

Pond Maintenance: How to Deal with Common Pond Emergencies

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Our ponds are complex systems, and for this reason it may be difficult to pinpoint the cause of a problem. Pre-planning will help you handle various emergencies, which usually come up in the middle of the night or when you are late for an appointment. It would be difficult to be ready for everything, but here are some tips to help you deal with the most common emergencies.



Equipment Failure

Despite your best efforts, there will be times when an essential piece of equipment will fail. This could be a burned-out pump, a broken plumbing connection, you name it, it has probably happened. Our best safeguard is to have backup equipment and parts. While the initial cost will be higher to have backups, the lives (and expense) of the pond inhabitants are dependent on our efforts to filter the pond. The biological filter, which is critical to the elimination of the toxic wastes given off by the fish, is especially sensitive to failure.

Power Outage

Power outages pose another set of problems for pond owners. You may feel helpless during a power outage, but there are a few things you should remember that can help ease your fish through a power outage with a minimal amount of stress.

Unplug all electrical devices you use for your pond in order to avoid possible damage from power surges when the electricity comes back on. A surge suppressor strip is a good investment; the power can surge at any time, and the breaker mechanism in the power strip will keep the power surges from damaging your equipment. You should also clean out the filters, and if possible, change the filter media when the power goes off. This will help keep the pond's water quality high.

An uninterruptible power supply (UPS) can also carry your pond through a brief power outage. They are available at most office supply or computer retail stores. The UPS works by providing the necessary current via a battery. The battery remains charged by being plugged into the wall outlet. This means that your pond will not flinch even a little bit when the power goes off, as it is will not be powered by line electricity. The UPS will last longer if used to power small pumps or air pumps with low current consumption. The larger circulation pumps will usually run only a few minutes.

Finally, if you live in an area where power outages are more common, you may want to consider a gasoline-powered generator. The downside to generators is that they can be expensive, noisy, and rather heavy. However, they can keep your pond (and also your home appliances) going throughout an extended power outage. An important safety tip: **DO NOT** feed your fish during a power outage unless it is absolutely necessary, as it will cause pollutants and algae to build up faster. Most fish can go 5 to 7 days without being fed.

Disease

Most pond owners will eventually have to face a disease outbreak in their pond. Because the pond environment is so tightly knit, disease can spread rapidly if left unchecked. Purchasing a few pieces of equipment ahead of time can help you control rapidly spreading disease.

Most pond owners do not have a quarantine tank for new fish or the treatment of sick ones. However, a quarantine tank is a great way to treat a sick fish instead of treating the whole pond. This smaller tank can also be used to house new fish for a quarantine period before they are introduced to your pond. You should always quarantine new fish for at least 1 to 2 weeks to ensure they are in good health and free of disease before introducing them to your pond. Many medications can safely be used in quarantine/treatment tanks that could be harmful to plants or some marine life found in a pond.

UV sterilizers are very helpful in preventing and controlling the spread of disease in your pond. They are set up like filters; water passes through the sterilizer and is bombarded with UV waves. These waves kill between 95%-99% of harmful bacteria. UV sterilizers are also used to control algae in ponds, but a more powerful sterilizer is needed to control bacteria than algae. To control bacterial populations, the UV sterilizer will need to be 2 to 3 times higher in wattage than the minimum required for controlling algae. Make sure to follow manufactures' recommendations.

Sudden Aggression in a Fish

This problem ordinarily occurs in ponds with multiple species. What causes it? Some species of fish suddenly become aggressive to guard their eggs. If you plan on breeding fish, it might be best to set up a separate breeding tank or partition off part of the pond. Isolating aggressive fish will keep them from harming the other fish in the pond, though you may lose the unguarded eggs to the other animals.

Note that some fish feed on their own eggs, which is another good reason to have a breeding tank.

A Sudden Leaf Fall

If you have deciduous trees around your pond, you should know that you must place a net over the pond in the fall to catch falling leaves and prevent them from decaying in your water and raising ammonia/nitrites to toxic levels. If the leaves fall suddenly, you will want to skim any that are floating on the surface and scoop up or vacuum any that have already sank.

High Ammonia or Nitrite Levels

This can be a very serious problem, as ammonia or nitrites in large quantities are very toxic for your animals. You should check the levels in your pond regularly; that way you can spot a problem before it gets out of hand. If you find your pond has high levels of ammonia or nitrites, there are commercially available products that can neutralize the toxicity of the chemicals in your tank, making them less dangerous for your pond animals.

In a newly set-up pond, you will experience high levels of ammonia and nitrite as part of the initialization process. Your tank is just going through the "cycle" - the process by which it naturally develops biological filtration. However, if the ammonia or nitrite levels in an established pond become high, you should take a closer look at your biological filtration, feeding, and maintenance, and pinpoint the cause of the problem. Decaying vegetable matter, a dead fish, overfeeding, or the addition of too many new fish too quickly can all lead to high ammonia and nitrite levels.



