

High on the Desert Cochise County Master Gardener Newsletter

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

Come to the High Desert Garden Fair!

Join the Cochise County Master Gardeners Association as they present the Fourth High Desert Garden Fair on Saturday, September 15th. The fair will be from 9 am to 2 pm at the University of Arizona South Campus, 1140 N. Colombo, and the best part is that it's FREE!

Are your trees looking like they some help? Then be sure to attend Deryl Smith's seminar on Pruning Landscape Trees from 9:30—10:30 a.m.. Deryl is a Cochise County Master Gardener Associate and Certified Arborist.

Ever wonder how the underground aquifer works? Cochise County Master Gardener, Ginger Maxey, will present the Groundwater Flow Model from 11:00 a.m.—12:00 p.m.. The interactive model enables participants to see how water moves underground and the effects of groundwater pumping. This session is fun for the entire family and there will be prizes! Ginger is the Water and Energy Conservation Educator for the Fort Huachuca Water Wise and Energy Smart program.

From 12:30—1:30 p.m. Master Gardener, Angel Rutherford, will talk about Healthy Houseplants. This session will cover the basics of houseplants to include plant selection and pest and diseases. Angel has over 40

years of experience in growing indoor and outdoor plants.

The numerous vendors and information booths to visit are:

- Arizona Feed Country Store
- Azida, Inc.
- Birdland Ranch/Citizen's Science Project
- Border Animal Rescue, Inc.
- Cochise County's Let's Talk Trash Recycling Program
- Gray Hawk Nature Center
- Karen's Grassland Meats
- Mountain View Koi Fish and Aquatic Plants
- Sierra Vista Area Gardeners Club
- Singing Wind Bookshop
- Turtle Island Herbals
- Water Wise/Energy Smart - Ft. Huachuca
- University of Arizona Bookstore

The Cochise County Master Gardeners will be on hand to answer your gardening questions as well as selling Desert Landscaping CD ROMs, T-shirts and caps, gardening books, soil probes, and herbs for the garden. See our herb garden guide on page two for some of the herbs you can purchase at the fair.

See you there!

Cheri Melton, Master Gardener

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HERB GARDEN GUIDE

	FLAVOR	HARVESTING & USING	POTENTIAL PROBLEMS	OTHER USES & NOTES
BASIL Warm Season Annual	Various to include clovelike, spicy, lemon, sweet	Use leaves fresh with meat, tomatoes, beans, pesto and pastas. Pinch off tips & flowers to prolong harvest and make plants bushier.	Beetles. Handpick and drop into soapy water.	Extra basil can be kept fresh by standing cut ends in water in the fridge. Good for teas and vinegars.
DILL Cool Season Annual	Fresh, aromatic	Use fresh or dried leaves on fish, potato salad and with eggs. Use dried seeds with vegetables, soups and pickling.	Food plant for the Black Swallowtail butterfly (parsley worms) plant enough for you & the butterflies	Yellow flowers are good for fresh cut flower arrangements. Will self seed.
LAVENDER Perennial	An aroma that is fresh, floral, sweet, pungent	Harvest flower stalks when in bud; use in ice creams, desserts, and lavender lemonade.	Provide well draining soil to prevent root rot.	Wonderful ornamental with fantastic fragrance. Use flowers in sachets, wreaths and arrangements.
MINT Perennial	Various to include peppermint, spearmint, apple, orange, chocolate	Harvest sprigs just before flowering or as needed. Use leaves fresh, frozen or dried for vegetables and mint sauces for meats.	Is an aggressive grower—contain the roots in the garden or plant in pots.	Iced and hot teas, vinegars.
OREGANO Perennial	Sharp, aromatic	Harvest before flowering or as needed. Use fresh or dried leaves with meats, soups, vegetables, pizza and pastas.	Provide well draining soil to prevent root rot.	It's important to taste oregano before you buy it so you get the flavor you want. Good for Mexican & Italian dishes.
PARSLEY Biennial	Peppery, refreshing	Pinch off parsley sprigs as needed or cut back entire plant to dry or freeze. Good in soups, vegetables, parsley butter and garnishes.	Food plant for the Black Swallowtail butterfly (parsley worms) plant enough for you & the butterflies	Italian or flat-leaf parsley has the best flavor.
ROSEMARY Perennial	Resinous & strongly pungent	Harvest leaves and use fresh or dried in Italian dishes. Snip or mince leaves finely or use sprigs and pull out of dishes before serving.	Provide well draining soil to prevent root rot.	Woody shrub—doubles as an ornamental landscape plant.
SAGE, CULINARY Perennial	Strong, musky, aromatically bitter	Best flavor when used fresh with meats. Leaves can be dried to use during winter. Also use in vegetable dishes and soups.	Provide well draining soil to prevent root rot.	There also exist ornamental sages (Salvia) that are used as shrubs in the landscape.
SWEET MAJORAM Perennial	Sweet, fragrant	Cut and use leaves just before flowering for the richest flavor. Use with chicken, cheese, vegetables and soups.	Provide well draining soil to prevent root rot.	Member of the oregano family. Taste before purchasing plants to get the desired flavor.
THYME Perennial	Pungent, strong Various flavors	Harvest thyme sprigs before flowering for maximum flavor. Use fresh or dried leaves for meats, vegetables, soups, and teas.	Provide well draining soil to prevent root rot.	Excellent edging plant and for thyme lawns.

