High on the Desert

Cochise County Master Gardener

Newsletter

The University of Arizona and U.S. Department of Agriculture cooperating.



Yellow Plants for the Garden

The desert is full of yellow plants! Yellow belongs to the warm-colored spectrum of the color wheel and blends well with white, red, and orange flowers and looks particularly beautiful with blue flowers. The following is just a handful of the numerous sunshine colored plants that are proven performers in my garden.

Wildflowers & Perennial

Flowers Baileya multiradiata - Desert Marigold Calylophus hartweggii - Sundrops Dyssodia species - Dogweed Helianthus maximiliani - Maximilian's Sunflower Hymenoxys acaulis - Angelita Daisy Lotus rigidus – Deer-vetch Psilostrophe tagetina - Paper Zinna grandiflora – Prairie Zinna

Shrubs

Acacia cultriformis - Knife Acacia Berberis trifoliolata - Algerita Dalea lutea 'Sierra Moonrise' -Yellow Bush Dalea Dodonaea viscosa - Hop Bush Larrea tridentata - Cresote Senecio douglasii var. longilobus - Threadleaf Groundsel Senna wislizeni - Shrubby Senna Senna lindheimerana - Velvet Senna

Tagetes lemmonii - Mt. Lemmon Marigold

Zexmenia hispida 'Devil's River'

Trees

Acacia neovernicosa - Viscid Acacia smallii - Sweet Acacia Acacia wrightii - Wright Acacia

Accent Plants

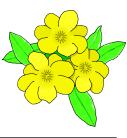
Agave harvardiana Agave lechuguilla Agave parryi var. huachuchensis Agave parryi var. neomexicana Agave schottii Hesperaloe parviflora 'Yellow' Opuntia macrocentra Opuntia santa-rita 'Tubac'

Summer is upon us, take advantage of the summer rains and plant! I do 95% of my planting during July and August. Here are two good books for ID'ing yellow plants (and the other wonderfully colored desert plants of the rainbow!).

A Field Guide to the Plants of Arizona. Anne Orth Epple, Falcon Press Publishing Co., Inc., 1995. Over 900 full-color photographs and descriptive text which includes growing elevation, habitat, bloom period, ethnobotanical uses, and history of the plants.

Native Plants for Southwestern Landscapes. Judy Mielke, University of Texas Press, 1993. Complete plant descriptions to include native distribution, culture, and landscape use. Excellent color photographs often with close-up insets of flowers or leaf structure.

Cheri Melton Master Gardener



Cochise County Cooperative Extension www.ag.arizona.edu/cochise/mg/

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Ag Agent on Sabbatical

Perhaps you are aware that Rob Call, Cochise County's Extension Agent, Horticulture, is absent lately. He is on a well deserved sixmonth sabbatical. During this time he will gain knowledge of production and marketing strategies visiting four distinct areas of Mexico. They are:

- 1) the deciduous tree fruit production area of Casas Grandes, Chihuahua;
- 2) Altarpec de Mexico juice concentrating plant;
- 3) Sonora vegetable production areas;
- 4) the Central de Abasto Wholesale Produce Market in Mexico City.

Information gathered will allow assessment of the opportunities that the University of Arizona and Arizona producers might have to participate in in this segment of the global market. Funding has been acquired of \$5,000 and in-kind contributions of \$2,000 in the form of room and board. This sabbatical project is from June 1 to December 1, 2000.

The Cooperative Extension Offices in Willcox and Sierra Vista are available should you require information. The numbers are listed on the front cover of this newsletter.

