May Meeting
Saturday, May 5
At Kansas Natural Stone
1550 S. Seville (Behind TSC on West Kellogg)

Plant Exchange

Well, now’s your chance to get rid of those plant divisions and pick up a few new plants in return. You can even bring fish, too. Please bring all plants in a bucket, box, sack or tub and attach some kind of label to the bucket to identify the plant. Also, bring containers to take home your goodies. If you don’t have any plants to bring, that’s okay. You are still welcome to take home some starts, anyway. We do ask that you not start claiming plants until after our meal, so that everyone has an opportunity. This will also be a good opportunity to meet the new owner of Kansas Natural Stone.

We’ll have our normally fantastic potluck buffet. Please bring a main dish and a side or dessert and lawn chairs. Paper plates and plastic forks are provided, but you are also welcome to bring your own plates and service. Drinks will be provided.

Welcome New Members
Arlene Fowler
Dan & Betty Bliss

From the President
By Mike Kandt

April was quite a month. On a beautiful warm spring day, we met at the Steddums in Mulvane and relocated their koi to new loving owners. We were so efficient that we finished early and several folks wanting fish came and left empty-handed. But there will be more. Two days later we were scheduled to divide water lilies at Botanica. We postponed a week because of the forecast cold weather. As it turned out, the rescheduled day was just as cold. We did the job anyway. Dividers worked in a sheltered greenhouse and others worked so hard, they didn’t mind (or at least didn’t complain about) the snow flurries. Fortunately Pat McKerman, Botanica’s Landscape Supervisor, was prepared. The staff had already divided some lilies and they did all of the pond work. Thank you, thank you. We even finished early.

Our May meeting will be the plant swap at Kansas Natural Stone. So between now and then, get your plants divided and save the starts. Both water plants and regular garden plants are okay. Be sure to identify the plants with labels so others will know what they are. If you are cleaning the pond, this is a great time to divide water plants. Just stick new starts in a bucket of water, and they should last until someone can plant them. Gene Shellenberg, who started KNS, has sold the business and the new owner should be there to meet us.

On May 26, there will be an event at the Sedgwick County Extension called Hostapolooza. This is sponsored by the Wichita Hosta Society, and the KPS will have a table to promote our Water Garden Tour. So come see us.

The water garden tour will be June 16-17. We have at least 5 gardens signed up and are still looking for a few more. If you want to show off your pond and be on the tour, please contact Wanita Wright at (316)733-6626 or email wrightd9@aol.com. Don’t wait too long. We are trying to identify host gardens as early as we can so that we won’t be rushing around in May to get the maps printed and into the garden centers. Please help out and contact us if you would like to be a tour host.

We are also looking for hosts for meetings in June and August. If you have offered to host one of these or would like to, contact me soon. I may have lost your offer in recent e-mail breakdowns.

Mike

Upcoming Events
May 5: Plant Exchange
Jun 1-3: Master Gardener Tour
Jun 2: KPS Meeting
Jun 16-17: KPS Water Garden Tour
Jul 7: KPS Meeting At Danny Lawson’s
### TIP OF THE MONTH:

**POTS FOR AQUATIC PLANTS**

By Mike Kandt

Now is the time of year to think about dividing your aquatic plants. Many of the veterans know well how to do this, but we have many novices, so over the next few issues, I will discuss pots, soil and actually dividing plants.

Generally, all pots for aquatic plants should be sturdy. I have bought cheap containers, only to have them break as I am pulling a plant from the pond. While black is preferable, any color will be quickly covered with algae.

**Holes or solid bottoms?** Pots without holes are fine for the plant and allow roots to get into the pond water to help filter it. Be sure to cover the holes with newspaper or similar material to minimize the potted dirt from getting into the pond. The newspaper will rot away. You can buy a mesh pot, but I have found these all to be very small and only suitable for small ponds. Pots without holes prevent soil from escaping into the pond but do not allow roots to get to the water.

