

The Lily Pad

The Topeka Area Water Garden Society

Published Monthly – February to November

Volume 6, Issue 8

September 1, 2003

Using pavers in your landscape

by Diane Gruver

Using concrete pavers in your landscape is pretty easy for the do-it-yourselfer according to Peter Browning from Concrete Capitol Products, who talked to the group about building patios and retaining walls with pavers.

Using a "how-to" brochure he passed out to members, Peter said the first step is laying out the patio, but the *most important* step is the base, which should be four to six inches of crushed aggregate. A common mistake is to use too much sand. It should only be an inch or so; its only purpose is to level the surface. You need a paving edge that is rigid enough to hold the patio together. It can be plastic, metal or even another edging paver, but it needs to be held firmly in place so that foot traffic will not push the pavers apart. Start in a corner and work your way out. If you have curved edges you can rent a guillotine or a special saw to cut the pavers.

Compress the pavers into the sand with a vibrator plate (which you can rent) and then sweep fine sand into the gaps and vibrate again. Sand Lock or Polymeric Sand, which will become solid when sprayed with water, can be substituted for regular sand. It will give the patio more stability and you won't have to replace it like you would the sand every year. If you do use Sand Lock or Polymeric Sand be sure to sweep the pavers clean before applying water because it will set up and make them rough if you don't. Some people like to seal the patio to give it a wet look but it is not necessary. It doesn't add a lot to the cost and you would need to re-seal it every three to five years. Salt will deteriorate the pavers but there are other products available to melt ice that would be safe to use.

Peter said that pavers can be used to build a driveway but it is not recommended to put them over a pre-existing concrete driveway because water doesn't have any place to go. Even drilling holes might not be sufficient to keep the pavers from drowning and deteriorating.

Retaining wall blocks are bigger and heavier than patio pavers and come in gray, tan and dark brown. As with a patio, the base is the most important step in building retaining walls. Peter said the first layer of block should be buried at least half way, if not more, to give the wall stability. Drain rock should be put behind and inside the holes in the blocks for drainage

Monthly Meeting

7:00 p.m., Wed., Sept. 17, 2003

"New technology in pond construction and how to integrate it into an existing pond"

By Justin Wood, AquaTerra Waterscaping

Come help us celebrate our 5th Birthday!



and use glue for blocks that are not interlocking. Choose retaining wall blocks in proportion to the height of the wall. Don't use big blocks for short walls or little blocks for high walls – it won't look right.

In closing, Peter reiterated that the important steps for patios and retaining walls are: a good level base, drains away from the house and use only one inch of sand. He said that most of the blocks are made locally at their plant in North Topeka and invited anyone to come by for a tour.

When is the right time to repot lilies

by David Puff

Answer! My best results have been from Easter to Labor Day, as far as dates go. However there are other things that factor as well. If your Lilly is pot bound whereas the leaves being somewhat smaller than normal is an indicator. Or if you have to search for a place to push plant tabs in because the roots are too tight. It's time to repot. Another thing to take into consideration is not repotting everything at once. This offers several benefits as we're not putting all the fertilizer in at the same time reducing the amount of nutrients lost from the initial submersion into your pond from a freshly potted plant. When you don't have 60 % coverage algae can be a problem and when you have more than 80% coverage high temperatures can be a problem. Suggestion, repot enough plants to get you back to the 60% factor by removing the leaves and buds that are over 6 inch's in length on the newly potted plants. These later repots will not need to be repotted next spring and should be tagged with the date visible so next spring you will have some of your work done and possibly the earliest blooms and the 60% coverage we need as soon as possible to help eliminate algae growth. I use the Highland Rim plant tabs and have found them to dissolve slower giving better results.

TAWGS Minutes August 20, 2003

President Tom Platis called the meeting to order at 7:00 p.m. Self introductions were made before our interesting program by Peter Browning from Capitol Concrete about Landscape pavers. The minutes were approved as mailed following a short refreshment break. Treasurer Jim Green reported that we had a combined total of \$6,142.20 in the savings and checking account before the meeting. Dues that were collected at the meeting brought the total to about \$6,200.

Vice President Becky Coffman reported that Deb Spencer will give a program on October on closing your pond and repotting iris. Becky is still looking for a program for September, possibly on lighting. Diane will also check with Justin Wood from AquaTerra Waterscaping in Kansas City to see if he could give a program.

