

The Lily Pad

The Topeka Area Water Garden Society

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May 1, 2002



Dean Demoss (in pond) hands plants to (l) Joe Sutcliffe and Joe Breitenstein.

Lilies repotted at Potting Party

By Mary Ann Bechtold

Thanks to the weather for not listening to the forecasters. We had a very nice morning to repot the water lilies, lotus and cattails at Ward Meade, Saturday, April 20th. Joe Breitenstein, Joe Weir and Dean Demoss had all the needed supplies ready and waiting at 8 AM. Dean gets the "wet" award for being the first to take a plunge for this year.

It was very heartening to see 25 members who all pitched in and helped complete the job by 10:30 a.m. The novices had a chance to observe the start to finish process and were introduced to the "Puff recipe". Several picked up a knife and were dividing rhizomes before the end of the process. Several water lilies were potted to sell at the plant sale April 27th. Bare rhizomes were also prepared for sale.

Dave Puff from Puffs Water Garden spent time earlier in the week preparing the up graded filter system for the Ward Mead Fountain. Hopefully, the water quality will make us proud this year and show off our club's handiwork. We expect the larger intake pipe to make all the difference. Dave will add the needed chemicals and bacteria later as the city is still adding water. They were held up until the screen cap could be installed over the drain. Please add this to the monthly maintenance to be sure the screen is free of debris and be careful not to dislodge it when wading in the fountain.

Thanks to each and every one of you who took

Monthly Meeting

7:00 p.m., Wed., May 15, 2002

Ward Meade Park

Paul Willis

Audubon Society

the time to spend quality time with TAWGS friends to accomplish a worthwhile project. Hope your take-home plant provides you with many hours of pleasure.

Those helping re-pot lilies were: Joe Weir, Larry Sheets, Dean Demoss, Joe Breitenstein, Betty Karnes, Hi Stockwell, Michael Bradley, Bob Saathoff, Joe Sutcliffe, Dale Jirik, Tam Vincent, Juan Sexton, Stan Wilch, Tom & Helen Platis, Lynn Pelton, Becky & Bob Coffman, Donnis & Gerald Hodges, Jim Green, Diane Gruver and Stan and Mary Ann Bechtold.

Thanks again!

From the President

By Mary Ann Bechtold

TAWGS continues to grow with new members joining the past two meetings. You are all very welcome and we hope you will ask questions. The best way to learn is to just do it. We have four geographic areas identified. Hopefully all of you are getting better acquainted with your closest neighbors. The membership only pond tours are taking shape. I think we will have a better focus and can address a few questions about parking, car pooling and a pre or post dinner afterwards, etc.

Please get your suggestions to Joe Weir about what our fund raiser should be spent on this year. It will be narrowed to three for a membership vote. Joe is looking for volunteers to research the suggestions. Call him.

A big thanks to all of you who helped with potting the plants April 20th.

We have missed some of our regulars at the meetings. You are in our thoughts and we hope to see you again soon.

Don't let the string algae get the best of you!!

Minutes 4-17-2002

President Mary Ann Bechtold called the meeting to order at 7:00 p.m. and welcomed everyone. Since there were several new faces in the group we had self-introductions. Following a talk by Dennis Brinkman of the Natural Resources & Conservation, the minutes were approved as read.

Under officer's reports, President Mary Ann said that she was circulating a page for people to sign up to help maintain the fountain at Ward Meade Park. She said that the Potting Party for potting lilies at Ward Meade will be this Saturday beginning at 8:00 p.m. A list of supplies were reviewed and discussed. She announced that following the meeting we would break into the four geographical areas to discuss the member pond tours scheduled July through October.

VP Joe Weir said that he had a pad circulating for people to list ideas for the next community project. He said the committee would review the ideas and present three of them to the members. There was no treasurer's report in the absence of Tom Platis.

Secretary Diane Gruver read a thank you note from Richard and Sharon Barnes for the \$25 gift certificate for being 2001 pond hosts. She said that several members are now receiving the Lily Pad newsletter by e-mail and encouraged anyone who would like to receive theirs by e-mail to contact her at fdgruver@holtonks.net.

Diane also reported that the 2002 Pond Tour Committee met April 10th to continue plans for the tour. The posters have all been distributed and advertising letters are going out soon. We have seven ponds committed for the tour right now and hope to have 10 ponds. Trina Wood said that she would see if Eric would want to put their personal pond on the tour. She also said there was a possibility of a pond that was recently built at the Sheriff's office that could be put on the tour if we don't have enough volunteers. The next pond tour committee meeting will be at Puddles and Pads on Wednesday, May 8th. Anyone wishing to help is welcome to join the meeting.

