

Yavapai Gardens

Master Gardener Newsletter

April-May 2019



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A Tough Winter?

by Nora Graf



I think it's been a long winter. I'm writing this after the "BIG" February snowstorm so I might be a bit snowed out but as far as I'm concerned there has been a real lack of sunny warm days this past winter. For a person who really likes the rain, I think I've had enough of that too. It's just that this winter has been very cloudy, wet, with damp days

interspersed with fleeting sunshine, the opposite of what an Arizona winter should be. I mean, really, three, YES, THREE snow storms in Camp Verde. That isn't supposed to happen!

I probably shouldn't complain. At least I didn't have to shovel snow; it melted of its own accord fairly quickly. I did suggest to a friend in Flagstaff to be careful as he might freeze or get lost while searching for his small car out in his yard somewhere. (If you didn't know, Flagstaff broke its record for snowfall in one day at 35.9 inches. The earlier record dating from 1915 is 31 inches. It continued to snow the next day for around 40 inches.) The upshot of this is my yard looks pretty dismal but I am sure that soon it will be summer. You know as well as I do that winter and summer seem to swap places overnight around here. So be prepared—summer will be here by the time this article comes out.

There are going to be weeds. Lots and lots of weeds and even more weeds. There is nothing weeds like better than good moisture in the soil and warming temperatures. The only real solution is to keep after them. Go out every day and weed. Cut them down before they set seeds. If you have wildflowers just wait till they flower to figure out those you want to keep and those you don't. How to tell the difference between weeds and wildflowers? When they bloom if you like them they are wildflowers, if you don't they are weeds. There is a fine line between the two. Some plants will be considered both depending on whose garden they are in.

Don't fertilize when the temperatures are cold and the soil is wet. Won't do the plants much good and you will be wasting money. On that note, I would suggest not fertilizing at all. As gardeners, we tend to over-fertilize. All the grumbling about desert soils makes us want to empty bags of fertilizer on our landscapes. I'm going to suggest this year to hold off and see how your plants grow. Signs of fertilizer deficiency will show up in your plants. (I only fertilize my



vegetable garden every 3 to 5 years, my iris even less. I'm risking the wrath of rose growers here but I have never fertilized my roses and they have been blooming steadily for years!) Fertilize if they need it, not if you think they need it. Two different

things! I would suggest getting a soil test to see what is actually deficient in the soil or wait until your plants show a problem before adding anything. I'm not sure what a soil test cost these days but it's probably going to be worth it. Contact the Master Gardener Help Desk for information. They can provide you with all the information you need to get a good soil test. Trust the results of the soil test and don't start throwing Epsom salts or some other home remedy out there because a friend told you about what they did. Friends are great but I wouldn't necessarily trust them to tell me what's wrong with my soil.



Water when the plants need it. Water deeper and less often. Our soils will hold onto all this winter moisture for a while and just because it looks dry doesn't necessarily mean you need to water, especially those plants with deep root systems like trees and shrubs. A soil probe will help you determine whether you need to water. You can pick up a jim-dandy one at the MG Help Desk in Prescott and Camp Verde for the low-low price of \$5, but a long screwdriver will work. You can also dig a hole to see the moisture level below the soil surface. Since this article is turning into a bit of a rant, I want to point out that it seems SO MANY people I talk to water incorrectly, especially those with automatic systems and those that hand water. How many times have I heard people tell me they have the water on a timer for 10 minutes every day. It's enough to make me want to fling myself into a dry wash bed head first. (A dry wash bed because it's sometimes hard to find water deep enough to drown yourself in around here.) For trees and shrubs, they especially need a long soak infrequently. Please water several hours (check your soil with that handy-dandy probe to make sure the water is going deep) once every few weeks. For perennials, maybe, a deep watering once a week. Annuals will probably need more frequent water. If you hand water, just accept that plants will die. It is really hard to give a plant enough water in the right place with hand watering. It's fine if hand watering is enjoyable to you but make sure you have an alternative for increasing the amount of water your plants

get. The only plants that I can think of that might need everyday watering are container plants or raised beds.

Just try it sometime; check your soil before you water. You will soon figure out how often is really necessary. Two last notes: watering deeper and less often encourages roots to grow down and moving into soil layers that hold more moisture. Win-win situation. Mulching when it gets hot is a good way to slow down the loss of water from the soil, leading to less watering.