Joe Breitenstein reported that TAWGS was responsible for providing refreshments for the August Garden Council meeting and thanked Mary Eberhart, Lynn Pelton, Diane Gruver, Donnis Hodges and Jim Green for helping him provide the refreshments. He again reminded us that we need at least one more representative for the Council meetings on the first Monday of the month. Apple Fest will be held Sunday, October 5 and they need as many volunteers as possible to help at the various booths. Please call Becky Barnes or Bev Gunderman at 368-3888 to volunteer. Volunteers are admitted free so please consider helping out. (One of Ward Meade's requirements for TAWGS use of the Preston Hale meeting room is that we volunteer so many hours a year to Ward Meade).

Joe said that he and Pat and Dick Rokey continue to care for the landscaping around the water garden that TAWGS built at Midland Hospice. He said that one of the patients at Midland had expressed her appreciation for the project and said she was donating \$300 to the Midland for use on the project. He also reported that Pat had secured a gift of many hostas and perennials from Skinner Nursery. They will plant them Friday the 22nd and would appreciate any volunteers that are able to help. Joe is also looking for a volunteer to talk to the Knollwood Garden Club in October about building water gardens in yards with mature shade.

Becky reported that she had entertained a few gardeners from the Potwin area at her house the previous week. They had called Diane to see if she would talk to them and show them her water garden but after learning it was in Holton they said they wanted something in Topeka so Diane gave them Becky's name. Thanks Becky!

Jim Green gave a detailed report on the work the committee, Don Tallifero, Doug & Marikay Peteman, Becky and he have made on the water garden project at the V.A. The drawing that Doug made was passed around so everyone could see what would be built. Doug has made arrangements to get

free rock from a construction project on North Highway 75. These are big boulders that will make nice waterfall rocks. The rest of the rock will come from Native Stone. Waters Edge, Puff Water Gardens and Puddles and Pads have all expressed interest in bidding on the materials. The bid specs are due by August 31 and the committee will review them as soon as possible after that so materials can be ordered. The tentative date to build the pond is 8 a.m. Saturday, September 20th, Volunteers are needed so mark your calendar and plan to come. This is an excellent way to learn first hand how to build a pond.

Hi Stockwell moved that we give the committee the authorization to spend up to \$4,200 on the materials. The motion was seconded and carried.

The Member Pond Tour has been set for Sunday, September 7th. Members are to meet at the home of Duane and Mary Eberhardt, 6023 NE Meridan Road at 2:00 p.m. (246-0240). They will convoy to the home of Doug and Marikay Peterman, 7225 SW Meridan RD; Jim Green, 5701SW Arrowhead CT; Don and Ruth Tallifero, 3119 SW Arrowhead RD; and Linda Hilderman, 2323 SE Liebra Ave (266-2855). The tour will conclude with a pot luck at Lake Shawnee, hopefully at the gazebo by the water gardens. Please bring lawn chairs, table service and food.

President Platis said he had received a letter from the St. Joe Area Water Garden Society inviting everyone to an all day seminar they are holding Saturday, March 27th. It features great speakers such as Greg Speichert publisher of the *Water Gardening Magazine*; Mia Keske, Aquarium Pharmaceuticals; Ron Knutson, Gard 'N Wise; our own member Eric Wood, Puddles and Pads; and several others. The registration fee is only \$35 per person if registered by February 14, 2004. You can get more information by going to their web site at SJWATERGARDEN.COM, or e-mailing watergardennews@msn.com, phone 816-233-9247 or check with Tom or Diane.

The nominating committee for officers for next year was appointed. They are: Dean Demoss, Tom Platis and Doug Peterman. They will report the slate of nominated officers at the September meeting.

Diane reported that TAWGS will celebrate their 5th Birthday with cake and ice cream at the September meeting. Diane and Helen Platis will make the arrangements. Volunteers for October refreshments are Dean Demoss, Mary Eberhardt and Debbie Durall. Meeting adjourned.

Oops, I goofed ☹

By Diane Gruver

John Mirgon read my article in last month's Lily Pad about the different plants that I saw on the Kansas City Pond Tour. He wrote that he is disturbed that many people go by the color of the water lily rather than the correct name. He said that the yellow fuzzy tropical that I described in the article was a Yellow Snow Flake, or *nymphoides geminata*. He also said

that the nuphar lily I described was not a miniature water lily, but probably *Nuphar advena* (*N. lutea*).