The Virtual Gardener—The Garden Portal

One of the latest words in geek speak is “portal.” According to one definition, a portal is a Web site with a rich navigation structure of both internal and external links. The Web site at <http://ag.Arizona.edu/garden> qualifies as a portal.

A few weeks ago I had the honor of being selected to join about 80 other Master Gardeners from around Arizona, including seven others from Cochise County, at the first Master Gardener University. The purpose of this day and a half event was to allow Master Gardeners to meet and exchange ideas and to be briefed on some of the activities ongoing among the Extension specialists at the university. One of the activities we were briefed on is the creation of two great new Web sites. This month I would like to tell you about one of these, the Garden portal being developed by Robert Lanza. Next month I will write about the Ag portal being developed by Robert MacArthur.

If there was ever a single Web site for gardeners to add to their Favorites list, the Garden portal is one of these. The site has something for everyone, with links to hundreds of Web sites of interest to gardeners. The site is organized into seven major topic areas: Home Gardening, Master and Expert Gardening, Community and School Gardening, Commercial Ornamental Horticulture, Southwest Gardening Web Sites, and National Gardening Web Sites. In addition, there are links to the Arizona Master Gardener Manual, an Arizona Gardening Events Calendar, and Gardening Publications of the Cooperative Extension of the University of Arizona. The latter topic area includes links to over 200 Univer-

sity of Arizona Cooperative Extension publications that can be downloaded for free in pdf format and hundreds more that can be ordered in hardcopy for a nominal fee.

The Master Gardener Manual itself would be worth a bookmark to this site. This manual is over 650 pages long and is the same book used in Master Gardener training classes. If you are interested in gardening—I mean really interested in gardening—in Arizona, this is the book to consult. It has eighteen chapters on topics ranging from basic botany to vertebrate pests and includes information based on the results of the latest research conducted by the University of Arizona Cooperative Extension scientists.

One of my favorite sections of the Garden portal are the links to online copies of John Begeman’s articles that appear in the Sunday editions of the *Arizona Daily Star*. For many years I have cut these out and saved them in a file. Now I can see them online. In addition to John’s articles, there are also links to online copies of Cooperative Extension Agent’s Terry Mikel’s articles in the *Arizona Republic* as well as John White’s *Southwest Lawn & Garden* articles from Las Cruces, New Mexico. All of these articles are stuffed with practical information for gardeners in the Southwest, and now they are available anytime you want to see them.

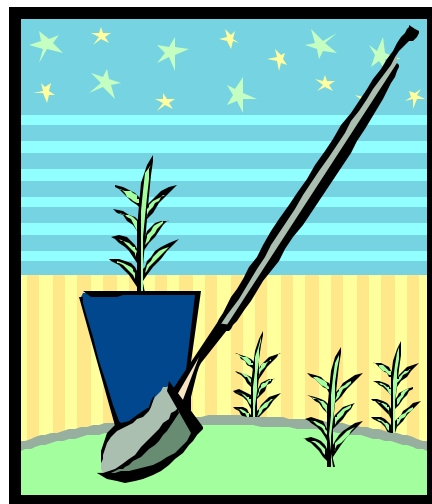
Another of my favorites are the sections on weather and climate. Want to know about current evapotranspiration rates or see historical weather data for many communities around Arizona or

find out the average date of first frost for your area. Check out these links.

