



# Genesee Valley Pond & Koi Club Newsletter

Volume 8 Issue 3

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## **Pond owned by: Bob & Yvonne W.**

This is a free form flexible liner pond. The unique features of this pond are its location on the front portion of the yard and because it is behind a wooded garden it is still quite private. They have incorporated a waterfall as a filter/aeration feature. There is also a pebble beach area that serves as an overflow containment section. The pond is home to various gold fish and is currently being more heavily planted to discourage visits by a heron.

## **Plant of the Month**

### *Nymphaea 'Marliacea Comanche'*

**Common Name:** Comanche (Hardy waterlily)  
**Zone:** 4 to 10 **Habit:** Herbaceous perennial  
**Family:** Nymphaeaceae  
**Height:** 0.25 to 0.5 feet **Spread:** 5 to 6 feet  
**Bloom Time:** May - To frost  
**Bloom Color:** Yellow turning coppery bronze  
**Sun:** Full sun to part shade  
**History:** Hybridized in 1908 by Latour-Marliac.

#### **General Culture:**

This changeable waterlily is easily grown in still water in full sun to part shade. Full sun may be best, but plants will usually flower with as little as three hours of sun per day. Plant rhizomes horizontally in spring with bud end up in containers submerged in ponds or water gardens where the water is 12-48" deep. Hardy water lilies will overwinter without difficulty in the



Rochester area, whether growing in ponds or in water gardens, as long as the water does not freeze to the bottom.

#### **Noteworthy Characteristics:**

This hardy hybrid waterlily is typically grown in ponds or water gardens. Rounded, speckled, greenish leaves (to 8" across) float on the water surface. Cup-shaped, semi-double flowers (to 5" diameter) feature upward-curving petals that open yellow but turn coppery-bronze and a central mass of dark yellow stamens. Each flower appears on or just above the water surface, opening in the morning and closing at night. Flowers typically bloom for about 5 days.

#### **Problems:**

No serious insect or disease problems. Leaf mining midges and aphids can be troublesome in some areas.

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In anticipation of spring, last month's presentation covered a number of less common water and water tolerant plants. The idea of course was to bring these lesser known plants to your attention so that you could complete your research and find sources for plants or seeds in time to add some of this versatility to enhance your ponds and gardens even more this year. The only limit to increasing your enjoyment of your water garden is the limit you place on yourself by restricting your willingness to experiment with new colors or materials regardless of whether it is in the plants, the fish or the hardscaping around the pond and garden. Furthermore, if you are thinking about redesigning a planting around the water garden or other area, Fine Gardening magazine had some helpful hints. You can roughly estimate the number of plants that you may need by dividing the square footage of the area you wish to cover by 1.5 (this represents an 18 inch spacing between plants). The next step is to allow for a variation in height to supply additional interest. The author, Lee Schneller, recommends a 30% short, 40% medium and 30% tall mix of plant materials. This

will provide a nice flow and texture to the arrangement.

A request for possible topics for this month's meeting offered no suggestions during the meeting.

Following the meeting, however, it was suggested that since this has been a rather chromatically monotonous (white and grey) winter, it might be nice to see some real color and gardens. This sounded like a good pick-me-up idea so I have borrowed a rather interesting video from the Oriental Garden Society titled "Reflections On A Japanese Garden". I hope that this will satisfy a need to see things in a more cheerful and brighter light and that it will get all of us thinking about the wonderful things that are waiting for us just around

the corner in spring. It is an interesting and entertaining presentation that will help you to more fully appreciate and enjoy the beauty of the water and plants surrounding you in nature. You will be able to slow down and enjoy your own gardens and water features in a new light following what you learn from this video.

If you need further inspiration, now is the time to start planning the changes to your ponds,

water features and gardens by checking out the various garden catalogues, magazines and garden centers for new products, plant materials and water garden supplies. Additional ideas, presentations and colorful displays will also be ready for you at the March 6th RCGC Spring Garden Symposium on "The New American Garden" and during GardenScapes "Swing Into Spring" from March 18-21

I have offered to enclose the flyer for the Symposium in this newsletter and they will allow us to attend at the member rate. If you are *interested* in attending please let me know and send your check by March 3rd. I will have your tickets available for you at the meeting or the show. Details and schedules for GardenScape should be detailed in the regular and suburban newspapers or are available on line [www.Rochesterflowershow.com](http://www.Rochesterflowershow.com)

Q: I've had my water garden for 5 years. Despite adding many plants and bunches of anacharis every year and after all this time to allow for the pond to stabilize, I still can't get my water clear. What else can I do?

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A: There are two possible reasons as to why your pond doesn't have clear water --- algae or very fine particles of dirt.

