



# The Lily Pad

The Topeka Area Water Garden Society

Published Monthly – February to November

Volume 6, Issue 10

November 1, 2003

## David Puff laid to rest

by Diane Gruver

It was a sad morning today (10-28-03) when Ruth Puff called me to tell me that David had passed away during the night. The only consolation in losing a good friend and is that he is not suffering and is in a better place. We however, are going to feel a great sadness and David will be greatly missed. I want to extend our sympathy to Ruth, Dawn, the grandkids and David's extended family.

I first met David when he and Ruth were on a Topeka Pond Tour way back before TAWGS was even thought of. I could tell that he was excited about his pond and anxious to show it off. Floyd had to work that day, but David told me to be sure and bring him back sometime.

As a new ponder back then, I had talked to Eric Wood several times about a water garden society, but he felt that it was a conflict of interest for Puddles-N-Pads to get a group together. I felt that I was too far away in Holton to really to take on the project. So, I was happy to see an announcement on P-N-P's bulletin board for interested ponders to meet at Ward Meade Park in July of 1998 and wondered who was responsible for the meeting.

Imagine my surprise, although I don't know why, when I found out that David was the person responsible for planning that very first meeting of what was to become the Topeka Area Water Garden Society. David's excitement, devotion, and determination to get a group together was evident. I think 19 people attended that first meeting. Several of us jumped on the bandwagon and TAWGS became a reality. By September, our official charter month, we had 41 members. It was David's dream to have 100 members by our second year and I think we came close.

When David completed his first year and a half term as president he was voted the Founding Father of TAWGS, a well deserved recognition, because without David, there wouldn't have been a TAWGS. The next year David served as vice president and I was elected president. I relied heavily on his advice and leadership that year. I did to this day.

In the ensuing years, David spent countless hours volunteering at Ward Meade Park, promoting TAWGS and helping to promote the betterment of

Monthly Meeting  
7:00 p.m., Wed., Nov. 19, 2003  
Potluck Supper  
and  
Installation of Officers

water gardening. He worked on all our projects and gave programs at our meetings. He helped individuals with pond problems and offered advice to anybody who asked. David was a wealth of information about water gardening. Even after cancer ravaged his body, he was never too sick to talk about ponding. I talked to him a week before he died and we still talked about ponds.

As the Founding Mother, I feel we have a tremendous responsibility to carry out David's wishes in our water garden society. With the help of our great members I hope we can keep David's dream alive.

David will live on through the David Puff Fountain at Ward Meade Park, our TAWGS projects, through our own ponds and in our hearts. May he rest in peace.

## Putting your pond to bed

by Diane Gruver

Deb Spencer gave a very informative and entertaining talk to TAWGS members about closing your pond for the winter. She did a good job of answering questions and providing good information to the "newsters" in the group as well as reviewing important tips for the "oldsters." She also provided a good handout to take home.

"When winterizing your pond, don't think about the way winters have been the last few years," Deb said. "Visualize six to eight inches of ice on your pond, because we can all remember the winters that we used to have in this area. We have had very mild winters recently."

A suggested timetable for pond duties includes:  
Fall – September and October, before frost

Stop fertilizing most plants, trim decaying foliage, skim or net for leaves, feed fish high carbs, and bring in vertical tropicals.

An exception to fertilizing would be Water Hawthorns, which are just now coming to life in the 60 degree water temperatures. Now is the time to give them

a half feeding. They will bloom during the winter when there is no ice on the pond. If you are dividing iris, you can also fertilize them now. Deb said yellow iris can be divided almost any time of the year. Don't cut iris back until after a hard frost unless you are going to repot them. When repotting plants remember that on most plants the new baby plants will have the most vigor. Throw the old plant away. Most iris can be left on the pond shelf to freeze but the red Louisiana iris are more tender and need to be put on the bottom of the pond. Don't trim plants that have "stiff stems" below the water line (such as cat tail). They will drown because they can't breathe.

Vertical tropical plants such as umbrella plants, taros, and cannas can be brought into the house before the first frost and treated like a house plant, in or out of water. Be sure to de-bug them and trim back if necessary. Give them a good hair cut in the spring.

