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 10, Issue 9 **October 1, 2007**

Floyd Gruver presents an appreciation plaque to Tom Platis for chairing the successful 2007 Pond Tour.

TAWGS Minutes 9-19-2007

President Duane Eberhardt opened the September TAWGS meeting with self introductions. We had several guests.

Julie Trowbridge, a horticulturist with Shawnee County Parks and Recreation, and coordinator of "Friends of the Gardens" opened her remarks by saying, "I just want to say thanks to you guys for working at Lake Shawnee (this summer)." She indicated that she was very pleased with the number of TAWGS volunteers that showed up to work in April when weather conditions were less than ideal.

She said that she was at the meeting to again enlist help from TAWGS in October. She said that the Gardeners of America would also be volunteering that month. Julie reported that the volunteer program at Lake Shawnee has been a success this first year. A total of over 4,800 hours have been donated by eight garden clubs and businesses, such as Hallmark. Garden clubs alone volunteered 1,300 hours. Hours for volunteering this fall will be 8:00 a.m. to 11:00 a.m., Tuesdays and Thursdays during October, however if anyone would rather volunteer on different days that would be acceptable. Meet at the parking lot by the restrooms near the new footbridge off 37th. Volunteers will assist in tulip planting, taking out annuals and planting the new shade garden. An appreciation dinner will be held at the end of the season for all volunteers.

Following Julie's presentation, Trina Wood gave a very interesting talk on fish health, titled "Fish 101." The fire alarm interrupted Trina's talk so we took a break for refreshments while we tried to dis-arm the alarm. Fortunately, no smoke or fire was detected, but we had lots of excitement for awhile. Five or six fire trucks responded to the alarm filling the parking lot and reaching all the way back to 1st street.

The meeting resumed after refreshments which were provided by Mary Pat and Jon Fischer and Marikay and Doug Peterman and Trina continued with her program. Thanks to Trina and Puddles-N-Pads for donating two door prizes. Marikay Peterman won two small butterfly koi and Bob and Cheryl Saathoff won a society garlic plant.

President Duane asked if there were any additions or corrections to the August minutes which were printed in the Sept. Lily Pad. Don Taliaferro moved and Tom Platis seconded that the minutes be approved. Motion carried.

Duane reported that he had attended a Keep America Beautiful dinner to receive a certificate for our volunteer work.

VP Floyd Gruver reported that Deb Spencer from Waters Edge will give the program in October on Frogs, Toads and Tadpoles. He said that November will be our potluck dinner. (Note that the meeting date is November 14, the second Wednesday instead of the third Wednesday which falls the day before Thanksgiving.)

Floyd presented appreciation plaques to Hi Stockwell and Tom Platis for their outstanding work on the 2007 Pond Tour.

Diane Gruver reported that Treasurer Jim Green was in New York and that he had sent her the treasurer's report before leaving town. We have $6,832.73 in the checking account and $1,194.39 in the saving account for a total of $8,027.12. Don Taliaferro

Monthly Meeting

7:00 p.m., Oct. 17, 2007

Historic Old Prairie Town

(Ward Meade Park)

Frogs, Toads and Tadpoles

Deb Spencer, Waters Edge

moved and Bob Saathoff seconded that the treasurer's report be accepted. Motion carried.

Tom Platis gave the nomination committee report. The slate of officers presented were: Duane Eberhardt – President, Don Taliaferro – Vice President; Diane Gruver – Secretary (with the help of Tiffany Mauer) and Jim Green – Treasurer. There were no nominations from the floor. Elections will be held in October.

Tom also reported that he is working on the schedule for volunteers to help at the Apple Fest, which is Sunday, October 7th. The schedule is as follows:

Betty Karnes, 9 – 12; Carol Gnagy, 12 – 3; Joe Breitenstein, 8 – 11; Doug and Marikay Peterman, 12 – 3: Jim Green, 2 – 5; Duane and Mary Eberhardt, 1 - 4; Floyd & Diane Gruver, 10 – 1; Don and Sandy Regier, 9 – 12; Dick and Pat Rokey, 1 – 4; Cheryl Saathoff, 12 – 3; Tom and Helen Platis, 8 – 5.

