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.

Volume16, Issue 8 **September 1, 2013**

Sandy & Don Regier, Jim Green, Danielle Patterson, Sherry Reedm and Tom & Helen Platis at the August meeting at Historic Old Prairie Town.

Minutes 8-21-13

President Don Taliaferro opened the August TAWGS meeting with self introductions. We had two visitors, Danielle & Robbie Patterson. Welcome!

Don asked for approval of the July minutes as printed in the Lily Pad. Sandy Regier moved to approve and Jim Green seconded the motion, which carried.

Jim Mowder reported that we have $2,009.42 in the checking account. The Pond tour resulted with a $1,436.72 net profit. The report was approved as presented.

Under old business, we discussed ideas to help increase membership. One idea was to have a reward card for purchases at businesses that carry pond products: Jackson's, Waterscape Concepts, Blue Acres and Waters Edge. Details will be worked out and presented to the four businesses for their approval.

Don reported that he had visited with TBA and we might be able to work with them on our garden/pond tours. We could possibly trade off every other year. Further details need to be worked out.

Helen Platis passed around a sign up sheet for volunteers that would help at Apple Fest, which it October 6th. Several members signed up to help the Platis's.

Members indicated an interest in having a Member's Pond Tour in September. Sandy Regier will try to organize the tour. It will probably be Sept. 22nd or 29th.

Don asked for volunteers for the nomination committee, but no one stepped up to the plate. We need to present a nomination slate of officers at the September meeting and elect officers at the October meeting.

Jim Green moved and Tom Garcia seconded to adjourn. Motion carried.

Refreshments were served by Jim and Sue Mowder. It was good to see Sue back on her feet after her broken bone. Tina Wesch will provide refreshments for the September meeting.

Diane Gruver, Acting Secretary

Monthly Meeting
7:00 p.m. Sept. 18, 2013
Historic Old Prairie Town, 124 NW Fillmore
Program to be announced later

A different seating arrangement at the meeting led to more discussion among meeting attendees including: Tom & Helen Platis, Don Taliaferro, Cheryl & Bob Saathoff, Don Regier, Jim Green and Robbie Patterson.

2013 Refreshments

September	Tina Wesch
October	Amy and Phil Thompson
November	Potluck

Moisture loving plants

New Guinea Impatients

Impatiens Walleriana

By Duane VanDolah

Here's an idea to brighten up your waterfall or around the rocks along the edge of your pond.

Try the New Guinea Impatiens in the Elfin series. The Elfin series is a more compact plant that won't get too leggy under above-average moisture. To make this work, you need to put the soil and rootball from the plant and put them in the end of some pantyhose. Cut the toe end out of some pantyhose, you can add some soil if you want, and tie a string or a rubber band around the stem of the plant so that the soil doesn't wash out. Pantyhose works best because of the fineness of the mesh. Put the hose in a crevasse between the rocks of the waterfall or the spaces between the rocks around the edge of your pond.

I think the key for success is to just have the end of the hose holding the soil and roots just touching the water or getting water splashed on them. The roots still need oxygen and can't be completely submerged. The plant needs full shade but probability would handle some morning sun because of the water conditions.

The New Guinea Impatiens Elfin series come in a range of colors from red, rose, pink, and white. The plant's height is 8-10 inches with a width of 12-14 inches. It is an annual but can be brought in for the winter, but constant pruning to keep it from getting leggy is needed and flowering is slowed down. This mounded and upright plant blooms Spring till late Fall.

I want to thank the Kandt's of Wichita for this plant idea, along with the Potato Vine article that I wrote. It's neat to come up with plant ideas that expand their use in the gardens, oops!, make that water gardens. If there's a will, there's a way!

Happy Water Gardening from the Semi-Arid High Plains. (Garden City, KS)

Good bye and good luck

It is with some sadness that this will be the last TAWGS newsletter that I will write. Watergardening has been my passion since the beginning of TAWGS in 1998, but my passion is diminishing as I get older and now, we don't even have a pond. Yes, we decided to have it taken out this spring so we could be free to pursue other interests and travel.

I will be working with Sherry Reed, who has volunteered to take over the newsletter duties, for a couple months.

If the newsletter is a bit late this month, please forgive me. I've been in El Dorado with my dying 100 year old Mother since the meeting. Her funeral was Sept. 6th.

Thanks for the opportunity to be your newsletter editor over the last 13 years.