Fish do not have a stomach so when the temperature gets cold their digestion gets sluggish. If food isn't digested the food rots and will make fish sick or even kill them. Begin feeding high carb spring and autumn food, which is easier to digest, and stop feeding them altogether when the temperature reaches 50. Do not feed them again until the temperature is above that in the spring. Cheerios have no food value and are more easily digested so you can use it if you *absolutely think* you have to feed them in the winter time, but Deb does not recommend feeding them anything. Fish food loses its vitamins fast, so Deb suggested buying smaller quantities more often. Store your leftover fish food in a plastic bag in the fridge or freezer until the next season.

The time to net a pond is now until Thanksgiving. If you have oak trees you might need to leave the net on all winter. Be sure to net the complete pond and stream to avoid trapping birds and other wildlife under the net. Try to make a tent effect and roll the excess net *under* instead of up, which will also help eliminate trapping frogs, snakes, etc. The new 3/8" netting which is available now works better than the larger net that was all that was available a few years ago. If you have itty-bitty leaves you could consider shade cloth, which is considerably more expensive but will have a longer life.

#### Heavy frost - October through December

Trim dead foliage, lower zone 6 plants to the bottom (Thalia, 4-leaf-clovers, pennywort, parrot feather, golden club, floating heart, dwarf aquatic bamboo and arundo donax), stop feeding fish when water temperature drops below 50, bring in tropical lilies. As it gets colder, lower hardy water lilies and lotus to the bottom of the pond, install bubblers and/or heaters, and optional for owners with skimmers is to shut down biofilter and remove filters, lava and plastic supports and turn off waterfalls.

Tropical lilies can be over wintered two ways if you don't want to treat them as annuals. One way is to bring them inside to a warm sunny place and put them

in water. Use an aquarium heater to warm the water in the spring to help them start growing again. Another way is to take the tuber out of the mud and wash it off. Let it dry down and remove all foliage (except baby sprouts) and roots. Store it in damp sand (not dry or wet) in a ziplock bag in a dark and cool place (45-60 degrees – beer fridges are too cold). Plant the tuber in a small container in warm shallow water in March or April and don't put it in the pond until the water temperature reaches 70 degrees.

Deb said that water flowing over stone during freeze/thaw cycles causes the stone to deteriorate faster. This is a good reason to turn off your waterfall. For ponders with skimmers is it a personal choice about whether to turn off the waterfall/pump. Clean pumps out and if you are not going to keep them running, lower them to the bottom of the pond or put them in a bucket of water in the basement to keep the seals from drying out.

The best time to clean the pond is in the fall after leaf fall. The fish are stronger now than they are in the spring when they are in a weakened state from the long cold winter. Also, if you do it in the spring you can disrupt life cycles if you don't do it *very* early in the spring. (Burr.) It is best if you can keep 1/3 of the old water when cleaning the pond. Use a long handled fine net to scoop debris off the bottom. You may never have to completely drain down your pond for cleaning if you use bacteria in the summer, don't over feed the fish and keep debris out of the pond.

If ice completely covers your pond for a week or more you risk losing your fish to a toxic gas buildup. Bubblers and/or stock tank heaters can be used to keep a hole open in the pond. A heater is more expensive to use than a bubbler, however, and only needs to be plugged in when it is extremely cold. The heater will last much longer if you clean it in vinegar yearly. Deb said a new 24 watt pond heater is now available from Tetra which costs around \$85. A 250 gallon pump set in a bucket with gravel can be used to make a bubbler, but don't set it on the bottom of the pond because you will displace the warmer water where the fish spend the winter. Set it on blocks or on the ledge. If the pond is large it may take several bubblers to keep open areas for the gas to escape. Deb gave two warnings: use a good heavy-duty extension cord for your heater or bubbler and don't try to break the ice with a hammer. Instead, use hot water to melt the ice.

Deb said you can start bringing your pond back to life in March or April. Turn on pumps, etc., add barley bales and bacteria and bring plants up to the ledge. Don't bring vertical tropicals out until May.

