



# The Lily Pad

## The Topeka Area Water Garden Society

Published Monthly – February to November

*The objective of the society is to encourage a greater appreciation and interest in water gardening and aquatic plants, to disseminate information about those interests and to help our members stimulate the study and culture of water gardens.*

Volume 17, Issue 9

Oct. 1, 2014



**Monthly Meeting**  
**7:00 p.m. Oct. 15, 2014**  
at  
Historic Old Prairie Town, 124 NW Fillmore  
Speaker  
**Wes Chiles – Waterscape Concepts**

*Chris Mammoliti talks about the trash mountain project on highway 75 north of Topeka. Most photos by Sherry Reed.*

## Raising plants in water

By Sherry Reed

TAWGS' September meeting was held at the Trash Mountain Aquaponics Project center. Thanks to Chris Newell for setting this up for us and to Chris Mammoliti for sharing with us the history, the mission and the functioning of the Trash Mountain Project.

The Trash Mountain Project (TMP) is a nonprofit organization whose mission is to develop Christ-centered environments for families and children living in trash dump communities worldwide. One way of meeting these family's needs is through the development of livelihood



*Rows of tanks where the veggies are grown in water. The fish are raised in the big tank at the center of the picture.*

projects centered on aquaponics food production systems. Aquaponics is a combination of aquaculture (raising fish for food) and hydroponics (raising plants in water rather than soil) in a re-circulating system.

The TMP center in Topeka was set up by local founders to develop and train volunteers to take the ideas and skills to third world countries to set up their own aquaponic systems. At the training center there are rearing tanks for fish (tilapia). There is plumbing connecting the rearing tanks to settling tanks. Settling tanks are for solids collection and biofiltration (fish waste and ammonia are broken into nitrates and nitrites). Plumbing then connects settling/biofiltration tanks to deep water culture beds. Deep water culture beds are for hydroponic gardening. Plants remove the nitrates and nitrites from the system. Water then goes to a sump tank with a pump pushing clean water back to the rearing tanks.

Trash Mountain Project believes aquaponics will help people become more self-sufficient by providing sustainable food production systems.



Lettuce being grown for a banquet for the volunteers of the Trash Mountain Project.



## Water plants

By Duane Van Dolah

### Bog lily *Crinum*

Known for its heavenly fragrance, a simple bog lily can

produce a large colony over time. All species of bog lilies live in tropical regions around the world. The plants are

known for their large flowers composed of six long petals that droop or hang from the center of the blossom. The bulbous plants have leaves that are narrow, evergreen, and strap-like with a width of 2 inches and 18 to 24 inches long. Appearing in the summer and early fall, the blooms are very fragrant in a range of colors from pure white to deep rose. They thrive in full sun to part shade depending on the species, with a height of 1 foot to 5 feet and spread of 1 foot to 4 feet. Hardy in zones 7- 11, it can be wintered over as a houseplant in a sunny window until spring arrives, but watch for spider mites and mealy bugs when the plant is brought in the house.

Bog lilies are propagated by removing small bulblets from the parent bulb and planting them. The seeds of a hybrid are usually sterile, but the seeds from a species can be planted immediately once they've ripened. This can be done by burying half the seed head in damp soil, keeping the soil warm and in bright light. It'll take a few years before the plant is mature enough to bloom.

Some bog lilies to look for are *Crinum americanum*, which are also called Southern Swamp Lily and Southern Swamp Crinum. These are native to wet parts of Florida and along the Gulf Coast of Texas. The flowers are long petaled, white, and very fragrant and the plant can tolerate water depth to 12 inches. *Crinum purpurascens* is native to tropical Africa with tubular flowers that are white and tinged with red. Its leaves are only 18 inches long with a width of 3/4 of an inch. The plant can live underneath 4-6 inches of water. *Crinum erubescens* 'West Indies' is a native of the West Indies that has small white flowers that bloom in the summer. Having little strap-like foliage like a large Liriope plant, this plant makes a good ground cover because of its growing habit of spreading to 12 inches with a height of 10 inches. It will grow in sun to part shade in moist soil or water depth to 4 inches in zones 9- 11.



## When is the best time to add fish?

The Pond Guy 8-20-14

Fish moving to a new pond during the summertime when temperatures are steady, and they have time to get used to their new digs and mature a bit before the cooler months ahead.

So, in general, we don't recommend that hobbyists add new fish to their pond right now – unless their water does not dip below 50° Fahrenheit in the fall and winter. That's the point at which the fish lower their metabolisms and become dormant, and that's not a very hospitable environment for getting settled in their new home.

If you are one of those lucky warmer-than-50° folks (or if you want to start thinking about next spring already!), follow these recommendations when introducing new fish to your pond.

**Test the Water:** Have uneven ground around your pond? Before adding your new finned pals, test the water in your pond to make sure it has acceptable pH, ammonia, nitrate,

nitrite and phosphate levels with an easy-to-use Master Liquid Test Kit.

**Remove Dangerous Chemicals:** To ensure the water in your pond is free from dangerous heavy metals, chlorine and chloramines, use a water conditioner, like Pond Logic® Stress Reducer PLUS. A conditioner will also replenish your fishes' protective slime coating and heal any tissue damaged during the move.

**Temper the Temperature:** Water temperature changes can stress out the fish, and so it's not a good idea to toss them in the pond as soon as you bring them home. Instead, you'll need to help them gradually get used to conditions in the pond. When you're ready to introduce them to the water, float them in a bag on the surface for 20 minutes and periodically mix some pond water with the water in the bag. The environment inside will start to even out with the pond, and that will make the move easy on the fish.

**Introduce the Fish:** Just in case there is a problem with your water chemistry, or some of your new arrivals carried a disease or parasite with them, introduce inexpensive fish to the pond first while quarantining your more expensive ones. After waiting a few weeks to verify that everyone is healthy and happy, then add them to the mix.