Council Representative Joe Breitenstein reported that the Garden Council is now incorporated. He said that their plant sale is April 27th and encouraged people to volunteer to help that morning. He said that it will be a pleasant experience and cautioned TAWGS to not sell their plants too cheap. Becky Coffman volunteered to be chairman for the sale.

Pat Rokey said that she would appreciate plants, both perennials and annuals, for the Hospice project. Joe Weir said that Midland Hospice has secured a new person and he will be training her on the up keep on the pond at Hospice. President Mary Ann said that there is a Garden Council Flower show on July 26th and they are needing volunteers to help set up the tables for the show.

Jim Green said that he would like to see more "water" at the Lawn and Garden Show next year and

said that he had seen a pre-form pond that would work. He moved and Dale Jirik seconded that we buy a pond for up to \$110, providing we can find a person willing to store it. Motion carried.

President Mary read an e-mail from Eileen Schmidt indicting that she has been making some changes on the TAWGS website that should make it easier to use. She also stated that she didn't have enough time to continue handling the website and would like for someone else take over managing it. No volunteers came forward. If someone is willing to assume the webmaster job, please let Eileen, Jim Green or President Mary Ann know.

Trina Wood and Earlene Jirik volunteered to bring refreshments next month. The meeting adjourned following a question and answer period about ponds and mini meetings for the four member pond tours.

Preserve natural resources

By Diane Gruver

"Soil is one of the most important natural resources that we have," Dennis Brinkman told TAWGS members at their April meeting. "Many nations have soil too poor to even grow food."

Dennis, who works for the Conservation Dept. said soil samples are free in Shawnee County, and are a good way to check the soil quality in your landscape. Check with the extension office for more information.

According to Dennis, erosion and water quality are the main concerns in Shawnee County, especially in new developments and construction areas. He said wind erosion can move mountains of soil. Possible solutions for wind and rain erosion are terraces and planting "buffers" to slow the flow of the water and wind.

"What we do around the water supply influences our water quality," Dennis said. We need to be mindful of our use of fertilizer and pesticides. Don't put fertilizer in the street, it just goes down the storm drain and eventually pollutes the rivers and streams. Be sure you use the right amount of fertilizer or pesticide, don't use more than necessary. Dispose leftover lawn chemicals properly – don't dump – recycle instead.

"Fertilize properly, use pesticide correctly," Dennis said. "Your actions affect water quality. Soil, water, plants and air are all renewable resources. We have a choice in how they are managed and preserved."

Dennis said the U.S. Congress established the conservation districts in 1937, because of the dirt storms of the 30's. The conservation department works with both rural and urban people as a third party advisor.

Two tips that Dennis left with the group are: Don't plant tomatoes in the same place every year and treat dandelions in the fall for best control.



Algae and what to do about it

Reprinted from The Water Garden News 6-01

There are thousands of types of algae and without algae there would be no life on Earth. However algae can be a problem for pondkeepers. Algae grows quickly now because of the warmer temperature, more sunlight and the accumulation of organic load due the increased metabolism of the fish. Algae thrive on these changes and will soon turn pond water pea green making it difficult to see the fish.

One of the best things you can do to help clear up green water is to make sure your filter is clean and working to capacity. It may be that your filter is undersized for your pond or fish load. To increase the productivity of your filter you can add a nitrifying bacteria such as Crystal Clear Nitrifying Bacteria or Ecological Laboratories' Microbe-Lift. These products contain beneficial bacteria which jump start your filter and help get things running up to speed. It can take from a few weeks to several months to over a year for a biological filter to reach peak efficiency.

Plants will also help in controlling algae by taking nitrates from the water which deprives the algae of the nutrient it depends on for sustenance. Anacharis is one of the best underwater oxygenating plants used for algae control. Use one bunch of anacharis per square foot of surface area for ponds less than 50 square feet. One bunch per every 2 square feet of surface area is adequate for larger ponds. If you have trouble with fish eating your anacharis you can purchase Submerged Plant Protectors.

Floating plants such as water lettuce and frog bit are also very good for absorbing nutrients in the pond to starve algae. You will want to provide some shade to the pond with water lilies or other surface plants. Provide 50 to 60 percent surface coverage if in full sun. If you get shade from trees or other objects then you don't need as much surface coverage.