"The main thing about winterizing your pond it to put it to bed as clean as possible" Deb said in closing.

Deb is co-owner of Waters Edge in Lawrence and has been in the water gardening business for over 10 years.

## TAWGS Minutes – October 15, 2003

President Tom Platis called the meeting to order and we had self introductions. Following a very interesting program by Deb Spencer and refreshments provided by Deb Durall, Mary Eberhardt and Dean Demoss, the meeting was re-convened. Dick Rokey moved and Floyd Gruver seconded that the minutes be approved as printed in the newsletter. Motion carried.

Diane Gruver gave the treasurer's report that was provided by Jim Green. We have \$4,244.57 in checking and \$2,113.57 in saving for a total of \$6,358.14. Dues received since last month bring the total to \$6,378.14. Diane said that there are several peoples whose dues are due since TAWGS was chartered in September and encouraged everyone to please pay their dues. She also said she will be gone next month for a business meeting and that Donniss Hodges has agreed to take the minutes in her absence. Thanks Donniss.

Becky Coffman said that the Lawn and Garden Show committee will meet sometime in December. The date for the show is the 4<sup>th</sup> weekend instead of the 3rd weekend of February and the theme is Olde World Gardens. Dean said that he and Ray will start closing the fountain at 10:00 a.m. Wednesday, October 22<sup>nd</sup> and that he would appreciate any help available.

The 2004 Pond Tour was discussed and Don Taliaferro moved and Larry Sheets seconded that the tour be held the 4<sup>th</sup> weekend in June, which is the 26<sup>th</sup> and 27<sup>th</sup>. It was either that weekend or the 2<sup>nd</sup> weekend in July and we have too many complaints about the extreme heat in July. Mary Bechtold said that she would be chairman with the challenge to members to offer their ponds for the tour. Eberhardt's, Taliaferro's, Janet Nyfeler and Mary Blubaugh stepped right up to the challenge and Tom Platis said that they might be on it if needed. We already have three other non-members who have expressed interest in being on the tour. Committee volunteers so far are: Rokey's, Hodges, Michael Bradley and Diane. If you would like to help please let Mary know (267-1611) soon as she would like to have a meeting before the first of the year.

Floyd Gruver moved and Dick Rokey seconded that the same officers serve another year. (They were nominated last month.) Motion carried.

President Tom said that he will also miss the meeting next month since he is expecting a grandchild and will be out of state. Vice President Becky will be in charge of the meeting and installation of officers. The meeting will begin with a potluck supper at Ward Meade at 6:30 p.m. Bring a dish and your own table service.

Meeting adjourned. Thanks to Del and Betty Lane who brought small bags of fish food to give away.

## Winterizing your pond

*By Randall Tate, Chief Manage*

*Reprinted from Water Garden News 10-03*

This article is devoted to winterizing your pond

for the coming cold weather months in the northern hemisphere. The information in this issue will be most helpful to those who live in cold to moderate climates.

When we start experiencing those first cold nights and the leaves are turning beautiful shades of gold, yellow, yellowish-orange, red, and purple, we should begin making changes to our water gardens.

### FISH

The water temperature in your pond is now beginning to drop and you should be feeding the fish less as their metabolism slows down. As we discussed in last month's issue you should decrease the amount of food given and feed only once a day as the water temperature starts to dip into the sixties. You should provide food with a protein content of 25 percent or less. A wheat germ based food is good at this time as it is easily digested.

Pond Care's Spring & Autumn food is an excellent food at this time. As the water temperature continues to drop to below 60 degrees you should feed only two or three times a week. It can take your fish two or three days to digest food at this temperature.

And finally, when the water temperature drops below 50 degrees you should stop feeding altogether until spring when the water temperature remains above 50.

Remember, we are talking about water temperature here. Although the air temperature may be much cooler, it takes time for the water temperature to drop. If you don't already have a thermometer in your pond, it may be time to get one.

