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Events & Activities

MG Association Meeting, Wednesday, August 16, 6:30pm, CottonwoodSee address page for map. Our speaker will be Tyler Fisher, Bamboo-4-U

Highlands Garden Conference

Oct 13-14 Hondah Resort, (near Pinetop) registrations materials available at the Extension offices and MG Association meeting.

Yavapai Rose Society, Aug.21, 7 pm, First Christian Church, 1230 Willow Creek Dr, Prescott. For more information call Bob or Nancy at 771-9300,

Alta Vista Gardening Club, Prescott, fourth Tuesday of the month, 12:30pm. Call 928-443-0464 for location and information.

Prescott Area Gourd Society, third Tuesday of the month, 6:30 pm, at the Smoki Museum.

Pond Club -this is an informal group that meets every couple of months, usually the 3rd week. Email aquaticgardens@esedona.net for more information.

The Organic Gardening Club meets on the 2nd Saturday of the month, 10845 Cornville, Call 649-6099 for informaion.

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University of Arizona Yavapai County Cooperative Extension

Yavapai Gardens

Master Gardener Newsletter

August 2006

Propagating Water Plants

by Nora Graf



August seems a good time to talk about water plants. Wet. . . cool. . . you get the picture.

Water plants are those plants that grow with their roots and part or all of their top growth submerged in water. Water lilies, bog plants, *Iris laevigata* and various surface floaters qualify. Most of the water plants produce vegetatively, usually by producing plantlets. Not only is dividing done to increase the quantity of plants, but it should also be done to thin the plants. Some plants reproduce so rapidly they can overwhelm a water feature. (Ed. Note: Some water plants can become quite invasive in natural waterways. Water hyacinth in Florida and Giant Salvinia (*Salvinia molesta*) in Arizona have created a number of problems in natural systems.) Never discard unwanted plants or any living creature from your ponds in rivers, streams or lakes. When replanting in your pond, select out the younger, more robust plants. Toss all the unwanted plants, leaves and roots into your compost pile.

Dividing is the easiest way to increase sedges and water lilies, along with other fibrous-rooted plants and rhizomatous plants. In some cases, young plantlets can be divided away from the main plant without lifting the parent plant. Divide plants when actively growing, generally late spring. This allows the wound created to heal quickly. Generally, you don't want to divide dormant plants. You risk the possibility of rot because of the lower water temperatures. Wash the stems, foliage and roots of the divisions thoroughly outside of the pond before replanting them. This helps reduce algal blanket weed, a problem in some ponds.

Sedges and other clump-forming plants can be lifted and pulled apart or simply cut in sections; make sure the clumps have a good root system. Throw away the oldest, central part of the plant. Replant each of the divisions. Smaller divisions can be grown in a separate container until they reach a good size for your pond. Place the pots in a container of water. The water must be up to the level of the soil. Don't allow to freeze.

Rhizomes and tuberous plants should be divided in spring or early in the summer. Hardy lilies and iris are two that fall in this category. With water lilies, you should be dividing them every few years. You will improve their appearance and vigor.

When the rhizomes are pulled out of the water clean, off the roots so you have a clear view of the growth on the rhizome. Cut it into sections, making sure you have a growth point on each section, and remove damaged and extra long roots. Different species will have different-looking rhizomes, but if you make sure you have a growing point (leaf buds present) and good roots, you should be able to make the cuts with confidence. Discard the oldest portion of the plant. Plant the divisions in their own containers with aquatic soil mix. The largest divisions can go back into their original place in the pond. Smaller divisions need to be raised up so the small stems can reach the surface. Make sure that through the winter you keep them underwater and allow the stems to float free. In the spring, lower them into the pond gradually as the stems grow. The growing tips and leaves need to be above water.

If you are dividing iris, you will probably need a knife to cut them. Make sure each division includes a fan of leaves. Cut the leaves back to about 3-4 inches, and replant.

Some water plants create plantlets. These can be easily separated from the parent. This is common in free-floating plants like water hyacinth. Some water lilies will form plantlets on long flowering stems. These need to be cut to separate them. These plantlets sometimes bloom while still attached. Detach the plantlet when the leaf starts to disintegrate or pin it down in a pot of soil while it is still attached and allow it to root before cutting it from the main plant.

Dwarf paper reed, *Cyperus papyrus* 'Nana', forms plantlets in the flower heads. Bend the stalk over and bury the plantlets in a partly submerged container of soil. As the plantlets root, they can be divided and potted separately.

