

## Koi Joy, the pleasures of water gardening and koi keeping

Winter months are quiet in the koi world. In the north the koi are resting under ice waiting for the warm temperatures of spring to thaw them out. Here on the first coast, other than the occasional cool down, our warm climate keeps our fish active for most of the year. However you should monitor your pond temperature and discontinue feeding if the water temperature drops below 55 degrees.

Early spring is the time to start preparing your water garden and koi pond for summer. Spending a little time now will save you headaches and possibly heartaches later. One of the many lessons my husband and I have learned in 20 years of pond keeping is a preemptive pond maintenance plan always pays off.

In spring, all of nature comes to life, including parasites, viruses, and bacteria. With the warming of the pond water, these critters cause problems in your backyard paradise. So create a maintenance plan to keep your pond well balanced.

Test your water regularly. During spring, when the water temperature is rising, test for the following items.

**Ammonia** - Created by fish waste, decaying leaves and organic material decomposing on the bottom of the pond. Keep your pond clean of debris and be careful not to over feed. Koi have zero tolerance to ammonia, so if detected, immediately start water changes and discontinue feeding.

**PH** - Koi are tolerant of PH changes as long as they are gradual. In the First Coast Koi Club, most of our ponds PH levels range between 8.0 and 8.5. Checking for PH changes after heavy rains should also be part of your maintenance plan. If there's more than 2 tenths of a change, there are chemical buffers that can be added. We find the simplest and quickest course is an immediate 40% water change with 20% water changes daily until the PH is at an acceptable level.

**Nitrite/Nitrate** – A natural by-product of bacterial reduction or removal of ammonia from the ponds natural ecosystem. If detected treatment is the same as ammonia.

**KH** – This is the test I perform most often. It measures carbonate and bicarbonate levels and indicates your ponds ability to handle PH swings. A stable KH of over 30 is desired.

My spring maintenance plan includes maintaining a salt level of .03% for three weeks as the fish become active and the water temperature rises. Salt is a first line of defense and treatment for many parasites and helps to create the koi's beneficial "slime" coating. Make sure the salt you use does not contain iodine or any chemicals. Household salt and most water softener salt are treated and can't be used.

Weekly water changes help balance your ecosystem until your water plants are growing actively and competing for nutrients. After a rain, I add baking soda to keep it buffered from PH crashes. Your pond is its own ecosystem, balance is everything.