



High on the Desert Cochise County Master Gardener Newsletter

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The Virtual Gardener—Garden Tip #7563

As I purchased a couple of tomato “six-packs” last week, I was reminded of this Garden Tip originally published in the February 2001 Cochise County Master Gardener Newsletter, and I thought I would share it again with you. . .

It won’t be long before it will be time once again to begin planning our summer vegetable gardens. One of the first plants that comes to mind for my summer garden is tomatoes. Although home-grown tomatoes are probably more expensive pound for pound than those you can buy in the supermarket, the taste of fresh tomatoes from your garden makes the extra cost worthwhile.

The tip is starting your tomato plants in paper bags. I had read about the technique a long time ago and filed it away for future reference, but I didn’t try it until just a few years ago when I discovered how great an idea it was.

When tomato plants first appear in the garden shops it is much too early to set them out in the garden, so you

must put them in a sunny, protected place to harden them off. I replant young tomato plants directly from the plastic six-pack container (six packs are much cheaper than the larger pots with single plants) into paper bags filled with garden soil and let them grow in the bags until it is time to put them in the garden. Then I plant the bags containing the young plants, which have grown quite a bit in size, directly in the garden. This not only provides a nice environment for the plants while they were growing up on my patio, but allows me to put them in the ground without disturbing the roots. In addition, I leave about a half-inch of the bag protruding out of the ground to protect the tomatoes from cutworms.

I use regular paper “lunch bags” for my little tomato plants. I fold down about an inch around the top to provide a little extra stability, and then I fill them with garden soil to within a couple inches of the top. I place the bags in one-gallon nursery

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Cochise County Cooperative Extension

www.ag.arizona.edu/cochise/mg/

1140 N. Colombo, Sierra Vista, AZ 85635

(520) 458-8278, Ext. 2141

450 S. Haskell, Willcox, AZ 85643

(520) 384-3594



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pots just to give them extra stability for their stay on the patio. Then I can easily transfer them to the garden. Although the bags become discolored from watering during this time, they only disintegrate after they have been in the ground for some time.

Until next time...Happy Surfing.

Gary A. Gruenhagen, Master Gardener
virtualgardener@cox.net

What's Xeriscape and Why Should I Have It?

Xeriscape—sounds like some kind of affliction, doesn't it? Well, you could be very distressed if you don't have it. Xeriscape or low water use landscaping is the easiest, most carefree type of landscape you can have anywhere—from Florida to the High Desert. The term was coined in 1986 by a group of Denver water conservation professionals. It was the beginning of an educational movement to change the way landscapes are designed.

Here in the Southwest, many of us rely solely on diminishing supplies of groundwater. Landscapes are a main focus for water use reduction as this is where the most water is used and can easily be saved. If we can have beautiful landscapes while being water conserving, why not? By following the

Principles of Xeriscape, the homeowner can design, install, and enjoy their environment while feeling proud that they are being good stewards of their natural resources. The seven Principles of Xeriscape are:

1. Plan and Design. In Xeriscaping as with almost every other endeavor, a good plan is the key to success. A Xeriscape design is centered around a concept of grouping plants in zones according to their water requirements. High water users are clustered close around the house in a mini "oasis." Surrounding the oasis is a zone comprising plants of intermediate water requirements, and at the farthest extremes is a zone containing the plants with the lowest water requirements.

2. Create Practical Turf Areas. Turf is the largest consumer of water in most yards. Turf areas are minimized in xeriscapes.

3. Use Appropriate Plants and Zone the Landscape. This should be obvious. Xeriscapers like to use native plants in their gardens and yards because they are adapted to the local climate.

4. Soil Improvement. The Xeriscaper improves the water retention properties of the soil by adding lots of organic material.

5. Use Mulches. Organic mulches such as straw, bark or compost, or inorganic rock mulches trap moisture and keep the soil cool to minimize losses to evaporation.

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Cuttings 'N' Clippings

* The next CCMGA meeting is 5:00 p.m. Thursday, April 3 at the University of Arizona South Campus, Public Meeting Room.

April is Water Awareness Month!

* The April *WaterWise* lecture will be held Saturday, **April 5, 9:00—11:30 a.m.** at the University of Arizona South Campus. Drip irrigation systems are great—if you know how to use them! This workshop, *Drip Irrigation for Homeowners*, will cover water/soil relationships, identify the components of a drip system, and have a hands-on session. Dr. Stephen Poe and Dr. Kitt Farrell-Poe, UA Extension Specialists will be the presenters.