Carolyn Gruenhagen Editor/Master Gardener



- A special CCMGA meeting will be held July 12, 5:00 p.m. in Room 102 at the University of Arizona South campus. The purpose of the meeting is to discuss and plan the Garden Fair which is scheduled for September 16 from 9:00 a.m. to 2:00 p.m. at the UA South. Members are encouraged to attend and help plan this annual affair. Remember! Volunteers hours will be earned.
- ▶ On August 12 at Veteran's Memorial Park, Ramada #3, Sierra Vista, the "Let's Talk Trash" program will present the second annual compost workshop from 10:00 a.m. until noon. Mary Sisson Ebs, President of the Tucson Organic Gardeners and Master Gardener will be the speaker. Ms Ebs is providing an information booth and volunteers from TOG to assist at the booth. They will have available at a discount price that day *The Earth Machine* and the *Crank* which makes turning your compost pile easier! Cochise County Master Gardeners are encouraged to help out with this workshop.

2000-2001 CCMGA Officers

President: Barbara Kuttner
V. President: Helene Wingert
Secretary: Gwin Garcia
Treasurer: Janet Jones

July Reminders

- > Keep the pests under control
- > You can still plant something
- > Keep watering!

Say it With Flowers

When you want to say:

"I love you." give red roses

"I'm jealous." give yellow roses

"My heart aches for you." give red carnations

"I'll never forget you." give pink carnations

"You're a wonderful friend." give chrysanthemums

"I want to spend my life with you." give orange blossoms

"I will always be true." give blue violets

"I can't live without you." give primroses

-American Floral Marketing Council

Robert E. Call

Robert E. Call Extension Agent, Horticulture

Carolyn Gruenhagen Editor

Garden Basics: Mulches

What is Mulch?

Mulches are organic or inorganic materials that cover the soil around the root zones of plants.

- Organic mulches (bark or wood chips, leaf mold, grass clippings, compost, hay, straw, newspaper) will break down over time and will need to be replenished. Keep them a couple of inches away from trunks and stems as moisture can cause rotting. They can also blow or float away with our strong winds and heavy rains. Organic mulches add small amounts of nutrients and cool the soil.
- decorative rocks, sand, boulders, decomposed granite) have a long lifetime and may need to be top-dressed or raked every once in awhile. Inorganic mulches add no nutrients and warm up the soil.

Why use Mulch?

- Mulching prevents moisture loss, therefore extending periods of watering by days, sometimes even by weeks!
- By shading the soil, mulches inhibit weed growth. What weeds do get through are easy to pull and weeding will decrease as time goes by.
- Keeps soil from splashing onto plant leaves, thereby reducing certain diseases.
- Matching the right mulch to the type of plant or crop can enhance plant growth.
- · Gravel or rock mulches can prevent rainwater runoff.

· Best of all, mulches reduce work and add a finishing touch to the landscape.

How do I use Mulch?

- A good rule of thumb is to apply mulch *at least* 2-3 inches deep around the root zone of trees, shrubs, flower beds, and vegetable gardens.
- Weed fabric may be used under the mulch as an added measure to keep weeds down NOT black plastic as it does not allow the exchange of water and oxygen that plant roots require. Plastics also permit rainwater to run off the property you want to retain it!
- · If plastic is already installed, you can take a garden fork and punch holes in it, especially around the perimeter of plants. This is especially important around trees, to allow water to penetrate the feeder roots which will improve the health of plants.
- For paths, using newspaper, old carpeting, cardboard, or other such materials as mulch will provide excellent weed suppression.

Be creative with mulches. Use different textures and colors to define areas. Also. use appropriate mulch for different situations. Most native plants enjoy rock mulches, thriving on the reflected heat. Roses and other "exotic plants" on the other hand prefer bark mulches. And don't forget the vegetable garden. It will benefit greatly from organic mulches (particularly alfalfa hay) and at the end of the season can be dug under to improve structure. Experiment and see what works best in your garden. Take

note in neighborhood yards, city plantings, and in botanical gardens not only of the plants but of the mulch used and duplicate it in your own setting.

Mulches - they're a good thing!

Cheri Melton Master Gardener

What's **₩ot** in Gardening!

Tooling with Tools:

Tools used in gardening are evolving. Ergonomic tools (designed to require less muscle strength and inflict less strain on ligaments and bones), such as ratchet prunders, angled rakes, and lightweight saws, will help an aging and sometimes ailing American gardener enjoy his or her hobby with fewer aches and pains.



