



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.

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June 1, 2009



Eric Wood talks about pump applications.

New pump and light technology

Eric Wood gave an informative program at the May TAWGS meeting about the new technology in pumps and lighting for water gardens.

"There are many reasons that a pump fails," Eric said. They may not be the right pump for the application and they perform in a harsh environment most of the time, (lots of debris, flow restriction or running dry). Up until recently, most of the pumps were designed for sewage treatment or swimming pools and were not really designed to run 24/7 under the conditions in a water garden.

"It is important to have the right pump for the right application," Eric said. Complete Aquatics, the company he wholesales for, has four locations across the United States. Eric said they carry 57 different pumps and, out of about 2,000 pumps sold last year, only about a dozen pumps that failed were actually defective. The rest were not maintained properly or were not the right pump for the application. Eric recommends that people talk to an expert who can help them calculate the total dynamic head (a formula using the size of the pipe, pipe length and the elevation pushing the water). He said there is a good calculator on www.pumpworld.com which can be used to determine the total dynamic head.

If the total dynamic head is less than 10 feet, an asynchronous pump will work just fine. It is a magnetic drive with a standard impeller and is very energy efficient. If the total dynamic head is over 10 feet, you will need a direct drive pump, which pushes the water.

"The sure way to kill a pump is pipe size," Eric

Monthly Meeting

6:30 p.m., Wed., June 17, 2009

Ensley Garden House – Lake Shawnee

East 37th and West Edge Road

Fish Fry and Pot Luck Supper

Please bring your own table service, a desert and/or a salad.

Dave Bartels will lead a tour through the gardens following the meal

said. Use a two or three inch pipe instead of a one and a half inch pipe. If you starve the pump for water it will shorten its life time. Direct drive pumps need water to keep them cool so if the water level drops too low it will damage the pump. A low water shut-off valve in the skimmer could eliminate that problem.

In many instances, two pumps are better than one Eric said. Place one in the skimmer and the other on the shelf beside the skimmer. The advantage of using two pumps is that it is more energy efficient and you have a backup if one of the pumps goes out.

Pump maintenance is important, Eric said. One easy thing to do is to put the pump in a 5 gallon bucket with CLR, diluted according to the label, while you are cleaning the pond. It will help break down the calcium buildup. A direct drive pump has oil that should be changed every five years or so. Eric suggested taking it to a small engine repair service rather than trying to change the oil yourself. A direct drive pump needs to be kept moist during winter storage. Leave it in the skimmer or store it in a bucket of water in the garage or basement. An async pump can be stored dry. As a general rule though, once you get a pump wet you need to keep it wet.

Moving on to pond lighting, Eric said huge strides are being made with LED and fiber optic technology. He said that you get more consistent lighting with LED instead of seeing the "line drop" you see in the halogen lights. Line drop meaning that the further away from the transformer a light is, the dimmer the light. New technology comes at a higher price however. A halogen light might cost \$80 and only last a year or two whereas a LED light, with a life time warranty, will cost \$120. Eric showed some LED "egg lights" which cost about \$60, and a 12" Colorfalls light

which directs a sheet of water over lights which was pretty expensive. LED and fiber optic lights can be used in or out of the water because they don't generate heat.

An interesting bit of information during the question and answer period was that GFI's can go bad, especially if there is a defective pump that throws the breaker. It is a good idea to put the GFI receptacle in the basement or garage, Eric said, and to replace it every few years.

TAWGS Minutes 5 20-2009

President Duane Eberhardt called the May TAWGS meeting to order with self introductions.

Eric Wood gave a very informative talk about new technology in the area of pumps and lighting. Following his talk we enjoyed refreshments served by Sandy and Don Regier.

The meeting resumed with Duane's announcement that the June TAWGS meeting will be a fish fry which will be held at 6:30 p.m., Wednesday, June 17th, at the Ensley Garden House at Lake Shawnee. Everyone is asked to bring their table service and a covered dish for the dinner.

Secretary Diane Gruver reminded people to look at their newsletter to see when their dues are due. She also asked for anyone who is willing to receive their newsletter by e-mail to let her know. Stamps and printing have gone up so it is a savings to be able to send it by e-mail when possible. Tom Platis moved and Mary Borough seconded that the April minutes be approved as printed in the May Lily Pad. Motion carried.

Jim Green gave the treasurer's report. He said we have \$4,029.75 in the bank with \$1,547.15 set aside for various projects. Mary Pat Fischer moved and Tom Routh seconded that the treasurer's report be accepted. Motion carried.