My hat is off to Robert Lanza and his crew who put this wonderful site together. If they keep at it, the Virtual Gardener may be out of a job or relegated to the role of the proverbial Maytag repairman.

Until next time, happy surfing.

Gary A. Gruenhagen, Master Gardener
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September Reminders

- Keep on watering!
- You can always plant something—try cool season veggies
- Start shopping for bulbs

(Bulbs for Southern Arizona bulletin is available from the Cooperative Extension Offices)

Helpful Hints for Fall Planting

Now is the time to add to or to establish a beautiful landscape with trees and shrubs.

Fall is the best time to plant potted or burlap/balled plants. Soil temperatures for several months will be warm enough for root establishment and growth. This will give the plants a head start for leaf and shoot growth the following spring.

Fall planting gives trees and shrubs a chance to establish deep roots before they have to endure the stress of summer. This will reduce the amount of water they will need to survive during the hot months.

Perennial flowers also do well if planted in the fall. The extra growing time will help flowers root in well, and they will last twice as long as those planted in the spring. October is also the month to sow wildflowers.

New planting standards have been developed from many years of research. The following describes the proper way to plant trees and shrubs.

Mark an area three to five times the diameter of the root ball. Till or dig this area to the depth of the root ball. Many people like to add sulfur to lower soil pH and/or nitrogen or other fertilizers at planting. While the efficiency of these practices is unproven, moderate amounts are unlikely to harm the

plant. Spread the chosen products over the entire area and till in. Tilling the soil improves aeration and encourages lateral root growth.

In the center of the tilled area, dig a hole slightly larger than the root ball but no deeper. A shallow hole prevents sinking of the plant and trunk burial. Make sure the "wall" between the tilled and untilled soil is rough or slightly sloping. Rough walls provide roots with better opportunity to penetrate the interface between tilled and untilled soil.

Remove the root ball from the container. Always handle the plant by the root ball, never by the trunk. Roughen the surface of the root ball and cut encircling roots. Set the plant in the planting hole with the top of the root ball at or slightly above the surface to avoid trunk burial.

Backfill with unamended soil. Do not pack the backfill, which when done, retards aeration. Do not prune unnecessarily. Remove only damaged or infested branches. Wait until the tree is established to begin training.

Mulch the entire tilled area with an organic material to a depth of three or four inches. Keep mulch away from the tree trunk to avoid burying the trunk. Depending upon how the tree is going to be irrigated, the mulch may be applied before or after the initial irrigation.


Stake trees only if necessary because staking functions as a crutch to hold the plant upright. Use at least two stakes placed outside of the root ball at right angles to the direction of the strongest winds. Hold the trunk and bend the canopy to one side. If the canopy does not return to an upright position, move farther up the trunk and try again. Find the lowest point on the trunk where the canopy will return to an upright position. Place ties about six inches above this point. One set of cross ties is best.

If using wire, shield the trunk from the wire by placing it through short pieces of garden hose. Cut off the tops of the stake well below the canopy to prevent limbs from rubbing the stakes.

If you construct an earth basin around the tree or shrub, place berms just outside of the root ball. This forces water through the root ball. Irrigate the entire tilled area. Water will settle the backfill soil without restricting aeration.


For publications on this topic and other information, contact the University of Arizona Cooperative Extension Office, Water Wise Program.

Cado Daily
Water Wise Program



Wettie sez...
BE Water Wise!

Water only in the early morning when evaporation is low. Do not water on windy days. The evaporation is really high!



The U of A *Water Wise* Program
458-8278, ext. 141

Cuttings 'N' Clippings

* The Cochise County Fair will be held at the Douglas fair grounds on September 27-30, 2001. Fair books are available at the Cooperative Extension offices in Sierra Vista and Willcox.