A possible method for testing this is to run a cup or two of your pond water through a paper coffee filter. If the filter paper shows a greenish stain, you have an algae problem. If the filter stain is brownish, it is most likely fine dirt. An alternate test would be to take a larger sample of water from the pond and allow it to settle undisturbed for several hours or even overnight if necessary. If the water settles and clears, the color of the sediment on the bottom of the container will have the same indicating colors as the filter paper test.

If the problem is algae related, you may want to try a UV clarifier or sterilizer. (More details on these are in another article in this newsletter.) A properly sized and functioning UV unit should be capable of clearing up the algae problem and the water in a couple of weeks. If the problem is dirt, there are several suggestions that will help to get the problem under control.

\* Thoroughly clean the pond at least once a year. This means vacuuming the

bottom and if necessary draining the pond to clean tight corners and crevices.

\* Clean your filter material more often to minimize the possibility of the waste stream from channeling or by-passing the filter material.

\* Your filter media may be too coarse for the particles that you are trying to capture. Try changing to a finer material if one is available.

\* Check that run-off water isn't carrying additional sediment into your pond. Also, if you are using water from a natural source for make-up, verify that it isn't adding fine sediment that is building up through evaporation from the pond.

\* Finally, if you are using a submerged pump, check for possible leaks or by-passes that are returning a portion of the waste stream directly back into the water. (A fountain-head attached directly to a submerged pump is an often overlooked by-pass source.) This can churn the normal fish wastes into a very fine suspension that is very difficult for most filter systems to remove. This can be improved by using a more adequate prefilter after the leaks and by-passes have been corrected.

From KoiVet.com by Dr. Eric Johnson.

Q: What are some of the external signs that might indicate the presence of KHV?

A: Koi Herpes Virus penetrates and annihilates the epidermal cells of the fish, stripping the gills and skin and leaving them extremely vulnerable to secondary infections. Because of the way the virus works, the fish may appear to be burned on the outside, or excessively slimy as the skin fights the virus. The damage to the gills is usually worse. Typical Symptoms:

- \* Head down when swimming
- \* Lethargy and weakness
- \* Sunken eyes
- \* **GILL LESIONS**
- \* Sandpaper skin.
- \* White stringy slime on the skin
- \* Eventual dark discoloration in some surviving fish
- \* Body sores

KHV doesn't always have to appear as a mass-mortality and wide scale infection.

Under the right circumstances, it can look like routine *Aeromonas* ulcer case.

Gill lesions are the safest clinical symptom to associate with this disease. What you might see are fish with very red gills,

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however, there would be white patches or streaks in the gill tissue.

If you wish further proof, a final diagnosis and confirmation for KHV can be undertaken via laboratories which are set up to perform Polymerase Chain Reaction testing. The PCR testing is best performed by sending three (3) live suspected case fish to the lab where tissue samples are prepared and can be analyzed for bits of the virus DNA.

I want to thank Norm James for agreeing to help bring back and develop color pages for our newsletter. He also provided a copy of the Koi Vet pages that were the source of the above KHV information.

The following information is based on an article by Karyn Venhuizen in Water Gardening magazine titled Ultraviolet Clarifiers.

UV treatment can clear pea soup green floating algae problems when all else fails. But what is it and how is it used?

A UV clarifier is essentially an assembly containing two concentric tubular units housing a light bulb capable of emitting ultraviolet rays. As the pond water passes through the unit, the UV

rays irradiate the water and the algae and other components altering their DNA and subsequently killing them. The water then carries these particles to the filter system where they can be trapped and be prevented from further clouding the water.

The beauty of the system is that it only affects materials within the water that passes through the unit. It has no effect on anything that remains in the pond itself. It also has no ill effects on people.

The amount of control achieved by the unit is determined by the strength of the UV and the flow rate of the water through the unit. This is part of the explanation of the different terminologies regarding UV units. Lower powered units that work primarily on algae and some other organic materials are referred to as clarifiers. Units that are powerful enough to eliminate virtually all of the biological matter and pathogens are more often referred to as UV sterilizers and this extra control is more expensive to purchase and operate. Also, sterilizers will only affect disease organisms and pathogens while they are floating in the water and can pass through the sterilizer. It has no effect on

those attached to or in the fish or other materials. Most pond units are clarifiers and if your goal is to control free floating algae a clarifier will do just fine. Note: Neither unit will control string algae since it remains attached in the pond.

The UV unit should become part of your filtration system. It is best installed between the mechanical filter (to minimize interference from dirt and debris) and the biological filter. The biological filter can then consume the destroyed algae before it can re-enter the pond.

It is important to establish the proper power to flow rate to optimize control. The flow must be slow enough to assure adequate exposure time to kill the algae but fast enough to assure that all of the pond water will pass through the unit in a reasonable amount of time. The clarifier must be cleaned periodically to maintain its efficiency and the bulb must be replaced about every other year assuming 6 months/year operation in this area.

Sadly and belatedly, I must inform you of the passing of one of our members Rodney Reis.