You should strive to keep leaves and other organic debris out of the pond especially in the winter. As these materials decompose they can produce toxic gases that could be trapped in the pond if it is covered by ice for more than a few days. It is important to keep at least a small area free of ice for these gases to escape. One of the easiest ways to do this is with a floating pond de-icer. This device floats in the pond and has a built in thermostat to turn the heating element on when the water temperature drops below 40 degrees. A de-icer can also be used to keep a small pond from freezing solid, allowing you to keep your fish alive. Do not break the ice, as the shock waves created can damage or kill your fish.

With their slower metabolism and the absence of plants our fish are more susceptible to predation by raccoons, birds and other animals. If you took our advice and added leaf netting to keep the leaves out of your pond this should protect your fish as well. A Koi Kastle will help your fish be more comfortable by providing a place for them to hide.

### PLANTS

Fertilization of your aquatic plants is not necessary again until spring.

As the foliage on your hardy plants begins to die back you should remove any dead or dying

leaves and place the plant deep enough in the pond to keep the root from freezing. While it is true that some marginal plants will survive even if their roots freeze solid, it is best to lower all of your plants below the ice zone.

If your pond is too small or shallow to offer protection from freezing temperatures, you still have other options. If your pond is not too large and does not contain any fish, you can place a cover such as plywood over the pond and cover this with bags of leaves or bales of straw to provide insulation. A tarp should also be placed over the straw to keep it dry and provide better insulation. A basement can provide protection if you remove the plants and store them either in their original containers or in peat moss.

You could also build a temporary shelter over the pond. Lumber or PVC pipe can be used to construct a framework over the pond. Place clear plastic over this and weight the plastic down with soil or stone.

This frame should hold the plastic a few feet above the water. Greenhouse type plastic is best, but construction grade plastic should last through one winter.

This method works very well and is basically like moving the pond one USDA hardiness zone higher. On clear days the sun warms the water and, even if covered with snow, there is good insulation over the pond. Some tropical plants can be wintered over this way in mild winters, even if you live in zone 6 or 7.

Some plants do not like being submerged in the pond through the winter. *Iris ensata* (formerly known as *Iris kaempferi*), a Japanese Iris, should be removed from the pond and planted in the yard. When new growth starts in spring it can be placed back in the pond for the summer. *Lobelia cardinalis* (Cardinal Flower) should be removed from the pond and planted in the yard for the winter. This plant should have a few inches of mulch over it as well. You will have more success wintering over Cannas if you remove the rhizomes from the pot and store in slightly damp peat in a basement or other cool area. Some tropical water lilies will bloom all winter if kept in a tub container inside and given at least six hours of bright light. You can also winter them over by removing the tuber from the pot after the foliage has died back from a freeze. Then place the tuber in a container of slightly damp sand or peat moss at 50 degrees. In the spring you will need to heat the tuber in an aquarium to about 75 degrees to trigger its growth before moving outside.

One choice with tropical plants is simply disposing of them after freezing weather and replacing them in the spring. This way you get to try new plants and colors next season. If you want to attempt to winter over your tropical plants there are a few methods worth

Many tropical plants can be brought inside and treated as houseplants for the winter. Umbrella Palm, Taros, and Calla Lilies will do very well with medium light levels. If these are in no-hole containers no special care is needed. Otherwise keeping the pots in a tray full of water is needed to keep the plants wet. Water hyacinth and water lettuce require more care than they

are worth. It is much easier (and less expensive) to replace them each spring. If you still want to make the effort, they require 10 hours of intense light and water temperatures above 70 degrees.

When working in the pond water in cold weather, you may want to consider having a pair of Aqua Hands available. These insulated gloves will help keep your hands and arms warmer and dry.