I'll have to confess that I couldn't find my aquatic plant book as the newsletter deadline loomed, couldn't find the plants on the internet, and the only information I had to go on was what the pond owners told me.

In my defense I will have to say that I have seen lilies in several well-known pond supply stores and on the internet labeled at "white lilies," "yellow lilies," "pink lilies," etc., etc. I have in my pond mostly un-named lilies because they came from friends and "potting" parties and the names were either unknown or the plant markers got lost. I admit that it would be nice to know what they are, but I haven't taken the time to study the plant book (that I can't find) to try to identify them. It doesn't keep me from loving every one of them and enjoying their beautiful blooms, however. Still, John has a point that we should try to properly identify our water garden plants.

They HAVE names...



by John Mirgon

Editor's Note: John is from Denver, Colorado and started the very first water garden society, the Colorado Water Garden Society in 1983. He is an honorary member of several water garden societies in the United States. The following are excerpts from an article that John sent to me. I appreciate his input.

Plants, same as people, have names. The last few years I've noticed more and more that plant society members are drifting back to the old habit that societies should discourage, calling the plants by blossom colors. The purpose of most societies is to educate so I don't like to see the failure to educate the members so they know the correct names of nymphaea and other aquatics.

A plant can have three names, botanical, common and colloquial. The botanical name will be the same every place, in English or German for instance.

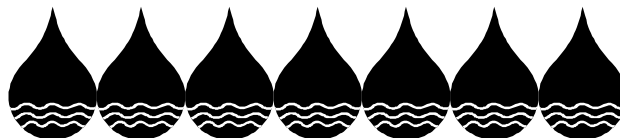
Some years back with some material for a booklet water lily was used for the common names of the different nymphaeas. Water lily is the common name for nymphaea but not for individual plants. As with 'Albida', the common name is 'Marliac White'. Many of the nymphaeas have common names and members who might wish to educate themselves further may wish to check out books from the library or if possible, borrow other member's books to learn the many names. Many people do not wish to loan out books, so should one ask and be turned down, by all means do not take it personal. Books are expensive and a returned book that has been accidentally or unnecessarily damaged doesn't make for good friendship between book owner and

borrower. Too, books are available at many nurseries and book stores so one can study and learn names they may wish to learn.

So, when members go in search of a new nymphaea for their pool they should have an idea what lily they wish for, the average surface spread, depth for growing and above all, the blossom's color. (Did I always know all this? No.) So hopefully this will help newer members and members who have been at it for awhile with a way to improve their knowledge about the nymphaea and other aquatics. So when they wish to get new plants they'll know what they have and what it requires.

One might notice that plants in many of the suppliers' catalogs are listed with the botanical name plus the common name. Sometimes a nursery wishes to push a certain nymphaea or other plant and they will give the plant a new name. Watch to see if the original or botanical name is given in small print. Don't buy a plant if you can't tell the correct name of the plant.

To end this, take this into consideration as well; if one belongs to a plant society expect the plant or plants the society represents to be the main subject for the meetings. I once spoke with a fellow I knew who is a terrific vegetable gardener about going to orchid society meetings since he also grew them. No, he said, I went once and all they spoke about and their programs were about just orchids. So, my conclusion to him was, I wouldn't expect information concerning cucumbers at an orchid society or any other society meeting that didn't represent vegetable gardening.



Maintaining the 'O' in H₂O

By Randall Tate

Reprinted from August 2003 Water Garden News

We all know that our ponds need oxygen in the water but we may not know how much and how to get it there.

A still pond is only able to exchange gases at the water surface and will support only a very small fish population.

A pond not only needs to absorb oxygen from the air but it also needs to release carbon dioxide and may be hydrogen sulfide among other gases. Hydrogen sulfide is produced by anaerobic (without oxygen) bacteria breaking down organic matter in the bottom of the pond. The pond bottom has less oxygen than the upper layers of the pond, especially if you have stone or gravel in the bottom of your pond. Anaerobic bacteria work in the absence of oxygen and causes a septic condition in the bottom of the pond.

When we spray water through a fountain or when we run water through a stream or over a waterfall we are increasing this surface that is exposed to the atmosphere many times. Harmful gases can be released and oxygen absorbed very easily.

We want to circulate the water in the deep part of the pond in order to help with the break down of organics therefore providing better water quality. During warm weather, draw water from the bottom of the pond to expose it to the atmosphere. When you expose the bottom of the pond to oxygen rich water you will have aerobic (uses oxygen) bacteria breaking down the organics. This will reduce foul odors in the pond, which are caused by anaerobic bacteria action.

