There are over 500 species of Aloe. The name aloe comes from the Arabic word alloh, meaning bitter substance. Aloes can range from trees 60 feet tall to small grass-like varieties. They are adapted to harsh conditions, including areas of infrequent precipitation. What most species don’t like, though, is the cold, which limits what we can grow in our County.

Aloes are originally from sub-Saharan Africa, Madagascar and Arabia. Prehistoric rock art by Bushmen featured aloes. The Egyptians (ca 1552 BC) apparently used the plants medicinally, including embalming. The Greeks recommended using it externally for wounds, hemorrhoids, ulcers and hair loss and internally as a laxative. Only a few of the species have been used medicinally. Aloe vera is the most commonly grown. In fact it was so widely grown as a medicinal plant in ancient times that its origin is unknown. Today Aloe vera is used to treat burns or skin rashes and is in every sort of product including shampoos, lotions, makeup and soaps.

There is no scientific evidence that internal usage is effective for any condition. What studies have been done have been inconclusive or unconfirmed. As I often say, “just because it’s natural doesn’t mean it’s good for you” and it applies to aloe. Aloin is the yellow sap of the aloe plant and had been used as an ingredient in over-the-counter laxatives. The US Food and Drug Administration now bans it.

Many aloes resemble agaves and are sometimes confused with agaves and yuccas. They have a rosette of fleshy leaves, usually with spines. A stalk of flowers comes up from the center. The flowers are tubular and can be red, orange, pink or yellow and are usually pollinated by birds. There is a species that is actually tree-like with a trunk, branches and leaf rosettes at the top of the branches. Another has leaves that are more grass-like. Other species creep along the ground. They have evolved a variety of interesting forms as adaptations to fill different niches in the habitat. The color of the leaves varies with species. They can be grayish green to bright green and some are striped or mottled.

While aloes are considered warm weather plants they are found in a wide range of elevations and climates, including deserts, grasslands and coastal and alpine areas. Aloe polyphylla grows in elevations as high as 11,500 feet.

The aloes were originally placed in the lily family but there are some significant differences from lilies and so aloes have been placed in the Asphodelaceae family. Apparently Asphodelaceae
family members are known for their pigment-rich black seeds. Along with that, aloes have a special kind of photosynthesis called Crassulacean Acid Metabolism (CAM). This minimizes water loss by only opening its stomata at night. In most plants stomata are open during the day. CAM is found in other desert plants. The plant also stores large amounts of water in its leaves. During drought they can draw on the water. A waxy coating on the leaves also helps prevent moisture loss and reflects sunlight. This is why most aloes have a bluish cast to them.

If you want to grow aloes, one of the keys to success is good drainage and lots of light. If your soil doesn’t drain well you can create a hill of faster-draining material and plant them on that. They require little care except for watering every other week or so. Transplant when the soil is nearly dry. If you are planting a container plant, loosen and remove some of the soil around the roots so they will have contact with the native soil you are planting them in and then DON’T WATER for at least a week. Fertilize lightly mid-spring and late summer if the soil is sandy or if it is being grown in a pot. Pests don’t usually cause problems but if they do, the use of many pesticides will damage the leaves, so be careful.

Most aloe species are frost-sensitive and will need protection. Very few of them are suited for our cold climates. If you know someone who is growing aloes close to where you garden see if you can talk them out of a few plants. You probably won’t find any in local nurseries. At least that way you know they might survive, or check with a local nursery and see what they recommend. They are very nice landscape plants that can attract hummingbirds so they would make a good addition to your yard. They just aren’t very hardy below 20 degrees.

A list of aloes that can survive in 20-degree temperatures follows. A few may survive at lower temperatures. Most of these would be difficult to find but it would be fun to explore the possibility of some unusual varieties.

A. arborescens, killed below 19 degrees is a fairly hardy and very wet-tolerant, large multi-headed sprawling plant. 6 to 9 feet tall.

A. aristata, very cold hardy—needs good drainage. Can handle to about 19 degrees, thorns are dark making for a nice contrast to bright green leaves.

A. broomii may be able to go as low as 17, but 20 degrees would be better. The flowers of this species are quite a bit different. They look more like the stalk found on the mullein plant.

A. brevifolia, a tiny aloe used in rock gardens. Endangered in the wild. Can form large clumps.

A. camperi, (might have bad leaf damage but could survive), has very showy orange flowers, forms colonies; rosettes can grow to two feet tall.

A. claviflora, rots easily when wet too long, has cone-shaped flowers.

A. daviana (now A. greatheadii); flowers range from pale pink to red.

A. claviflora, severe damage at 20 degrees, this one grows tall, the leaves are a dull gray-green with brown teeth at the edge. Scarlet flowers.

