**Events & Activities**

MG Association Meeting, No Association meeting in July.

Alta Vista Gardening Club, Prescott, fourth Tuesday of the month, 12:30pm. Call 928-458-9508 for information.

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

Prescott Orchid Society, 3rd Sunday of the month, 2pm at the Prescott Library, (928) 717-0623

Prescott Area Iris Society call 928-445-8132 for date and place information.

Mountain View Garden Club, Prescott Valley, Dewey area, 2nd Friday of month, 1:30pm, call 775-4993

Native Plant Society Meetings - Prescott, 2nd Thursday of the month, 6:30pm. Attending the talk qualifies as Continuing Education. Non-members are welcome. Highlands Center for Natural History, 1375 S. Walker Rd. (928-776-9550).

The Verde Thumbs Garden Club, Cottonwood 2nd Tuesday, 6:30 pm at The Seventh Day Adventist Church. (928) 634-7172

Check out the new MG blog. More garden information, events and pictures. http://yavapaigardener.blogspot.com

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Agave are succulents whose leaves form a large rosette. The leaves often have thorny margins and generally end in a thorny point. The plant grows slowly until it gathers enough energy to bloom. When that moment happens is anyone’s guess, but when it does a tall stem grows from the center at an extremely rapid pace. You can practically watch it grow it happens so quickly. While all this growing, flowering and producing seed is going on, the plant is dying. Agave bloom once and then are gone, leaving behind the dried shell of the plant. The once-fleshy leaves decomposing and a dried hard flowering stalk are all that remain. If you are lucky, the plant left behind some "pups" to carry on a new generation, but maybe not.

There are approximately 208 species of agave. They are not related to cactus. Agaves are found mostly in Mexico, the south-ern and western United States and tropical South America. Many of the species are now grown as landscape plants and sometimes with the additional water and nutrients home gardeners provide the growth can be accelerated, encouraging the plant to flower sooner than expected. While often referred to as century plants, they really don’t bloom in 100 years; they bloom when they get big enough to support the energy needed for producing the amazing stalk and flowers. The flowers are quite beautiful……if you can see them, the stalks generally tower over humans. No, you can’t save the plant by cutting off the flower stalk.

The plants weren’t particularly embraced by southwestern gardeners until the movement to more water-conservative gardens became popular. We had big Agave americana’s in our yard in Tucson back in the dark ages that killed all sorts of inflated balls. An agave spine can puncture a ball and kids with ease. The agave in our yard disappeared at some point! It was Europeans who embraced the plant for decorative purposes first. Portuguese and Spanish ex-
Explorers likely brought the plants back with them during their explorations. The plants became popular in the 19th century. One of the interesting things about these plants is that they were propagated by offsets (pups) and some do not consistently resemble any species in the wild. While to the uninitiated the plant may look worthless (except for its decorative use), it is a hotbed of potential. First off, all parts of the plant are edible. Agaves produce several pounds of edible flowers per stalk. The stalks can be picked while young and roasted. They are sweet—something like sugarcane. The young leaves in the winter and spring are filled with a rich sap. They can also provide a strong fiber for making cord. Agave nectar, popular today, is from the sap at the base of the flower stalk. The juice in the leaves can be a substitute for soap. The thorns can be used as sewing needles or awls. The most famous use is the manufacturing of mescal and tequila. The Hohokam cultivated agave because it was such a useful plant.

One caveat is that the juice from some species can cause acute contact dermatitis. Blisters, reddened skin, and itching can last one to two weeks and the itching may crop up on and off up to a year. Dried leaves have no effect. If the skin is pierced deeply by a thorn, blood vessels may erupt and the area appears bruised. This bruising could last up to three weeks. Today many of the wild species are routinely cultivated for the nursery trade and rightfully so as they are an easy-to-care for addition to a home landscape. They like well-drained soil and many can survive with only occasional water. Buying varieties that are native to the region make it possible to almost never water them when established. Many agaves will do well in pots. The roots don’t grow deep so even a shallow pot will work. Use a well-draining mix and water once a week in the summers and hardly at all in the winter. Plants will need to be repotted every three years or so, especially if many pups form and the plant gets crowded. Those pups can be put in their own containers or planted in the yard. Anytime you repot it is best NOT to water immediately afterward, especially if you have significantly damaged the roots. Leave it a week or so before you water. Don’t repot in the winter.