Diane Gruver moved and Tom Platis seconded that the 2008 Pond Tour be held the 4th weekend in June, 28 – 29. Motion carried. Hi Stockwell said that he will do what he did last year for the ticket/guide and Diane said that she will work on the advertising. Tiffany Mauer said that she would line up the ponds. Tom Platis finally agreed to be chairman again. Thanks Tom!

Bob Saathoff reported on the TAWGS pond at Lake Shawnee. Work has been done on the ravine and waterfalls. Please let Bob know if you can work any time in October. Call him at 785-272-7125 or e-mail bobsaathoff@yahoo.com. The Lawn and Garden Show will be February 15-17 and Bob needs someone to volunteer to help chair the project as he will not be able to be there the whole week because of a prior commitment. Volunteers please step forward.

Don Taliaferro said that the Topeka Tennis Association contacted him about TAWGS building a pond next year at Felker Park. There are 18 courts in the park and it is seen by lots of people. He will see if they will make a commitment to maintain the pond if we build it.

Guest Mark Sailer said that he volunteers for the Topeka Tree Team and they are in the process of pruning trees in some of the city parks. They have been working in Felker Park and he thinks a pond would be a nice addition to the park.

Don moved and Bob seconded that the meeting adjourn. Motion carried.

Floyd Gruver presents an appreciation plaque to Hi Stockwell for his hard work on the Pond Tour Guide.

Koi and goldfish most common

The most common fish that water gardeners keep in their ponds are koi and goldfish Trina Wood, co-owner of Puddles-N-Pads, told TAWGS members in September. Goldfish include such fish as comets, shubunkins, fantails and sarassas. She said that people frequently ask if they can mix koi with comets and the answer is yes, with some conditions. Don't mix big koi with little comets because the big males will actually run a small fish to death during spawning. Also you will probably have a mix of fish rather than true koi or gold fish. Many people solve this problem by maintaining two ponds, such as the two that they have at the entrance of Puddles-N-Pads.

"Fish release hormones in the water, which regulates how big the fish will grow," Trina said. Frequent water changes will reduce the hormones in the pond so that the fish will grow bigger. The general rule for comets is one inch of fish for every 5 gallons of water; for koi the ratio is one inch of fish for every 10 gallons of water.

Talking about water quality, Trina said, "If you only remember one thing, remember fish don't get sick if the water is perfect and they have no stress." Although we all like for our ponds to be crystal clear, that does not guarantee good water quality. Green water is not a bad thing.

Controlling ammonia is probably the most important thing to remember about water quality. Several things can cause high ammonia: too many fish, no plants, a poor filter system and stress.

pH balance is a problem for us in Kansas because limestone makes pH higher; pH should be under 8.1 or 8.2. White vinegar can be used to bring it down but it needs to be dropped slowly or you can kill everything in your pond. Salt or a buffer can also be used to drop pH. Water hyacinths won't bloom if the pH is too high. Test six inches under the water and the same time every day to get the most accurate readings.

Warm water holds less oxygen than cold water so you have a problem if your pump goes out on a hot day and your pond is overstocked. When your big fish die first it is a sure sign of oxygen depletion.

Fish stress can be caused by many different things, but water temperature fluctuation is probably one of the most common problems. Here in Kansas we have a lot of up's and down's in the spring and fall, but April is probably the worst month because the fish are weak from their winter hibernation. Trina suggested using Stress Coat in the spring and fall to increase slime coat and reduce stress. A salt solution will also help increase slime coating. You can maintain a .01% salt solution without hurting plants. (One pound of salt for every 100 gallons of water.) Salt does not evaporate so do not add more salt unless you do a water change. Morton salt with no iodine is a good choice. The percentage of salt in a pond can be tested with a salt meter.