A. grandidentata, brownish, yellowish-green leaves with white spots.

A. ferox, flowers damaged at 20, leaves ok, can grow 10 feet tall. Beautiful red/orange flowers.

A. lateritia, leaf damage at low 20’s, bright green leaves with white spots

A. microstigma, white spotted blue-green leaves.

A. perfoliata (formerly known as A. mitriformis), appearance varies greatly depending on the environment it’s in. A creeping aloe, as it sprawls on the ground. During dry conditions the leaves can turn red.

A. perryi, orange spines on the edges of gray-green leaves.

A. petricola, flowers are beautiful, going from red at the top of the stalk to yellow at the bottom, similar to the Red Hot Poker plant.

A. striata, performs well in all but the coldest winters. No teeth but the margins of the leaves is pink. The leaves are broad and pale green.
The florist and chocolate business make big bucks in February as men (mostly) are harassed to make sure they buy both items for their wife, girlfriend, daughter and who knows who else. Just to help out I am adding this list I found of the 15 most romantic flowers for women. I don't agree with every one, so men, make a wise choice for your loved one!

1. Iris: how many of you buy iris for your wife. HAH, I thought so, none of you—for a good reason. Iris isn't generally grown for forcing blooms. They won't bloom until long after Valentine's Day. The meaning of iris: faith, hope, wisdom, and courage. Really.... Iris, Number 1......what are these people thinking?


3. Wildflowers: this sounds like someone trying to grasp enough straws to fill out the list of 15. Pretty, yes, but how many people are going to wander around picking wildflowers. Besides, many places don't want you to pick them. Their meaning: whimsy, spontaneity and thoughtfulness.

4. Lilac: beautiful, lovely smell. I'll buy this one as a favorite. Their meaning: youthful, innocence.

5. Carnation: this is an old standby that you don't see much these days. Everyone had carnation boutonnieres or corsages in my day. Long ago they also had a wonderful spicy aroma. These days not so much. The meaning of carnations: fascination, distinction and love.

6. Orchid: remember when orchids were a rare and expensive gift? Now you can buy them at the supermarket. Not necessarily a bad thing; they are still beautiful. Their meaning: love, beauty, luxury, and strength.

7. Lilies: an eternal favorite for Easter but today lilies can be found in a variety of sizes and colors. The stargazer lilies have been selected because the blooms face upward vs. the downward tilt of most lilies. Whichever way they face, they are an elegant flower. Lilies mean: friendship, devotion.

8. Tulips: the perfect flower for Valentine's Day, in part because they might even be in bloom in your garden. Elegant, graceful and colorful they light up any room. The second reason is they are the perfect flower, their meaning: perfect love.

9. Daisy: not one that comes to mind as romantic but they have a simple sweetness. Pick your color but the meaning of white daisys: innocence, purity, and cheerfulness.

10. Roses: how this flower is only tenth I'm not sure I understand. This is THE Valentine's flower. Probably more roses are handed out than any other flower, likely because they grow well in greenhouses and can be forced to be readily available in February. Still a lovely gift. Their meaning: love, romance.

11. Gardenia: this is one for the southern belles out there. Creamy white flowers with a magnificent scent. Not easy to find in February, but I guess you never know. Gardenias mean: purity, innocence, modesty, and sincerity.

12. Hydrangeas: if you want to impress someone bring a mass of these giant blooms. Each cluster of flowers is bigger than a softball (smaller than a volleyball) so they are dramatic. Their meaning: enduring grace and beauty.

13. Gladiolas: this is another head scratcher. Don't often hear that glads are people's favorites. I've always liked them and they do grow well in the Verde Valley. Growers do force them for the florist trade and they are tall and striking but it is surprising. Nonetheless their meaning: infatuation, moral strength and integrity.
14. Jasmine: the scent of jasmine in bloom can knock you over. The jasmine we are talking about is the lovely white flower that glows against the dark green leaves. They look and smell great on fences and around doorways where you can enjoy the bloom and the scent as you walk by. The meaning: love, modesty, sensuality and attachment.

15. Magnolia: another surprising flower on the list. They are beautiful and dramatic and certainly a mainstay of the South but it seems unlikely for a list of favorite flowers. Must have taken the survey in Savannah. Anyway the meaning: nobility, perseverance and love of nature.

When I went looking for other lists, I found this one was pretty inclusive. Some of the others that made lists were forget-me-nots, camellias, violets, sweet peas, plumeria (really!!??), periwinkle, passionflower, hyacinth and dahlia. So if there is anything to take from this list...buy what your spouse/girlfriend, etc., loves—or roses are always good!

