Events & Activities

MG Association Meeting, Wednesday, Feb 15, 6:30pm  See last page for information.

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.

Prescott Orchid Society, meets 3rd Sunday of the month, 2pm at the Prescott Library, call Cynthia for information.  (928) 717-0623

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

Verde Valley Iris Society call Janet Regner at 602-370-4836 or email her at jkregner@aol.com

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

Native Plant Society Meetings 6:30pm, Highland Garden Center for Natural History, 2nd Thursday of the month.  Attending the talk qualifies as Continuing Education.  Non-members are welcome to attend.  928-776-9550

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

Table of Contents

2012 Gardening . . . 1
Plant Explorer . . . 3
Western Banded Gecko . . 4
Abiotic What??!! . . . 5
To Cut or Not to Cut (Mistletoe) . . . 6
MG News . . . 7

Wow, the beginning of another gardening year.  If you have been lazing around watching TV or snuggling up in a warm place reading a book, it’s time to brave the elements and start thinking about planning and working in your garden.  Seeds need to be started, the garden tidied up and how about planning ahead.  My gardening plan normally consists of fantasizing about what I would do if I had unlimited money and someone to do the heavy work.  Since most of us don’t have that, here are some thoughts about planning.

Relying on plants from the nursery is easy but what about starting seeds.  You have a bigger choice of varieties for one thing.  There are a lot of amazing plants to try if you start your own seeds.  The big nurseries will only buy what they think they can sell.  Even though they are selling a bigger variety of heirlooms than ever before, you won’t be able to find Basinga (a real tomato!).  Besides, seeds are magical things, from something the size of a grain of salt you can get plants that overrun the garden.  Magic like that should be embraced.

It’s pruning season.  Please don’t take out the pruning saw and clippers and just start whacking away.  Starting in November, someone in my neighborhood has been “pruning.”  As time has gone on, what he has left is getting freakier looking and spindly.  Not much thought was given to the shape of the plant, about future blooming or much of anything.  Almost worse than the cubes and tennis balls favored by city maintenance crews!  Less is usually more when it comes to pruning.  If you are pruning flowering shrubs find out whether they bloom on old wood or new wood to make sure you prune at the correct time.  Prune to remove unsafe limbs (safety issue) and to maintain the health of the plant.  (Shrubs that bloom on old wood—last year’s growth should be pruned after blooming is complete.  For those that bloom on new wood, this year’s growth, prune early spring before bud break.)

Create a compost pile.  If you garden, you should have a compost pile.  I’m a lazy composter and I just throw all my leaves and vegetation from the yard into a pile.  To that I add vegetable and fruit stuff from the kitchen.  I have a sprinkler that gets turned on when I water the vegetables and that is all I do.  (Compost piles dry out too much otherwise).  Yeh, I know I should be checking tem-
temperatures, making sure it’s balanced out and probably a lot of other things, but the compost pile is just a small part of my life. While this method takes a while longer to produce compost, it does show that you can compost with minimal effort. I still get nice compost. Anyone can do it. The reward is worth it.

Prepare your gardening beds AHEAD OF TIME! This is a “do what I say, not what I do” kind of message. I am often so busy I’m going, Oh my gosh!!!, I need to plant the peas today!!! Then I rush out and plant the peas today. The better plan is to get the garden ready before that moment. Add compost and fertilizers a few weeks before you plant.

Plan on using less this year: less pesticide, less fertilizer. For the less fertilizer part, see the section about composting. For the less pesticide, embrace IPM. Integrated Pest Management is about knowing what the pest is and just targeting the pest you know. Then select the pesticide and TIMING to have the most impact. Know your enemy. Sometimes you might feel you have to spray. In that case, read the label on the pesticide container and make sure it works for the pest you want to target and apply it according to the directions. Before you spray there might be other alternatives to an insecticide. Aphids can sometimes be controlled with a spray of water, beneficial insects may be available and sometimes you can just ignore it and accept the loss. This past summer I had two of my zucchini plants decimated by aphids but I had already gotten quite a few zucchinis from them so I let the aphids have at it. Surprisingly, the two plants eventually recovered and started producing again. It was really late in the season but they survived. Just remember sometimes less is more.

Everyone wants tomatoes by July 4th or earlier. Some years you can get away with planting really early, other years it means death to the plant. As much as we want to change the seasons we can’t. Be mindful of the climate in the area. If you plant things too early or too late they can be set back or killed by unexpected frosts or heat waves. Keeping a journal that includes weather information and when you planted is helpful for the future planning of your planting schedule. Know your location and what the weather is doing.

