



NEWS LETTER - November 2006

Controlling Predators

Hérons have been protected for so long now that they are as plentiful as rats in a New York sewer. Uninformed lawmakers have let it get to the point that there is too much competition for available food. There are so many herons now that they soon deplete natural food sources and move on to the middle of cities looking for food. This obviously puts herons back in a position that may be detrimental to them. Rather than practice protection AND control, they simply went for the easy and much less expensive "protection" without thinking about what over population would do to natural food sources and other environmental issues.

Hérons have been removed from the Federal and Washington State protected species lists, however, they still fall under the protection of the migratory bird act, even though many do not migrate but stay all winter feeding on what ever food sources may be convenient.

And well meaning but misguided people have been feeding raccoons for so long that they live and breed right in the middle of cities. No longer the wild animal that you would only find in the woods. It is also important to know that raccoons are the leading carrier of Rabies.

Raccoons kill fish even if they have no intention of eating them. It is not uncommon to find your favorite koi or goldfish floating in the pond with the head bitten off. Herons are not smart enough to know that they cannot eat a 24 inch fish but they will stab it anyway. If you have ever lost a nice fish to a heron or raccoon, you know that you need to do something. The question is what. You can cover your pond with a net but that usually defeats the purpose of building a beautiful pond. Nets are fairly unattractive and sometimes still don't work very well. Raccoons can maneuver around and under nets, or simply rip a hole in them, with ease.

There are several devices on the market that help to deter

predators. One is the Scare Crow, this is an impact sprinkler with a motion sensor. When anything, heron, cat, raccoon or you, activates the motion sensor it turns on the sprinkler. Once activated the sprinkler makes noise and shoots a 2 to 3 second spray of water. This usually works well but it does have some draw backs. The first is that it doesn't care what moves, it will spray. After several times of getting a face full of water because I forgotten I had it set up, I decided there should be something better. The second problem is that it is useless in the winter time in areas that experience freezing temperatures as the unit will freeze up and break. However, the motion sensor idea is still the best as far as I am concerned.

For about a quarter of the cost of the Scare Crow you can go to Harbor Freight Tools and pick up a wireless "Driveway Alert" system. This system (\$19.95) consists of a motion sensor and transmitter with a range of about 300' and the receiver and "Dinger" that emits a loud and annoying BONG, BONG, BONG, when ever there is movement. It doesn't just bong and then stop. As long as the critter moves around it will continue the loud and irritating noise. This should scare just about any wild critter including the neighbors cats. The sensor unit should be placed in a location where it can "see" the pond and surrounding area. The "dinger" can be placed right next to the pond to maximize the noise effect, however, the dinger may also be placed in the house so that you will know whenever there is movement by your pond. This works well in case you have planned some sort of reception party for visitors.

Covering Your Pond For Winter

Covering your pond during the winter can be a very good thing, or it can be very bad. It just depends on how you do it. Covering the pond will help hold in heat and keep

the pond from cooling excessively from wind, but, it can also create severe problems if not done correctly. The best way to cover your pond is to use visquene or clear plastic. When using the plastic make sure that it is several feet above the surface of the pond. Pump in clean air from an air pump located OUTSIDE of the pond area, otherwise you will be recirculating green house gasses. Make sure that the plastic is not touching the surface of the water. With sufficient air space and fresh air in a "Positive ventilation" mode your pond will stay much warmer during the winter. Solar energy will help to heat the pond and toxic gasses will be eliminated while the pond water is being oxygenated. If you lay plastic or another type of cover on the surface of the water, toxic gasses may be trapped and dissolved into the water of your pond poisoning your fish and oxygen will be blocked. So, to recap, if you lay plastic directly over the surface of your pond, you will trap toxic gasses, restrict oxygen flow and undoubtedly kill your fish. If you construct a cover a couple of feet above the surface and provide positive ventilation, toxic gasses will be off gassed, the water will be oxygenated, the greenhouse effect will heat the pond and you should be successful in keeping your fish and plants healthy during the winter. If you cover and/or heat your pond during the winter a temperature of 52 degrees should be ideal. Koi need a definite winter cool down and at 52 degrees their immune system is still working. It may be slowed but it is still working. Their metabolism is slowed as well so feeding should be limited to once or twice a week. Your filter system will not be operating to capacity so water changes once a week are imperative.

Unexplained Fish Losses

Have you ever lost a koi or goldfish for no apparent reason? You look over the body but see no ulcers or other damage, the gills look good and you are unable to figure out why it died? Fish losses from parasite activity will usually show certain indications of body or gill damage. Bacterial issues also will present certain telltale signs.

For those of you that have taken one of our "Fish Health" or "I Have Fish Now What?" classes, you should be fairly comfortable in identifying these issues. However, if the loss is not due to parasites or bacterial issues the cause can be narrowed to environmental issues or genetics. Chlorine, ammonia and heavy metals poisoning are among some of the probabilities. However, these things are easily checked with a test kit and are easy to avoid and to reverse. Some of the more sinister problems are other toxins that may be in the water that we usually do NOT test for.

Recently I observed a pond that seemed quite healthy and

only had an occasional problem with the fish. The water was clear and clean and tested well (for the things we normally test for). I noticed that the bottom drain was of the type that had to be opened manually and was not connected to the pump. It was intended to just be dumped every once in a while to remove all of the gunk that collected in the drain and pipe from the pond bottom. When the valve was opened to drain the debris, the most horrible odor was unleashed. The pipe and the water it contained was saturated with methane and hydrogen sulphide gas. This process only takes a few days to occur.

Standing, non-oxygenated water with rotting debris will very quickly go anaerobic, producing deadly toxins. Now, you may have a tendency to think that as long as these toxic gasses are contained in the drain pipe that they won't be a problem. Unfortunately you would be wrong. These gasses are lighter than the water so they will find their way back up the pipe and into the main pond. Some of the gas will be absorbed into the water slowly poisoning your fish. I have often been asked "if that is the case why did it only kill one fish and not the others"? With some things, fish, just like people, have higher or lower tolerances to certain things. When exposed to toxins some will die before others. If you notice in most MSDS statements they list an LC50 for fish. This stands for a Lethal Concentration high enough to kill 50% of the fish in the test. As the level of toxins rise more and more fish will die. It takes a higher concentration to kill some than others. Along those lines, I have often wondered why I can eat a bunch of peanut butter cookies and just a couple of years ago a young boy died from just eating a bite of one.

If you have experienced any unexplained losses you should start looking for a cause. Any drains or pipes, large plant pots or anything that can hold water and allow it to go anaerobic may be contributing to the problem.