

## Koi Joy – The pleasures of water gardening

Even with our tropical climate in Jacksonville, the dropping temperatures signal it is time to get out of that hammock you've spent time in all summer enjoying your pond and prepare it for winter.

Fish and aquatic plants have different needs in the winter and the better care you give your pond during the winter, the healthier your fish will be in the spring.

Clean all filters and pumps and do 25% water change. Remember to keep all pumps running, maintain aeration and continue your maintenance routine during the winter months.

Floating plants should be thrown out or moved to a green house. Trim all aquatic plants, and cut back any marginal plants that could fall into the water when they die off. For the water lilies, cease fertilizing and trim off all vegetation. Sink your water Lillies to the bottom of your pond in case of frost.

Vacuum or remove any fallen leaves from your pond so there is no deteriorating vegetation to spoil the water. A build up of dead vegetation reduces oxygen levels in the pond stressing fish. If your pond acquires a lot of debris during fall, it can be helpful to net the pond for a few weeks making it easier to remove.

In the fall continue feeding the fish with protein enriched foods to prepare them for the winter. As water temperatures begin dropping they require less protein in the diet due to slowing metabolism. Specially formulated foods for fall and spring are readily available that are designed to help your fish prepare for and recover from winter. Because we feed our fish most of the year, winter formulated foods will have wheat germ as a primary ingredient so it will digest quickly. But remember to discontinue feeding your fish when the water temperature drops to 50 degrees or less. Fish can't digest food when it is cold and the undigested food can cause ulcers in the digestive tract. My friend Tom, who is the current VP of the First Coast Koi Club, has a saying "Over 55 keeps 'em alive". This is close enough for me and easy to remember.

We have found at our house when the water temperatures drop and the fish in the river and lakes go deeper in the water is when the herons start dropping by so provide protection from them.

If you have any questions feel free to email me at [Dale@DWhaley.com](mailto:Dale@DWhaley.com)