Phil Thompson reported on the upcoming pond tour. He said that we have a few new advertisers to replace the ones that we lost from last year and a couple new places, Roundabout Café and Patio, Pool and Fireside, to sell tickets. He passed around a list for people to sign for volunteering as pond hosts. Hi Stockwell reported that we have 12 ponds on the tour this year. He read the names of the pond hosts and passed out posters to anyone that could put them up. He said that the map/guide should be ready to send to the printer next week. He said that Waterscape Concepts will be celebrating their 2nd anniversary with hotdogs both days of the tour.

Tom Routh reminded everyone that May is the month that TAWGS members are to be volunteering at Lake Shawnee. Volunteers work 8 – 11 a.m. on Tuesdays and Thursdays.

Diane told people to be thinking whether we wanted to have a Member Only Pond Tour this year. Would someone be willing to plan it?

Meeting adjourned.

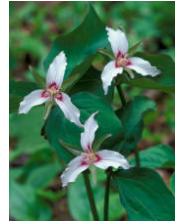
Ultraviolet lights are an excellent way to eliminate green water. However, they can interfere with treatments to the pond. It is better to always turn off the

UV light for 24-48 hours when adding treatments, especially bacteria and many fish medications.

Moisture loving plants

by Duane Van Dolah

Wake robin



Trillium

Sorry about the common name! I've never heard Trillium called that or Wood Lily, but you've got to admit it caught your attention.

Trillium is a perennial herb that comes from North America, Asia, the Himalayas, and Japan. It is a fairly small plant at 12-15 inches tall and has a spread of 12-15 inches. It wants humus-rich, well-drained, consistently moist soil in partial shade. Their parts of three easily recognize them. The plant has three leaves, three flower petals, three sepals, and even three sections in the berry. A thick rhizome produces several fleshy stems, which have stems and flowers that in the spring produce colors of white, red, and purple.

The Trillium is a great plant for the woodland garden and next to a partially shaded waterfall or stream. Propagation is by dividing the clumps in late summer and fall, when the foliage dies off. Some species to look for are 'T. grandiflorum', which is the most common. It flowers from April-June with 2-3 inch wide blooms in white, turning pink with age. Of this Trillium there is a pale pink variety called 'roseum' and a double flowering white, 'Flore Pleno'. 'T. erectum', this Trillium has large, mottled, deep green leaves and reddish purple to maroon flowers. And finally 'T. undulatum', The Painted Trillium, the plant forms clumps 4-8 inches tall and spreads of 6-8 inches. Open funnel shaped flowers have red edged borders with white or pink petals and a carmine stripe at the base.

Refreshments for 2009

June – Fish Fry - Connie & Allen Ellis, Bob and Cheryl Saathoff and Don and Ruth Taliaferro

July – Amy & Phil Thompson

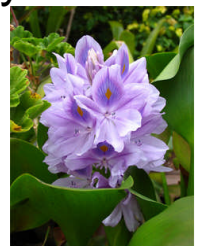
August – Floyd and Diane Gruver

We still need hosts for September and October. Call Duane 785-246-0240 if you can help out.

Water hyacinths easy to use

Parts from 5-16-09 The PondGuy Blog

Water hyacinth, especially in water gardens, are a useful tool when trying to create a balanced ecosystem. Water hyacinth are simple to use and perform many functions in a water garden such as: great for filtration, compete with



algae for nutrients and provides shade and shelter. I know many of our readers may not agree with this so

let's explain some of the cons first. Many southern states have restricted water hyacinth because of its aggressive growth. They clog waterways and choke out native plants. In these areas other plant types can be used. Bogs can be planted with marginal/bog plants to maintain the water body that are not as aggressive. Water lilies can be utilized for shelter and shade. If you are in the northern climates, water hyacinth still spread quickly but they cannot survive the cold harsh winter. So why use water hyacinth anyway? "

Easy to Plant: Water hyacinth are one of the most simple plants to add to your water garden. Simply drop them in and enjoy. You can place them in your waterfall filter, calm areas in the pond or any place where there is at least a few inches of water. "

Shelter: Water hyacinth float on the water's surface covering the pond and shading it from the sun keeping the water cooler. The root systems also provide hiding places for your baby fish as well as cover in general against predators. "

Filtration Capacity: Water hyacinth have large root systems that can stretch 10 or more inches. Each of these individual roots have thousands of root hairs which increase the roots surface area. We know from our filter systems that the main reason they work so well is the large amount of surface area for bacteria to grow on. Multiply that by numerous water hyacinth and you have instantly doubled or even tripled your filtration capacity. "

Compete with Algae: Since water hyacinth are prolific growers, they compete with algae for the same food source, thus keeping your water garden balanced and looking good all year. "

Looks: Water hyacinth are nice too look at. Foliage is green all season and purple flowers form through out the year as well. "

Easy to Remove: If water hyacinth get out of control in your water garden, don't worry, they are extremely easy to remove with a pond net. With so many benefits, in the right conditions, water hyacinth are a great renewable resource.