Pick appropriate plants for your climate and location. Really serious gardeners like to push the edge of the envelope in terms of what they can grow and there isn’t one of us that hasn’t lusted after a plant that only grows in New England or some other faraway place. For the most part, though, I suggest you don’t do it. Pushing the climate envelope will simply be a waste of time and money. No matter how much we try, chances are Himalayan blue poppies aren’t going to grow in our garden. Some plants are just not suited to survive our cold winters and very hot summers, dry conditions or soil types. When it comes to location, don’t plant something whose mature size is 8 feet across in a space that would suit a 3-foot plant. Don’t plant a pine tree three feet from the house; don’t plant a mesquite tree next to the well house and don’t plant a perennial sage in the flowerbed with small annuals. You get the picture. Make sure you know what plants will grow in your climate and what size they will be at maturity. Otherwise you will end up with dead plants or have to hire someone to remove a 30-foot pine because it’s lifting the foundation of your house.

So there you go, lessons for the new year. Not difficult—we just sometimes fail to plan ahead. Spontaneity is a good thing and feel free, but try to not end up with gardeners’ remorse. So it’s time to get busy, have fun and a great gardening year.
This isn’t about the plant; it’s about the man who it was named after. Edward Palmer was one of Arizona’s first plant explorers and you probably don’t know anything about him. Palmer was one of several men who came to Arizona to explore and collect in the unknown West thanks to the US Army. He was an adventurous man who spent a lifetime on the road collecting plants and objects and is considered the father of ethnobotany. His collections now reside in the Smithsonian’s National Museum of Natural History and the Harvard Library, among others.

Palmer was born in Britain in 1829 and came to America in 1849. By 1853, he was taking his first expedition in America as a naturalist. Palmer became a doctor but had little training. He spent a year attending the Cleveland Homeopathic College. In 1861, Palmer enlisted into the Union Army. He had chronic rheumatism and it became enough of a problem that he was discharged in 1864. This didn’t stop him, though, as he began working as an Army contract surgeon.

In 1865, he was assigned to the Arizona Territory. At Fort Whipple (Prescott) he met one of the other great naturalists of the time, Elliot Coues. Between the two of them they collected over 600 specimens that were sent to the Missouri Botanical Gardens in St. Louis. Coues and Palmer had a bit of a dust-up at some point in their relationship, with Palmer accusing Coues of claiming credit for a shipment of specimens that Palmer had entrusted to Coues.

In 1866, Palmer came to the Verde Valley with the Arizona Volunteers (Palmer served at Camp Lincoln, located at the confluence of Clear Creek and the Verde River, near the elementary school today. It was replaced by Camp Verde in 1871.) The volunteers were a pretty ragtag group of men. When they left Fort Whipple, Palmer discouraged drinking the alcohol (in the form of whiskey) he brought along to preserve specimens, by publicly pouring arsenic into the alcohol barrels. Drinking heavily was a soldier’s past-time and Palmer had experience with his alcohol disappearing even if it already had specimens stored in it.

Stricken with malaria, Palmer spent only a year in the Verde Valley before going back to Fort Whipple. He recovered eventually and was assigned to Camp Grant, at the junction of the San Pedro-Arivaipa Rivers. Three months later he asked to be released from his contract with the Army and he was. Palmer was always more a naturalist and collector than a doctor. At one point a commanding officer complained because he felt the doctor was spending more time collecting than doctoring.

From that point on Palmer spent his life exploring and collecting. He spent most of his time in the southwestern United States, Mexico and South America. He collected plants and ethnological specimens for the Smithsonian Institution, the Department of Agriculture and the Army Medical Museum. He is credited with discovering 1,162 new plant specimens, two hundred of them are named after him, including one genus of palm (Palmarella). In his travels Palmer forged relationships with local Indian groups and was knowledgeable about Indian culture. He was once considered for the post of special agent for the Pima and Maricopa Indians. He is probably better known for his archaeological work than his botanical collecting.

There is some confusion about Palmer’s findings, as parts of one collection were lost at sea and others sat around for several years before they were reviewed. In the meantime, notes and documentation had disappeared or become unreadable. Regardless, Palmer left an enduring legacy behind him and a few plants to remember him by.

Some of the plants named after him:

Amaranthus palmeri—Palmer’s Amaranth
Lupinus palmeri—Blue-bonnet Lupine
Distichlis (Uniola) palmeri—Palmer’s Grass
Euphorbia palmeri—Woodland Spurge
Phacelia palmeri—Palmer’s Phacelia
Have you seen a small colorful spotted and stripped lizard around your house, most likely at night? It might be the Western Banded Gecko. I seem to have large population of them around my house. Occasionally, if I am moving stuff around on the porch, one will scurry out. During summer evenings when I leave the door open I sometimes find them clinging to the screen door. The love my enclosed back porch but unfortunately the cats like to chase and catch them. Sometimes I can rescue them, but not always.