"Fish do not have to be fed," Trina said. "Overfeeding is probably the worst thing you can do." If you think you must feed your fish, feed them once a day or less, and feed a highly digestible food no less

than 93% digestible. Use wheat germ food or cheerios early spring and late fall and quit feeding when the pond temperature drops below 40 degrees F.

Ich is a common parasite that we see in the spring. It is caused by stress, usually from temperature fluctuations in April and May. Ich can be seen with the naked eye and looks like white spots on the fish. Anchor worms and lice can also be seen by the naked eye but there are some parasites that are so small that you need a microscope to see them. Bacterial infections, such as fin rot, body sores, popeye, etc. are usually internal. They are hard to treat but can be treated with injections or food. Oil of cloves is sometimes used to euphonize sick fish.

Puddles-N-Pads has a microscope and is happy to help people with sick fish. Be sure to keep them and the water in a well sealed plastic bag so that contamination is not a problem for the business.

We thank Trina for the informative program and Puddles-N-Pads for the donation of two door prizes, two koi and a society garlic plant.

Water Plants

By Duane Van Dolah

Golden Candles

Lysimachia punctata

This plant comes from central and southern Europe as far as Turkey, but it has naturalized to North America. It is a marginal plant for moist areas around the pond and stream. This plant is an erect, clump-forming, softly hairy herbaceous perennial. The 3 inch leaves are whorled with elliptic to lance-shaped and are dark green. From June to August the leafy stems bear whorls of yellow, cup shaped, 1-inch flowers. Reaching a height of 2 ½ to 3 feet, with a 6-inch spread, this plant can be invasive. Golden Candles thrives in zones 4-8, in sun to part shade. Division is done in spring or autumn. A variegated form, 'Alexander' or Variegated Golden Candles, has creamy white margins on its leaves. In the spring and again in the fall, leaves are tinged in pink. 'Golden Alexander' is a variegated form with gold margins leaves.

Plants that can not freeze solid in the winter time

Information provided October 1999 Reflections

Lower semi-hardy marginals to the bottom of the pond to assure that they live through the winter. Some winters you might be lucky enough for them to survive on the shelf, but don't count on it being a sure thing!

Plants that can't freeze solid in the winter time are: hardy water wisteria, golden buttons, melon sword, houttynia cameleon, New Zealand jumping rush, azure carpet, cardinal flower and the lobelias, water clovers, parrot feather, water parsley, pickerel plant and lizard tail.

PVC pipe can be used to build a tent like structure to hold a net over the pond.

Leaf me alone

Or how to keep leaves out of the pond

By Greg Speichert, Water Gardening Magazine

Ponds are like magnets for dirt and leaves. Tree leaves will find a way to your pond even if you live in the middle of a corn field and the nearest tree is a mile away. When it's not tree leaves, it's leaves from something else – bushes, perennials, even annual plants. And the worst season; autumn, of course.

You can try to go out every day for half an hour or so and skim them from your pond. Unfortunately, the leaves don't care about your schedule, tumbling into the water all day and all night, whether you are home to rake them out of the pond or not. In-ground skimmers help, but they can get clogged from leaf overload in the fall.

A more temporary solution is to put netting over the pond to keep out the leaves. Although it's not very decorative, netting will ensure that the leaves stay out of the water and don't muck up the pond. Letting those leaves stay in the pond all winter is not a good idea. They slowly decay, robbing the water of oxygen and dumping their nutrient load into the pond like a giant tea bag. Come spring, you'll still have to clean them out of the pond, when they've become a slimy, smelly rotten mess. What's worse, they provide a fertile breeding ground for parasites and bacteria to lay in wait until early spring, when they attack fish whose immunity is reduced from winter's sleep.