Use salt or not?

The Pond Guy 8-19-13

Salt may be good for the pond, but using water softener discharge is not a good idea. Resourceful, but it's not safe for your fish. Water softening products often have additives in addition to the salt. Even at low doses, these additives can be harmful to your pond's inhabitants.

Believe it or not, there's a lot to know about salt. Here's a quick primer about the different types of salt and what's best for your fish.

Salt 101

Salt comes in several forms, including rock salt (halite), solar salt (sea salt), evaporated salt (refined salt), iodized salt and packaging salt. The first three are the kinds most commonly used in water softeners.

- **Rock Salt:** The most popular salt used in softeners, rock salt, or halite, is mined from underground deposits by drilling and blasting. Being raw and unrefined, you can imagine the other kinds of minerals and impurities that hitchhike along with the sodium chloride.
- **Solar Salt:** Commercial solar salt is produced by natural evaporation of seawater or brine in large, diked, earthen concentration ponds called condensers. Though the end product can be up to 99 percent pure sodium chloride and has become a favorite among food gourmands, the sea salt also contains minerals and other impurities.
- **Evaporated Salt:** The purest grade of salt, evaporated salt is manufactured using a system of pans that boil away the water from salt brine. The brine, which can itself be purified, is crystallized under controlled conditions often in plants that resemble food processing plants. The process has two steps: obtaining the brine, usually from a solution mine, and then thermally reducing it to crystallized salt.

Salt for Your Fish

Pond Logic® Pond Salt, which is a special form of evaporated salt, is the purest form of sodium chloride and is created specifically for use in your pond.

Adding pond salt to the water reduces the stress on the fish by assisting the fish's osmoregulation, making it easier for the fish to maintain itself physiologically in the water. It reduces fish stress, adds essential electrolytes, improves gill function and protects against common pond toxins. In fact, most diseases suffered by fish can be cured and prevented by simply adding pond salt .Salt is a great addition to your pond, but be careful to only apply as directed, particularly if you have plants in the water. Be sure to monitor your salt levels by using a salt tester, which will instantly measure your water's salinity.

Water Changes

David Jones, KHA
July, 2010 Water Works

The secret to improving the health and appearance of your pond is to do a small water change every week. You probably realize that fish waste, wind blown debris, dead plant materials, and other organic matter are continually accumulating in your pond. As this material decays, it creates toxins which can lead to stress and illness in your fish, and give a yellowish brown tinge to the water. You can minimize these problems by doing regular water changes to flush away the toxins from your pond.

One of the joys of being a pond keeper is feeding your fish and watching them grow. However, many overfeed their fish, so besides the fish creating more waste, some uneaten fish food will go to the bottom and start decaying. Many people think that fish waste is taken care of by their biofilter. That's only partially correct. Fish waste can be divided into two components- ammonia which is largely excreted from the gills and feces which is the solid waste. The circulating pump carries the ammonia to the biofilter where it is converted into nitrite then nitrate. Nitrate can be used by plants and algae as a nutrient, but any excess nitrate will accumulate as a toxin. The solid waste falls to the bottom of the pond along with decaying plants and algae and other organic matter such as leaves, pollen, and dust. If you have a bottom drain, this combination of ingredients (mulm) is carried to the settlement area in your filter and must be emptied regularly. If you do not have a bottom drain, then the mulm sits on the bottom and is decomposed by heterotrophic bacteria (Pseudomonas/Aeromonas) by a process known as mineralization. While these bacteria are present in all ponds, those with lots of mulm will have large colonies which can infect your fish with "Hole in the Side Disease."

