



Genesee Valley Pond & Koi Club Newsletter

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Diversity of Seedlings in a Single Cross of *Nelumbo* Lotus



Below are seedlings produced by a deliberate cross of *Nelumbo* 'Pekinensis Rubra' x 'Chawan Basu' by Christian Meyer



Genesee Valley Pond & Koi Club Newsletter

"Wet -n- Dry" "News -n- Views"

Last Month

Bob Wheeler presented an overview of lotus. He pointed out that both "waterlily" and "lotus" are common names that have, unfortunately, been used interchangeably at times in the past. To be correct, we must use the true botanical classifications.

<u>Waterlily</u>	<u>Lotus</u>
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Order: Nymphaeales	Proteales
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Family:

Nymphaeaceae	Nelumbonaceae
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Genus: Nymphaea	Nelumbo
Nuphar	
Victoria	

By Lotus, we will mean the genus *Nelumbo* which is similar to but not really related to the *Nymphaeaceae* family members. The *Nelumbo* leaves are peltate, that is they have fully circular leaves. *Nymphaea* have a single characteristic notch from the edge to the center of the lily pad. (The *Victorias* are the exception to this leaf notch form.)

There are just two *Nelumbo* species. *Nelumbo nucifera* is from Asia and some far east countries and Northern Australia. *Nelumbo lutea* is the American lotus and may be found from southeast Canada through eastern and central US and into the Caribbean, Mexico and northern South America.

Lotus cultivars are classified on blossom color and shape, plant size (bowl, dwarf, medium or large) and by hardiness (hardy or tropical). The plant structure is characterized by segmented runners that thicken to "rhizomes" or "tubers". Short roots form at the tuber nodes from which the leaves and flowers also grow on separate prickly stems.

Buds form and last a long time before opening as blossoms. The

shape and size of the flower varies greatly and in colors of white, pink, red, yellow or multicolor. The flower is categorized as single if it has 25 or fewer petals. Semi-double flowers have 25-50 petals and fully double flowers will have 50 or more petals. Both *Nelumbo* species have single flowers. It is only the more developed cultivars that exhibit the semi-double or double flowers.

The *N. nucifera* tubers can be sliced and served as a vegetable or baked and dipped in confectioner's sugar. Either way, the taste is somewhat like a sweet potato or yam. The seeds are edible but must be peeled and any sprouts (bitter) removed. The young leaves can be collected before they unfurl and are steamed like spinach or watercress.

I want to thank Bob Wheeler for stepping in and handling last month's meeting for us. Since I wasn't certain how to summarize the meeting for the newsletter, he also deserves an additional thank you for supplying the information for the above "Last Month" column.

Coming events

It is difficult to admit that our pond season may be coming to an end, but the weather, the trees and nature are beginning to change. The pond and other wildlife are busy preparing for the impending changes. Looking at our calendar, it also indicates that we too should be very busy preparing for the end of our year. Likewise this month's meeting will also have a full schedule.

We must seek nominations for new, replacement or additional members for our Board of Directors. We can understand a certain amount of reluctance of people to volunteer for these positions and the uncertainty of what you may be

getting into. We all work together on the plans, so you will not be alone. You could also check with current and past Board members for additional insights into what is involved. The one thing we can promise you is, that you will have more fun, get to know everyone a little better and have a chance to bring more interest and activity to our meetings and events.

To help us in setting up the 2008 schedule of events and topics, we would appreciate any suggestions that you might have especially for new and interesting topics, types of speakers or off-site tours or visits. We need this information before the end of the year, so that we can start to recruit speakers and to make the necessary time and contact arrangements before the speaker schedules become filled with other commitments.

The main topic for this month's meeting will be the different techniques and treatments for over wintering various plant materials and some points for re-starting them in spring. I hope to have additional books from the RCGC library for source information as well as for sign-out by anyone interested in more details on these techniques. We also have a "Thermoplanter" that was donated to the club for our raffle by Mark Prescott who developed it in his Black River Nursery. The timing of this donation was perfect, in that it is an additional device and technique that may be utilized in the wintering over process. Mark was kind enough to also to share some ideas on over wintering plants that will be incorporated into the presentation.

If time permits, we will also touch on some of the suggestions and ideas for preparing our ponds, water gardens and fish for winter. I will bring some of the handouts

(Continued on page 3)

Genesee Valley Pond & Koi Club Newsletter

from last year's presentation for those who are new members or didn't receive one last year.

November will be our last business and informational meeting for this year. The actual elections will be the main business item. There will be a final opportunity for additional candidates to volunteer or be nominated prior to the actual voting. Please join us to assure that we have good representation for this election.