Information at Your Fingertips:

You can rest assured that the information age will not leave gardening behind. Gardening is becoming more sophisticated as gardeners use computers to obtain information about plants, products, and gardening techniques. Web sites, specializing in gardening information and products, continue to expand. One such site is National Gardening Association's:

www.garden.org

- Charlie Nardozzi, National Gardening Assn. Farmers' Almanac 1999

Lions, Tigers and Bears! OH MY!

(Part One - Venomous Snakes)

Just like the hapless young maiden and her companions in the classic movie The Wizard of OZ, many residents of Southeast Arizona harbor irrational fears of many of the creepy crawly critters who share this special place with us. All fauna, whether venomous or not, form an integral symbiotic part of the environment. With a little self education, a small dose of tolerance, and some acceptance of the natural world in which we live, we all can learn to live in harmony with the critters who reside here with us and not faint dead away like the cowardly lion at the first sign of an unwelcome varmint in our garden.

If asked, most residents of SE Arizona would respond that the one thing they fear most in the Southwest is the rattlesnake. Our media has done much to encourage the hysteria by portraying the rattlesnake as some cobraesque aggressive killer to be destroyed immediately when discovered. Even if the snake poses absolutely no danger to them, most now feel that they must kill the snake that has dared venture into their presence and don't give a hoot about just how important this critter is to nature's balance. You think you have a problem in your home and garden with rodents now; destroy all the snakes and you could see an immediate explosion in their population. (More people have died of hantavirus in the recent past than have died of snake bites.) The Chinese discovered the interrelatedness of nature when

Chairman Mao ordered the destruction of sparrows because they were eating grain. The populace with revolutionary ardor preceded to decimate the sparrow population. After the sharp decline in bird population, the insect population exploded causing the destruction of crops far in excess of the damage wrought by the birds.

This does not mean that one should not be cautious and take leave of his/her senses when it comes to snakes, particularly venomous ones. Being bitten, though seldom fatal, can definitely ruin your day. Rattlesnakes, I can assure you, are just as afraid of you as you are of them. Most snakes will flee from footsteps. If vou come across a venomous snake freeze to let it get away and then step away. If you do get bitten, don't panic! Immobilize the area affected and seek medical attention. In this scenario, try and kill the snake and bring it with you to the medical facility. The doctors who treat you will need it to properly identify it and administer the necessary antivenom. The victim should avoid moving and keep the injured body part just below heart level. Try to keep the person, warm, calm, and at rest while seeking medical attention. If you are alone, walk SLOWLY towards help, exerting the injured area as little as possible. Use snake bite kits only if stranded in a very remote area far from medical facilities.

There are nine species of rattlesnakes indigenous to SE Arizona (actually there are more but they are exceedingly rare). They are: Western diamondback rattlesnake (bites can be fatal), Sidewinder (rare in SE Arizona),



Rock rattlesnake (aggressive), Black tailed rattlesnake, Mojave and (most venomous most aggressive - leave this guy alone), Massasauga (seldom aggressive), and the Western rattlesnake. The most dangerous are the Western Diamondback and the Mojave Rattlesnakes! Both have potentially lethal venom and should be given wide berth. (See the Audobon Field Guide to the Southwest for complete descriptions). Remember, however, that any snake can be quite aggressive when cornered or threatened (don't be a Rambo or SheRa of the desert—leave them alone!).

Try to snake proof your garden and home. You should work continuously to reduce rodent populations in these areas (contact the Cooperative Extension for information). No food—fewer snakes! Clean up debris (don't give them a convenient home). Keep your lawn closely mowed (so you can see the critters). The natural look may be nice but if you can't see the dog or your toddlers, you definitely won't see Mr. Snake until it is too late. Train everyone in your family, especially children and pets, to curb their curiosity and leave snakes alone. They should alert you immediately so that appropriate action can be taken. Always be vigilant; look before you reach.