Agaves can be grown easily from seed; in fact the seeds sometimes sprout while still on the stalk. Use a mix of good quality top soil and crushed granite or horticultural grit as a soil mix. Sow the seeds a couple of inches apart and cover lightly with some of the soil and a light layer of grit. Water by setting the seed pot in a container with water so water can be absorbed from the bottom up. Once the soil is saturated, remove and let drain. Cover the container with glass, plastic wrap or something similar to maintain moisture and let in light. Place in a warm place out of direct sunlight. Seedlings should appear quickly in four days or so.
If after two weeks nothing is showing up, the seeds are not viable. A single leaf will show with the seed husk still stuck on it. You can leave it or remove it if it annoys you. The seedlings may fall over—just use a little of the soil mix to prop them up. By the time the third leaf appears, the first leaf is starting to yellow. THIS IS NORMAL! At this stage the soil should be moist. but if it dries out for a couple of days, the plant should be ok. If the seedling appears purplish it is getting too much sun; if it is pale it needs more sun.

One of Master Gardener Pam Bowman’s agaves bloomed this year. She provided these pictures. Please note the timeline.
We are in the middle of summer. With any kind of luck the monsoons will have started but the heat can be unrelenting. All the delicate spring bloomers are long gone. What we need now are tough troopers that not only withstand the heat but thrive in it. Below are some of the tough customers that you can try. Now just because they do well in the summer, doesn’t mean you can ignore them. All of these plants will need regular watering throughout the summer to get them to grow and bloom well. If you don’t want to do that I know where you can find some gravel.

Cosmos—One of my favorites. Easy to grow. I have seen gallon plants for sale in nurseries for crazy prices…for an annual! It would be nice to see the comeback of the six-pack. Hate buying annuals in big pots. Another story though! These grow easily from seeds; so grow your own. You can direct sow in the ground or start them in containers. They come in a variety of colors and petal shapes in both the tall original version and dwarfer varieties. Cosmos will also reseed on their own.

Zinnias—Another real favorite. These just go and go all summer long. Best to start your own from seed. You don’t find them in nurseries often as they hate overhead watering. Direct seed or, if you start them in containers, water from the bottom and not the top. They come in a huge variety of colors, sizes and shapes. They are a luxuriant looking plant with lots of nice green leaves and usually lots of flowers. Keep the plant deadheaded for continued blooming all summer long.

Marigolds—A mainstay of the nursery industry, marigolds are tough, tough plants. But grow your own; they start easily from seeds and you will have some other choices in plant size and shape. The lush dark green foliage can make you believe it’s cooler out there. They are all yellows and oranges but there are some interesting combinations not available in the nurseries. You can also find something besides those dwarf buttons they sell. I like big plants and those little dwarfs are just not enough.

Blanket Flower or Gaillardia—This is a native plant and the highway department sometimes uses them in its seeding program along roadcuts. It doesn’t have the lush foliage like zinnias and marigolds but it is a nice plant because it blooms like crazy all summer long. It’s actually a short-lived perennial that will reseed itself, so once it gets going you should have it for years to come. Blanket flowers are members of the sunflower family and make a bright and cheery addition to the garden. There are some different varieties available with different petal shapes and variations in the red and yellow color pattern.

Sunflowers—Growing from big to small sunflowers should be in every summer garden. These really are easy starters and you can practically just throw the seed out there. Well….maybe a little more care would be helpful—but just a little. You can have the gigantic yellow or the luscious orange and even red, peach, nearly white and mixes in between. There is even one that is just a big yellow powder puff. The bonus of sunflowers is that once the flowers have gone to seed they attract a ton of birds that feast on the seeds. I’d grow them just because of all the little yellow finches that come to my yard each year to eat the seeds.

Mexican Sunflowers or Tithonia—If you are looking for a big dramatic plant this could be it. A shorter version is just four feet tall while the full version can grow to eight feet. The original choice was orange-red flowers but today there is a chrome yellow and an orange version. This is a crazy, big-not always attractive plant but it brings in insects like crazy (useful if you want your squash pollinated) and birds when the seed sets and it does just keep blooming.