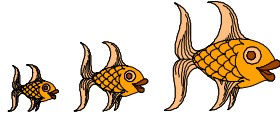
#### PUMPS AND FILTERS

You may or may not want to run your pump and filter stem through the winter. This will depend on several factors, including climate. If you live in a climate with temperatures mostly well above freezing, then it will be to your advantage to keep your pump and filter running through the winter. The bacteria in your biological filter will not be active at low temperatures, but it will remain alive as long as you keep it supplied with oxygen-laden water. When spring arrives and the water temperature is rising, the bacteria can start to work much quicker keeping the water quality good for your fish and helping to control the algae. Should you choose to run your filter through the winter it is a good idea to minimize the water circulation in order to take advantage of the layering effect of the water. (Water temperature is densest at 39 degrees and the water on the bottom of the pond will remain at this temperature even with freezing temperatures at the surface.) Some ways to minimize circulation are to turn off bottom drains, place intakes to pumps/filters at mid water (you do not want to circulate bottom water in the winter), place your intakes closer to the outlets in the pond (waterfall or fountain), and/or turn the pump down. These actions will allow the biological filters to stay alive without interfering with the layering of the water. Massive circulation of water in the winter can super chill the water by exposing warmer pond water to below freezing temperatures leading to death of the fish. One problem with running a pump and filter in the winter, is the potential of major damage to your filter and plumbing system if the power goes off for extended periods and you are not at home to make sure no water is present in the filter and plumbing. If water is allowed to freeze in plumbing, UV's or filters this can lead to breakage and replacement of these units. If your system is designed to allow water to flow back into the pond in the event of a power outage, these problems can be averted. If you have a check valve in your system, you can use a long piece of small tubing or wire to hold the valve open allowing water to drain out.

You can turn off pumps and filters for the winter. Cold water holds much more oxygen than warm water and the fish's respiration is slow. Therefore you should not need the circulation and aeration in most areas. The bacteria in your biological filter does not work in cold temperatures, so the reason to run the filter is to keep the bacteria alive. If you turn off the pump and filter for the winter be sure to drain all plumbing. External filters, UV's, and external pumps will need to be drained.

Submersible pumps should be left in the pond or in a bucket of water in a warm place to keep the seals from drying out. If you choose this method be sure to clean the filter before starting up in the spring. With the absence of biological filtration, you may want to add Microbe-Lift's Autumn/Winter Prep which contains bacteria that will work in near freezing temperatures and enzymes that consume cellulose in the form of leaves.

If you choose to run the pump all winter and you have an Aqua Ultraviolet UV sterilizer, it would be advised to remove the lamp, ballast, and quartz sleeve. You can use a Winterizing cap on the UV sterilizer and avoid removing the whole unit from the plumbing.



## Do the fish grow in winter?

*Reprinted from 10-21-2003 Splash*

The short answer: Yes, indeed, they usually do!

The little bit longer answer: A lot depends on the location of the fish pond, of course. There is no noticeable difference in growth where temperatures stay warm and feeding continues all year. But even in northern areas some growth continues.

The fish tend to eat a little when the temperatures temporarily warm. They munch on little bits of algae we can hardly see, for example. In most areas they are not completely dormant the entire time. This can lead to some growth. I am surprised every spring by how much particularly the really small fish have grown.

## Thoughts on aquatic plants in winter

*Reprinted from 10-21-03 Splash*

We always get lots of questions whether plants are hardy or tropical, so I thought I will include a list of the most common of each here:

### Tropical Aquatic Plants:

Taro	Longwood Canna
Umbrella Palm	Papyrus
Bog Lily	Spider Lily
Water Hibiscus	

### Hardy Aquatic Plants:

Arrow Head	Lizard Tail
Parrots Feather	Pickerel Rush
Cattail	Dwarf Bamboo
Golden Club	Water Mint
Thalia	

Tropical plants need to come inside for the winter. Hardy plants can be cut back to within about 4 inches of the soil level once the leaves die back and then submerged into deeper water until the first green sprouts appear again in the spring.

### Tip of the week

Submersible pumps that are turned off for the winter should be kept in water. Allowing the pump to dry can reduce the lifespan of the pump.

## Prepare your fish for winter

The best time to insure healthy fish in the spring is in the fall of the preceding year! It is much easier to prevent and if necessary cure problems while the water in the pond is still warm and before the fish go into dormancy.

Examine the fish closely at feeding time. Are there any specks, spots or unusual markings? Any signs of parasites? Fins that look like they have been torn or have had bites taken out of them? Bloody spots on the body of the fish (especially near the fins)?