Cuttings can be taken to increase some plants. *Lagarosiphon* and *Potamogeton crispus* are two great candidates for this type of propagation. In fact it is best to

replace old plants with new cuttings occasionally. Cut healthy softwood stem cuttings. Remove lower leaves or trim rosettes. Tie cuttings into bunches of six and either pot or simply throw in a muddy pond to root. Water mint and water forget-me-nots should be potted singly in trays or pots and submerged in shallow water. Others can simply be rooted in a jar of water.



Still another method is through root-budding. Some water plants create nodule-like roots. These are small, rounded swellings with emerging shoots. Pare out the bud with a sharp, clean knife. Pot them up and keep them submerged under glass, rising the water level as shoots grow. Keep cool, but frost-free over the winter; transplant as growth starts in the spring.

Last is propagation by seed. This is a slow process and it could be 3 to 4 years before a plant reaches blooming size. It is best for water lilies, lotuses and a couple of other water plants. If you want to try this adventure, keep in mind that if you have hybrid plants, the seeds may not create plants true to type. If you are still interested, gather the seeds as soon as they ripen in the summer. Sow immediately. To find out more about your plant, do an internet search or get a good book on water plants. There is a lot of variation on which plants seed well, so I am not going to go into that here.

Fill pots or trays with aquatic potting soil. Do not add fertilizer. Fertilizer enhances algal growth which you DO NOT want. Sow seeds on the surface, cover with fine grit. Let the pot stand in water so that it is partially submerged or just covered with water. Some artificial heat may be necessary. Check to find out the needs of the plant you are trying to start. Once the first set of true leaves emerge, they can be transplanted into individual pots and immersed in water. Transplant to the pond in the spring.

I've just given you the basics of propagating water plants. Water gardening isn't any different than any other gardening, each plant has different needs that must be met. If you are interested in a particular plant, do some research to find out what works best for that species. Lastly—you will need a specific kind of potting soil designed for underwater use. Do not use your garden variety potting soil. Make sure it is formulated for pond use. Splash-splash, enjoy the summer.

Marsh Mallow

Althaea officinalis

by Nora Graf

No, chances are you will not be able to grow this plant in this area, but I was desperate for something to write about, it's hot and sticky and I have other things to do. So I was ruminating about summer and browsing through an herb book when I saw marsh mallow—marshmallow, s'mores, summer camp. You can see the progression there, I think. Plus, I thought it might be interesting—so all you've ever wanted to know about Marsh Mallow:

The marshmallow, that white puffy thing we buy today is not made of marsh mallow but there is a connection. The root of this mallow renders up a mucilaginous concoction first used to give the candy its puffy texture. The sap of the root was cooked with egg whites and sugar and whipped into a foam. This

hardened when cool. It was cut up and used as a throat lozenge. In the 1880's, gelatin replaced marsh mallow sap and egg whites were phased out. Today, the marshmallow is made either with sugar, corn syrup and gelatin or sugar, corn syrup and gelatin folded into egg whites.

This plant has been known as a medicinal herb and food plant for centuries. The entire plant contains a mild mucilage. It's name, *Althaea*, is derived from the Greek, altho-*to cure*. The Chinese have used mallows as food and they were a favorite dish of the Romans. The Egyptians also ate it, along with Syrians, Greeks and Armenians. Unfortunately, the only description I saw said it was palatable, so don't rush out and try some. Palatable generally means that you could eat it—if you had to, but it was common enough that it was used mainly to fill stomachs during crop failures. Hippocrates, a Greek physician, used the plant to treat wounds. Another Greek physician, Dioscorides, used it as a vinegar infusion to

cure toothaches and its seeds to soothe insect bites. The roots were used as a laxative by the Romans and Renaissance herbalists used it for sore throats, stomach problems, gonorrhoea, leukorrhoea and mouth infections. Today it is still used to treat inflammation of the alimentary canal, urinary and respiratory systems. It is also used as a poultice for skin problems. As usual, do not use this medicinally without consulting your doctor.



On the culinary front, the uncooked young leaves were added to salads, the roots were boiled then fried in butter with onions. French cooks created the original “marshmallow,” *pate de guimauve*, using the root of the plant.

It is native to Europe and has become naturalized in eastern North America. It prefers moist habitat, salt marshes and damp areas close to the sea and its estuaries. Marsh mallow is a perennial with a woody taproot. It has soft woolly stems and leaves. The hairs are star-shaped. The soft gray fuzz distinguishes it from other mallows. The flowers are the typical mallow flower, pink to white, 1 to 2 inches across. It grows 2 to 4 feet tall, flowering July to September. One description of it was “weedy-looking.”