The informational portion should be a presentation by Larry Nau on the IWGS symposium in Thailand. Larry has explained a lot of the beauty of this event to me and I am looking forward to seeing some of this in his many pictures and hearing more about his experiences there. Since he is very busy and committed to other groups, if there should be an unforeseen change of plans on his part, we will try to reschedule this presentation for one of our spring meetings.

Please save the date December 7th for our Christmas Party. This will follow our usual format with a gathering at 6:30 followed by a dish to pass dinner at about 7:00 PM. The entertainment will be in the form of our Pond Jeopardy game that reviews some of the information that was presented during the year. More details and the suggested schedule for the dish to pass portion will be in the next newsletter.

Personal Note

Thank you all for your prayers, cards and support following my recent surgery. They were very helpful in making the operation and my recovery go so smoothly and so well. The next phase will include additional testing and a dozen chemotherapy treatments

during the next 6 months. Radiation therapy may also be added to assure that the cancer will be further controlled.

For those who may have missed the last meeting, the explanation of the above item is that I recently was diagnosed with breast cancer and it was successfully removed with the mastectomy surgery.

Waterfall Guideline Suggestions

If you are thinking of adding a waterfall or redesigning an existing one, here are a couple of thoughts from *Gardening How-to* magazine that I haven't seen before, but which may prove helpful.

Ideally, the waterfall should be at eye level when you are sitting down to relax and enjoy your pond. This will give your waterfall the maximum visual impact.

Use larger boulders at the waterfall for a more natural look, but keep them in the proper scale for the size of the pond and waterfall.

To create more sound and add more drama, use additional ponds and pools set at different heights, distances and locations. This will allow the water to spill over through various waterfalls and cascades as it travels from one pool to the next one.

New Hope For Algae

Several years ago, I jokingly said that the best way to get rid of algae would be to find a reason to make it useful or valuable. Once this happened, it would probably die off because we wanted it to grow.

An article in the current issue of the *National Geographic* magazine is offering that glimmer of hope. In the article about bio-fuels, they tell how there is a possibility that algae can be used to reduce excess carbon dioxide emissions by absorbing and growing on some of the excess emis-

sions. The slimy growth may then be further utilized by being harvested and converted into a viable fuel.

This is not a new dream or a new technology. The National Renewable Energy Lab (NREL) in Golden CO. ran an experimental algae program for 17 years before it was phased out as funding dropped off. Now, there is a significant renewed interest and at least a dozen start-up companies are looking into its development. Two of Arizona's largest universities have recently started algae programs which added support to the concept and credibility of the program and process.

There are several possible advantages to using algae as a bio-fuel. Not only can it absorb carbon dioxide from other processes as previously mentioned, it can double in mass within hours under the proper conditions. The excess carbon acts as a fertilizer and growth stimulant. The algae can also be harvested almost on a daily basis under those conditions. These advantages are significant versus the growing times and seasonal harvesting limits on some of the other biofuels like corn and sugar cane.

We may be several years or decades away from this becoming a viable alternative to fossil fuels. Yet, with tongue in cheek, it would be a shame if, in our desire for clean, clear water for our ponds that our chemicals and sterilizers killed off one of the algae strains that might power one of our future vehicles.

Turtles

Your pond may have attracted a certain amount of wildlife that usually come for periodic visits and then move on. Among the animals that may take up residence in and around your pond are turtles.

Genesee Valley Pond & Koi Club Newsletter

Dave Simmons has published some of his thoughts and experiences in *Flowers and Fins* the Springfield Water Garden Society newsletter. This might help us decide if we want to keep them or build a turtle pond for them.

Water turtles must eat in the water. Their diet consists of about 3/4 meats and 1/4 vegetable matter. Because of this, it is not a good idea to have the fish and turtle in the same pond. They will try to eat smaller fish and may nip the fins of larger fish.

The turtles are affected by the same chemicals in the water as the fish. You will need a method of keeping the water clean. In a small pond, you can empty the pond and replace the water on a regular basis. In a larger pond filtration and circulation is the best route to take. Their ponds should, therefore, have similar good or even better filtration than a fish pond. Ideally, a good turtle pond system should provide a complete water turnover every half hour or less.

Turtles do carry salmonella. You must be very careful when handling them. You must always thoroughly wash your hands and other contact areas after handling them.

If you decide to keep a turtle, select an outdoor area that has both sun and shade throughout the day. The shape and design are optional but the depth should range from about 6 inches in the shallow end to about 24 inches in the deep end. You will also need to provide an area for the turtles to climb onto to get out of the water and to bask in the sun when necessary.

You should put a low fence or barrier around the turtle pond so that they can't get out and get lost. Note: this is important where tortoises are also present to keep them out of the pond because they cannot swim and would drown.