One last rant, (really feeling much better about the cold weather, getting all my frustrations out!) I'll even try to make it a mild rant. I know there is a lot of controversy about planting natives. There is research showing that natives provide better habitat for native wildlife, which includes insects, birds, reptiles, and mammals, while there are other studies that say that isn't entirely true. My rant is to perhaps err on the side of natives and encourage the use of your yard for wildlife. This doesn't mean you can't plant non-natives just try to make your yard a stopping place, a refuge for the creatures your home displaced. Sometimes there are animals you don't want like rattlesnakes, javelina and a host of insects but sometimes we should be willing to accept that nature is nature, it is humans who are insistent on labeling things good and bad. So instead of planting a pristine lawn, how about a meadow-like planting of native grasses. Instead of spending time and money planting something that you loved when you lived in the Midwest, how about finding something more suited to our soils and growing conditions that maybe will provide cover for the birds or berries for them to eat. And yes, accept the fact that sometimes rattlesnakes come by, sometimes scorpions end up in the house, sometimes you have hornworms (wonderful sphinx moths later on) and sometimes javelina. Or in my case an influx of gophers and other rodents. Just so you know, my yard is far from pristine, it's mostly weedy. On the other hand, I have birds hanging around and hummingbirds year-round. I come across interesting insects sometimes, including one that glowed in the dark. I've had some unusual snakes also, not the run of the mill common ones. And then the rodents which have been hard to stomach but it is amazing how much earth they can turn over and dig through in a short time. I've also started hearing great horned owls some nights and two beautiful local cats who hang around those rodent holes. Some advice, though, for this coming fall. Don't plant tulips where you have javelina. It's just like tossing candy to kids.

So, by now it's hot and all my angst about the cold should be over with. Now it's time to start complaining about the heat. Don't get upset about it, it's just the Arizona way.

Rant over, have a wonderful spring!



Identifying Flowers

by Nora Graf

Flowers come in many different forms and shapes. When you are trying to identify a plant having a flower is important, and understanding the language botanist's use will go a long way in identifying your plant. Here are a few of the terms you might encounter in trying to identify a plant.

Types of Inflorescence

From Google Dictionary: The complete flower head of a plant including stems, stalks, bracts, and flowers the arrangement of the flowers on a plant, the process of flowering.

Head: This is the most common flower type. It is a dense cluster of petals attached to a common base. A sunflower is an example of a head. It is actually multiple flowers; each petal is a flower and each of the center parts are individual flowers.



Spike: A cluster of flowers that are attached to a single tall stem. They can be attached on any side of the stem and have no

branches between the flowers and stem. Sages and foxglove are examples.



Raceme: Flowers are attached to any side of the stem by shorter stems. Lily of the valley and hollyhocks are examples. Racemes and spikes are sometimes confused.



Panicle: This describes a type of branching inflorescence. Lilacs,



hydrangeas, and phlox are panicles.

Umbels: Think carrots, Queens Anne lace. Flowers at the top of pedicels which are attached to the top of a stem, forming umbrella-like

shapes.

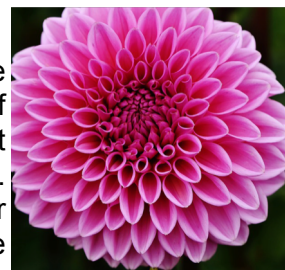
Blooming

Bloom period is the total time a plant is in bloom. Keep in mind that catalogs and nursery labels are often very optimistic when it comes to how long a plant will bloom. It depends on climate and growing conditions. Long-blooming flowers are plants that will bloom until the first frost. Many annuals like marigolds, petunias, and salvias are long-blooming. Reblooming plants will bloom in the spring, stop through the summer and then rebloom in the fall.



Recurrent is a term applied mostly to roses where the plant has a heavy bloom period but flowers slowly through the rest of the season.

Petal arrangements: A single flower has one row or whorl of petals. This is the default condition of most wildflowers. Double flowers have two or more rows of petals. These are found frequently in man-made hybridized plants. The perfect example is the difference of wild roses and most of the roses in our garden. Pollinators seem to prefer single flowers.



Tubular, funnel-shaped and campanulate flowers; These flowers look somewhat similar as they are long and narrow.



Funnel-shaped

Funnel-shaped morning glory

flowers are shaped like funnels (morning glories), wide at the top, narrower at the base.

Campanulate are narrower than tubular and shaped like a bell (foxglove).