Chocolate Flower—It’s the scent, like being immersed in chocolate. Really, this is one plant that lives up to its name. In late summer the plant is covered with bright daisy-like yellow flowers that perfume the air. This is a native desert plant so does well in the summer. Can’t say it’s the most attractive plant but the smell is worth it.
Lantana—This is a perennial in some locations like Phoenix where it is a favorite landscaping plant. It probably gets too cold except in the lowest elevations for it to survive our winters but you can grow it as an annual. Look for cold-hardy varieties. Its dark foliage and colorful flowers make it a nice summer plant. It can take some shade, so it can work in various areas of the yard. A favorite of butterflies.

Verbena—They are sometimes confused with Lantana because they look somewhat alike. This is a desert perennial, though so is a bit more drought resistant. It will take full to partial sun and average soils. Some of the varieties available are not hardy and should be grown as an annual. It is loved by moths, butterflies and hummingbirds. Most verbenas are in shades of purple but white and red verbenas are also available.

Salvia—As members of the largest genus in the mint family, salvia run the gamut in terms of hardiness, colors and shapes. Lots of them will do well in your yard. There are annuals, biennials and perennials. A little searching will give you lots of possibilities. I tend to avoid the bright, bright, bright annuals you sometimes see but if you want color they do make a big splash. Some of the others add cool colors to the garden and attract a host of insects and hummingbirds.

Lisianthus or Eustoma—These are really lovely flowers that you don’t see around here much. I first ran into them when I lived in Phoenix. I have seen them in nurseries in the Verde Valley so think they would grow here. You might have to experiment a bit to find the right place. They like well-drained soil in full sun. Don’t overwater. They will bloom from spring to fall. I prefer the single flowers but there are doubles and they come in white, shades of pink, purple and blue. Some are even bicolored. You can even find yellows and occasionally red. Once again, they have taken a lovely tall plant and stunted it but that seems to be what people want these days. Most of the ones you find in garden centers are the dwarf varieties but look for some normal ones too. They make very long-lasting cut flowers.

The Monsoon rains will be here soon and with them a great opportunity to add new plants to your garden. The soil will be warm and moist.

Just in time, the University of Arizona Yavapai Master Gardener Association will hold its annual Monsoon Madness Plant and Yard Sale on Saturday, July 13, 7:30 AM to 1:00 PM at the rodeo grounds, 840 Rodeo Drive, in Prescott. A wide variety of native and low water use locally grown plants, garden tools, pots, and garden items will be available.

Expert advice on choosing and growing plants will be available from Master Gardeners. Stop by the information table where Master Gardeners can answer your gardening questions. Shoppers will be entertained by local musicians.

Bring your knives, pruners, shears, loppers and axes (no serrated edges, please) for a tune-up at our tool and knife-sharpening table.

All sales are cash only. For more information call 928-445-6590 x222. Also visit our website at http://extension.arizona.edu/yavapai.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Jeffrey C. Silvottooth, Associate Dean & Director, Economic Development & Extension, College of Agriculture and Life Sciences, The University of Arizona. The University
Tomato juice is the official state beverage of Ohio, honoring the part A. W. Livingston of Reynoldsburg, Ohio played in popularizing the tomato. There are at least 10,000 varieties of tomatoes, from small cherry ones to Ponderosa, which can weigh over three pounds. The tomato first grew as wild, cherry-sized berries in the South American Andes. The tomato as we know it today was developed in Mexico. Tomatoes are the world’s most popular fruit! More than 60 million tons are produced every year. That’s 16 million tons more than No.2 — the banana.

During the 1600’s, tulips were so valuable in Holland that their bulbs were worth more than gold. The craze was called tulip mania, or tulipomania, and caused the crash of the Dutch economy. Tulips can continue to grow as much as an inch per day after being cut.

Vanilla flavoring comes from the pod of an orchid, Vanilla planifolia.

The word pineapple comes from European explorers who thought the fruit combined the look of a pinecone with flesh like that of an apple. Pineapples are the only edible members of the bromeliad family.

From a botanical standpoint avocados and pumpkins are fruits, not vegetables, because they bear the plants’ seeds. Rhubarb, on the other hand, is a vegetable.