If there is rain run-off flowing into your pond then it will be difficult if not impossible to keep all of the algae in control. This is one of the most common problems that keep a pond from clearing. If water flows over your lawn or planting beds and then into the pond it is carrying with it fertilizer in the form of organics or commercial fertilizer which may have been spread to feed the lawn or other plants. If this is happening in your pond, take measures to divert the runoff around the pond by either constructing a berm or a trench. If the run-off flows over a concrete patio and then into the pond it can carry nutrients to feed the algae as well as raise the pH of the water which contributes to algae growth. A pH closer to neutral will decrease algae growth. Cement, limestone, and marble will raise the pH of the water therefore contributing to algae growth.

Another thing that makes the control of algae difficult is a lot of sludge (dirt and decaying organic debris) in the bottom of the pond. Biological Clarifier and Microbe-Lift will help decompose this sludge but you should not expect it to totally get rid of large

amounts on its own. If you have an inch or so of sludge on the bottom of your pond get rid of as much of this as possible by siphoning, scooping, vacuuming, or whatever means are available. If the bottom of your pond is higher than other parts of your yard then you can use a section of 1 ¼ or 1 ½" flexible pipe to use as a siphon. This is much easier with two people. Fill the hose with water and each person will hold their hand over the ends to keep the water in the pipe. One person holds one end in the water and the other will hold the opposite end at the low point in the yard. Release your hold over the ends of the pipe and the water should start flowing. The end in the pipe can be moved about pulling the sludge out of the pond at the same time. Pond vacs can be used to remove debris from the pond bottom.

If you cannot control the green water you may want to consider the addition of an Ultraviolet Sterilizer for your pond. An Ultraviolet Sterilizer will kill all of the algae that pass around the ultraviolet light. These units are sized according to your pump's flow rate and the number of gallons in your pond. The dead algae is then picked up by the filter to be washed away when the bio-mechanical filter is cleaned or broken down by the biological filter.

Filamentous algae is many cells attached together in many forms. It can be long and stringy. It can be short and furry or in the shape of webs or mats. The short velvet type of algae that covers the liner and everything else in the pond is beneficial. It helps provide a natural appearance to the pond. It uses nutrients from the water, provides oxygen during the day, and the fish nibble on it. This type of algae can not be totally eliminated with fish and plants in the pond. String algae, which may coat the waterfall, is a little harder to control. You should physically remove it from the pond where possible. Filamentous type algae will flourish on waterfalls and in shallow streams because the sunlight is more intense providing more heat and light than what may be in other parts of the pond and there is a constant supply of nutrients flowing through it. In my koi pond I dislodge the algae from the waterfall for them to eat. Biological Clarifiers help by breaking down the organic material in the pond, which feed algae. There are other types of products that contain bacteria and enzymes that will help in the control of this type of algae. Crystal Clear's Clarity Max and Ecological Laboratories' Microbe-Lift have proven effective. Microbe-Lift contains nitrifying bacteria as an added bonus. These products help in the control of algae but are not an algaecide. The use of these products is a process and you will not have results overnight.

If you have a pond without fish, you can use fountain chemicals to control the algae. One product that works very well and economically is Fountec. It is safe for plants, birds and other animals but it can NOT be used with fish.

You may have a pond with fish but no plants

in which case you can use Pond Blocks. This is a slow release algacide that will kill the algae (both single cell and multi cell algae). One block will last about a month and treat 250 gallons of pond water. (Remember this is NOT safe for most plants.)

To summarize:

- Keep the organic load down by keeping runoff out of the pond and the sludge to a minimum.
- Don't over feed or keep more fish than your pond will support. One goldfish per 5-sq. ft. and one koi per 10-sq. ft. are a good rule for most ponds.
- Install an adequate size biological filter and give it time to work, this could take several months.
- Use enough and the right type of aquatic plants. One bunch of Anacharis per one sq. ft. for ponds under 50 sq. ft. and one bunch per two sq. ft. for ponds over 50 sq. ft.
- Use biological treatments and give them time to work. Microbe-Lift and Clarity Max will help but this is an ongoing process and takes time along with the methods outlined above for balancing your pond.