**Pot size and Dimensions.** If the plant is tall, then look for a wide-bottomed pot. This will help keep it from being blown over in the wind. Larger pots with narrow bottoms do not help this problem. While they are heavy outside the pond, when immersed in water they become lighter and don’t help much with tipping. I have large tropical plants that grow up to 4 feet high. I keep them in 24-inch wide x 8-inch deep containers (bottoms of plastic drums). While they still occasionally blow over, they work fairly well. The problem is that they take two people to move them in and out of the pond. Pots that are too high can be a problem. Most aquatic plants are not deeply rooted and don’t need the depth. The pots might stick out of the water and look unsightly. Again, they are just heavier to lift. This normally means that the black nursery pots are not suitable for most aquatics. I like the water lily containers. These are shallow, wide plastic pots, generally about 12-inches wide x 6-8 inches deep. An alternative to this is a black rubber feed bucket (same dimensions) usually found at the farm supply stores. These have nice handles, are sturdy, and last for years.

Another option that has been around for years is a fabric pot. These are bags made of sturdy synthetic fabric. They conform to uneven shelf surfaces, and the tops can be rolled down like a pant cuff to match the water level. They come in a wide range of sizes, even large enough for trees, but are hard to find in stores in larger sizes.

Some pots can be pricey, but I have found that a buck or two saved in the pots just isn’t worth the trouble you face when it comes to the pots breaking after a year of service.

---

**SWAP SHOP**

If you have articles, plants or fish to sell or give away, let me know at 838-6681 or koikat@cox.net

**700 gallon rubber maid plastic stock tank:** Free. Approximately 8’ diameter, 2 feet deep. Similar to picture below. 4004 E. Countryside Plz Wichita 67218. Call James Consolver at 683-0162 or aldenconsolver@gmail.com.

**Liner for Sale:** 65mil EPDM 50’ x 11’ (I think) $100. Contact Ron at rw19@cox.net or (316) 755-2476.

**Moss Rock Boulders for Sale:** About a dozen, 200-300 pounds. Size and price varies. Contact Ron at rw19@cox.net or (316) 755-2476.

---

**ADVERTISING RATES**

<table>
<thead>
<tr>
<th>Business Card Size Ad</th>
<th>(about 2” x 3 ½”): $15 per 3-month period; $50 per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter-Page Ad</td>
<td>(about 3 ½” x 4 ½”): $30 per 3-month period; $100 per year</td>
</tr>
<tr>
<td>Half-Page Ad</td>
<td>(about 5” x 7 ½”): $60 per 3-month period; $200 per year</td>
</tr>
<tr>
<td>Full-Page Ad</td>
<td>(8 ½” x 11”): $400 per year</td>
</tr>
</tbody>
</table>

---

Mike
**Cattails** *Typha*

Foliage of cattails anywhere from 1/2 inch to 2 inches wide, depending on the species. Height can range from 6 inches to more than 12 feet tall. Leaves are generally flat on one side and rounded on the other. Flowers are long catkins that turn brown as they mature, releasing downy seeds that float away on the breeze. Cattails grow in freshwater marshes and colonize wide areas with their stiff, running rhizomes. They tolerate water over their crown and provide important habitat for fish and amphibians. Their foliage serves as a nesting source for many species of wild birds, and their roots are often eaten by muskrats. Leaves and roots have also had their place as food for humans – rootstock can be ground into flour, and the new shoots may be boiled and eaten as a vegetable. Cattails can be grown from seed, but they propagate quickly from division of the rhizomes. They over-winter in cooler water and withstand freezing temperatures. Native to many parts of the world, *Typha* grows wild in North America from Newfoundland to Alaska and southward into Mexico.

**Graceful Cattail** (*Typha angustifolia*)
More narrow-leaved, foliage arches and sways gracefully in the breeze. Very elegant. Suitable for most ponds and large container water gardens. Height 4-6 feet. Catkins are very thin and make attractive additions to floral arrangements. Grows in sun to part shade in moist soil or water to 12 inches deep. Zones 3-11.

**Standard Cattail** (*Typha latifolia*)
A bold vertical accent in any pond, this is the standard cattail commonly seen growing in ditches and in wetlands. It is excellent for water filtration and should not be dismissed for its value in the water garden landscape. Grows in sun to part shade in moist soil or water to 12 inches deep. Reaches 7 feet tall. Zones 3-11.