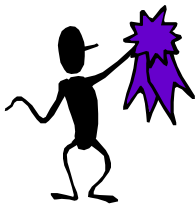
Since oxygen is absorbed only through the surface of water it is possible to have too many plants in a pond. If the entire surface is covered with water lilies or other surface plants very little gas exchange can take place unless there is a large fountain or waterfall.

You may think that adding more underwater plants will add oxygen to the water. While underwater plants will help add oxygen to the pond during the daylight it will use up the available oxygen at night the same as other life in the pond. As such, it is possible to have too much anacharis in a pond. Anacharis is important to the pond but its function is to use up nutrients to starve out the algae.

There is a limit to the number of fish that you can keep in a pond. When you exceed this number you start having problems with water quality and fish health.

The hotter the water the less oxygen it can hold. Therefore cold water holds much more oxygen and coupled with the slow respiration of fish in the wintertime you should not need additional aeration in the pond.

Besides adding a fountain or a waterfall to your pond what steps can you take to insure an ample amount of oxygen in the water? We have already mentioned that it may be necessary to remove plants and fish when these become excessive. You can also increase the respiration of the pond by adding products such as the OSAE PondAir, which pulls air from the surface and distributes this in the deeper water. Micro-Lift OX is a chemical that you can put in your pond that releases oxygen slowly over a few weeks. This is a good product to have in case your pump should to go out unexpectedly.



**Congratulations to
Joe Breitenstein for
earning seven blue
ribbons on his floral
entries at the
Shawnee County Fair!**



Recipe for the Biggest Blooms

by David Puff

Editors Note: This recipe is reprinted for the benefit of our new members. It works!

A lot of fellow water gardeners have asked what I do to get large lily pads with five to seven blooms on each plant. I tribute this to an article I read by Perry D. Slocum in the March 1997 edition of the Water Garden Magazine. Perry's article briefly covered different recipes they had used over the years on their display gardens. He gave a detailed recipe of "How to grow the biggest blooms" after many years of experimentation.

Perry's tub measured 23" across x 12" deep. The tubs I use are 17" across x 8" deep so the quantity of materials was slightly altered. I also used Fertiloam 9-13-7 New Law Fertilizer instead of the Miracle Grow 10-20-15 from Perry's recipe. Starting at the bottom of the tub, I use the following steps:

1. 1" of mostly clay soil finely tilled. A little sand is okay.
2. 1" of composted (bagged) cow manure mixed with the soil from step 1.
3. 2/3 cup of bone meal spread around the outside perimeter of the tub, on top of the manure and soil mix.
4. Using a 3 lb. coffee can, mix one can of tilled clay soil and one can of composted cow manure in a separate container. Spread the mixture on top of steps 1-2-3 in the tub without disturbing the bone meal placement.
5. 3 Tablespoons of Fertiloam New Lawn Fertilizer 9-13-7 spread evenly over the top of steps 1-2-3-4.
6. 5 Pondtabs 10-14-8 (planttabs Aquatic plant food). Use a wooden dowel or small broomstick to push the tabs to the bottom, spaced evenly around the outer perimeter of the tub. Pack the hole tightly with clay.
7. 1" of finely tilled clay on top of steps 1-2-3-4-5-6.
8. One Hardy Lily rhizome of your choice. Make sure you wash off any soil from the previous pot, coat any cuts or division with an anti-fungal powder. Trim off excess roots. Plant the rhizome in the container and firm down soil and rhizome firmly.
9. 1" of pea gravel pressed firmly over the mix and rhizome. Place a stone or half brick over the rhizome or it will float out. Water heavily with pond water before placing your plant in the water. Firm it again. This will help to keep it from floating out of the unsettled mix.