Once the fish are in the pond, take a few minutes several times throughout the day to check in on them. Active and curious fish are healthy fish, and so keep a close eye on any odd or erratic behavior. In most cases, it'll be a smooth transition and easy addition to your finned family.



## More hummer info

*Jill Staake, Birds & Blooms*

It's that bittersweet time of year when northern folks say goodbye to the hummingbirds they've watched all summer. It's time for fall migration, and hummingbirds across the country are heading south. Some Rufous hummingbirds may linger in southern Texas or Florida into the winter months, but most won't risk the possibility of cold weather and instead will move on. **(The exception to this are Anna's Hummingbirds, which remain in coastal California year-round.)** Here are some cool facts to know about this autumn journey. (Oh, and no – they don't make

the journey on the backs of geese. This legend is amusing, but not the least bit true!)

**Hummingbird migration is triggered by the amount of daylight, not the amount of available food.** Some folks worry that leaving their feeders up will cause hummingbirds to remain in the area and freeze to death in the winter. This is completely false. In fact, taking down your hummingbird feeders too soon can be a problem for birds in areas where wildflowers no longer dominate the landscape. Leave your feeders up and full for two weeks after you see your last hummingbird visitor to ensure they have the sustenance they need to make the long journey ahead.

**Male hummingbirds leave first, and females and juveniles follow.** This may be a few days or even a few weeks later. Hummingbirds do not migrate en masse; each undertakes the journey on its own. This allows them to space out their travels to take best advantage of available food. Hummingbirds are too small to benefit from traveling in each other's wake like larger birds, so individual journeys work best for these small creatures.

**A hummingbird's fall journey south takes approximately two weeks.** This varies, of course, depending on weather and other factors. The birds are headed for Mexico and South America, with some species heading as far south as Panama. They are capable of flying at speeds up to 35 miles an hour, and could make the journey in as little as a week, but most stop to rest and all stop to feed along the way. During the fall migration months, you should notice an increased number of visitors at your feeders during warm dry weather, but don't expect them to linger – they usually spend no more than a day in one area.

**A hummingbird's flight across Gulf of Mexico takes 18 – 24 hours of nonstop flying.** Hummingbirds travel during the day, with the exception of those that must make the perilous gulf crossing. Once a bird leaves shore, it must continue the journey until it finds dry ground again. That means the birds must fly for at least 18 hours, and sometimes longer if the weather is bad. Folks who live along the northern Gulf Coast can help hummingbirds prepare for arduous journey by providing lots of nectar flowers and sugar-water feeders.

**Hummingbirds who encounter cold weather experience torpor.** Hummingbirds migrate because they are unable to withstand freezing temperatures for extended periods of time. They have an amazing adaption to help them survive the unexpected, though. If cold weather sets in early, or a belated lingerer faces an unexpected cold spell, hummingbird bodies will essentially shut down all non-essential functions (including breathing for a short time). They drop their body temperatures by up to 50 degrees, and slow their heartbeats to almost nothing. When warmer temperatures return, they "wake up" in about an hour or so and continue their journey. It can be a little alarming to see a hummingbird in torpor, since they often hang upside-down from a tree or even a feeder. Don't disturb hummingbirds you find exhibiting this behavior; they'll be just fine once the weather warms up.

Topeka Area Water Garden Society  
9900 SW K-4 Highway  
Topeka, KS 66614

October 5                      Apple Fest  
October 15                    Monthly Meeting  
November 19                 Pot Luck

**2015**

June 20                        TBA Garden Tour  
June 27-28                  Topeka Pond Tour

**TAWGS Minutes 9-17-14**

President Tom Platis called meeting to order. Treasurer report showed a beginning balance of \$1902.51, an inflow of \$60.00, an outflow of \$21.09 and an ending balance of \$1941.42.

The only new business was a plea for new officers for 2015. Floyd Gruver resigned his duties as vice-president. It was tabled until next month for nominations to be made.

A reminder was given for Apple-Festival at Ward Meade on Sunday, October 5.

Don Taliaferro made a motion to adjourn and Don Reiger seconded the motion.

**Your Dues are Due if your label reads  
9-14 or 10-14**

**Please renew as soon as possible to continue  
receiving the newsletter.**

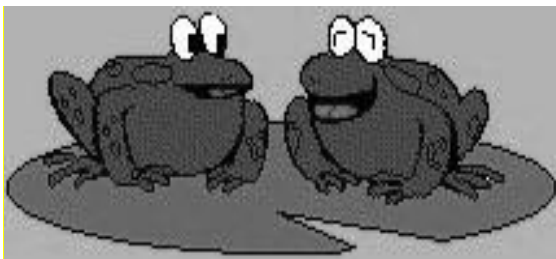
Send dues to  
**Jim Mowder, 3717 SE 31st ST, 66605**

**THE TOPEKA AREA  
WATER GARDEN SOCIETY**

**2014 OFFICERS:**

Tom Platis Topeka	President 785-478-9514
Floyd Gruver Holton	Vice President 785-364-3046
Sherry Reed Topeka	Secretary 785-408-5060
Jim Mowder Topeka	Treasurer 785-267-0672

Meetings are usually held the third Wednesday of each month at Old Prairie Town (Ward Meade Park) unless otherwise publicized. Dues are \$15 per single or \$20 per family and can be sent to Jim Mowder, 3717 SE 31st ST, Topeka, KS 66605.



**Check it out - [www.tawgs.org](http://www.tawgs.org)**

*The Lily Pad*

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The Lily Pad encourages submission of articles pertaining to water gardening from the membership and other interested parties. Deadline is the third weekend of each month. Address input and/or questions to:

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