Switch Koi to easily digestible fall food when the water temperature drops below 55 degrees Fahrenheit.

Stop feeding when the water temperature drops below 48 - 50 degrees, the fish cannot digest food once the water gets cold. They may act hungry, but please resist the urge to feed.

Place pieces of PVC or Terra Cotta pipe in the bottom of the pond for your fish to hide from predators now that the plants no longer provide adequate shelter.

Put a floating de-icer in the pond to insure adequate oxygen/carbon monoxide exchange during freezing weather.

Cover the pond with a net to keep out leaves which would contaminate the water and consume much needed oxygen when they decompose.

## Plan a new pond this winter

*Reprinted from Water Garden News, 11/12-2000*

Winter is a great time to be planning a new water garden. If you have been in the hobby for any length of time you have probably filled up your pond with all the plants and fish that it will hold. Build another pond and make it larger this time to allow you to add a new fish or plant occasionally. You can use the information that you learned from your first pond to improve on the new one. As long as the ground is not frozen then you can construct the pond throughout the winter months and not be in a hurry to get it finished for the season.

The process of building the pond is a lot easier when you can take your time. You will have plenty of time to finish and the pond will be ready for fish and plant as soon as spring arrives. If you are digging your pond and don't get the liner in before an expected rain you should use cheap builders plastic (available at your local builders supply store) to cover the excavation to keep the weather from damaging your work.

## Puff Memorial established

The family of David Puff has announced that a memorial has been established in David's name. Donations can be sent to the David M Puff Fund, % Bank of America, 2000 NW Central, Topeka, KS 66608.

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

## Calendar of Events

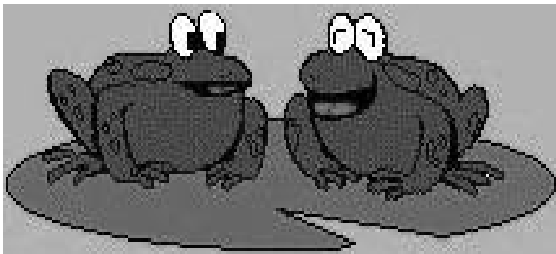
Nov. 19	TAWGS Potluck Meeting
Dec.	No Meeting
<b>2004</b>	
January	No Meeting
Feb. 1 – 5	Flower Lawn & Garden Show, American Royal, KC
Feb. 18	TAWGS Monthly Meeting
<b>Feb. 20-22</b>	<b>Topeka Lawn &amp; Garden Show*</b>
February 27-29	Johnson Co. Lawn & Garden Show
March 3 – 7	Wichita Lawn and Garden Show
March 17	TAWGS Monthly Meeting
March 18 – 21	Kansas City Home Show, Bartle Hall
March 26-27	St. Joe Water Garden Seminar
Apr. 10 – 21	Binkley Tulip Days
Apr. 21	TAWGS Monthly Meeting
May 19	TAWGS Monthly Meeting
June 16	TAWGS Monthly Meeting
June 26-27	13 <sup>th</sup> Annual Topeka Pond Tour
July 10 – 11	Kansas City Pond Tour
July 21	TAWGS Monthly Meeting
Aug. 18	TAWGS Monthly Meeting

\*Note correction

**Your Dues are Due if your label reads  
 9-03, 10-03 or 11-03** (or earlier)  
 Please renew as soon as possible to continue  
 receiving the newsletter.

### THE TOPEKA AREA WATER GARDEN SOCIETY OFFICERS:

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Becky Coffman	Vice President
Topeka	785-272-6568
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Holton	785-364-3046
Jim Green	Treasurer
Topeka	785-272-7139



Check it out - [www.tawgs.org](http://www.tawgs.org)

### *The Lily Pad*

Published Monthly, February to November by the Topeka Area Water Garden Society (TAWGS), a non-profit organization. TAWGS does not warrant the information in this newsletter. The opinions expressed are solely those of the authors and do not necessarily represent those of the Topeka Area Water Garden Society.

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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