Spring Water Garden Seminar

March 26-27, 2004

Stoney Creek Inn - St. Joseph, MO

Friday March 26

5 - 10 p.m. Registration and Vendors Exhibit Area
8 - 9 p.m. Greg Speichert will present an informal question and answer session

Saturday, March 27

7 - 8:15 a.m. Registration
8:30 - 9:30 **Greg Speichert**
An introduction to water plants
9:30 - 10:00 Exhibit area open with refreshments
10 - 10:45 **Mia Keske**
Chemicals, pond care, water quality & the health of your pond
11 - 11:45 **Bob White**
Sizing pumps for applications & building waterfalls and streams
11:45 - 1:00 Lunch in the Exhibit hall
1 - 1:45 p.m. **Ron Knutson**
Building a budgeting a water feature
2 - 2:45 **Eric Wood**
How to create a bog and planning a filtration system for a healthier pond
2:45 - 3:15 Break in the Exhibit Hall and visit with vendors
3:15 - 4:00 **Todd Howe**
Attracting birds & dragonflies to your pond

For room reservations call Stoney Creek Inn and let them know you are attending the Water Garden Seminar
800-659-2220
www.Stoneycreekinn.com

Reservation Form

Name _____
Address _____
City _____ State _____
Zip _____ Phone _____

Registration: \$35 per person if received prior to 2/14/04. It's \$45 per person after that and at the door. Registration fee includes conference meetings, Friday night reception and Saturday lunch. There is a \$15 cancellation fee prior to 3-1-04. No refunds after 3-1-04. Cancellation must be in writing.

Please send completed registration form and full payment to:

St. Joseph Area Water Garden Society
3607 Robin Lane
St. Joseph, MO 64506

For information: www.SJWATERGARDEN.COM
watergardennews@msn.com
816-233-9247

Watch the water temperature!

Reprinted from 8-2-01 Splash

In many parts of the country the temperatures have been really HOT! This means that the water temperature in your pond is correspondingly high! There are some precautions to take to make sure your fish stay healthy during these extreme temperatures:

- 1) Do run the waterfall/fountain 24 hours. Many a pond owner woke in the morning and all his fish were dead from lack of oxygen after the pumps were turned off during the night or while away from home. Hot weather depletes the oxygen supply in the water
- 2) Do not feed the fish when water temps are above 82 degrees Fahrenheit. Fish, just like us, need to eat light in extreme temperatures because their digestive system is more sensitive. This is particularly true for Koi. Feed early in the morning. It is even a good idea to switch to Spring/Fall food because it is easier to digest during hot spells.

Be a well prepared pond owner

Reprinted August 2001 Water Garden News

Ponds run smoothly most of the time, but there is always the possibility of problems arising. A few supplies on hand in advance of these problems will help you handle the problems better.

One of the most important things to have available is dechlorinator (if you use tap water.) In the event that an emergency water change needs to be performed or you just need to top off your pond a dechlorinator will be a critical supply.

Eventually all pumps will fail. When this happens major problems can occur. But if you have a spare pump available these issues can be sidestepped. The obvious problem is that the lack of circulation means less oxygen in the water and lack of oxygen means dying fish. The less obvious issue is your filtration system. If water doesn't flow through the filter media the beneficial bacteria dies from lack of oxygen. This may take only a few hours of a pump being out for this to occur. If this happens it can take many weeks for the bacteria to reestablish.

When fish health problems arise you may not be able to diagnose the ailment, but the first step should always be to check your water chemistry. Fish problems are often caused by water pH being too high or too low or an ammonia buildup. Aside from pH and ammonia it is also a good idea to test nitrites and nitrates. Regular water testing using inexpensive test kits can also help prevent potential problems before they get to detrimental levels.

A fish net or skimmer net will also come in handy to retrieve something from the pond or to catch a fish if it needs to be examined.

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

2003 Calendar of Events

Sept. 7 Member Pond Tour
Sept. 17 TAWGS Monthly Meeting
Sept. 20 Build Pond at V.A.
Oct. 15 TAWGS Monthly Meeting
Nov. 19 TAWGS Monthly Meeting

2004

Apr. 10 – 21 Binkley Tulip Days

Pond Tip

It's easier to keep leaves out of the pond than to get them out once they have fallen. Stretch pond netting over your pond to keep leaves out of the water this fall.



Your Dues are Due if your label reads

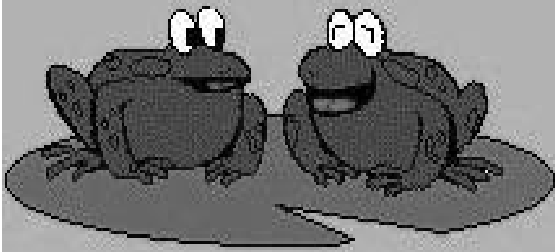
7-03, 8-03 or 9-03

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

THE TOPEKA AREA WATER GARDEN SOCIETY

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Jim Green	Treasurer
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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 last 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.