Programs for 2002

May 15 - Paul Willis, Audubon Society

June 19- Eric Wood, Puddles-N-Pads, Streambed Plants

July 17- -David Puff, Puff Water Gardens, Proper Coverage

Aug. 21 - Jeff Yeckel, River City Koi, Koi/Fish Disease

Sept. 18 - Cameron Rees – Landscape Design/Plants

Oct. 16 - Deb Spencer, Water's Edge, Hydraulics

Nov. 20 - Pot Luck Supper & Social

Water canna



Reprinted from Splash 4-12-02

One of my favorites, this aquatic plant is tall, lush and blooms all summer (with adequate fertilization), even in partial shade.

Water Canna is easy to grow, but it is a tropical plant and must be over wintered inside where water temperatures fall below 50 degrees Fahrenheit. The plant should not be moved back into the pond until the water temperature reaches 60 - 65 degrees.

Water Canna should be planted in large containers, which are both deep and wide. Since the plant does get tall, it has a tendency to topple over if the container is inadequate. We like to put a heavy rock in the bottom of the container before planting the Water Canna, to give it more stability.

Spawning time is here

Reprinted from Splash 4-12-02

As the weather and the water temperatures rise, the fish will start to get ready to spawn. This is really the only time it is possible to determine the sex of your fish with any degree of certainty.

Females will start to get broader in the middle and when they are ready to spawn, the males will start chasing them.

Goldfish (as well as Koi) are "egg scatterers", meaning the eggs are all separate, not in a clump. The eggs are tiny and sticky and adhere to just about anything in the pond from pond liner to plants.

It's stringy, it's puffy, it's green

Reprinted from Splash 4-12-02

Filamentous algae (string algae, blanket weed) comes in several forms: Sometimes it looks like puffs of light green swimming on top of the pond, sometimes it is dark green strands attached to the sides, rocks and plants.

It is, however, always some shade of green :-)

In the spring, the pond often has an overload of organic waste and the pH has a tendency to be too high.

It is a good idea, to either take a close weave net and fish the as much "gunk" out of the bottom, or to vacuum it out. Balancing the pH is also important, to prevent the algae from growing back faster than it can be dissolved.

It is important to use a product that will dissolve the algae that will not hurt your aquatic plants. Algacides will damage most pond plants (algae is also a plant).

Pond Balance seems to be highly effective without hurting any plants. It dissolves the algae slowly (it does take several days).

Fish gulping at the surface

Reprinted from Reflections, April 2002

Many of us have gotten up in the morning and found a number of our beautiful, biggest fish floating in the water without a mark on them. Sometimes this isn't the result of disease, but of a meteorological phenomenon.

According to Bill Heritage, of Ponds & Water Gardens (Revised 2nd Ed), your pond's surface acts like a lung, taking in oxygen and releasing carbon dioxide. In heavy thundery weather, this process slows down and sometimes stops altogether. The carbon dioxide doesn't escape from the water. As it builds up the fish become distressed and mouth at the surface as if gulping air.

It is most critical at night when both the plants and the fish are producing carbon dioxide; that's why dead fish are usually found in the morning. Death comes from the suffocation by carbon dioxide rather than the

shortage of oxygen.

Adding more oxygenating plants only makes the problem worse at night. The answer isn't adding more oxygen; it's getting rid of the carbon dioxide. All you have to do is keep the surface of the water agitated. Stir with a stick; churn it up with the house. The evening and early mornings are the most useful times to do this.

If you have a fountain or waterfall you shouldn't have a problem. From the time you see your fish gulping in distress, you should run your fountain or waterfall 24 hours a day. If you don't have a fountain or waterfall, an inexpensive aquarium air pump will do for the duration. Such pumps aren't designed for use outdoors and need to be under cover. You'll need plastic airline long enough to reach from the pump to the pond. Adding an air stone just a few inches below the surface will create enough turbulence to get your fish through the emergency.

Update on Ward Meade Fountain

David Puff reports that he has been working with Ray on the fountain at Ward Meade Park. There was a leak in the plumbing that the park dept. installed so David has had to hold off putting the dechlorinator and bacteria in the pond until the leak is fixed. He reports that the cost for the materials for the filter change, bacteria and dechlorinator are well under the approved amount by TAWGS.

Thanks to David for the work and to Puff Water Gardens for supplying the materials at cost!

If you have a computer and would like to assume the duties of our webmaster of the TAWGS website, please contact:
Eileen Schmidt, eileens@oz-online.net
Jim Green, jrgreen@cjnetworks.com
or Mary Ann Bechtold, sbech1@mindspring.com.

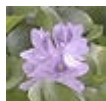
Too early for Water Hyacinth & lettuce?