* Saturday, October 6 from 9 a.m.—10 a.m. *Sensational Succulents* with Deryl Smith, Horticultural Specialist, Plant Sciences Center. Given at the University of Arizona South campus 1140 N. Colombo (behind Cochise College), this is a free seminar and is part of the Water Wise monthly series. For more info call 458-8278 ext. 2141.

* Sierra Vista operates Arizona's only municipal yard waste composting program. City residential refuse customers may deliver yard waste to the facility, free of charge. (Be sure to bring a copy of your City refuse bill to show the attendant.) They may also call 458-7530 to arrange for a free special pick-up of their yard wastes. Local businesses and County residents may also use the facility for a small fee. In addition, both mulch and compost are sold to the public at the site—at bargain prices! The compost site is located adjacent to the County Transfer Station on Highway 90 East (just past the entrance to the City Wastewater facility).

The Agent's Observations

Q What is happening to my tomato plants? The bottom leaves are brown and curling up and some have black spots and holes in them. This started close to the ground and not about one third of the plant is affected. Is this a disease and what can be done about it?



A Your tomatoes have Early Blight (*Alternaria solani*). Plants infected with early blight develop black or brown spots, usually about 0.25 to 0.5 inch in diameter, on leaves, stems, and fruit. Leaf spots are leathery and often have a concentric ring pattern. They usually appear on older leaves first. Spots on fruit are sunken, dry, and may also have a concentric pattern; frequently they occur near the calyx end of the fruit. Early Blight occurs when tomatoes are exposed to rain and humid conditions. Severe damage can occur if conditions remain cool and humid for several days after a rain. The early blight fungus survives in the soil on residue of infected tomatoes,

potatoes, and nightshade weeds. The fungus is spread by spores that are carried by the wind or splashed in water. Germination of spores and infection require free moisture. Disease development stops in dry, hot weather.

Control: Treat with a fungicide when environmental conditions are favorable and the first sign of disease becomes apparent. Chlorothalonil, sold as Bravo or Daconil, or mancozeb, sold as Dithane, are available and provide good control. Other treatments include growing plants on plastic or organic mulch and pruning off lower leaves and stems as the rains start. This can aid in decreasing the splashing of soil that contains Early Blight spores on to the foliage. Remember when using any pesticide to read, understand and follow the label. **It is the law!**

Source: The University of California IPM Website. URL: www.ipm.ucdavis.edu/PMG/r783100311.html

Q My Tif-Green Bermuda grass lawn is quite yellow. I have applied fertilizer, ammonium phosphate, 16-20-0, as recommended by a nursery and the grass is still yellow. What can I do to green up my lawn?

A It sounds as if you have a case of iron chlorosis. Over-watering can cause this. Cut back the water. Too much water ex-

(Continued on back page)

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(Continued from page 5)

cludes oxygen needed for root growth. If roots are not growing then iron can not be “mined” from the soil. With a lack of root growth nutrients are not taken up for plant growth. Iron is needed to make chlorophyll, the stuff that make leaves green. Without iron new leaves will be yellow because they lack chlorophyll.

Control: Watch your watering schedule. For a quick green up apply liquid sprays of a foliar iron chelate. Make sure that a foliar rather than a soil applied material is used to avoid burning plant tissue. After several treatments your lawn should green up if you have adjusted the watering schedule to an appropriate level.

Robert E. Call
Extension Agent, Horticulture

Cochise County Fair

September 27, 28, 29, & 30, 2001
Douglas, AZ



JANE DEE HULL
GOVERNOR
STATE OF ARIZONA

June 2001

GREETINGS!

As Governor of the State of Arizona, I would like to welcome exhibitors, participants, and spectators to the 77th Anniversary of the Cochise County Fair. This year, the Fair's theme is "Swinging at the Fair" and it promises to be a truly exciting event for all!

The Cochise County Fair will provide fun and excitement for the whole family. During this year's County Fair, please enjoy the exhibits, rodeo, entertainment, and good food. I hope that this celebration will be a continuing success, as well as the biggest and best Fair to date.

Once again, welcome to the Cochise County Fair and have a great time!

Sincerely,


JANE DEE HULL
Governor

JDH:jll