Our Fish Comet Characteristics

Since we were asked to participate in the NFKPC Koi and Goldfish show, I thought that it might be appropriate to review the history, characteristics and qualities of this fish. It is possibly the most common variety of pond kept goldfish and is the fish most people think of when the word goldfish is mentioned.

The comet is a single tailed, long-bodied fish having a streamlined body shape. They are graceful fish that swim easily through the water. They may range in length from 6-10 inches for tank raised fish to 12-20 inches when raised in a suitable pond environment. Comets come in a variety of colors that include orange, almost red, yellow, white, olive or drab green, yellow-brown and black. Those that might exhibit a calico color pattern are usually referred to as long-finned shubunkins.

The main identifying characteristics of this goldfish variety are the long and flowing dorsal, pectoral, ventral and caudal fins. The caudal fin is often the length of the body. Large specimens in excess of 12 inch body length with an equal or longer tail length are an impressive sight and a joy to watch. The tail should be prominently forked and the tips of the tail are almost clear, which is a great contrast to the background body color of the fish and the other fins. The dorsal fin should be fairly large, equal to the body depth and held erect. There is a single ventral fin that should be in proportion to and consistent with the size, length and flowing appearance of the remaining fins.

In show quality fish, the body depth should be approximately 3/8 the length of the body. The dorsal fin should be as high or higher than the body depth and erect. The single caudal fin should be deeply forked, so that approximately 80%

of the tail appears to be forked. It should have long narrow lobes that gradually tend toward almost clear and ending in a point. The caudal fin should be as long or longer than the main body length. The pectoral and pelvic fins are paired and should be long, flowing and tend to end in a somewhat pointed fashion. There is a single anal fin which should also be long, flowing and pointed at the end. The scalation is metallic in appearance and the more acceptable color variations are: red-orange, red and white.

Judging for comets is similar to that of the other single-tail fish, but there is a more significant emphasis on fin development and deportment. Furthermore, larger fish often exhibit more intense coloration, especially when raised in outside ponds. A typical point schedule for show comets is: Body Style-20 points; Coloration-20 points; Fanning-20 points; Special characteristics: Caudal fin development and carriage-20 points and Department and Condition-20 points.

Now, go out enjoy your fish and compare them to each other and see how your favorite might compare to the others and to the judging criteria.

A concern

A local incident of intentional or accidental release of non-native water plants causes concern. While kayaking on Irondequoit Creek, I encountered 30 or 40 water lettuce plants in a short section of the creek. Even though the lettuce will most likely be killed by the first frost, incidents like this can encourage the passage of restrictive water garden regulations, and gives local ponders cause to realize the importance of being careful. (Norm James)



Genesee Valley Pond & Koi Club Newsletter

Board Members 2007

President: Larry Hursh
Vice President: Bob Wheeler
Secretary: Kathy Hursh
Treasurer: John Roguski/Les Saiers
Pond Tour Chairperson: Norm James/Les Saiers
Refreshments: Yvonne Wheeler and Kathy Hursh
Newsletter Editors: Hursh, James, and Nau families
Webmaster: Norm James - gvpakc@attglobal.net

Purpose of the Club

- To promote, create and enlarge the hobby of keeping, breeding, appreciating and exhibiting Koi and goldfish.
- To promote and appreciate the hobby of Water Gardening.
- To disseminate information about Koi, goldfish and Water Gardening.
- To socialize and have fun.

We meet in a very friendly atmosphere at 7:00 pm, the first Friday of every month, at the Rochester Civic Garden Center (the Castle), 5 Castle Park, off Reservoir Ave., in Highland Park. Parking is free. Anyone interested in water gardening and/or Koi is welcome to join us. We ask that you consider joining the club after your third visit. For more information call Larry H. (585) 473-6276 or e-mail lkhursh@aol.com or visit the club website at www.ggw.org/gvpakc

Calendar of Events

October 6, 2007: We will be asking for nominations or volunteers to run for the various officer and board member positions. The elections will be held at the November meeting. Our main topic this month will be a discussion of the various methods used to winter-over water garden and other plants. If time permits, we will also review and discuss preparing the ponds and water features for winter.

October 13, 2007: NFKPC monthly meeting

November 3, 2007: Election of officers and board members. We are hopeful that Larry Nau will be able to have the date open to update us on his trip to Thailand and show some of the beautiful flowers and gardens that he toured as part of the IWGS Symposium.

November 10, 2007: NFKPC

December 7, 2007: This will be our Christmas party and year end celebration of another successful year. We will also present a review of this year's information in our version of pond jeopardy.

January 4, 2008: There will be no meeting this month.

“Naturally Green” - A live gardening show every Saturday from **9-10 am** on **WYSL 1040 AM**.