



# Genesee Valley Pond & Koi Club Newsletter

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## GVPAKC Pond Tour – 2005 Father Giles' Koi Ponds



Father Giles hosted an interesting tour of his ponds at The Franciscan House on Mt. Read Boulevard. The largest and newest pond (*upper left*) is a deep, rectangular, traditional Koi pond with a minimal amount of plant life. His largest breeding fish, along with other Koi in various stages of development, are kept here. To protect the fish from marauding herons, he has installed a fence around the rim of the pond. The water from this pond circulates through two nearby cattle troughs (*upper right*), which house spawning mats and thousands of fry. When the fry are large enough to move to



the pond, the circulation system can be opened, and the fry are allowed to find their way to their new home. The smaller ponds, located on adjacent property, are the first that he built and feature goldfish, water lilies, lotus (*lower left*), and iris. We also enjoyed seeing his parrots, and other birds in an aviary.

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

I hope that everyone enjoyed the photos of the NFKPC tour, our tour and an overview of Alaska from the James' vacation as much as I did. It is always nice to see all of the different approaches and techniques that others use to create their ponds and water gardens and what mother nature provides as an inspiration for us to create our own versions of them.

Our thanks go out to the Wheelers and the Jameses for sharing these photos, their experiences and the equipment necessary to make it so easy for all of us to enjoy the programs.

A follow-up on last month's newsletter feature on invasive species continued with information on some of the more common ornamental landscape trees and shrubs that are becoming invasive. The information included possible alternative species that would yield similar color, growth or texture to compliment your existing landscaping as you replace the offending species.

Most of the information in both of these presentations was related to invasive plant materials. But plants should not be our major or only concern. A recent study on the Great Lakes published by the National Wildlife Federation showed some frightening trends.

A new non-native species is introduced somewhere into the Great Lakes every eight months. So far there are 162 aquatic exotic species

that are already present in some if not all of the lakes.

Here are some of the more prominent ones:

**The sea lamprey-** This predatory eel-like fish attaches itself to other fish and drains them of blood and other necessary body fluids. An adult lamprey may be responsible for killing as much as 40 pounds of fish in a 12-20 month period.

**The round Goby-** An aggressive fish that decimates the nests of other fish especially small mouth bass and consumes the eggs. It may become necessary to restrict or prohibit fishing for certain species during their breeding season to offset the decline in some of the sport fish species.

**Zebra and quagga mussels-** These filter-feeding mollusks are highly opportunistic, reproduce rapidly and consume incredible amounts of microscopic plants and animals. This deprives native species of their food chain. Furthermore, we have all heard of the problems that these mussels cause to water intake lines. Researchers are now linking them to the toxic algal blooms that foul our drinking water supplies and foul some of our beaches.

This is obviously a very much shortened version of the report. If you are interested in learning more about the report and the other species detected and the problems that they are causing, you can read the full report by visiting [www.nwf.org/greatlakes](http://www.nwf.org/greatlakes).

This month, we will be seeking volunteers and/or nominations for officers and board members. We will then publish a list of known

candidates in the November newsletter and will have a final call for additional candidates just prior to the voting at the November meeting. While our By-laws do not impose or imply term limits for officers or board members, it is usually beneficial to incorporate new candidates to keep an organization flexible and fresh. New candidates, whether they win or lose, can bring new ideas and programs to keep the club interesting and lively. Therefore,

please consider becoming a part of this process and help to provide the continuity necessary to help us through the coming years and especially for this the start of our tenth year.

We will also be touring the RCGC library and learning more about the changes that they are adopting to make it more user friendly especially for the clubs that reside there. Erika Casler, one of the library volunteers, will be our guide for this presentation. She will also be assisting us, as necessary, by having books related to our monthly topics available from the library for additional reference and follow-up information.

The main portion of the meeting will be a round table discussion on "What Works For Me". This may be somewhat of a misnomer because the idea is to discuss our various successes, failures or how we broke the rules. We hope that this will encourage a great deal of audience participation and prove to be a good learning experience for all. Please start thinking about some of your favorite experiences to facilitate these exchanges so that

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we will all be ready to share and keep the meeting happy and enthusiastic.

Also, next month we are supposed to share cooking recipes based on suggestions from participants at the pond tour picnic. Please bring any recipes that you would like to share so that we can have copies available for possible inclusion in future newsletters.

We also hope to have a discussion of some of the edible water plants. If mother nature cooperates and some of the plant materials are still available, we may even have a live demonstration or possibly samples to taste.