Tubular flowers are longer than wider, shaped like a tube (penstemons)

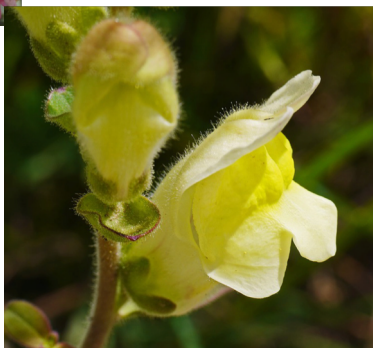


Companulate Foxglove



Tubular Penstemon

Bilabiate flowers have two distinctive lips. Think snapdragons and



Argemone pleiacantha

Southwestern Prickly poppy

by Nora Graf



With all the rain we should have wonderful wildflowers this year. One of my favorites is the prickly poppy. Its big flamboyant white blooms are frequently seen along roadsides. It will be blooming about now and will continue to bloom through the year. When the

sun shines, their translucent petals glow.

This poppy has very large blooms up to five inches across. There are six petals that look like crepe paper. Bright yellow stamens form the center of the bloom which many people equate with a fried egg. They are considered both an annual and perennial. The plants can grow from 3 to 5 feet tall so they are hard to miss. The leaves, stems, and sepals are a blue-green color and covered with spines which is one of the reasons I expect they aren't as popular as they should be. If you break the foliage it will ooze a yellow sap. All parts of the plant are poisonous. They contain several toxic alkaloids like papaverine and berberine (gives the sap it's yellow color). The prickles and poisons are used to deter wildlife from eating it.

The southwestern prickly poppy is native to Arizona, New Mexico along with Chihuahua and Sonora, Mexico. There are three subspecies, *ssp. pleiacantha* is the only one that occurs in Mexico, *ssp. ambigua* is endemic in Arizona. *Ssp. pinnatisecta* (Sacramento prickly poppy) is found in only one area of New Mexico and is considered endangered. There are other poppies that come under the prickly poppy umbrella. Fifteen different species are found throughout the United States except in the Pacific Northwest.

While I think of them as pretty general desert flowers they can normally be found between 1500 and 5000 feet although I think I have seen them in higher elevations. They like disturbed soils along roadsides, washes, slopes and plains.

The alkaloids in the prickly poppies are known to cause dilation of blood vessels and edema severe enough to kill a person. One species in India has caused mass poisonings when the oil from its seeds was mistakenly added to mustard oil.

I don't think I have ever seen these grown in a home garden. I suspect the prickles and poison put people off but lots of plants we grow have prickles and poisons. I'm talking to the rose growers and people with larkspurs in their gardens. I understand if you have pets and young children using your yard but for those others, prickly poppies might be a fun addition. One thing to consider is that they are great plants to attract pollinators. It's pretty rare when you look at the flowers in the wild that they don't have all sort of insects hanging around them.

Meet A Master Gardener: Leonard Filner

by Laurie Cameron



I met with Leonard at the County Extension office in Camp Verde where he volunteers one day a week as a Master Gardener to provide educational information to clientele who call for advice or information on any variety of garden issues. Leonard completed the Master Gardener training in 2016. Like many, perhaps most Master Gardeners, Leonard is not a native but hails from a region of the United States where gardening is not quite as challenging as here. In Leonard's case, he comes from Pennsylvania.

Prior to moving to Yavapai County in 2009, Leonard was a landscape architect in California. He learned of the Master Gardener program at the farmer's market in Cottonwood where he now resides. He enrolled in the program to learn how to address the many challenges he encounters here with its harsher environment and soil conditions.

He enjoys his work at the help desk of the extension office where he has acquired a wealth of information as he researches issues brought to him by the

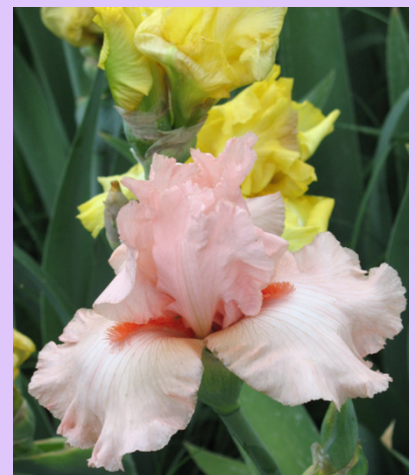
public. He draws on samples, pictures, and internet sites to identify plants and symptoms affecting their health.

His major volunteer efforts have involved the design and implementation of gardens. He designed the irrigation system and helped to install the native plant garden in front of the extension office in Camp Verde. He has also worked at schools, libraries and non-profit organizations including Rainbow Acres where he works as a caregiver and at the Old Town Mission in Cottonwood. Sadly, the project at the Old Town Mission, which was meant to provide its own fruits and vegetables to the food bank, is on hold for the moment, but he hopes that it will resume sometime in the future.