Their proper name comes from the Greek. Koleos translates to sheath and onyx to nail, talon or claw, referring to its sheathed claws. Variegatus is Latin for, “of different colors,” which is referring to its colorful skin patterns. Geckos are found in the southwestern United States and northern Mexico. They are small (3 inches) slender lizards and have dark stripes and spots on a pink-orange body. When young they will have mainly stripes but the stripes break up as the lizard ages. The head has a triangular shape, the toes are long and slender and the tail is constricted at the point where it joins the body. The fatter the tail, the better fed it is. The tiny scales give the skin a very silky texture. They always seem soft and vulnerable to me in comparison to the rugged looking lizards found sunning on rocks and fenceposts. They have large eyes with movable lids.

Active at night, geckos hide away during the day. They use burrows or, in my case, hide in the piles of gourds and other things I have on the porch. During the winter, generally from November through February, they hibernate. While I have never heard them, geckos will emit a short squeak when picked up. They also readily lose their tails when disturbed. More than once I have found a wigglng tail on my floor from a cat-harassed gecko. Geckos will also curl their tail over their head to imitate a scorpion in hopes of scaring away a predator.

Geckos are predators and eat small invertebrates including spiders, beetles, grasshoppers, larva, termites and baby scorpions. Breeding occurs in April and May. They lay only one or two eggs, anytime between May and September, which hatch in 45 days. They have been known to lay up to 3 clutches per year.

In spite of their delicate appearance, they live in some pretty harsh climates. Geckos can be found in desert scrub, sand dunes, creosote flats, rocky slopes and high desert plateaus. If you see one, watch and enjoy and leave it alone. In your yard, they are part of the often unseen pest control squad.
At the conference held in October we had a speaker talk about abiotic factors and how they affect plants. There was a lot of, “what the heck is abiotic?”, when people heard about the speakers and their topics. Well, for everyone out there, abiotic factors are non-living things that will affect your plants. So once you rule out micro-organisms (bacteria, viruses, nematodes) insects, birds, livestock, parasitic plants, etc; what is left are the abiotic factors. These can include nutrient deficiencies, moisture extremes, temperatures, chemical problems, phytotoxins, pesticides and others. So you know about abiotic factors, you just haven’t heard the word before.

It is often difficult to figure out the difference between the two. The symptoms of problems can often be similar. For example chlorosis and leaf drop can result for a number of reasons. To help you distinguish between the two keep these characteristics in mind.

**Biotic factors**
1. Physical evidence of a pest or disease may be present.
2. The problem may spread rapidly.
3. The injury may often be limited to a single species, although some problems will cross from species to species.

**Abiotic Factors**
1. There is rarely any physical evidence on the plant like frass, insects or moldy spots.
2. The problem usually does not travel from plant to plant and may not develop progressively through the plant.
3. The problem may affect many species in a planting.

This may sound kind of vague but by assessing the problem carefully you may be able to eliminate some suspects from the list. Good knowledge of how plants grow, your soil conditions, water habits and fertilization will help you figure out what is wrong with your plant.

Assessing the problem: It’s difficult-you have to be a well-informed detective. Many of the symptoms can be a variety of things. But before you spray anything on your plants consider some of the ideas below.

Wilting is a problem where most people actually jump to the right conclusion: that wilting is caused by insufficient water in the plant’s systems. You might not jump to the right reason for the wilting though. My experience with people is that they are remarkably unwilling to think they are watering incorrectly or that the soil may be a problem. Poor watering practices are a common problem. Ask yourself, is the plant getting enough water? Can the soil hold the water or is it draining quickly. Mechanical injury to the roots can also cause wilting. The roots are not able to move water into the plant.

Changes in the leaves where edges are drying out, the color is changing from green to yellow, splotchy spots, inter-veinal color changes or just the sudden dying of leaves can all be caused by abiotic factors. Some of the causes would include salt damage. The edges of the leaves turn brown and dry. This is prevalent in our area and is usually caused by frequent shallow watering vs. infrequent deep watering. The salts in the soil and water move through the plant into the leaves and cause the drying edges. It could also be sun damage, herbicide damage, even pollution. Inter-veinal color changes can be nutrient deficiencies. Loss of leaves in the summer, especially on trees planted outside of their comfort zone, can be due to poor watering practices, not enough water and high temperatures. I’ve seen this in cottonwood trees that are planted in sandy soil in a hot climate.