We are not the only ones who are interested in edible plants. On Saturday, October 15th, Lee Reich, a noted gardener and author, will be presenting two talks about edibles at RCGC.

From 9:00-10:30, he will discuss "Native Fruits". This will be a departure from the familiar market fruits of our mainly foreign heritage. He will present some truly native American fruits that often look at home in our landscape plans.

His second presentation, "Edible Landscaping" from 11:00-12:30 will expand the concept of edible plant materials to include some ornamental trees, shrubs and vines that not only look good but bear delectable fruits. Space is limited and pre-registration is required. The cost per session is \$20 for members; \$30 for non-members. See the 2005 Fall Classes bulletin for additional information or call RCGC 473-5130 for additional information or reservations.

If you think that your Koi are getting too big, this is a news item that you may find interesting. The *Focus* newsletter from the World Wildlife Fund featured this Ultimate Catch.

Fishermen in northern Thailand netted what is claimed to be the largest freshwater fish since records for this category have been kept. This record breaker is a Mekong giant catfish, Southeast Asia's largest and rarest fish. It measured nearly 9 feet long and weighed in at 646 pounds. It was reported as part of a new WWF and National Geographic project to identify and study all freshwater fish over 6 feet long or over 200 pounds. This Mekong catfish was an astonishing find and is obviously the current record holder.

While it is amazing to think that giants such as this still swim in some of the world's rivers, the news is not all good. The study is showing a clear pattern that the largest fish species are disappearing and like the Mekong giant catfish may be facing extinction. These and other giant fish have been poorly studied and some are already critically endangered. The real fear now is that some of them may disappear before we have the opportunity to study and save them.

A recent issue of Water Gardening magazine was subtitled "Guide to Koi and Goldfish" and was devoted to articles by Dr. Myron Kebus, a fish veterinarian. Some of the following information was abstracted from these articles.

To fish or not to fish addresses the old question as to whether or not

fish are a necessary addition to help create or maintain a healthy pond. While it may be true that a pond or water feature may appear to have something missing when fish are not present, the owner must decide not only on the type of pond that they have but also the amount of care, responsibility and time that they are willing to invest in the pond. Then, they must make the additional choice of selecting the right type of fish for their water garden if that is the way they would like to go.

If you have a shallow pond and have only minimum time to devote to fish care, you want smaller fish that are more tolerant of temperature swings and water quality. The suggested fish would be rosy red minnows or some species of killifish. In our area these would need a winter home.

Panfish (bluegills, sunfish etc) and gamefish like bass and pike do better if raised in earthen ponds that are preferably quite large both in gallonage and surface area.

Dr. Kebus also discusses the possibility of fish controlling mosquito larvae. Not all fish are interested in eating these larvae. Older and mature Koi and goldfish may not be as enthusiastic as younger ones in eating them. He suggests that, if this is your primary reason for having fish in the pond, better alternatives would be to add Mosquito fish (*Gambusia* species), rosy red minnows or killifish.

Many other types of aquarium fish can live and grow well in backyard ponds. Unfortunately they are mostly tropical in nature and must be brought indoors for the winter. They obviously will grow large and enjoy their space during the sum-

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mer. A good comparison is that it would be like sending kids to summer camp.

In his conclusions in a sidebar, he states that fish do add to the beauty and life of the pond. However, they aren't necessary to have a balanced pond nor are they necessary to have good water. Actually, they can make it more difficult to have clear water due to the added waste loads and their possible disturbances of the plant soils and settled materials, especially during spawning activities.

Furthermore, you don't need fish to feed the plant materials in the pond.

Yes, the beneficial bacteria can convert fish wastes to nitrates that the plants can use but it could be easier to poke a few fertilizer tablets into the soil than it is to feed and care for the fish and associated equipment if your time is limited.

The final choice is yours but, if makes the decision easier, they are not necessary for balancing the pond, controlling water quality or fertilizing the plants. So relax in your decision and enjoy what you have created with or without fish.

The article [Skin Deep](#) is an unusual look at the skin of the fish and how important the care of the skin is to the health and happiness of your fish. The skin on a fish is relatively delicate especially in comparison to that on mammals and other animals. Because the skin is the first line of defense, it is often the first area to show that something may be wrong. The thickness of a fishes skin can vary from one area to another. Generally, it is

thickest where there are fewer scales. Therefore, it is usually thicker over the head and around the fin areas. Skin thickness can also vary with age, gender and sometimes even with the time of year.

