Causes and Solutions of Foamy Pond Water

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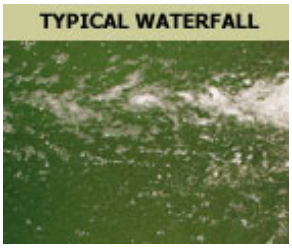

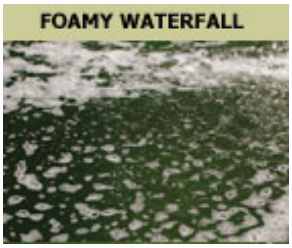

What is that white foam covering my pond?

Most ponds with a waterfall or fountain have some foam or froth from normal water agitation. But if that foam keeps accumulating and does not dissipate, spreading like a white carpet across your pond, it may be a sign of an underlying problem with your pond's water conditions. These stubborn bubbles (white foam) are commonly due to an excess of dissolved organic compounds (DOCs) collecting in a slick along the water's surface. The DOCs can come from many sources including overfeeding, a buildup of fish waste, or decaying plant material. DOCs not only produce unsightly foam, the can also reach a level at which they become deadly to your fish.

If you are trying to solve a pond foam problem, consider these possibilities and solutions:

Possibility: **Are your pond's water conditions out of balance?**
Solution: Use a test kit to check for ammonia, nitrite, and nitrate levels. Trace amounts of nitrate are acceptable, but if any ammonia or nitrite are present, your pond may not be cycled correctly and is out of balance. In other words, there is more waste being produced than can be processed by the bacteria and plant life available. Your pond may need more biological filtration or bacterial additives to bring conditions back into balance.

Possibility: **Are you keeping too many fish in the pond?**
Solution: High nitrate can mean that you have an overstocked pond or you have not performed a water change for a long time. If water changes are performed regularly, you have 2 choices: reduce your fish population, or reduce the amount of DOCs your filter must process. Reducing the amount of DOCs can be approached in several ways:

- Pack your filter with activated carbon. The activated carbon will adsorb the DOCs. Once the carbon has become saturated or coated with suspended solids it must be replaced. Activated charcoal is relatively expensive, so is not the best alternative for larger ponds.
- Add many more healthy, live plants. The plants will help to use up the nitrate produced by the fish.

Regardless of the problem and solution, you will still need to perform regular water changes to keep the DOCs under control and the nitrate levels low.

Possibility: **Is your pond filter too small for the size of the pond?**
Solution: If your filter is not adequately sized for your pond's volume, DOCs may be collecting on the water surface. To remedy this situation you will need to either add another filter, or get a larger one; remember it's always safer to use a larger filter than recommended by the manufacturer.

Possibility: **Have you recently used a dechlorinator?**
Solution: The same solutions you may use during routine water changes to make your tap water safe for your pond fish can also cause foam buildup. If this is bothersome, try a water purifier system especially made for ponds such as the PondFil Float made by Kent Marine. This connects to your outdoor faucet/garden hose and automatically adds filtered water back into your pond when it drops below a certain level due to evaporation or normal water changes.

Possibility: **Have you recently added medications?**
Solution: Medications can also cause a waterfall or fountain to foam, although is should dissipate within a day. Since you will need to remove any chemical media such as carbon for treatment, and any foam covered surface area cannot efficiently exchange oxygen, it would be wise to run an aerator during treatment. If possible, it is more productive, safer, and cheaper to treat diseases by removing the fish to a separate container.

A quick solution...

In addition to getting to the root of the problem, there are some "quick fix" products targeting nuisance foam directly. Try a defoaming agent such as Pro-Polish Defoamer, Anti-Foam, or No More Foam to keep the surface of your pond a clear reflection of all your hard work and creativity. These products are deemed safe to use with plants, pond fish, and other animals.

A great solution, regardless of the cause...

A main way of controlling the buildup of DOCs in the average garden pond, regardless of the cause,

is to increase the number of water changes. In some geographical areas and in very large ponds, the cost and/or amount of water needed may be unfeasable. In these situations, a foam fractionater or protein skimmer may be helpful. Ironically, a protein skimmer actually uses bubbles to attract protein molecules. The resulting foam is then removed through a disposal hose.