Some Prophecies Do Come True

Grape Culture in Arizona
From the Prescott Miner Newspaper, November 12, 1880

There is no reasonable excuse why the grape should not be extensively cultivated in many of the valleys in Northern Arizona. Lower Agua Fria, Walnut Grove, Santa Maria and the extensive valley of the Verde all present inducements to vine growers, which should cause extensive operations in the cultivation of the grape and manufacture of wine. Wherever experiments have been made, favorable results have followed. Enough is known so that entering into the cultivation of the grape is no speculative thing. In and around Los Angeles the manufacture of wine has become one of the most lucrative industries, and we can see no reasonable obstacles presenting themselves why, at no future day, Northern Arizona should not be entered upon the list with other successful wine manufacturing districts. By a little exertion on the part of those who own suitable farms for grape culture, a few years hence we can possess valuable and extensive vineyards that will vie with those of Southern California.

Thoughts About Gardening
by Nora Graf

I read someplace that gardening was divided into "three species," kitchen gardening, parterre gardening (a formal garden constructed on a level surface consisting of planting beds typically in symmetrical patterns separated by gravel pathways—(from Wickepedia), and landscape gardening (or picturesque gardening). So a kitchen garden can't be picturesque? How about a parterre garden? Does anyone have one....thought not. Things have changed since the 15th century.

Variety may be carried to excess. Too many different plants isn't necessarily the best thing. Try swaths of the same plant in areas.

Life's problems can sometimes be solved in the garden. Take your mind off the problem, invest in a little soil and sometimes the solution pops into the mind.

Lifelong gardening means lifelong learning. A good garden doesn't stay the same.

No garden is ever finished; there is always next year.

Our desires and sensibilities change. Change is good. Learning new things is good.

Weather throws monkey wrenches out there—insects too. Be prepared to punt.

The plant you want most to grow and thrive will not. Other plants, less loved, will often surprise and delight.

Some years are going to be better than others. The thing about gardening is, there is always another season in the wings, another plant to try out.

Sometimes it's good when winter comes.

Neatness is overrated.

Visit other gardens; you never know where new ideas will come from.

Plant something fragrant where you often walk. The scent will lift up your day.

Take chances—surprise is a wonderful thing.

Last: gardening is good for body and soul.
Today literally, nearly everyone has a camera and by the looks of the pictures on the internet they are incessantly posting EVERYthing! But there was a time before the camera where pictures only came from the hands of an artist.

Maria Sibylla Merian (1647-1717) was such an illustrator. It wasn’t unusual for women to paint flowers. It was considered a womanly art. It was unusual for her to be interested in the science of botany and even more unusual for her to participate in a long self-funded scientific expedition.

Merian was born in Frankfurt, Germany in 1647. She was born in the family of Swiss engraver and publisher Matthaeus Merian the Elder. Her father died and her mother remarried and it was her stepfather, Jacob Marrel, also a painter, who encouraged her drawing. Merian married in 1665. She had her first child in 1667. Early on she worked in the family business creating embroidery designs. She gave drawing lessons to daughters of wealthy families, which gave her access to their beautiful gardens. In 1692 she divorced her husband and moved to Amsterdam. For unknown reasons she joined a very strict religious sect called the Labadists. The Labadists were trying to achieve a primitive version of Christianity, which apparently meant denying yourself nearly everything and what you had was community property. She eventually left the group and returned to Amsterdam. The city had changed over the years she spent with the group and as a single woman life could be difficult. Amsterdam turned out to be a good choice, as women could actually own their own business, keep property, and train as apprentices. Agnes Block, a benefactor, hired her to paint exotic plants and butterflies.

Merian went past the surface beauty of her subjects and actually investigated their scientific nature. Her artwork combined art and science. She wrote two books, “Neues Blumenbuch (New Book of Flowers)” in 1675 and in 1707 a book on the lifecycle of caterpillars and their transformation into butterflies and the plants they fed on, titled “Caterpillars, Their Wondrous Transformation and Peculiar Nourishment from Flowers.” The transformation of caterpillar into butterfly was poorly understood at the time but because the book wasn’t written in Latin, the scientific language of the day, scientists ignored it. Further publications of drawings and articles brought her an opportunity to travel to Surinam (a Dutch colony) in South America.

The city of Amsterdam in 1699 sponsored her and daughter Dorthea to travel with the expedition in a time when it was rare for a woman to leave home. She spent two years traveling, drawing and studying. A serious case of malaria forced her home. The result was the work “Metamorphosis Insectorum Surinamensium.” The book covered the lifecycles of over 180 insect species, another unusual thing as women rarely studied insects.

