



# Genesee Valley Pond & Koi Club Newsletter

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June, 2008

## 2008 is the “The Year of the Frog”



**Chiricahua Leopard Frog**, *Rana chiricahuensis*



**Mississippi Gopher Frog**: *Rana sevosus*

### Why Year of the Frog?

Although the Chinese calendar considers 2008 the Year of the Rat, the World Conservation Union (IUCN) recently announced that 2008 is the “Year of the Frog.” Frogs, toads, salamanders, newts, and the intriguingly unusual caecilians are in danger of becoming extinct. After thriving for over 360 million years, one-third to one-half of the world’s approximately



**Mountain yellow-legged frog** *Rana muscosa*

**Wyoming Toad** *Bufo baxteri*



6,000 known amphibian species could become extinct in our lifetime. While the major culprit has historically been habitat loss and degradation, many of the declines and extinctions previously are now being attributed to the rapidly dispersing infectious disease chytridiomycosis (“chytrid”). This fungus is causing population and species extinctions at an alarming rate.

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

## News From Norm (Acting Editor)

We received encouraging news about Larry. He is making some progress and is regaining some strength in his hands. He very much appreciates your visits. So please feel welcome to stop by and see him at the Episcopal SeniorLife Communities at 505 Mt. Hope Ave.

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At the April 4<sup>th</sup> meeting, club members enjoyed an inspiring presentation by Sandy Baker, President of Monroe County Alliance for Wildlife Protection, and Consultant to the Humane Society of the United States. She brought hope for anyone who has had their gardens ravaged by white-tailed deer. In her presentation, "How to Deer Proof Your Garden," she explained the MCAWP's five easy steps to help create a site-specific plan for individual gardening success. (1) First, learn to understand why the deer behave as they do. Deer rely on their acute senses of sight, smell, and hearing, and are afraid of anything new. They will, however, become accustomed to anything new within about a week, so we should not expect to rely on a single solution to the problem. (2) Select plants and design gardens that will reduce the risk of damage. Choose plants that deer do not

like (such as heavily scented varieties), experiment with new plants a few at a time to see if they will survive, and encircle vulnerable plants with less vulnerable varieties. (3) Consider repellents and deterrents that are offensive to deer. Repellents have an odor or taste that deer do not like. Homemade repellents may include: soap; hair; fabric softener strips; and mixtures of garlic, hot-pepper and rotten eggs. Commercial products, like Deer Away, Rockland Deer Guard, Milorganite Fertilizer, and Ropel are effective and are sometimes easier to use than homemade mixtures. Deterrents work because they startle the deer, offending their sense of hearing and/or vision. One deterrent that works well is the Smart Scarecrow Motion Activated Sprinkler. (4) For more protection, try one of the many kinds of fencing. Among the options are: solid, electric, living, high/standard, single strand wire, slant, double row, and pre-fab mesh. (5) Finally, use the first four steps to develop a strategic plan for your own property. The Humane Society of the United States website can also provide more information about specific problems with other animals. Thank you, Sandy. Your enthusiasm, personal experiences, and depth of knowledge gave us more confidence in protecting our gardens from white-tailed deer. □



## "POND BUGS"

Is something bugging you?

Get an answer to your problem!

[Q] *I am moving out of town and cannot find homes for my koi. I've heard that I shouldn't release them in the lake near my home. Is this still true? Anonymous*

## [A] **Koi herpesvirus (KHV) Warning!**

Koi owners should **never** release their fish into any lake, river, wild pond, or natural waterway.

In 2007 the Ministry of Natural Resources (MNR), announced after extensive testing that the Koi herpesvirus was identified as one cause of the carp die-off that littered the Canadian province of Ontario area lakes with 12,000 to 24,000 fish last summer [2007].

If something has been bugging you, we'll try to get an answer. Please send your questions to Norm at [gvpakc@rochester.rr.com](mailto:gvpakc@rochester.rr.com) or phone 334-3536. Then check out future issues of the newsletter to read what our "experts" have to say.

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## Why Year of the Frog?

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The combined effect of habitat destruction, climate change, pol-

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lution, and chytrid cannot be addressed solely in the wild. Captive assurance populations have become the only hope for many species faced with imminent extinction and are an important component of an integrated conservation effort. The Association of Zoos and Aquariums (AZA) accredited zoos and aquariums, with their demonstrated expertise in endangered species breeding programs, have been called upon to meet this conservation challenge.

The IUCN has classified four amphibians in the U.S. as critically endangered, the Mississippi gopher frog, the Chiricahua leopard frog, the mountain yellow-legged frog, and the Wyoming toad. The U.S. Fish and Wildlife Service has listed thirty-seven amphibian species under the Endangered Species Act. AZA-accredited zoos and aquariums may be their only hope for survival.

## Why Now?

AZA-accredited zoos and aquariums are committed to ensuring the survival of all amphibian species and are already an active force in amphibian conservation. Since 2000, they have spent more than \$1.1 million on amphibian conservation and research projects in more than 20 countries around the world. Now, with Year of the Frog, they need to take their efforts to the next level, not only by increasing their conservation efforts, but also by engaging the public to learn about and support their critical work to

prevent amphibian extinction.

## Why should we care?

In addition to their intrinsic value as a beautiful part of nature, they offer many benefits to us: They play an important role in the food web as both predator and prey, maintaining the delicate balance of nature. Where they are disappearing, detrimental effects are already being documented. Amphibians eat pest insects, benefiting successful agriculture around the world and minimizing the spread of diseases, including malaria.