Reprinted from Splash 4-25-02

We, who love ponds, tend to get impatient this time of year to get our ponds looking beautiful again. Especially those of us living in colder areas. One of the staples of ponds in areas north of the Mason Dixon line are Water Hyacinths and Water Lettuce (they are considered a pest in many states south of the Mason Dixon line, because they do not die during the winter and can choke water ways).

Water Hyacinth are somewhat more tolerant of cool water than Water Lettuce. Water Hyacinth will survive if water temperatures warm to about 60 degrees, but Water Lettuce needs at least 65 degree water (Fahrenheit), 70 degrees is better!

If the water is too cool, the plants will simply slowly disintegrate.



Finding a leak

by Erik Tate

Reprinted from Water Garden News 4-02

While some water loss in a water garden is normal due to evaporation and sometimes splash out, significant loss can be a problem. The first, and usually most difficult, step in fixing a leak is to actually find the problem. Follow these steps to make the job a little more efficient.

Step A - Turn off the pump. If the water continues to drop skip to Step C. If the water level stays the same see Step B.

Step B - You have now determined that the problem is not in the main basin pond. Now you need to narrow it down a bit further. The leak is either in the plumbing or in the waterfall/stream. Closely inspect your plumbing, particularly at any joints, make sure there is no leakage here. Inspect your waterfall and stream. Most of the time, the problem is caused by plant matter or other obstructions raising the water level behind the weir and causing an overflow over the liner. Perhaps a stone has settled or your liner has slipped below water level in an area. If it hasn't rained in a few days, check around the perimeter for a wet spot. If you find one, you have a good idea of where to look closer. If you still have not found the problem use the ideas in Step C in the streambed.

Step C - At this point, you have determined that the problem is in the pond itself. Leave the pump off and allow the pond to drain until it stops. If it does not stop before reaching a level dangerous to fish and plants, you will need to temporarily remove them. While the water is dropping check around the edges to make sure that the liner has not sunken down or rocks have not been displaced. When the water reaches the point where it is no longer dropping it will be necessary to closely inspect the liner all along this water level. You may be looking for a large gash or a tiny pinprick. For quick leaks you can try putting some milk in a squirt bottle and spraying at the edges. It will cloud the water where there is no hole. It will flow toward the hole, if there is one. This method will not work for slow leaks.

There is another method that you can use even for small leaks when the ground is very wet. Make sure that the pond level is full for a few days to saturate the soil under the liner. Remove all your fish to a holding tank and quickly pump out all the water. If there is enough water in the ground there should be a small amount of water seeping back into the liner from outside the pond through the hole.

When you have found the problem it is time to make repairs. If it was just a displaced liner, move everything back into place. If a hole was found, you can patch it following our Splicing and Patching Instructions found on The Water Garden's Website: <http://WaterGarden.com/wgn/April02.php?i=3leak>.

Pond Tip

Dechlorinator needs to be added to the pond water prior to adding bacteria.

The Topeka Area Water Garden Society
4111 NW 16th
Topeka, KS 66618

2002 Calendar of Events

May 4	Grdns. of America Plant Sale
May 15	TAWGS Monthly Meeting
June 19	TAWGS Monthly Meeting
June 22-23	Topeka Pond Tour
June 29-30	Lawrence Pond Tour
July 13-14	KS Pond Society Tour, Wichita Kansas City Pond Tour Garden City Pond Tour
July 17	TAWGS Monthly Meeting
July 21	SW Members Only Pond Tour
July 26	Garden Council Flower Show
August 11	NW Members Only Pond Tour
August 21	TAWGS Monthly Meeting
Sept. 15	SE Members Only Pond Tour
Sept. 18	TAWGS Monthly Meeting
Oct. 6	Apple Fest
Oct. 16	TAWGS Monthly Meeting
Nov. 20	TAWGS Monthly Meeting

Your Dues are Due if your label reads

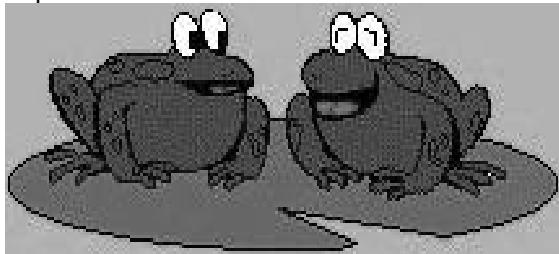
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Please renew as soon as possible to
continue receiving the newsletter.

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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 first 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.