

**This Month in the Koi Pond** — Jerry Kyle, *Koi Health Advisor* (“KHA”)**Non Healing Wounds Are Common This Year
Or, Why Are Easy Solutions So Hard To Do?**

Chronic non healing wounds are common in ponds that are over crowded, over fed, and/or high in nitrates. When I was a little kid I was a happy healthy rascal with little or no health problems. Then I became old enough to go to school. That koi pond is like the first grade schoolroom where twenty five kids and the teacher grouped together to pass back and forth and all around all kinds of bacterial pathogens. This previously healthy kid got a cold, mumps, and measles one after the other. Got sick, stayed home till well, back to school to catch something else, stayed home till well, back to school to get something else, over and over. Half way through the school year I was so far behind the others that I was taken out of school to start over again the following year. It was embarrassing to be held back in the first grade but not my fault. Crowd together too many in too small a space and this kind of thing happens all too frequently. In a crowded environment, if someone has something, others will catch it too. Just like in a koi pond.

Over feeding puts an unfair load on the bio-filtration system. Over feeding is an easy fix. Feed a couple of times a day only what will readily be consumed in five minutes and stop. It is not just the koi that get overfed, it is the bio-filter. Whatever goes in one end of the koi comes out the other end and goes into the filter. If there is too much food to consume it just goes directly to the filter without the middle man, er, koi. Now there is more ammonia and/or nitrites and/or nitrates. Perhaps you have a great bio-system so don't worry. You should. Ammonia may not build up as it changes to nitrites. Nitrites may not build up, they become nitrates. Nitrates do build up. Oh Boy, do they build up and up and up. Enough nitrates over a period of time suppress the koi immune system. Don't do water changes and a bacterial infection can be disastrous. Water changes help but why not save some money and help by stopping overfeeding also?

If there is more than one inch of fish per ten gallons of water in the pond it is overcrowded. Treat as needed to get rid of a problem and another problem is just around the corner. Get rid of the mumps and get the measles. Or something else. Nothing you can do about it. It happens. It's nature.

What caused that ulcer on the fin or tail or that hole in the side or that sore looking lip on a favorite koi? Did Mother Nature cause this or did you contribute by overcrowding, overfeeding, or allowing too much nitrate? Previously I wrote about mother and her whims and what I did when a bacterial infection attacked my koi. Dipped in Tricide Neo, added Koizyme, to the pond water and fed a medicated food. It worked and the koi are recovering. Some are a little slower healing while others quickly threw off the bacterial infection.

The best medicine is still prevention but once the bacterial infections set in the medicated food is a good idea along with salting to 0.3%. Not everyone can give a koi an injection of medicine to stop an illness and as long as the koi is eating this is a good way anyone can administer antibiotics to stop infections.

The koi immune system is at its best with water temp at 76 to 78 degrees. We should be getting over the rampant bacterial infections that have swept the country this year. The Koizyme and the medicated food have helped. A Tricide Neo dip or applying an ointment such as Debride Cream can help but requires catching the koi which can not always be done by some. The application of Koizyme, medicated food, and salt to 0.3% can be readily done by all of us. There is nothing in these last three products that can hurt although they are not cure-alls. The most important thing to keep in mind is the immune systems are tied directly to water quality and water quality is tied directly to overcrowding, overfeeding, and water changes. Or lack of. Especially lack of.