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 8 **Sept. 1, 2014**

Melody Weller entertains TAWGS members with her interesting talk about hummingbirds. Photo by Sherry Reed

How to attract hummers

By Sherry Reed

Melody Weller from the Wild Bird House in Brookwood Shopping center shared her wealth of information about hummingbirds. August and September are the big months for hummingbirds. The babies have fledged and are thick on the feeders. All of the hummingbirds are getting ready also for their long migration south. The adult males leave first, then the adult females and finally the young birds leave last. The young hummingbirds must double their weight before they are ready to migrate.

The ruby-throated hummingbird is the most common to our area. Some may be lucky enough to see a Rufus hummingbird come through the area later in the summer or fall. That is why it is important not to take down feeders too soon. They will start leaving late September to early October. Melody leaves her feeders up until November.

Nectar in a hummingbird feeder needs to stay fresh. If the nectar ferments the hummingbirds will stop coming to the feeder. How often the nectar is changed depends on temperatures and placement of the feeders. If the temperature is 80 degrees, change the nectar at least twice a week. If the temperature reaches 90 degrees or higher change every other day. At 100 degrees change every day. If the feeder is in the sun, the nectar should be changed daily.

You may make your own nectar which is 4 parts water to 1 part sugar. Or there are nectar powder to mix with water and also pre-mixed nectar you can buy. You may store these for 1 week in the refrigerator after the have been mixed.

There are many types of hummingbird feeders to choose. There are saucer types that tend not to swing in the wind. There are also window feeders that fit on the window so you can have a close-up view of the little hummers.

Feeders come with ant moats and bee guards to protect the nectar for the birds. Also keep your feeders clean.

Monthly Meeting

7:00 p.m. Sept. 17, 2014

at

Trash Mountain Aquaponics facility located at NW 62nd and Highway 75, behind the Lighthouse Bible Church.

Chris Newell

Water plants

By Duane Van Dolah

Water Snow-flake

Nymphoides Indica

This water lily-like plant floats on the water with round, emerald green pads that are 2-6 inches across. From the junction of the stem and pad comes flowers that are held 2-3 inches above the water. The flowers are 1-1 ¼ inch, paper-white in color and shaped like a five-pointed snowflake with frilled centers and

fringed edges. It spreads by viviparous leaves or leaves that produce plantlets. It grows in full sun in zones 8-11 with a spread of 2 feet and more in water depth of up to 2 feet. Propagate by stem cuttings or planting the plantlets.

Another plant in the Snowflake family is the *Nymphoides cristatum.* This snowflake is called the variegated water snowflake because its pads have a red edge and are heavily veined in burgundy. It grows in zones 7-10 with 6-10 inches of water over it.

Nymphoides hydrocharioides is the orange snowflake. Wavy marginal pads with frilled orange flowers make this snowflake another choice for a small pond or water container garden. It needs a depth of 6-24 inches deep in zones 7- 10.

Nymphoides geminata is the Yellow Water Snowflake. It has the same characteristic as the Snowflakes above but with yellow flowers and being winter hardy down to zone 5.

Do I need to turn off my UV light when adding water treatments, like Nature's Defense®, to my pond?

The Pond Guy 8-2-14

Great question! The answer all depends on the kind of ultraviolet light you're talking about – so let's quickly go through the differences between a UV sterilizer and a UV clarifier.

UV Sterilizer: Cleans It All- Good and Bad

A UV sterilizer completely sterilizes the water – which means it kills anything and everything that floats past its path, including beneficial bacteria found in some water treatments. These units are effective at killing floating algae and harmful pathogens like parasites, but they kill the good stuff, too. We don't recommend adding bacteria to your pond while using a UV sterilizer.

UV Clarifier: Targets the Green Stuff

A UV clarifier is different. It targets just algae and leaves the bacteria alone (as long as the unit is sized right for the pond). The clarifier uses ultraviolet light to destroy the reproductive ability of suspended green stuff. Dead algae then clumps together into particles large enough to be removed by mechanical filtration, leaving the pond cleaner and clearer. If pea soup water is a recurring problem for you, add a UV clarifier to your pond.