Since becoming a Master Gardener, Leonard has donated over five hundred volunteer hours. He most enjoys designing landscaping projects and setting up research projects. He would love to be more involved in greenhouse gardening. When asked for his thoughts on how to improve the MG program, his only comment was that the program was almost perfect as it was.

Kaleidoscope of Color 2019, Prescott's Festival of Iris

Saturday, May 4th, 10:00 a.m. to 3:00 p.m. Location: Mortimer Nursery, 3166 Willow Creek Road, Prescott, Arizona. Prescott Area Iris Society (PAIS), contacts: Dennis (623) 980-6627, website <http://prescottirissociety.org>, Email: president@prescottirissociety.org. PAIS presents its 20th annual Iris Exhibit and Potted Iris Sale. Free event open to public, features an amazing variety of iris colors and patterns. Vote for your favorite irises. Stunning displays of blooms and arrangements. Planting and care demonstrations. Hundreds of potted Irises for sale. Local gardeners, who wish to participate in horticultural, or artistic design categories may pick up the rules form at Mortimer Nursery, or go to our website <http://prescottirissociety.org/> and print the form. Also, visit the Yavapai College Sculpture Garden, 1100 E. Sheldon Street, Prescott, to see newly expanded Iris gardens in bloom.



Lettuce *Lactuca sativa*

Originally printed in the April 2000 edition of *Yavapai Gardens* and edited to bring it somewhat up to date.
by Nora Graf



It's so much a part of our lives, we barely think about it, the obligatory iceberg salad before the steak dinner at a restaurant—the base we reluctantly use for piling on

the extra goodies at a salad bar. There are shreds of it on our tacos or piled in a wet limp lump on top of enchiladas. When was the last time you went for steak and exclaimed what a good salad you had? (Editor note: since I originally wrote this, iceberg lettuce has gone out of fashion and back into fashion renamed as the wedge salad to make it trendier I guess.) Today it doesn't have to be that way. Beyond iceberg is a wonderful variety of different and nutritious lettuces and they grow quite well in our mild climates.

Lettuce originated from the wild species *Lactuca serriola* L. in Asia, North Africa to Northern Europe. There are other closely-related varieties including *L. virosa* and *L. saligna*. Other species are found in Turkey Iran, China, Indonesia, and North America.

The Egyptians were probably the first to use lettuce. Paintings in tombs contain a plant that is thought to represent a variety of cos lettuce (cos lettuce are a romaine type) that dates from 2680 BC. There is evidence that the first plants were raised for seeds rather than the leaves. Seeds were pressed to make an edible oil.

Lettuce appears in Greek mythology. The goddess Aphrodite and the young man Adonis were having a torrid love affair. She hid him in a bed of lettuce where he was killed by a wild boar. There are several variations in the story. His death was forever connected with lettuce in Greece where it assumed a religious and cultural metaphor for “food for corpses” and male impotence. Greek author, Athenaeus, devoted an entire chapter of on lettuce and its ability to render male lovemaking worthless. Ancient Greeks associate perfumes and spices with virility and seduction while lettuce was the opposite.

Romans are credited with some of the first uses of lettuces. They were the ones that began the tradition of starting a meal with a salad. During the reign of the emperor Domitian (AD 81-96) it became fashionable to serve a lettuce salad as the first course. It is thought that it acted as an antidote to the passions that the meat course might inflame.

Romans introduced lettuce to Britain and this is first mentioned in “Gerard’s Herball” in 1597 where he writes about eight different varieties. These early varieties were blanched before eating to remove the bitterness. Wild lettuce is very bitter and over time fewer bitter

varieties were selected for cultivation. The bitterness comes from the “latex” the plant produces. This white milky substance is not commonly seen in leaves picked up in the grocery stores but you will see it in freshly picked leaves from your garden lettuce especially when the plant is ready to bolt. Firm-headed types (like iceberg) were first described in the 16th century. Early British settlers brought lettuce seed to America.

While consumers today don’t think about lettuce’s medicinal properties, historically lettuce is known as soporific (tending to induce drowsiness or sleep). It was mentioned by Hippocrates, who was born in 456 BC. It is the latex that was used as a substitute for opium or laudanum. In 1809 a Scottish doctor published a paper: “An account of a method of preparing a soporific medicine from the inspissated white juice of the common garden lettuce”.

By medieval times, references to lettuce were common, mostly as a medicinal herb. They mention the three types we are familiar with today—heading lettuce, loose-leaf and tall or cos. (The term cos comes from the Greek island of Cos where some of the earliest seeds came from.) The tall, or cos variety, was grown by the papal gardeners in Rome. The French came to call it romaine. Somehow, San Francisco gardeners in the 1880s came to call the plant romaine also and the name stuck and spread.