Rain Runoff

In areas with high amounts of rainfall, you want to be sure that your pond is guarded from excess rain runoff. In addition to containing potentially harmful chemicals, rain runoff can cool the pond water rapidly, which can lead to the more serious problem of turnover in larger ponds. Continuous rainfall may eventually cause your pond to overflow. An overflow break-point to drain water away from the pond is recommended. If you know ahead of time to expect a long period of heavy rainfall, you may choose to remove some water from your pond. If a heavy rainfall comes unannounced, however, you may find yourself in the backyard frantically bailing water out of your pond. In cases like this, you can move your fish inside to a quarantine tank temporarily. Once the rainfall subsides, you should return the fish to the pond.

High Temperatures

Unusual hot or dry spells are another problem for pond owners. While excess warming can be easily remedied by floating bags of ice in your pond (NEVER add cool water directly to the pond), excess water evaporation over time can be a concern. While it is usually not a good idea to add new water to your pond, it is okay to do so if you notice the water level dropping drastically for more than a couple days. Be sure to use a water conditioner to remove any chlorine or chloramines from the source water. For extended droughts, your quarantine tank is a good place for your fish while you look into a regular tank setup.

Freezing Temperatures

Unless you live in an area with severe winters and temperatures that are normally ten to twenty degrees below zero (Fahrenheit), your pond should be able to maintain itself through the winter months. Just be sure to follow climate guidelines when you are constructing your pond; it is imperative that a region of the pond be deep enough to provide fish and other pond life with an area for hibernation.

Before the pond has a chance to freeze over, you should have disconnected all pumps from their outlets and tubing and brought them inside. You should also have installed a de-icer to keep the surface from freezing and blocking oxygen, and of course, covering your pond to keep snow and debris out is another wise idea. If the unthinkable happens and the first freeze comes before you can take these precautions, you will need to break the surface of the ice. However, do not tap on the ice to break it since the shock waves will kill or harm your animals. Use sealed bags of boiling water instead to melt patches of ice, and then follow standard winter precautions.

Turnover

Closely related to weather concerns is the problem of turnover (also called rollover). Turnover is usually only a serious problem in ponds 4 or more feet deep, but it is something that every pond owner should be aware of. Turnover occurs when the top layer of warm oxygenated water mixes with the lower layer of non-oxygenated water. This mixing, caused by a sudden cooling of the top layer of water (by rain, a rapid temperature drop, or high winds), reduces the oxygen. Organic material on the bottom of your pond rapidly uses up this oxygen, leaving none for your fish.

Turnover need not be a problem for your pond. Purchasing an aerator will ensure that the top layer of water maintains a healthy oxygen supply. Another way of combating turnover is to drain the pond and scrape out the organic buildup on the bottom. This should only be done if feasible, and only about once a year.

Clogged Filter

Clogged filters can cause a rapid deterioration of water quality in your pond. While ordinarily preventable by regular cleaning, everyone can forget once in a while. Presumably, if you forget to clean the filter, you may not notice that it is clogged until some damage is done. If you find that your filter is damaged, you should replace it as soon as possible. If your filter seems to be working normally, clean it at once and replace the filtration media as soon as you can. Look for any changes in water quality; test for unhealthy levels of ammonia or nitrite as well as for a change in pH.

Food-related Problems



Sometimes the unthinkable happens: an overzealous child or neighbor will dump far too much food into the pond. This should be removed as soon as possible. Vacuum or skim off as much as you can before it settles. And if necessary, do a water change to eliminate the excess since the decaying material will create ammonia/nitrite spikes that can kill your fish.

In the event you run out of food, do not panic, your fish should be able to go for 5 to 7 days without eating. Unless you are in some sort of dire or extreme situation, this should be plenty of time to get some more. Note that fish food can get stale, so buying that 10-pound bag of flakes for your one goldfish is not the best idea.

Also, stop feeding your fish when the water temperature falls below 40-45 degrees F.

Animal Death

If you discover that one of your pond animals has died, remove the dead animal as soon as possible. Next, you should test your pond water to make sure the ammonia and nitrite levels, and the pH are safe. If they are, check other fish and animals for sudden changes of behavior and signs of stress or disease. If more animals continue to die, you may have a disease epidemic in your pond, or you may be feeding them too much. Seek out a knowledgeable veterinarian or pond professional to help with the diagnosis and treatment.

If a wild bird or animal has fallen into your pond and died, follow the same procedures as above, but check also for measures that you can implement to keep that from occurring in the future. Your pond should have at least one area where animals can easily get out again if they get in trouble. A mat or set of stepping-stones can help to prevent accidents, but be aware it also makes it easier for cats or wild animals etc., to gain access for fishing.

Pond Poachers

If wild animals or the neighborhood cats are poaching your fish or other pond life, try a movement-sensitive "scarecrow." These are available with light or water pulses, and when activated, they are highly effective in scaring away marauders.

Animal emergencies are unfortunate but occasional occurrence in any pet owner's life. The same is true for aquarium and pond keepers. By being aware of the problems and using these tips on prevention, planning, and preparedness you can help to prevent these problems or stop them from becoming worse.