

Spring Kill, How to Prevent

Drs. Foster & Smith Educational Staff

After a long cold winter, nothing is more exciting for a pond owner than the arrival of spring. However, for pond enthusiasts with [koi](#), [goldfish](#), or other [pond fish](#), spring can mean unexpected challenges. Be prepared with a spring survival kit for koi.

In early spring, life that was once dormant becomes active. This awakening includes fish as well as bacteria and other microorganisms. If conditions are right, microorganisms can quickly multiply and create conditions that are stressful to fish. If pond conditions are left unchecked, eventual fish loss due to "spring kill" may occur.

What is "spring kill?"

The term "spring kill" commonly refers to seasonal fish loss due to a series of related water quality issues. It is generally indicated by dangerous, oxygen-poor conditions. A low-oxygen environment is not only stressful to fish but also allows certain harmful microorganisms to thrive.

Conditions that favor microorganisms

Unseasonably warm spring days can give microorganisms an unfair advantage. It provides the energy that microorganisms need to actively metabolize and reproduce. In contrast, these short periods of warm days have minimal effect in raising the overall water temperature fish rely on to boost their metabolism and immune system. In this weakened state, fish are vulnerable to any opportunistic organism.

Easy steps to prevent spring fish loss

Installing a [pond aerator](#) is the easiest way to prevent spring fish loss. The added aeration prevents oxygen depletion and creates a healthy aquatic environment. Place the diffuser (bubbler) near the surface, so it won't stir up any debris, harmful gasses, or aggressively churn the water.

Related Information

[Spring To-do List](#)

[Spring & Summer Pond Care](#)

[Pond To-Do List Before Spring](#)

Other essential items for a spring survival kit should include a [master pond test kit](#) to measure ammonia, nitrite, and nitrate levels, a [pond thermometer](#) to accurately measure water temperature, a combination ammonia detoxifier such as [Pond AmQuel+](#) to neutralize harmful compounds, and [pond salt](#) to encourage protective slime coat production. When pond water temperature is consistently above 45°F, reconnect pumps and start up filters to ensure proper filtration and a successful new year of pond keeping.

Helpful Product Categories

Aerators

Water Conditioners

Test Kits

Thermometers