In the early 18th century the evolution of lettuce was centered in France, Italy, and Holland. Many of the old standards were created in Holland. Today we have a wide range of varieties available.

In our area lettuce can be grown year-round depending on where you live. In hotter areas, lettuce will bolt quickly in the summer while in other areas, you may have to provide some protection from the cold, depending on the variety. There



are hundreds of lettuces to choose from so try something besides iceberg. Iceberg was really developed for the commercial trade so its claim to fame is that it will pack and ship well. It grows

extremely well in Yuma, Arizona and the Imperial Valley of California, making it primary winter lettuce for years. When you are knee deep in snow in Nebraska, I suppose any fresh lettuce would be a thrill but we have the advantage of being able to pick and choose from many more beautiful and nutritious types. Today seeds and plants can be found in a huge variety of colors, heirlooms, and modern hybrids.

Lettuce is one of the easiest plants to grow.

Practically all you have to do is throw the seed on the ground and water. While some soil conditioning and loosening of the soil may be helpful, lettuce isn't too fussy. Plant in early spring or late summer for the best crops. Heat is the factor that can stop your lettuce. Lettuce will start to bolt (flower) when the temperatures get warmer and the plant can taste bitter. There are some varieties that are more heat tolerant. The seeds germinate in the fall, forming the typical rosettes of our familiar varieties. In summer the plant sends up a flowering stalk that reaches around two feet tall. The leaves that form on the stalk are often spiny. Flowers are small and pale yellow and the seeds blackish. Sow the seed directly in the soil or you can start plants inside. They like cool conditions and even moisture.

Leaf lettuce can be cut carefully and the plant continues to grow, providing salad greens for a long period of time. You might find seeds marked "cut and come again". Heading lettuces are picked one time.

As usual, with anything we like to eat, a variety of non-human critters like lettuce also. Seedlings are vulnerable to cutworms, slugs, and snails. Aphids also attack lettuce. In some areas mildew can be a problem but it is not usually a serious issue.

Seed-saving from lettuce is possible, but the plants easily cross-pollinate so if you wish your variety to remain pure, you will have to grow only one variety or somehow protect the plant from insects bearing pollen from other plants. Lettuce also throws "sports" and revisions to ancestral types, so your seeds may not always grow true. This is not necessarily a bad thing, you could discover the next prize-winning type. So, if you are the adventurous type.....

Balsamic or Fruit Vinegar Vinaigrette

4 T. Balsamic or fruit vinegar

2t. red wine vinegar

1 shallot, finely
diced

Salt and pepper

5 T. olive oil

Combine vinegars
and shallot, salt
and pepper in bowl.
Let stand 15 mins.
Whisk in olive oil.
Add more of the
ingredients, if
desired, to taste.



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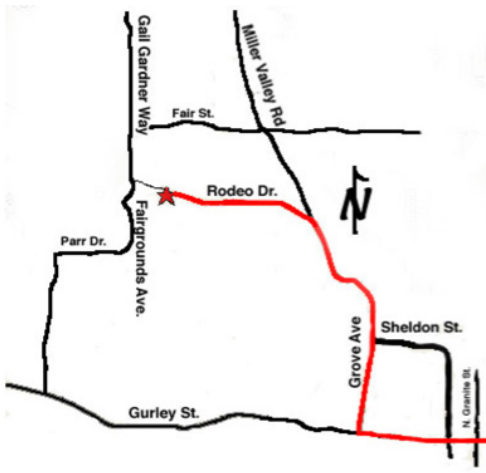
2018 Newsletter Deadline Schedule

The newsletter comes out every two months. Please note the deadlines.

Publish	Date	Deadline
Feb-Mar	Feb 1	Articles Jan 5, announcements Jan 25
April-May	April 1	Articles March 5, announcements Mar 25
June-July	June 1	Articles May 5, announcements May 25
Aug-Sept	Aug 1	Articles July 5, announcements July 25
Oct-Nov	Oct 1	Articles Sept 5, announcements Sept 25
Dec-Jan	Dec 1	Articles Nov 5, announcements Nov 25

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MG NEWSLETTER



Next Meetings

April 17, 2019 Monthly Master Gardener Association Meeting, Camp Verde. Speaker is Jon Fredericks from Yavapai College, "Biodiversity of Plant Communities."

May 15, 2019 Class Welcome (in lieu of MGA meeting), Prescott

July 13 Monsoon Madness