**Variegated Cattail** (*Typha latifolia ‘Variegata’*)
The variegation in this cattail is bold, forming clean, bright, green and white stripes. An elegant addition to any pond, it does not grow as readily as other cattails and does not appreciate being transplanted. Grows in sun to part shade in moist soils or water to 12 inches deep. Height 5-6 feet. Zones 4-11.

**Dwarf Cattail** (*Typha laxmannii*)
Ideal for small ponds and container gardens, dwarf cattail has very narrow foliage and small catkins. Growing only to 36 inches in height, it is not as heat tolerant as other cattails. Zones 3-10. Grows in sun to part shade in moist soils or water to just 4 inches deep.

**Miniature Cattail** (*Typha minima*)
Perfect for the very small pond or container garden, this miniature species has petite, round catkins on petite, vertical plants. Height is just 12-18 inches. Foliage is often an attractive blue-green color. Grows in sun to part shade in moist soils or water to 3 inches deep. Zones 3-9.

(Editor's Note: Cattails can be very vigorous and should be grown in wide pots to prevent their roots growing through the liner and to keep the wind from toppling the taller plants)
KPS Equipment for Loan

The Kansas Pond Society has a 3,000-gph submersible pump and discharge hose and two water meters that members may borrow when they clean out their ponds. The water meters are critical for determining the exact volume of water that your pond and stream hold. The only thing we ask is that you pick them up and return them quickly so that others may use them. If you are interested, call Mike at 838-6681 or 619-7501.

Did you know ....

You need 200 gallons per hour flow from your pump for EACH 1” of waterfall weir span.

wcw

The website PASSWORD has changed to LOTUS

Membership Cards

Also, please note that your membership card is good thru December 31st, which is the same date through which your annual dues are paid. EACH YEAR YOU WILL NEED A NEW MEMBERSHIP CARD FOR THE NEW YEAR. The vendors that are so generous with their discounts to our members have committed to honor membership discounts for active cards for the current year only. They have not committed to give discounts on expired cards. We truly appreciate their generosity and ask that everyone honor them by being considerate and showing them current year membership cards. In lieu of having a membership card with you when you shop, you can also pay for another year’s membership which Larry will credit toward your next year’s dues.
Algae

Pond scum, seaweed and giant kelp are all examples of algae. There are red algae, fire algae and green algae. Green algae mostly abide in freshwater environments, (our ponds!) have cell walls and undergo photosynthesis. This is the type with which most of us are familiar. I have seen 4 distinctive types in ponds− surface slime, string algae, pea soup and the short-fibered mossy coating (my terms).

**Slime algae** is the picture to the left. It is disgusting, may also be black or brown, thoroughly coats the water’s surface, gives off an unpleasant swampy or fishy smell, is exceptionally slimy, and can be scooped out or removed in sheets. This occurs with extremely high levels of dissolved organic wastes and nutrients in the water and can be due to lack of water changes, lack of regular maintenance, overfeeding, etc. You can see it at the edges of natural ponds with little or no water movement or filtration. It has recently been reclassified to the Monera Kingdom of bacteria.

**Planktonic algae** are the microscopic vegetation that looks like pea soup and is throughout the water. In controlled amounts it is beneficial as it is the start of the pond food chain. This type of algae feeds fish, helps shade the pond’s bottom and grows baby fish to a size that can eat the food we offer. The Japanese value this type of algae. But, in uncontrolled amounts, it can deplete dissolved oxygen in the pond, leading to a fish kill, if oxygen is not being constantly replaced.

**Filamentous (string) algae** is comprised of single cell plants that form long, visible chains, threads, or filaments. These threads start growing along the bottom of the pond, in the shallower water, on rocks, or other aquatic plants and intertwine to form mats that resemble wet wool. It grows when there are higher levels of calcium and phosphorus. These mats make great homes for micro- and macro-invertebrates, like bugs and worms (also good fish food) but are very unsightly. I pulled bushels of this the first 4 years of ponding, but after that, have not seen it. KPS had a contest one year for ideas on repurposing it – I found it very useful for lining flower pot bottoms before adding the soil, as it retains water quite effectively and lasts for years.