Herbicides can be a factor. If you have a neighbor who sprays abundantly, wind-blown spray or just carelessness on the part of the sprayer or even maybe intentional spraying can damage your plants. I’m not pointing fingers but I had a *Rhus trilobata* that suddenly appeared to be dying. I finally decided that the neighbor had been at the Roundup. Fortunately, it was apparently just a light dusting of pesticide and the plant did survive.

These are just a small number of the problems that can be caused by abiotic factors. When you are diagnosing a plant problem don’t forget that not everything is caused by a pest or disease. There is a book in the Camp Verde and the Prescott office called *Abiotic Disorders of Landscape Plants, a Diagnostic Guide,* that is a good resource to read.
Have you ever driven into your yard, only to discover something looking like a clump of green broom bristles in your favorite Mesquite tree (Prosopis sp.)? Well I did, about a month ago. I didn’t have any idea what it was, but I knew I didn’t like it. I just wanted it gone! So, as a person who doesn’t have a clue what to do, I naturally turned to the Internet. I discovered that I was looking at Desert Mistletoe (Phoradendron californicum) according to Gardening in Oracle, Arizona (www.gardenoracle.com/parasite.html). It’s a perennial, evergreen, obligate parasite that likes leguminous trees, such as mesquite and acacia. Its “roots” invade the bark of the tree to steal water and nutrients, but it’s also capable of photosynthesizing on its own. This snarled-up mass is capable of generating pretty, small, yellow-green flowers and pinkish-orange berries between October and November. Who knew?

The seeds germinate; grow into the tree as “haustorial sinkers” - organs that act much like the roots of a plant. Margie Klein, in her article about the Phainopela for the Nevada Department of Wildlife in December, 2006, pointed out that this bird lives entirely off the mistletoe! (www.ndow.org/about/news/pr/122806_phainopepla.shtm)

So, I’m faced with this dilemma. On one hand, this disfiguring plant is slowly killing my tree and is very hard to kill. On the other, mistletoe supports the life of many really cool birds! It’s a natural part of a well-balanced eco-system.

Here I am with my chain saw in hand. To cut… or not to cut?

The seeds germinate; grow into the tree as “haustorial sinkers” - organs that act much like the roots of a plant. Margie Klein, in her article about the Phainopela for the Nevada Department of Wildlife in December, 2006, pointed out that this bird lives entirely off the mistletoe! (www.ndow.org/about/news/pr/122806_phainopepla.shtm)

So, I’m faced with this dilemma. On one hand, this disfiguring plant is slowly killing my tree and is very hard to kill. On the other, mistletoe supports the life of many really cool birds! It’s a natural part of a well-balanced eco-system.

Here I am with my chain saw in hand. To cut… or not to cut?

The National Heirloom Exposition
September 11.12.13, 2012
Sonoma County Fairgrounds
Santa Rosa, California
www.theheirloomexpo.com
(707)773-1336

75 food, farm and garden speakers
Congratulations

For completing 50 hours of volunteer service.

Sharon Sechrest

Pauline Rotta

Volunteers Needed!

Farmers Markets

We need chairs for our Master Gardener information tables at the Prescott, Chino Valley, Camp Verde, and Sedona farmers markets. The markets start in May or June and go until September or October. The chairs can select the dates we will be there. Contact Mary Barnes, mcbarn1@cableone.net.

Rose Pruning - Prescott

If you would like to help prune the roses at Sharlot Hall Museum on March 13th, contact Kathy MacCauley, prescottgirl@qwest.com, 443-8934.

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.

Nora Graf
PO Box 3652
Camp Verde, AZ 86322
esquite2@hotmail.com
(928) 567-6703

Jeff Schalau
County Director, Yavapai County Extension Agent, Agriculture & Natural Resources
e-mail: jeschalau@cals.arizona.edu

Prescott
840 Rodeo Dr.
Building C
Prescott, AZ 86305
(928) 445-6590
FAX: (928) 445-6593

Camp Verde
2830 N. Commonwealth Dr
Camp Verde, AZ 86322
(928) 554-8999
MG Desk (928) 554-8992

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Kirk A. Astroth, Interim Director, Cooperative Extension, College of Agriculture Life Sciences, The University of Arizona.

The University of Arizona is an equal opportunity, affirmative action institution. The University does not discriminate on the basis of race, color, religion, sex, national origin, age, disability, veteran status, or sexual orientation in its programs and activities.
“Why the Verde?”. Dan Campbell has directed The Nature Conservancy’s Verde Program for six years. Before that he’d been State Director for 12 years and launched new programs in Belize, Bahamas and Jamaica for eight years. For many of us in the Tri-cities area it’s difficult to get to know the Verde River. Dan will explain why TNC has chosen to focus so much attention there.”