Cool Water Food](#). At 40°F, stop feeding your fish altogether. Resist feeding no matter how much your fish beg. The fat reserves built during the summer will sustain your koi throughout the winter. Do not feed your fish again until spring when water temperatures are consistently above 40°F.

### Maintain high oxygen levels

During periods of freezing temperatures, ice can completely cover the entire pond surface. This may not be a serious problem if the ice lasts only a few days. However, a prolonged covering of ice can create conditions toxic to your pond fish. Without an opening in the ice for proper gas

exchange, harmful gasses such as carbon dioxide accumulate as dissolved oxygen is slowly depleted. If proper gas exchange is not allowed to occur, water quality degrades to unsafe levels and results in seasonal fish loss called "winter kill."

### Related Information

[Proper Winter Pond Care](#)

[Pond Winter Survival Guide](#)

[Change Food with the  
Change of Seasons](#)

Invest in a [de-icer](#) or an [aeration pump](#) to avoid winter kill. Pond de-icers rely on heat to maintain an opening in the ice while aeration pumps prevent ice formation by agitating the water surface with air bubbles. These units rely on different methods but both devices safely maintain an opening in the ice and promote proper gas exchange, even during a hard freeze. Keeping an open area in the ice with a de-icer or aerator is one of the most effective

ways of preventing the seasonal loss of prized koi due to poor water quality.

Be prepared during fall to avoid costly mistakes in the dead of winter. Maintain good pond water quality for healthier koi and over-wintering success.