Decomposed materials are called Dissolved Organic Compounds (DOCs). These toxins discolor the water to a yellowish brown tinge, and often cause bubbles and foam around the waterfall. To summarize our situation, we have excess mulm and excess dissolved toxins; we can improve both of these conditions by doing water changes. To be sure that there is no misunderstanding, I want to define what is meant by "water change." When a couple of inches of water evaporate during the heat of summer, the water molecules have evaporated but the Mulm and DOCs are still in the pond. So if you top off your pond thinking you are doing a water change-you are not. The water containing the mulm and DOCs must be removed from the pond and replaced with fresh water in order to reduce the toxins. Using the expression - "The Solution to Pollution is Dilution" as our guide, we must reduce toxins by diluting them with routine water changes. For ponds with bottom drains leading to a settlement area in the biofilter, you can easily do water changes by draining the settlement chamber and flushing pond water through the bottom drain until the desired amount has been drained. For ponds without bottom drains the process requires a pump. I encourage the pond owner to purchase a submersible sump pump. These pumps come in various sizes, I have one that pumps about 1200 gpm; it has a long cord, a handle on top to which I have attached a rope. The pump's outlet has a fitting to connect a garden hose. This last feature is very important because it allows me to water my flower beds and vegetable garden with the old water. I use the rope to lower the pump into the pond and to move it around on the bottom to suck up the mulm. Using a hose end sprayer, you can control the speed and amount of the emptying. On a weekly basis, it would be a good goal to change out 10% of the pond volume. If there is a lot of mulm, or if you have algae problems, or if the water is quite tea colored, change out 20% for a while, then go down to 10% when clarity improves. When activity in the pond slows down in the cooler months, you can reduce changes to every other week, but keep in mind that even in the winter, toxins are still accumulating.

Suppose your pond is 3000 gallons and you want to do a 10% water change. You need to determine how many gallons are in each inch of water. If the surface is 8 X 12 feet, your surface area is 96 sq. ft. Multiply that by 144 to get the surface area in square inches =
13,824. Divide that by 231 which is the number of cubic inches in a gallon and you get almost 59 gallons for each inch of depth at the surface. So if the goal is to change out 300 gallons (10% of 3000), you divide 300 by 59 to give the amount of water to drain (300/59) =5 inches of water. Lower the water level 5 inches and get ready to fill 'er up!

On a final note, here are some reasons for always using a dechlorinator, and some caveats about adding water. Most all public water supplies contain chloramines as a disinfectant. It kills bacteria in the water to protect us from disease. It also kills the good bacteria in your pond and is VERY harmful to fish. It burns their gills and makes it difficult for them to breathe. Most pond wipeouts come from adding too much water without a dechlorinator. To be safe, I recommend that you always use one unless you're only adding an inch or so to your pond. When you buy a dechlorinator, be sure it says that it neutralizes chloramines on the label and use the recommended dosage for the number of gallons you are adding. To be safe, I also add the dechlorinator before adding the water! I mentioned above that chloramines are harmful to fish and the good bacteria in your pond. So, to protect them from a chloramine overdose, use a wide dispersion sprayer so that the new water is spread out around the pond, and not concentrated in one area-this is especially important to prevent new water going directly into the pump pickup area leading to your filter. Don't get distracted during this time, use a timer or shut off valve to prevent "fish kill overfill."

A final thought about improving your water. Ponds with rocks on the bottom tend to accumulate more muck. It's impossible to keep this kind of pond as clean as a bare bottom pond with a bottom drain-so you have to go to "plan B."

Continued on page 4.

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

September 18	Monthly Meeting
October 6	Apple Fest
October 16	Monthly Meeting
November 13th	Potluck and Monthly Meeting

Water Changes Continued from page 3

This entails the regular use of a pond enzyme to help break down the sludge. Microbe-Lift PL and Pond Pig-Out are two that work well. These enzymes will benefit any pond, but are an absolute necessity on ponds with stones or no bottom drain. Routine use of enzymes plus weekly water changes will really improve the health and sparkle of your water. Best wishes to your fishes.

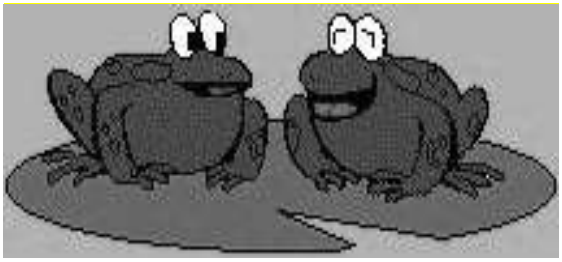
Your Dues are Due if your label reads 7-13, 8-13 or 9-13
Please renew as soon as possible to continue receiving the newsletter.
Send dues to
Jim Mowder, 3717 SE 31st ST, 66605

THE TOPEKA AREA WATER GARDEN SOCIETY

2013 OFFICERS:

Don Taliaferro	President
Topeka	785-272-8348
Open	Vice President
Amy Thompson	Secretary
Topeka	785-273-7005
Jim Mowder	Treasurer
Topeka	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, 3713 SE 31st ST, 66605



Check it out - www.tawgs.org

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