Optimize the Flow:

If you use a UV clarifier, you can leave the light on while you use bacteria-based treatments, like those found in the DefensePAC® Pond Care Package. But just be sure the bulb and pump are sized correctly.

Bright Enough Bulb:

For a UV clarifier to be most effective, the bulb needs to have a high enough wattage for your pond's volume. All UV clarifiers are rated based on pond size. The larger the wattage, the larger the pond size the UV clarifier can handle.

Power to the Pump:

The water needs to flow pass the UV bulb at the just right speed, so the pump size is important. If the water moves too quickly, it won't kill the algae and it could cause the seals on the unit to malfunction; if it moves too slowly, it will kill the algae and beneficial bacteria. A great rule of thumb is to push the water approximately half of what the UV is rated per hour.

A convenient option is to try out an all-in-one unit, like the AllClear™ & SolidFlo™ Combo Kits. The mechanical and biological filter system comes with a built-in UV clarifier. When used with the SolidFlo pump, you'll be well on your way to clear water.

One last tip:

Keep the water well-circulated by running an aeration system, like one of the Airmax® Aeration Kits. Its diaphragm compressors and air stones keep the beneficial bacteria supplied with oxygen, as well as ensure every drop of water and every algae cell float past that UV bulb.

Calculating gallons in your pond

The Pond Guy 8-16-14

Gallons matter. Knowing how much water your pond holds will help you determine the size of aeration and filtration systems you need. It will also help you properly dose your pond with commonly used pond products and determine how many fish your pond can house.

So how do you calculate this all-important figure? Put on your thinking cap, because we're revisiting some high school geometry.

Rectangular Ponds

The easiest ponds to measure are those that resemble a rectangle. If you'll recall from geometry class, you can calculate a rectangle's volume by multiplying its length by its width by its height, so L x W x H.

First, to get your length and width, measure your pond at its longest point and its widest point. Figuring out its depth is a bit trickier, particularly if you have plant shelves, or if the pond is sloped.

If it is the same depth throughout, use that number in your formula. If you have a plant shelf or the

depth varies, measure the maximum depth and cut it in half to create an average depth. For instance, let's say the pond is four feet at its deepest but has some shallow areas for plants. Use half of that depth, or two feet, for your formula.

So let's put this in real terms: If your pond is 15 feet long by 10 feet wide by 2 feet deep, your pond's volume is 300 cubic feet. One cubic foot holds 7.48 gallons of water, so multiply 300 by 7.48 to get your total – which equals 2,244 gallons.

Circular Ponds

If your pond is round or oval, you'll start by using the formula to find the surface area of a circle – which is Pi x Radius2 , or 3.14 x R x R. The radius of your pond is half the distance across, so if your pond is a 10 foot circle, the radius is 5 feet. Your formula will look like this: 3.14 x 5 x 5 = 78.5.

Next, figure out your pond's depth, just like we did with the rectangular pond. If it's 4 feet deep with plant shelves and sloped sides, use 2 feet. Then multiply that number by your surface area: 78.5 x 2 = 157 cubic feet.

Finally, convert that number into gallons. One cubic foot holds 7.48 gallons of water, so 157 x 7.48 = 1,174 gallons.

Irregular Shaped Ponds

The more irregular your pond's shape, the less accurate your measurement will become – but it's OK. In most cases, you don't need to pinpoint its volume to the exact gallon. Use whichever formula best resembles your pond's shape. For instance, if your pond is kidney shaped, use the rectangle formula and remember that the final figure will be slightly higher.

Playing with the Numbers

With your newfound numbers, head over to The Pond Guy's® online calculator where you can plug in those figures and see how many boulders you need, how many fish your pond can hold, what pump size you need and more.

Now aren't you glad you paid attention in geometry class?