Amphibians profoundly enhance our lives and our world in countless ways. They provide vital biomedicines, including compounds that are being refined for analgesics, antibiotics, stimulants for heart attack victims, and treatments for diverse diseases including depression, stroke, seizures, Alzheimer's, and cancer. The Australian red-eyed treefrog (*Litoria chloris*) and relatives give us a compound capable of preventing HIV infection, the cause of AIDS.

Amphibians' thin skins help them drink and breathe, but also make them susceptible to environmental contaminants, particularly agricultural, industrial, and pharmaceutical chemicals. Many herbicides, pesticides and other organochlorine pollutants (e.g., DDT, PCBs, dioxins) can also act as endocrine disruptors, inducing similar feminizing effects in amphibians. It has been demonstrated that these re-

sponses are occurring in nature, but it is yet unclear what long-term effect they will have on wild populations.

Biologists refer to amphibians as "the canary in the coal mine": they are among the first species to be affected by environmental stressors, so when they show declines in the wild, it serves as a warning to other species, including humans.

## One Problem

The amphibian chytrid, a disease that is deadly to hundreds of amphibian species and has quickly spread from Africa across the planet over the past 30-40 years. Global climate change may have exacerbated the problem. It was discovered a decade ago and since then dozens of frog species have become extinct because of it.

Since the 1930s, African clawed frogs (likely resistant carriers of the fungus) have been

shipped around the world by the thousands for human pregnancy tests and lab studies,

spreading the disease worldwide. Recently, the food and pet trade may have contributed to the problem as well.

Amphibian chytrid is currently unstoppable and untreatable in the wild, even in protected areas. In the environments where it thrives, the fungus can kill 80 percent of the native amphibians within months, leading to widespread amphibian extinctions.

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The amphibian chytrid's spread and effects may be exacerbated by climate change.

## Frightening statistics!

- 50% of 6,000 described amphibian species are threatened with extinction; 32% known to be threatened; 23% data deficient but believed threatened; 3,000 species are in trouble.
- 165: number of amphibian species believed to have already gone extinct, including 34 known to be extinct, 1 extinct in the wild but still survives in captivity, and 130 not found in recent years and possibly extinct.
- 500: estimated number of amphibian species whose threats currently cannot be mitigated quickly enough to stave off extinction, i.e., those who require ex situ intervention.
- 10: number (not percentage) of amphibian species North American zoos are currently prepared to manage long-term.
- 50: that same number extrapolated (extreme best-case scenario) to the global zoo community.
- 10%: portion of amphibian species threatened with extinction that the global zoo community is at best currently prepared to manage.
- 1: the number of amphibian species for which each of the 500 largest WAZA zoos must take responsibility as a stopgap to stem the losses.

## Four Amphibians in the U.S.

### that are Endangered

The **Dusky Gopher Frog** or **Mississippi Gopher Frog** (*Rana sevosa*) formerly occupied the Coastal Plain west of Mobile Bay from Alabama to Mississippi and Louisiana; it is now found in a single site in Mississippi and is federally listed as Endangered. The Mississippi Gopher Frog is threatened by habitat loss.

The **Chiricahua Leopard Frog** (*Rana chiricahuensis*), is a species of frog in the Ranidae family. It is found in Mexico and the United States. Its natural habitats are temperate forests, rivers, swamps, freshwater lakes, freshwater marshes, and ponds. It is threatened by habitat loss and the chytrid fungus *Batrachochytrium dendrobatidis* to such an extent that it has vanished from 80% of its former habitat.

The **Mountain yellow-legged frog** (*Rana muscosa*) is a small (5-7.5 cm) frog species. Its lower abdomen and the underside of its hindlegs are yellow or orange.

Historically, this frog was found in the Sierra Nevada Mountains and in isolated locations in the San Gabriel, San Bernardino, and San Jacinto mountains, and on Mt. Palomar. In February, 2008 was listed on the Endangered Species List.

The **Wyoming Toad** (*Bufo baxteri*) is an extremely rare amphibian that exists only in captivity and within Mortenson Lake National Wildlife Refuge in the U.S. state of Wyoming.

The Wyoming Toad was listed as an endangered species in 1984. Its possible causes of loss include climate change, increased predation, changes in agricultural practices, disease, and pesticide use.



## For Sale

Indoor Koi tank complete with pump and filtration system. Round tank is 320 gallon, . Filtration system includes twin pumps, filters, and trickle tower. We have wintered 5 large (18 – 20 inches) in this tank with no water quality problems. The outfit includes a spawning mat that assists with the growth of good bacteria. Sell complete for \$300. Could also use for hospital tank. Dee Troutman, phone 624-5846.



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## Board Members 2008

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](mailto: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](mailto:lkhursh@aol.com) or visit the club website at <http://www.gvpakc.org>

## Calendar of Events

**June 6**, Friday, no meeting due to Plant Auction on June 8

**June 6-8, 2008:** LilyFest with GVPAKC plant and product auction on June 8. We are also trying to find a speaker for a presentation prior to the auction.

**June 8**, Sunday, at 1:00 PM - Annual GVPAKC Plant Auction at Bergen Water Garden & Nursery. Bring your plant donations. Get a great deal on other donated plants and on the manufacturer products again donated through Ray "Kingfish" Lucas.

**July 4**, Friday, no meeting due to 4th of July holiday

**July 11**, Friday, 7:00 PM rescheduled club meeting at Warner Castle

**August 1**, Friday, no regular meeting due to pond tour

**August 2, 2008:** Our Pond Tour will be changed to the first Saturday in August instead of the last Saturday of July.

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