**Moss algae** (my name) is very desirable. It is that 1-2” thick velvety mat on your pond sides and bottom that would feel like a green carpet if you were to walk on it. It houses millions of ammonia- and nitrite-eating bacteria that keeps your water healthy for your fish. It also works at keeping your water clear and extracts extra nutrients from the water. It is best to leave this intact when you clean your pond, as it is like gold to a healthy pond. It also houses micro-creatures that are food for your fish. It is healthy stuff, indeed!

Slime algae and string algae are undesirable because they are unsightly, and slime algae is not a pond-healthy growth. Pea soup is beneficial but prevents us from seeing the fish. Several factors can combat these less-than-desirable conditions: 1) A filtration system that is sized appropriately for your fish population (don’t forget the same fish count this year as last is actually MORE fish as they have all grown), and/or 2) a reduction in the fish population, 3) More shade from trees &/or aquatic plants. Plants steal nutrients from algae, while sun feeds the photosynthesis process that causes algae cell division, 4) more aeration – fish need oxygen, as do the beneficial bacteria that make your water healthy, 5) salt, which helps the slime coat but can kill some water plants. 6) An algaecide is also an option, but in my opinion, is a short-term fix as it really does not fix the problem but rather treats the symptoms. You will find that you will need repeated treatments as the algae will keep coming back. It is also quite stressful on the fish, and if done improperly, can cause a major fish kill.

**Wanita**
THE DARKER SIDE OF KOI KICHI

(Definition: Koi Kichi, according to the lovely book by the same name by Peter Waddington, means “koi crazy”.)

Well, much as I hate to do it, this seems like a fitting time to address the subject of death. More accurately, fish death.

Yeah, yeah, I know. Being a real Debbie Downer here. But we got a lot of calls this winter from people who lost fish in their ponds. There was so much despair in their voices (and a few tears) that I thought I’d break my cardinal rule about ignoring serious subjects of any merit in this column and address the subject.

Now, losing fish in the winter wasn’t at all unusual in the earlier days of this club. This, despite all our preaching and advising about water quality and the benefits of pumping air into fish ponds all year-round, but especially during the winter when a lot of people turn off their pumps, thereby taking away all water movement. We preached, we advised, we dedicated lots of printer ink to the subject in this here li’l esteemed rag.

Still, every winter we would get calls from people saying all their fish had died. It would go something like this.

Caller: “Eek! I went outside just now and all my fish are DEAD! Belly-up, floating on the surface D-E-A-D!! What the frack?!” Us: “That’s a shame. Was your pump running this winter?” Caller: “No, we pulled it for the winter.” Us: “Okay. Did you keep your air pump running?” Caller: “Our what?” Us: “Your air pump. You know, like we talked about in the last meeting and wrote about endlessly and tirelessly in the last newsletter.” Caller: “Huh?”

This reaction, I am proud to say, rarely happens anymore. You KPS members have been paying attention. You’ve been educating yourselves, both through this club and from your own research, and you guys have become impressively, marvelously, and downright awesomely knowledgeable pond keepers compared to those of us in the old days of this club. So pat yourselves on your collective backs, people!

And, hey, I’m not saying I did any better in those old days. I admit I’ve lost more than my share of fish along the way. Like I’m always saying, our motto here in the pond keeping hobby is, “We learn by killing.” Any pond keeper who hasn’t lost a few fish somewhere along the way just hasn’t been at it long enough. It happens. Sometimes from something we did wrong, sometimes from mysterious reasons.

This winter, something mysterious was definitely up.

Our first clue came during mid-winter when Janie and Dave Chisholm called to say they’d lost one of their big koi. Now, Dave and Janie have been at this koi keeping hobby for a lot of years. They have a gorgeous yard and water garden at their home over in College Hill. They do everything right, so they were understandably upset at the inexplicable loss of one of their favorite fish.

They told me they’d called Dail Hong, and Dail told them he’d been hearing about several fish kills this winter. The collective thinking was that it was the up-down-up-down nature of temperatures. (Ah ha! That infamous witch, Stepmother Nature again!)