This is a very hardy plant that needs moist soil and full sun. In our area, that is almost an oxymoron, but feel free to give it a try. It can be propagated from seeds, cuttings or root division. Root divisions can be taken in the spring, but fall is best. The leaves and flowers should be gathered in the morning. The root should be collected in the fall from 2-year-old or older plants. To store, remove any lateral rootlets, wash and peel them and then dry whole or in slices.

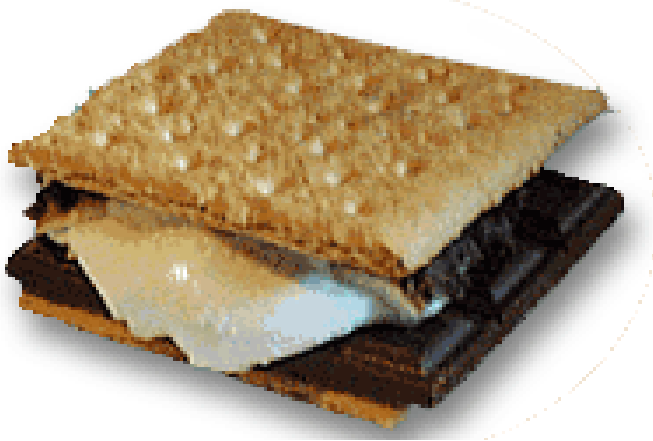
Sources are very limited, if you really want 3

to try this plant. Thompson & Morgan has a white variety for sale, Sand Mountain Herbs, www.sandmountainherbs.com and PlantExplorers.com had seed. The last company is in British Columbia, Canada.

So this summer, when you are sitting around a campfire eating s'mores, surprise your friends with your knowledge of the first marshmallows.

For the completely “deprived childhood” kind of persons, S'mores are often the preferred snack around the campfire. Each summer young children are shipped off to camps around the country to learn the traditional way to make this sticky treat. If you actually want to make marshmallows, check out www.cookingforengineers.com which has an excellent recipe and description for making your own.

The Traditional S'more



Graham cracker, broken in half
Marshmallow, preferably toasted over a campfire
Hershey bar, broken to fit on half of graham cracker

Place chocolate on half of graham cracker. Toast marshmallow to taste. Golden brown and gooey all through is best. Black marshmallows will give the food a charred taste. Place the HOT marshmallow on top of the chocolate covered graham cracker. Gently smush (that's the correct word) the other half of the graham cracker on top of the gooey marshmallow until it begins to seep out the sides. Eat and enjoy. Wet towels should probably be kept handy as, if the s'more was correctly made, you will get sticky marshmallow and runny chocolate all over.

Variation for the adventurous
Add slices of bananas on top of the chocolate.
For the “upscale” version use a high end dark chocolate

August To-Do List

Thought I'd let you sit around in August just contemplating s'mores? Fooled you, didn't I. Here's your list of things to do now. Wear your hat and put on the sunscreen and here we go.

Pull Weeds. Being this is the first of July when I'm writing this, I am optimistic that we will have rain. Rain means weeds. Weeds mean they will win unless you get out there and remove them.

Look at your plants. Are they ok? Check for nutrient deficiencies, over-watering, under-watering. It's bad enough it's 100+ degrees out there, don't compound the plants struggles by poor care.

Plant another round of carrots, radishes, salad greens, spinach for a fall crop. You do want to have fresh vegetables later in the year, right? Cool season flower seeds can also start to go in for a good fall display. They will be ready for transplanting out in the garden by the time the weather cools off a bit.

Fertilize annuals and vegetables with a phosphorus fertilizer to keep them blooming and the vegetables growing.

If you have grass, poor soul, feed it. Warm-season grasses need some encouragement to hang in there, although Bermuda never seems to need encouragement. Keep it watered.

If you haven't already, mulch trees and shrubs and anything else you have growing. Mulch helps hold water in the soil.

Wildflower seeds can be sown now; plants like Mexican hat, coreopsis, poppies, penstemons can be started.

Feed roses to encourage a fall bloom.

Water Water Water. Chances are there won't be enough rain to keep everything going. Just be careful and don't over-water desert plants. Over-watering can kill them.

Now if there is time after all that, take a break and get the catalogs out. It's time to start planning the bulb garden.

Meet a Master Gardener: Missy Sandeen

by Pam Bowman

Moving to Prescott with her husband Bob in 2002, Missy Sandeen was finally able to fulfill her life-long dream of developing and maintaining her own multi-faceted garden. To increase her knowledge about gardening in the Southwest, she enrolled in the 2003 Master Gardener class and, upon graduation, promptly volunteered to staff the phones in Prescott. These days she substitutes for phone duty and helps with farmers markets, county fairs, garden tours, plant sales and garden conferences. She also developed and chaired a landscaping committee in Prescott Lakes (where she and Bob live). As current co-chair of the Program/Education Committee, she actively recruits speakers for MG Association meetings and develops educational field trips.