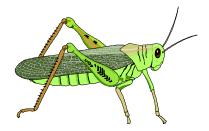
Next month, Arachnophobia 101!

John Phillips Master Gardener

Dear Master Gardener:

How can I keep grasshoppers from destroying my plants? Jane, Bisbee, AZ

Dear Jane: I am not sure there is a way to completely keep them at bay because grasshoppers seem to thrive in our desert climate. Here in Cochise County we have several species, some of which are quite large and colorful. Usually a cold winter offers some relief because the adults die when it becomes cold. However, this past winter, I noticed quite a few around my garden because it was not cold enough to kill them.



While some grasshoppers may still be around from last fall, they emerge en masse in late spring. After hatching, the numphs feed voraciously, and when their wings develop they seek other sources for their food. They will eat just about anything, and in fact can destroy entire plants.

Cultural controls are your best defense. Other than catching them and either killing them or delivering them to another part of town, one of the best ways to deal with grasshoppers is through good cultural practices. Females prefer to lay eggs in dry, undisturbed ground so tilling in the fall (and spring) will discourage egg-laying and may uncover deposited eggs.

Clean up litter and debris and chop down weeds or other vegetation that will host the critters. Also, heavy mulch or compost may help prevent the young from emerging in the spring.

There are a few other solutions as well. By walking through your garden and shaking plants, you will disturb them and they may fly away. Worth a try, but perhaps not too successful, companion planting may also work. Try planting onions, garlic, and hot peppers and/or make a tea of these plants, mix with a bit of liquid soap and spraying your garden. Of course, there are some natural insect enemies of the grasshopper, including spiders, ground beetles, Tachinid wasps. A better solution might be to invite birds to your garden because they love to feast on grasshoppers. This would involve planting plants to attract birds and/or hanging a bird feeder and adding a bird bath.

Carole Beachamp Master Gardener

"He who
plants a
garden,
plants
happiness."

Call's Classic Comments

If your strawberry, raspberry, and grapes that were growing well now have leaves that are drying up around the edges and in the middle of leaves, they are not getting enough water for two reasons.



The first is that water volume and watering duration are not adequate. The second is that as you water, salts in the water are added to the soil in addition to natural salts that are native to our desert soils. These salts, in part, are sodium, carbonates, calcium, chlorine, and perhaps some heavy metals. To correct the problem start watering every other day for a half an hour, then check the water penetration depth using a soil probe or long screwdriver. If they go in an inch or two in the ground then you need to water. If it goes in a foot or two don't water. Once a month or so, a deep watering is needed to leach out salts causing them to pass the root zone. The drying of the leaf edges is caused by the plant taking up salts through the root system which are then conducted up to the leaves. The leaf cells "pump" out water into the "saltier" intercellular spaces so that equilibrium is reached between salts within and without of the cell. This removal of water from leaf cells causes the drying.

Source: July 1994 Cochise County Master Gardener Newsletter

Robert E. Call, Agriculture Agent, Horticulture

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What is Xeriscape?

Xeriscape, a creative landscaping program, comes from the word "xeros," the Greek word for "dry," but the look of a Xeriscape can be lush and colorful. A xeriscape yard can provide shade, beauty, and color, and save you water, money, and time. To Xeriscape, apply the seven basic landscape principles:

- 1. Start with a plan. Put higher water use plants close to the house and group plants, shrubs, and trees according to their water needs.
- 2. Limit turf areas. Use grass where it provides functional or recreational benefits.
- 3. Install an efficient irrigation system. Consider drip irrigation systems.
- 4. Harvest rain water.
- 5. Improve the soil. Decomposed organic mulches provide plant nutrition and improve water absorption. Cover the soil—it minimizes evaporation and reduces weed growth.
- 6. Use low water plants. Visit your local nurseries for assistance or call the Cooperative Extension Office.
- 7. Remember appropriate maintenance. Careful pruning, weeding, and watering will increase your water savings.