Small pockets of air inside cranberries cause them to bounce and float in water.

All parts of the oleander (Nerium oleander), a beautiful Mediterranean-native flowering shrub, are poisonous. Ingesting oleander leaves can cause gastrointestinal, cardiac and central nervous system problems and possible death.

Iris means “rainbow” in Greek, and Iris was goddess of the rainbow in Greek mythology. Wormwood (Artemisia) was named after the goddess Artemis, milkweed (Asclepias) after the god Asclepius and Hebe after the Greek goddess Hebe.

A sunflower looks like one large flower but each head is composed of hundreds of tiny flowers called florets, which ripen to become the seeds. This is the case for all plants in the sunflower family, including daisies, yarrow, goldenrod, asters, coreopsis and bachelor’s buttons.

Most variegated plants are actually mutations! Chlorophyll is the green pigment needed for photosynthesis. In variegated leaves the cells that are genetically unable to produce this pigment appear white; some pigments in the mutated cells can produce pink or yellow. These interesting and attractive plants are prized by most gardeners and highly cultivated by nurseries. A variegated plant will grow more slowly because of its reduced ability to produce food energy.

Peaches, pears, apricots, quinces, strawberries and apples are members of the rose family. So are ornamental species such as spirea, mountain ash, goatsbeard and ninebark.

Cranberries, Concord grapes and blueberries are three popular fruits native to North America.

The difference between nectarines and peaches is that nectarines don’t have fuzzy skins. You can graft peach branches onto a nectarine tree or nectarine branches onto a peach tree so you have both types of fruits.

Sulfuric compounds are to blame for cut onions bringing tears to your eyes. According to the National Onion Association, chilling the onion and cutting the root end last reduces the problem.

Peanuts are not nuts but legumes related to beans and lentils. They have more protein, niacin, folate and phytosterols than any nut, according to the National Peanut Board.

Figs were the first domesticated crop in the Near East—about 11,400 years ago! Archaeologists found carbonized figs in a village north of ancient Jericho and compared the fruits to modern specimens. Through this comparison, they determined that the fruits had been intentionally propagated.
**MG News**

Monsoon Madness Proceeds – What You Should Know

As we get closer to Monsoon Madness you may be asked how the proceeds from our sale are used. And for those MGs who are working on sale day, you for sure need to know how to answer this question. And here is the answer. We use the proceeds for our educational outreach in Yavapai County. Some of the things we have purchased with proceeds from previous years: audio/visual equipment like LCDs for powerpoint presentations, handouts of horticulture information, easel stands, supplies for our information tables (including books, materials, EZ-ups, tables), supplies for insect boxes, bookmarks with Extension contact information, garden conference for the public, materials to package seeds for the public, etc. Also, don’t forget to bring your knives and tools for sharpening on Thursday, July 11th. No serrated edges please.

**Arizona Highlands Garden Conference**

The 14th Annual Arizona Highlands Garden Conference will be held October 12th in Miami, Arizona. As the name suggests, this conference is geared toward high desert gardening. The featured speaker is Dr. Jeffrey Silvertooth (who will be speaking on GMO’s). This link contains the agenda and registration form http://extension.arizona.edu/events/arizona-highlands-garden-conference

Please refer questions to Tara Celentano, 928.402.8589, Gila County.

**Searching the MG Newsletter on the Extension Website**

Trying to find something in the back issues of Yavapai Gardens has always been difficult. There is a partial index available. Steve Moody has figured out a way to do it and it works better than the U of AZ’s CALS search engine.

Go to: [http://www.arizona.edu/search/google](http://www.arizona.edu/search/google)

In the search window type in: "Yavapai Gardens" (including the quotes) and the topic you are looking for. For example:

"Yavapai Gardens" tomato blight

The search engine retrieves all the issues with tomato blight information.

FROM THE EDITOR: Please send or email articles and announcements to the address below. All articles must be in my hands by the 10th of the month. Short announcements (no more than 2 or 3 lines) will be accepted until the 25th.

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**Congratulations to Ann Baugh for completing 50 hours.**

*Mentor—Dede Erceg.*

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Next Meeting

No meeting this month but Monsoon Madness takes place at the parking lot at the Prescott Extension Office.