One of the most amazing things is that a fish's skin has a local immune system similar in concept to what we would have in our blood stream. For fish, the skin immune system is their primary one and their secondary immune system is in their blood. This secondary blood based immune system in fish is not as long lasting or as effective as that of humans and is not as effective as the primary skin system.

It is the duty of the antibodies circulating in the skin tissue to recognize the disease organisms and isolate them so that other cells can destroy them before the organisms can penetrate deeper into the fish. This is why any break in the skin can be so dangerous and also why ulcers are so dangerous and potentially lethal for our koi and goldfish.

Another unusual feature about the fish's skin is that it contains taste buds. These taste buds can vary in characteristics and location in various species. Koi and goldfish have the densest amount of taste buds outside their mouths and along the outside of the head. They have others evenly but less densely distributed along the rest of their bodies. These taste buds not only sense when food is nearby and in which direction but they can also detect if other fish or things that they should avoid (predators) are in the area.

The best way of protecting the skin is to not handle the fish any more than necessary. If you must net

them, use a fine net that has smooth seams and is made of a fabric that will not catch on the scales and that won't be harsh or abrade the fish. Better yet is to use a flat net to guide the fish into a container that is submersed just below the surface of the pond. You can then use the container to remove the fish from the pond. This has the advantage of not taking the fish out of the water and exposing it to the air. Exposing the fish to the air while transporting it between containers can create some problems and therefore such exposure if necessary should be kept to the absolute minimum.

If you must handle the fish by hand, always moisten your hands or gloves before you touch it. This will lessen the amount of the protective mucous coat that you may accidentally disturb or remove through your handling of the fish. Use extra caution in this process since wet hands and an active fish could result in it flipping out of your grasp. Also be careful that your reflex actions do not prompt you to exert too much additional pressure to control the fish which could also be harmful to the health of the fish.

Make sure that your pond is safe from sharp objects and rough surfaces to reduce the possibility of injury. This is especially important in spring because the skin of koi and goldfish is most sensitive to abrasion and possibly thinner. Unfortunately, this is the time of the year when they are most active in spawning. They may be injured by their spawning partners or by chasing through and into the sides and bottom of the pond as well as objects within it.

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Fish have three skin layers- the epidermis, the dermis and the hypodermis.

The epidermis is the outer most layer, covering the skin, scales and other parts slightly beneath it. It may be referred to as the cuticle but is more commonly referred to as slime coat or mucous layer. This layer is very thin and does not contain many cells. It does contain the antibodies that are the first line and most important defense layer against disease-causing agents.

The dermis is the middle layer and contains the scales as well as pig-

ment cells, blood vessels and nerves including taste buds. If a scale is lost or disturbed, it exposes this middle layer to possible infection.

The hypodermis is the most internal layer of the skin. It contains the blood cells that help to nourish the other two layers.

These three skin layers also seal in the essential body fluids and salts of our fish. This process of osmoregulation is responsible for maintaining the proper balance between body fluids, salt and the surrounding area. Since fresh water does not

contain sufficient salt, koi and goldfish create the salt themselves and utilize their skin to maintain their internal salt requirements to support their blood and other tissues at a slightly salty level. Therefore, an injury to the skin can upset this salt equilibrium and lead to more serious problems.



## Board Members 2005

President: Larry Hursh  
Vice President: Bob Wheeler  
Secretary: Kathy Hursh  
Treasurer: John Roguski  
Pond Tour Chairperson: Brain Nagel  
Refreshments: Yvonne Wheeler and Kathy Hursh  
Newsletter Editors: Hursh, James, and Nau families

## 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. 473-6276 or e-mail [lkhursh@aol.com](mailto:lkhursh@aol.com) or visit the club website at

[www.ggw.org/gvpakc](http://www.ggw.org/gvpakc)

## Calendar of Events

**October 7, 2005:** Round table discussion "What works for me", hopefully this will be a group participation on pond problems and answers, nomination or volunteering of candidates for November elections and a presentation by representative from RCGC library.

**October 14, 2005:** NFKPC meeting

**November 4, 2005:** Recipe and cooking information exchange (possible demonstration and tasting) Election of officers

**November 11, 2005:** NFKPC meeting

**December 2, 2005:** Pot Luck Christmas Party and Pond Jeopardy Game. We are looking forward to celebrating the end of a successful year and the start of our tenth anniversary year.

**January 6, 2006:** There will be no GVPKPC meeting this month.

**February 3, 2006:** This will be the start-up meeting for our tenth year. We welcome your suggestions for programs to make this a memorable year.

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