

- Potassium limited:

These ponds are the prime targets for an algae bloom, water plants will look yellowish and hyacinths will have long leggy roots that are trying to find any potash at all in the water. Cure: add potash (sold at garden centers) a little every day until your plants look nice again and suddenly algae will disappear as the plants now have an important ingredient they need in order to really hammer away at nitrates in the water.

- Nitrate limited:

These ponds will have no floating algae...pea soup, but will have string algae, plants might look OK but their growth won't be spectacular.

- Phosphorus limited:

These ponds will look the best, plants will look nice and green, there will be no algae of any kind and plants will grow in step with the amount of phosphorus available and there is the trick....to have JUST enough phosphorus to be used by the water plants and not a stitch more. This will usually be accomplished by weekly water changes unless you have well water that can be very high in these trace minerals and in that case you should change less frequently and in smaller amounts.

- NO PLANTS?!!!

Now for those of us that don't have plants we need to depend on a WELL designed filtration system that uses solids separation (settlement chambers that are flushed daily...only uses about the amount of water in a toilet flush), submerged media and trickle towers to keep ammonia, nitrite and nitrates at zero, the bacterial colonies will chew through other nutrients that algae need....and PRESTO clear water!! The reason this does not work for some people is that they don't have a well-designed filter or they have too many fish for the system they have so nutrients are not being consumed fast enough by the filter. Even so if you at least have a trickle tower that will remove the nitrates (will keep floating algae at bay) and then let your fish eat the string algae that will grow in a Nitrate limited pond. Once the strings get out of hand in areas where there are no fish (falls and streams) you can do a salt charge (.3% salt is not appreciated by string algae and will go bye bye) and then over time water changes reduce the salt back to zero.

Feed, nurture and grow your bio-filter as it is a living-breathing creature and your fish will, as a byproduct, be awesome.

The most important thing in order to not only prevent algae but disease as well is prudent feeding. One of the biggest culprits in the supply of nutrients to algae is food that we happily throw in the water, the second it hits it starts

leaching nutrients right into the water (hence the 5 minute rule...if they aren't done eating...tough).

The answer: feed SMALL amounts of wheat germ food with low to no protein till water temps go above 72 degrees. The other key is to flush the vortex chamber daily. The sooner you get the poop out of the system the healthier your water is, why let it sit there and turn your pond into a tank of poop tea.

Along with some new lilies buy some Muriate of Potash. Your pond needs this nutrient in order to use up all the phosphates and other nutrients. Dissolve 2-3 tablespoons in a liter bottle of water. Add 1/8 cup to 100 gallons of pond water twice a week. When your plants green-up, you can switch to once a week.