Does too many fish cause too much algae



Parts taken from 5-23-09 The PondGuy Blog

You can ask anyone here at The Pond Guy; usually the first question we ask when someone says they have a bad algae problem is, "How many fish do you have?", followed by, "What size water garden do you have?". 9 out 10 times, there are way too many fish in the water garden.

So why does having that many fish cause algae? Let me explain. Sunlight + Food Source = Algae: Algae really only needs two things to grow, sunlight and a food source. The food source can come from many sources but fish waste is a major contributor. This means the more fish you have, the more waste, the more algae. Make sense?

Finding a Balance: When you put fish into your

water garden always consider the future. Small fish become big fish and fish are very romantic creatures. Let's say you purchased 20 koi at around 3" each. Your pond may be able to handle the fish load for a few seasons, then all things start to change. As time went by, your fish have grown and maybe even started a family. As nature takes its course, your pond starts to pay the price and water quality becomes an issue. Take into consideration that 40 1" fish produce the waste of just one 12" fish. So even though your pond may have been able to handle the fish load in the past, you must consider that your fish load or fish waste grows exponentially every year.

Koi vs. Goldfish: I know that when you're shopping for fish koi are more expensive and sometimes the goldfish look really nice too. I feel the same way myself at times. Just keep in mind that goldfish can reproduce up to 6 times a year where koi only reproduce once a year.

Fish Tips: Goldfish can grow up to 18" long and live up to 20 years, where as a koi can grow up to 36" long and live over 200 years! One famous scarlet koi, named "Hanako" (c. 1751 - July 7, 1977) was owned by several individuals, the last of which was Dr. Komei Koshihara. Hanako was reportedly 226 years old upon her death. Her age was determined by removing one of her scales and examining it extensively in 1966. She is (to date) the longest-lived koi fish ever recorded (wikipedia).

Time to repot houseplants

As house plants develop, they may outgrow their container, becoming top heavy or root bound. A root bound plant may dry out more rapidly requiring more frequent watering and roots may be seen growing out of the drain holes in the bottom.

A root bound plant can be repotted in the spring as growth resumes. Before repotting, confirm that the plant is root bound by knocking it out of its container to look at the roots. Do so by tapping the rim of the pot on a level surface to loosen the root ball. If there is a mass of white roots around the soil ball, repotting is necessary. These roots should be loosened and separated – encircling roots will continue to grow in that direction unless they are re-oriented.

Transplant into a container that is only one size larger. Excess soil in a container that is too large will hold too much water and results in too much soil volume that is not occupied by roots, causing the soil to stay wet. Never put a layer of gravel or other aggregate in the bottom of a flower pot; this disrupts drainage and restricts the soil volume available for rooting. Pieces of paper towel or coffee filter can be used to cover the drain holes to prevent the soil from washing out before new roots bind the soil together.

Re-pot the plant at the same depth as before; with the soil surface about ½ inch below the rim of the container.

Use moist potting soil that is similar to what was previously in the pot. Never use garden soil for house plants. A peat moss based potting soil is best.

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

Calendar of Events

June 17 – Fish Fry & Monthly TAWGS Meeting
June 27 – 28, 2009 – Topeka Pond Tour
July 11-12 – Kansas City Pond Tour
July 15 – Monthly TAWGS Meeting
Aug. 19 – Monthly TAWGS Meeting
Sept. 16 – Monthly TAWGS Meeting
Oct. 21 – Monthly TAWGS Meeting
Nov. 18 – Potluck



When adding new fish to a pond, it is a good idea to keep them in a quarantine tank for at least 2 weeks, to make sure that they are healthy, before placing them in the pond with your existing fish.

**Your Dues are Due if your label reads
4-09, 5-09 or 6-09**

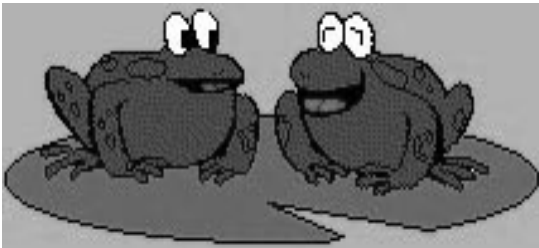
**Please renew as soon as possible to continue
receiving the newsletter.**

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

THE TOPEKA AREA WATER GARDEN SOCIETY 2009 OFFICERS:

Duane Eberhardt Topeka	President 785-246-0240
Don Taliaferro Topeka	Vice President 785-272-8348
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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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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785 364-3046

fdgruver@embarqmail.com (note change)

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