Well, that made sense. Anybody who’s had aquariums can tell you one thing that will really play havoc with fish mortality is sudden water temperature change. We even had a bunch of goldfish floaters a couple of years ago after we did our annual emptying and cleaning out of our water lily pond in the front yard. We waited until summer was in high gear instead of doing it in early spring like we usually do. The only thing I could come up with as an explanation was that the water we pumped out was really warm, and the well water we pumped back in was really cold in comparison.
Then my daughter Steph called, in tears and wracked with guilt, because most of their goldfish were floating. They don’t keep koi, but they have a lovely small pond that they stocked with goldfish from our water lily pond. Some of them were huge, and they, of course, all had names.

Then we got a call from Rick and Debra Carr, who had lost a lot of their koi. By this time, we were definitely putting two and two together and decided the one commonality here was sudden and repeated water temp changes due to weather.

But the black cherry on top of this whole thing was when I lost three of my own large koi. Not my biggest, mind you, but definitely koi with size and, yes, names.

Now, we have 9,000 gallons of water, five feet deep, in that koi pond. We’ve got a small leak in the waterfall, which we don’t worry about, because we’ve got an automatic refill hooked up to the sprinkler piping, and we have small amounts of fresh well water coming in at 55 degrees throughout the day and night all year round. So, sudden water changes have just never been a problem.

But this winter, I lost one of my koi, and to say I overreacted is putting it mildly. I shrieked, pulled my hair, wracked my brain and questioned my reason for living. Then I ran out and pumped a WHOLE LOT of water out of that pond. I mean a WHOLE LOT of water. My frenzied reasoning was that I had to get the dead fish cooties out of there so all the rest of my fish didn’t die.

And then, I promptly had two MORE koi go belly up. WHAT THE FRACK?!

Okay, I calmed down and thought about it. All this was in the middle of this stupid winter when temperatures were ricocheting so wildly you had to check the TV every morning just to see whether to put on a wool sweater or a pair of shorts.

And as cold as it got on the wintry days, my pumping in all that fresh well water was probably a sudden introduction of relatively warm water compared to the really cold water I’d pumped out.

So okay, lesson learned. I should have followed my own advice when I tell people to LEAVE YOUR POND ALONE DURING THE WINTER. I know better, and I still killed fish. We learn by killing. Even when we should have already learned years ago.

So those of you out there who lost fish this winter, I know it hurts, but take some comfort in knowing that even we veterans lost fish, too. It’s all part of the darker side of fish keeping, or in the words of the Japanese, “Koi Kichi.” Koi crazy.

And if this hobby doesn’t make you crazy, nothing will.

See you in May!

Susan
IT'S WATER GARDEN TOUR TIME!

Now's your chance to show off that water garden project you've slaved over and are proud of! And share your hard-earned knowledge and the resulting beauty with others! The Kansas Pond Society Water Garden tour is June 16 and 17. We need hosts for the tour, and this will give you an opportunity to share your expertise and the beauty of your water garden with people interested in building their own.

No water feature is too big or too small for our tour. People are interested in seeing examples of all sizes of water features. Some folks want a modest-sized feature, so don't feel that your water garden may be too small to qualify for the tour. The same goes with big ones. Variety is what we're looking for in our tour, so we welcome all comers! Please consider showing off your water garden in June. You may contact either:

Wanita Wright at (316)733-6626 or email wrightd9@aol.com or
Susan Kandt at (316)838-6681 or email koikat@cox.net

We'll be happy to answer any questions you may have about being on the tour and will provide each of you a packet in June.

WEBSITE PASSWORD CHANGE

Every year we change the password to the “Members Only & Newsletter” tab on our website: www.kansaspondsociety.org. We do this to restrict access to paid members only. The new password is:

LOTUS

Please do not give this to friends that are not paid members.
Tour custom demonstration gardens
Come experience eleven different water gardens and see why we are quickly becoming the ultimate water garden destination in the Midwest. Our retail center is stocked with beautiful fish and aquatic plants ready to enhance your garden.

4385 W. 247th Street
Louisburg, Kansas 66053
www.swanswatergardens.com
913-837-3510
Monday - Friday 9:00am to 6:00pm  Saturday 9:00am to 4:00pm