TAWGS Meeting August 20, 2014

A big thank you to Jim and Sue Mowder for hosting the meeting in their beautiful backyard and for providing the yummy refreshments. It was great to welcome three visitors to our meeting.

President Tom Platis called the meeting to order. Jim Mowder, treasurer, presented the treasurer's report that showed a beginning balance of $1,847.51, an inflow of $55 and an ending balance of $1902.51. Don Taliaferro made a motion to accept the report and Floyd Gruver seconded the motion.

Floyd Gruver is donating a 100 gallon Rubbermaid tank for storing fish while cleaning out a pond to the club. It will be stored by Don Taliaferro and anyone wanting to use it can get it from him. Floyd and Diane also have some items to donate that will be used as door prizes for next year's meetings.

September's meeting will be held at the Trash Mountain Aquaponics facility thanks to Chris Newell. The facility is located at NW 62nd and Highway 75, behind the Lighthouse Bible Church. Floyd and Diane will provide the refreshments. Don and Sandy Reiger will provide refreshments for October.

TAWGS will work with TBA to construct and host the booth for Lawn and Garden Show in February 2015. TBA is hoping to have a garden tour next summer and hopefully TAWGS will host a pond tour the following weekend.

Don and Sandy Regier have fish they would like to give away. Don Taliaferro suggested taking some to the Wildlife Fish and Game that were still needing fish. Don was recognized for delivering fish to the Wildlife Fish and Game earlier this summer.

Volunteers were recruited for Apple Festival held at Ward Meade Park.

Diane Gruver asked everyone who could to acquire the Lily Pad Newsletter on e-mail. Some difficulties with mailing the newsletter through the post office has arisen and it would save on the printing and postage costs as well.

Bob Saathoff made a motion to adjourn and Don Taliaferro seconded the motion.

The August TAWGS meeting was held at Jim and Sue Mowder's pond where we all got to enjoy their lovely backyard. Photo by Sherry Reed

Don't forget change of meeting place for September meeting!!!

Chris Newell

Trash Mountain Aquaponics facility

Located at NW 62nd and Highway 75, behind the Lighthouse Bible Church

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

September 17	Monthly Meeting
October 5	Apple Fest
October 15	Monthly Meeting
November 19	Pot Luck
2015	
June 20	TBA Garden Tour
June 27-28	Topeka Pond Tour

Part of the cycle of water lilies and other aquatic plants includes foliage turning brown and then rotting off. This is normal as long as new foliage is emerging as well. To help reduce the amount of sludge build-up in your pond, remove dying foliage, including spent flowers, from plants before it has a chance to fall into the water and decay. Basic routine maintenance like this goes a long way towards keeping a healthy pond.

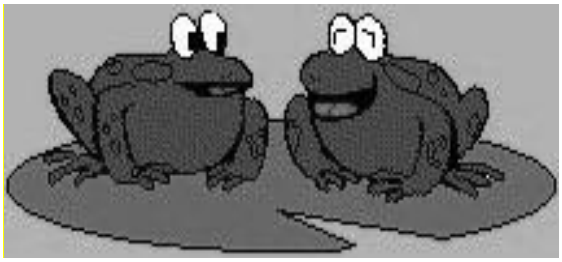
Your Dues are Due if your label reads 7-14, 8-14, 9-14 or anytime in 2013
Please renew as soon as possible to continue receiving the newsletter.
Send dues to
Jim Mowder, 3717 SE 31st ST, 66605

THE TOPEKA AREA WATER GARDEN SOCIETY

2014 OFFICERS:

Tom Platis	President
Topeka	785-478-9514
Floyd Gruver	Vice President
Holton	785-364-3046
Sherry Reed	Secretary
Topeka	785-408-5060
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, 3717 SE 31st ST, Topeka, KS 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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785-364-3046 or 785-364-0666
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We reserve the right to edit input to meet publishing requirements. Copy cannot be returned.