Merian worked from live specimens, again unusual as most illustrators stayed at home and worked from dead and dry material. She also pioneered the idea of depicting insects in relation to their host plants.

In 1715 she suffered a stroke and was partially paralyzed. While she continued to work, it likely became difficult and eventually she shows up on a registry listed as a pauper.

One thing that hasn’t changed, though, is the original artist doesn’t always benefit from their work. Merian died in poverty in 1717, never recognized by the scientific community. It wasn’t until the late 20th century that she was recognized. Her picture appeared on German currency before they converted to the Euro and schools were named after her.

Today her work is highly collectable and she was honored in an exhibition at the J. Paul Getty Museum in 2008.
University of Arizona Offers Beginning Farmer Workshop

Are you interested in growing fresh produce to sell? This four-session workshop is for those interested in starting their own business growing vegetables and/or other specialty crops. This is a great opportunity for youth and others looking to gain some first-hand experience developing a business plan and acquiring niche marketing skills. Participants will also learn how to grow in a hoop house so that they can supercharge the annual growing and market potential of their land. This course is appropriate for individuals simply growing their gardens for their own use as well as those wishing to grow fresh produce for market.

Three classroom sessions will be taught by a team of University of Arizona Cooperative Extension Specialists. Workshop sessions will be held at the Yavapai County Cottonwood Annex, Verde Room at 10 South 6th Street in Cottonwood on Tuesdays February 18, March 4, and March 18 between 8:30 AM and 12:30 PM. The fourth session will be a Field Tour of a local farm and the date will be announced at the first session.

There is no cost to attend, but an RSVP is required and class size is limited to 25 participants. To RSVP, please call the Camp Verde UA Extension Office at (928) 554-8990. The office is open between 9 AM to noon and 1 to 4 PM M-F.

I don’t know about you, but I’m pretty tired of the cold by this time of year. Not that I want the really hot summer days yet but a nice hearty stew will help break the winter chill.

Yucatán Pork Stew with Ancho Chiles and Lime Juice

contributed by Tia Harrison: active: 40 min, total time: 3 hrs 40 min

1/4 cup vegetable oil
4 1/2 pounds trimmed boneless pork shoulder, cut into 2-inch pieces
Salt and freshly ground pepper
2 large white onions, cut into 1/2-inch pieces
8 garlic cloves, smashed
1 pound carrots, cut crosswise into 2-inch lengths
3 ancho chiles, seeded and cut into very thin strips with scissors
3 bay leaves
Pinch of ground cloves
1/4 cup fresh lime juice
6 cups chicken stock
6 plum tomatoes, quartered lengthwise
2 tablespoons chopped cilantro
Steamed white rice and sliced jalapeños, for serving

1. In a very large enameled cast-iron casserole, heat the vegetable oil until shimmering. Season the pork with salt and black pepper and add half of it to the casserole. Cook over moderate heat, turning, until browned all over, about 10 minutes. Using a slotted spoon, transfer the pork to a plate. Brown the remaining pork.
2. Return all of the pork to the casserole along with any accumulated juices. Stir in the onions, garlic, carrots, chiles, bay leaves, cloves, lime juice and chicken stock. Season with salt and pepper and bring to a boil. Add the tomatoes, nestling them into the liquid. Cover and cook over low heat until the pork is very tender and the carrots are cooked through, about 3 hours. Discard the bay leaves and stir in the cilantro. Serve with rice and sliced jalapeños.

MAKE AHEAD The stew can be refrigerated for up to 3 days. Reheat before serving.
Congratulations!

The following Master Gardeners have completed their 50 hours.

Linda Hochman – mentor: Mary Barnes
Scholly Ketcher – mentor: Connie Loving
Tony Dale – mentor: Ken Earls
Al Herron – mentor: Bill Cart
Susan Tolley – mentor: Hope Fonnet
Phyllis Jiacalone – mentor: Sherry Howard
Bob Miller – mentor: Doug McMillian
Marion Johnston – mentor: Nancy Deane

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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Next Meeting

February 19, Camp Verde, 6:30pm

The meeting is at the Superior Court Building off of Hwy 260 in Camp Verde.

2840 N. Commonwealth Dr.

The speaker is Wayne Ranney. His topic is the geology of the Verde Valley.

Wayne has studied House Mountain, the entire Verde Valley, the Grand Canyon and Colorado Plateau. He is author of several books of this region. He is a world travel escorting tours. We are fortunate to have Wayne as our speaker.