Netting

The purpose of netting is to keep the leaves out, but let the air and sunlight in. Most important is the size of the weave. If you're fighting off small, narrow leaves (like elm, ash or pine needles), you'll have to have a narrow-holed netting. If you're only dealing with large leaves (like maple or oak), then a more open weave is suitable. The second thing to look for is durability. If you're only going to use it for a few weeks in mild weather, and you have a tub garden that's just a few feet wide, you might be able to use a few feet of

open weave fabric from a sewing center. If you're going to use it for several weeks, even though the autumn weather is cold and wet, then you have to select something more durable made of nylon or polyethylene. What size should you get? Ideally, you'll want a single piece of netting that will fit completely over the area you want to cover. Sometimes, though, it is not possible to find just one piece. Multiple pieces can be sewn together with nylon string. Fishing line is another good choice to hold together two or more pieces of netting.

Here are some of the more common nettings used by pond keepers to protect their water gardens from leaves in the fall.

Tree netting, fruit netting, bird netting

This is the netting used to keep birds out of fruit trees and bushes. It usually has an open weave with holes half an inch to an inch wide. Made from nylon or polyethylene, it's often black or dark green and, as a rule, lasts for more than one season. Use it for large leaves like sugar maples or oak tree leaves. If you have a corkscrew willow, move on to something with a closer weave. Because of the more open weave, it can unintentionally trap frogs and small birds. Make sure to check it often so you can help any wildlife that gets hung up while visiting your pond.

Pool or pond cover netting

Netting designed specifically to cover pools and ponds is often made with narrower holes, so it will keep out smaller leaves. It is made from nylon or polyethylene and often lasts for an entire season or more. Some will even last for several years. If you want a netting that you'll use for a long time, make sure that it's treated so it won't be damaged by the sun's ultraviolet rays. Don't use the pool tarp, since it won't let air pass through.

Window screening

When all else fails, use metal or nylon window screens. You can even use chicken wire or woven shade cloth. It's all a matter of how large the holes are and how you want to hold the screening off the pond water. Window screening is excellent for keeping all sorts of leaves and debris out of the pond. Unfortunately, it's hard to see your pond under all that metal. It will also prevent any wildlife, whether frogs, toads, birds or dragonflies, from reaching any part of your pond that's under cover.

Support for netting

There is no use putting netting over the pond if it's simply going to fall into the water. In that case, both the netting and leaves will just sink into the pond. Algae can build up on the netting as well, increasing its weight and making it more difficult to remove from the pond. Worse, your fish can easily get tangled in the netting, with dire consequences. The solution, of course, it is to use something to hold the netting up out of the water. The netting should be flat or elevated, so leaves don't collect in the center and weigh it down. By keeping the net higher in the middle, leaves slide to the edges and, hopefully, off the pond completely, Don't stretch netting tightly across the pond. Many nettings tear easily if stretched taut, since they are designed to tent loosely over objects. One choice is to put a few large plastic balls in the pond. They'll float on the water and keep the netting afloat too. These work in smaller ponds where netting won't drape between the plastic balls that are out on the water. Since the balls will float around the pond, the netting may drape once the balls have moved from their ideal spot. Draping the netting over wooden boards placed up on concrete blocks outside the pond will also keep the netting from laying on the water. Inner tubes and pool pillows used to keep pool covers out of the water work well too. They can be tired to the edge of the pond to keep in place. An inner tube can support a board or pipe run across the pond. It can also cradle a beach ball and tent the netting.

