



Keeping Your Fish Alive

Factors that affect trout survival

There are many who have stocked trout in their ponds that have experienced the unfortunate fish kill. In most situations, this is preventable. Maintaining a pond is an acquired skill, most people learn by trial and error, those who have figured it out have many years of experience.

The key is to understand the relationship between your pond and your trout. A pond is a limited environment for brook trout, therefore the healthy balance is easily affected by different factors, such as fish population; mother nature, pond design, and feed. Neglect only one of these factors and you will probably lose your fish at some point in time.

Brook trout are carnivores, and to some extent, cannibals. For those of you who think trout will clean up your pond, not true. Trout do not eat weeds or algae. Too many trout in a pond can increase nutrient levels, which in turn stimulates weed or algae.

Algae blooms are hard to control, and can kill fish. The trick is to manage the fish population, which in turn manages how much nutrient is released into the water. Most fish kills are the result of having more fish than the pond can hold. That's not to say you can't stock 300 6-7 inch fish in your pond. Your pond may be well suited to handle 300 fish of that size, but remember that as your fish grow, so do their needs. Three hundred 6-7 inch fish weigh about 30 pounds combined. As the fish grow, the 'bio-mass' (total combined weight) of your fish increases dramatically. One year later, you might have 300 ten-inch fish with a bio-mass of 200 pounds. Get the picture? Now you realize that two hundred pounds of fish is way too much for what your pond can handle. If the fish aren't

thinned out, oxygen levels will decrease, nutrient levels will increase, all makings of a summer or winter fish kill.

The hot dry summer months of July thru September are the critical months for fish kills. Keeping your fish alive during this time is not impossible. As mentioned before, understanding trout and how they process feed is important, especially during this critical time. The growing season for trout is May thru October. It is at this time that trout are most active, and feed the most. The process by which a trout feeds and grows is metabolism. The more fish eat, the more they metabolize, and grow. During this process, the amount of oxygen a trout uses can double, depleting precious oxygen in the pond. It is also important to remember that oxygen levels in water decrease naturally as water temperature increases. Oxygen becomes less soluble in water as temperature increases, thereby compounding the oxygen situation. The last factor is the algae bloom. Don't be fooled, algae will be always present in your pond, even if you don't see it. Algae produce oxygen during the day, but revert to using oxygen at night. With the already depleted oxygen levels, algal blooms could potentially deplete oxygen to levels that trout cannot tolerate. This is called the summer fish kill.

Fish kills can also happen in winter, usually in the months of February thru March. These months are typically "dry" months in terms of rainfall; therefore water in ponds can become stagnant, especially if there are too many fish. Ice cover limits the exchange of noxious gases and oxygen at the surface. The best remedy for this situation is to thin fish population before winter, and use some type of aeration.

Finally, keep an eye open for birds, mink, and other fish eating animals. Once they discover a well-stocked pond, they may decide to stick around. There are many different bird-scaring devices available today. I recommend using more than one device at a time, or alternating devices during the week, and also placing them at different locations every other day. If you are having persistent predation problems, call the Warden Service, they may be able to help you with your problem.

Listed below are some helpful hints that can help you better manage your pond.

Helpful Hints

1. Do not overstock your pond; let us recommend how many fish to stock.
2. Thin out your fish population as they grow, and keep a count of what you remove. This over time will give you a history of how your pond is performing.

3. Do not overfeed, overfeeding will not increase growth rates, it will only pollute your pond.
4. Invest in a thermometer, like the ones that come with an outside probe. Monitor water temperature, two to three feet below the surface.
5. Do not feed fish when water temperatures exceed 58 degrees. Trout can survive for long periods of time without feed by using up fat reserves. There is also naturally occurring feed in your pond that can easily maintain your fish for weeks at a time. Minimizing feeding rates will reduce oxygen demand by fish, and also minimizes waste by-product, which in turn reduces algal populations.
6. Aeration can improve oxygen levels, however, avoid pumping the cold water from the bottom of the pond to the surface, this could disturb the thermocline, and could potentially remove any cold spots that fish might be using.
7. Call Us! Often times, we may be able to talk thru the problem over the phone.