Born and raised in Slayton, a small town (population 2,500) in southwest Minnesota, Missy has memories of carefree days riding her bike and reading in the library. Thanks to her grandmother who introduced her to beautiful flowers and her father who taught her the value of tending a vegetable garden, she developed a love of gardening early in life.

Upon graduation from high school, Missy moved to Sioux Falls, South Dakota where she graduated from a small college with a double major in sociology and social work and became a program director for a local girls club until she returned to school. After receiving her Masters degree in social work at the University of Wisconsin, Missy moved to St Paul, Minnesota where she was the aftercare program director of a drug and alcohol rehabilitation center for adolescents. Taking a break 3 years later, Missy sold "telecommunication equipment" to businesses. While selling to a local racquet club, she decided to take tennis lessons. Meeting Bob in her tennis class, Missy agreed to a tennis date; a month later they were engaged. Leaving sales, she returned to social work and took charge of emergency

services in a neighborhood center. Missy then worked as a manager for the YWCA of St Paul. Later, as a grants analyst in victims services for the Minnesota Department of Corrections, she says she found her favorite job, working with a multitude of programs and using her organizational skills. Remaining with this department, 10 years later Missy became the Director of Grant Management for the probation and halfway house programs.

The years spent in school and work left little time to develop and maintain a garden. Missy and Bob only had time to plant a small vegetable garden. With retirement and a move to Prescott (downtown reminds them of small mid-west towns), the couple finally had time to



landscape and maintain a garden. They installed a cactus/succulent garden, herb/vegetable garden and perennial/annual garden. They also planted 3 fruit trees and grapes that will grow over the pergola Bob crafted and have "lots" of potted plants. Missy loves to watch the birds and has a special fondness for a lizard who sleeps under the fly swatters on an outside window ledge.

When not tending to her home and garden, Missy loves to cook, take cooking and water aerobics classes, read, hike and travel. She and Bob will tour California in September and next year, they plan to travel in North Carolina and Georgia. Missy also sings in her church choir and was a representative in her homeowners association for 3 years. And every year she and Bob organize a holiday boutique where they sell the jewelry Missy makes using Bob's handmade glass beads, Bob's hand-carved items and other craft items made by friends and neighbors.

An active member of the MG Association and the current Programs/Education co-chair, Missy uses her love of variety and skills of organization to bring interesting speakers to meetings and well-organized trips in the field. Thank you Missy!

Hose Management

By The Absurd Gardener



In the attainment of horticultural perfection a gardener will be measured by many standards. You must learn to identify a thousand plants by their correct horticultural names, and know how to keep them alive in all seasons. You must be part botanist, meteorologist, chemist, agronomist, entomologist, and irrigation specialist, and have the wisdom and patience of Job. But you will never be considered a true gardener until you have learned to master the hose.

Be it a modest 25 feet or a 50 foot monster, a hose is not to be taken lightly. In inert slumber it sits there in the shed, innocently coiled for duty. But within its rubbery soul there lurks an insidious will to mischief.

As the water is turned on, the hose seems to come alive. It surges, then thrashes about, defying you to control its watery heart of wildness. You grab behind its head as if it were a serpent, and proceed to the business of watering. But the hose has other plans.

As you spray the delphiniums and idly contemplate the world in your garden, this creature of malice suddenly, without warning, decides to KINK! All it takes is some slight irregularity in the ground or a too tight turn around the corner. The water just stops and you must do one of two things, depending upon your level of skill. You can drop what you are doing and walk all the way back to

the twisted section, thereby conceding defeat to the hose. Or with an expert flick of the wrist, known only to Zen masters and certain gardeners, you can simply make that kink disappear.

But it is only when you have finished watering that the real challenge begins. The water is turned off and you think you are safe. The hose sprawls limply across the landscape, seemingly devoid of all life. But the hose knows otherwise.

For you must still master that most difficult task of all – winding the hose back into its proper coil. Your goal is merely to return the hose to its starting point. It should be neatly and tightly rolled, as close as possible to the condition in which you found it. To the uninitiated it sounds so simple. But just try making that hose, all twisted and full of water, go back into its original shape. It resists like a stubborn python, and if it's cold outside, a very stiff stubborn python. As you try to roll it into neat little circles, the coil winds and curls about into shapes of its own choosing. In desperation you whirl and shake that hose in one final effort to beat the chaos out of it. You watch as it writhes and twirls, spewing out its last bit of water. And with a calm and steady hand you force its coils to obey, and know that at last you are a gardener.