The problem with keeping the netting flat with plastic balls or wooden slats is apparent once you think about it, or once you've tried it and seen the results. As soon as leaves hit the netting, the leaves and netting simply sink into the water. The netting acts like a tea bag holding the leaves as they steep in the pond water. This isn't a good thing. Leaves decompose, releasing nutrients into the water that can still cause an algae bloom. It's also a lot harder to clean wet leaves out of the netting than it is to remove dry leaves. If you do use a flat method to hold netting out of the water, make sure to keep the netting taut across its support. Otherwise you're going to spend a lot of time cleaning it off before the leaves sink into the pond. One way to tent the netting over the pond is with a pole in the middle of the pond. The pole or stake is attached to a plat that's held firmly in place. You don't want it toppling over in a heavy wind or rain storm. A more elaborate solution is to make hoops or v-frame forms from PVC tubing. These can be affixed with stakes into the soil around the pond, and the netting can then be tied to the tubing. Wood frames work on a similar principle and we are especially good if you use metal screening to cover the pond. For small ponds, simple PVC hoop frames made of one-half to one inch PVC works just fine for leaves. This method won't work with heavy snow, though. Fine netting holds too much snow and ice and can easily collapse. In larger ponds, use steel tubing instead of PVC. It's important not to leave fountains running, especially if they spray water onto the netting and give leaves something wet to stick to. If you have a waterfall, make sure to cover it as well, and keep the netting out of the water.

Net result

Using netting to protect your pond from falling leaves and debris may not be an ideal solution from an esthetic point of view, but it is a necessary evil in autumn if you want to make sure your pond and its inhabitants stay healthy through the winter. Not doing so could 'net out' with some unwelcome surprises next spring.

Volunteers for 2007 Refreshments

Month	Refreshments
Oct.	Floyd & Diane Gruver, Betty Karnes
Nov.	Pot Luck

Educational opportunities

Puddles-N-Pads 2007 Seminars

Call 785-233-3474 for more information

Oct. 13	8:30 am	Winterizing your pond
Oct. 18	6:30 pm	Winterizing your pond

Waters Edge 2007 Class Schedule

Call 785-841-6777 for more information
Or check website at www.watersedge.com

Oct. 6	10:30 am	Bubbling Bird Baths and Fountains
Oct. 20	10:30	Winterizing your garden pond

Give fish places to hide

Reprinted 9-03 Splash

When the plants in the pond start dying down for the winter they leave your precious fish pitifully exposed to predators! Hawks, owls, etc., consider koi and goldfish a Gourmet Dessert! Take steps to prevent them landing on the predator dinner plate, give them places to hide:

1) Take large terra cotta flower pots and put them in the bottom of the pond turned on their sides (the fish can scoot into them). Be sure the pots do not contain residue from fertilizer, etc.
2) Cover the pond with a net even if there are no large trees nearby.
3) Use two foot sections of white PVC pipe and put them on their side in the pond so the fish can hide in them.

Fall pond preparations

by ERIK TATE, Operations Manager, The Water Garden

Parts reprinted from 9-04 Water Garden News

Sludge on the bottom of the pond should be removed as best we can. If it is about 1/4" thick or so, it is normal and should not be a concern. This sludge is a combination of decaying plant debris, leaves, fish waste, and more. Some of this can be removed with a net. The finer debris can be removed by siphoning or by using a vacuum such as the Mini-Vac or the PondoVac 2.

Remember to continue use of beneficial bacteria. Microbe Lift Autumn Winter Prep is made for cooler weather and can continue to be used throughout the winter. These bacteria will reduce maintenance by breaking down sludge and debris as well as sustaining biological activity throughout the cold winter months.

You should have stopped feeding your plants by this point. As the foliage on your hardy plants begins to die back you should remove any dead and dying leaves and place the plant deep enough in the pond to keep the roots from freezing. While it is true that some marginal plants will survive even if their roots freeze solid it is best to lower all of your plants below the ice zone.

Why fall food for fish?

Reprinted from 9-03 Splash

Special food formulations for the cooler water temperatures of fall and winter are available for fish. Here is the reason why it is necessary to switch to this special food.

Koi and goldfish do not have stomachs and they digest all of their food with their intestines. As the water cools, the fish's metabolism slows and with it their ability to digest food. Fall/winter food is formulated with more vegetable matter (which is easier to digest) than summer formulas.

It is equally important to stop feeding completely when the water temperature dips below 40-45 degrees Fahrenheit, because the food will no longer be digested at all and it will sicken the fish if remains in the intestine.

Wintering aquatic tropicals inside

There are two primary factors to consider when growing aquatic plants indoors: light intensity and light duration (day length). Tropical plants are especially affected by the length of daylight hours.

Put tropical plants in a sunny window and supplement the short daylight hours with some form of artificial light to extend the daylight hours to 14. South windows are best and west windows are second best for light intensity.

A homemade light fixture can be created with a shop light with florescent lights. Special plant grow lights are more expensive but can be relied upon to supply necessary light in small setups. For convenience, set the lights on a timer. Maintain water temperature in the seventies for best results.

Don't crowd plants and run a fan to help keep the stalks from becoming weak.

Winter fish food storage

Fish food needs to be stored properly in the wintertime. It should be stored away from heat and moisture to preserve quality. Leaving bags of flakes or pellets open to the air causes deterioration. Toxic substances can be produced by the growth of microbial contaminants, fat oxidation and growth of molds and other organisms. Infestation by insects, including ants and weevils, can easily occur.

Vitamins are particularly susceptible to deterioration. For example, vitamin C is very sensitive to heat. Within three months, food stored under high humidity and temperatures of approximately 70° F. or more will lose a minimum of 50% of its initial vitamin C content.

Dry prepared foods must be stored in cool, dry conditions. It is recommended that 90 days be the maximum storage time for foods stored at room temperature. If you are going to need to store larger amounts of food for longer periods, it is recommended that it be packed in double plastic bags or in re-closeable plastic containers and stored in a freezer.

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

Calendar of Events

8:00 – 11:00 a.m. -Tuesday's and Thursdays in October – work at Lake Shawnee
Oct. 7 – Apple Fest, Ward Meade
Oct. 13 – Net Anna's Pond at Ward Meade
Oct. 17 – TAWGS Monthly Meeting– election of officers
Nov 14 – TAWGS Pot Luck & Monthly Meeting **(Note change of date)**

2008
Feb. 15-18 – Topeka Lawn and Garden Show
Feb. 20 – Monthly TAWGS Meeting
March 19 – Monthly TAWGS Meeting
April 16 – Monthly TAWGS Meeting
May 21 – Monthly TAWGS Meeting
June 18 – Monthly TAWGS Meeting
June 28 – 29, 2008 – Annual Pond Tour
July 16 – Monthly TAWGS Meeting
Aug. 20 – Monthly TAWGS Meeting
Sept. 17 – Monthly TAWGS Meeting
Oct. 15 – Monthly TAWGS Meeting

Your Dues are Due if your label reads 8-07, 9-07 or 10-07

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

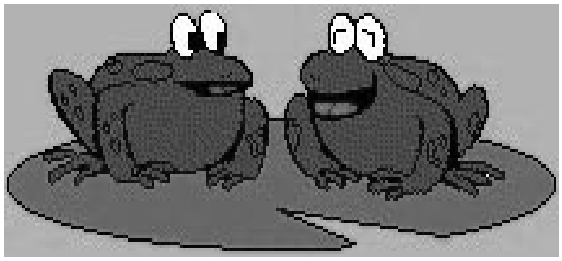
Send dues to Jim Green, 5701 SW Arrowhead CT, Topeka, KS 66614

THE TOPEKA AREA WATER GARDEN SOCIETY

2007 OFFICERS:

Duane Eberhardt Topeka	President 785-246-0240
Floyd Gruver Holton	Vice President 785-364-3046
Diane Gruver Holton	Secretary 785-364-3046
Jim Green Topeka	Treasurer 785-272-7139

Meetings are 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 Green, 5701 SW Arrowhead CT, Topeka, KS 66614.



Check it out - www.tawgs.org

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Published Monthly, February to November by the Topeka Area Water Garden Society (TAWGS), a non-profit organization. TAWGS does not warrant the information in this newsletter. The opinions expressed are solely those of the authors and do not necessarily represent those of the Topeka Area Water Garden Society.

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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We reserve the right to edit input to meet publishing requirements. Copy cannot be returned.