MG Association News

August 5, 9-5:00--Penstemon Festival, Flagstaff Arboretum. Free with Arboretum admission (\$5). 4001 South Woody Mountain Rd. For more info--www.thearb.org or 928-774-1442.

Basic Backyard Composting Workshop, Aug 12 & 25

10 am to noon, Fort Verde State Park, Camp Verde. Cost: \$3 entrance fee to the park, Call Marc Johnson 928-567-3275 for more information.

Gardening Whodunit

What do you get when you cross gardening with criminology? How about a news series on PBS called "Rosemary and Thyme" that begins in August. Lecturer Rosemary Boxer and policewoman Laura Thyme, two gardening enthusiasts, find themselves solving murder mysteries.

Iris Sale August 5, Sharlot Hall Museum, Prescott

Looking for beautiful 21st century iris or historic, antique iris for your garden? The Prescott Area Iris Society will be selling iris in all the colors of the rainbow. Begins 9:30 a.m. until the supply is sold out. Iris are trimmed, cleaned and ready to plant. Come take advantage of our reasonable prices, large selection and knowledgeable growing advice. If you have rhizomes to donate to the sale, or need more information, call 445-4357.

Southern Bulbs

Just by chance I discovered a bulb nursery that specializes in southern grown bulbs. They rescue bulbs from old homesteads and farms that have grown on their own for years. They have some nice looking bulbs for sale that should adapt to our climate. Check out their website is www.southernbulbs.com

- *August 16, 6:30, (Cottonwood) MGA Meeting,
- August 26, V Bar V Ranch, Call Cottonwood office for more information
- *September 20, 6:30 (Prescott) MGA Meeting, "Working with Bulbs" with Valerie Phipps from Mortimer's Nursery
- September 21-24, Yavapai County Fair
- October 21, Master Gardener Picnic, at Jerome State Park in Jerome, 11:30-1:30
- October 13-14, Highland Garden Conference
- *November 15, 6:30 (Prescott) MGA Meeting, Gary Young from Young's Farm in Dewey will be talking about the history and sale of the farm

*For Yavapai Master Gardeners Only

UofA Master Watershed Steward Program is taking applications. Classes start in October. The AzMWSP will offer Yavapai County residents an opportunity to become valued volunteers who are knowledgeable about Watershed and Water Resources of Yavapai County and Arizona. A better informed public and greater participation in decision making processes are key goals of this program. Application fee \$25. Applications due by Sept. 15. Call Russ Radden Phone: 928-445-6590 x 227 for more information.

FROM THE EDITOR: Please send or email articles and announcements to the address below. Long articles will go in as soon as possible, announcements must be in by the 15th of the month to be included.

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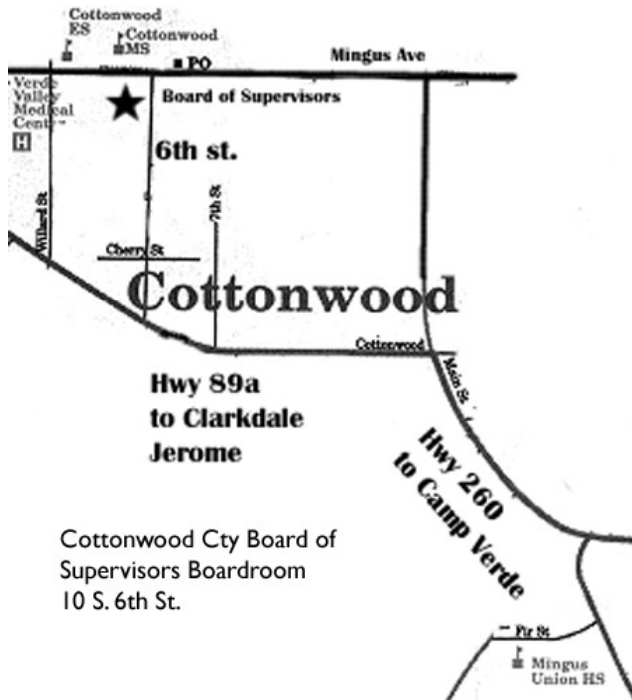
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MG NEWSLETTER



Cottonwood Cty Board of
Supervisors Boardroom
10 S. 6th St.

MG Association Meeting
Cottonwood,
August 16, 6:30pm
Speaker: Tyler Fisher,
Bamboo-4-U