* **April 19, 9:00—11:00 a.m.:** *Get the Timing Right—Irrigation Controllers*. This hands-on workshop at the University of Arizona South Campus will teach you how to schedule an irrigation controller. There are different brands of controllers but most use the same basic programming. It is hard to have a water wise landscape if you aren't in control of your controller! Cado Daily and Cyndi Wilkins, UA Extension Water Wise Program, will be the presenters. For information contact Cado Daily at 458-8278, Ext. 2139 or check the web site: www.ag.arizona.edu/cochise/waterwise

* It is with sadness that we note the sudden death of Alice Rumsey-Fox, a member of the 1994 Master Gardener class. Although not an active MG, she was known by many in Sierra Vista as she worked in several nurseries and most recently in the Garden Shop on Ft. Huachuca. She will be missed.

Robert E. Call

Robert E. Call
Extension Agent, Horticulture

Carolyn Gruenhagen
Editor

Organic Farming—Part II

All 50 states now have certified cropland. Fourteen states have organic programs that certify producers. But Arizona is not among them, even though legislation authorizing an organic program has been on the state's law books for years. Title 3 of the Arizona Revised Statutes provides:

3-301. Developing and adopting the program; advisory committee

A. The director [of the Department of Agriculture] may develop and adopt by rule an Arizona organic food certification program that shall meet the requirements of the national organic program (7 Code of Federal Regulations part 205).

B. If the director establishes such a program, the director shall establish one or more advisory committees pursuant to section 3-106 to assist in developing the program

Across the nation, organic plant production has increased dramatically each year since the early 1990s. And despite the occasional flush years for the state budget, Section 3-301 was never funded. Producers in Arizona who want to be certified must use certifiers employed by companies outside of the state. There is at least one certified organic inspector who lives in Arizona, but she is a subcontractor for companies in California. Even though she is closer to growers than inspectors living outside the state, working through a distant company drives up the cost of certification. Unquestionably, this makes Arizona producers less competitive in the now bullish and increasingly industrialized organic market.

Arizona producers are also at a disadvantage because they don't



receive the same state support as growers in California, New Mexico, and Washington for example. All three states have sophisticated programs to encourage organic production and educate growers and the public. The State of Washington also helps its growers acquire the documentation necessary to prove proper certification for exports. Foreign market penetration gives Washington's organic growers a definite advantage over growers from states without a similar program. Despite the disadvantages they face, several growers in Arizona have found organic production not only spiritually satisfying but they make a good living, too. And fortunately, there are exceptions in the National Organic Program (NOP) for very small producers. Agricultural operations that sell less than \$5,000 a year (gross sales) are exempt from certification. They may label their products organic if they abide by the NOP standards, but they cannot display the USDA Organic Seal.

Investment follows consumer demand, so it is no surprise that large corporations have gotten involved in

organic farming. There are those who assert that the super large organic farm businesses wield influence that waters down organic standards or make it difficult for the family farmer to compete. A California company called Earthbound, for example, grows more than 70 percent of all the organic lettuce sold in America. It has giant operations in six counties in California and two locations in Arizona. This prompts critics to suggest that the carbon footprint of industrially farmed organic produce trucked thousands of miles undermines the organic farming movement.

Fortunately, we have several food producers in southeastern Arizona. If you want to purchase organic local meat, fruit, and vegetables, just visit a farmers market, orchard, produce stand, or community garden in your area. Some of our small producers may not be able to use the USDA Organic seal, but many are scrupulously organic growers who would love to tell you exactly how their animals and plants are treated. And some of the produce in local supermarkets, such as fruit from Willcox, has earned the USDA Organic seal, despite the absence of a state organic program. When you buy these products, your money will support great food and careful growers. If you would like more information on the National Organic Program, go to <http://www.ams.usda.gov/nop/Consumers/Consumerhome.html>. There are a number of excellent reference materials listed at Organic Materials Review Institute web page:

http://omri.org/OMRI_links.html

Terri Gent, Master Gardener

Arizona Native Plant Law—What You Should Know

The Arizona native plant law was enacted to protect rare plant species and to protect some species from being over harvested. There are four Protected Native Plant Categories:

1. **Highly Safeguarded**—This group of plants is threatened for survival or is in danger of extinction. Protection includes not only the plants themselves, but their plant parts such as fruits, seeds, and cuttings. A few of the species that are in this category are saguaro, Arizona willow, and some of the agaves and cacti.
2. **Salvage Restricted**—This large group of plants is subject to damage and vandalism. This is a large list of species with 44 plant families represented, the largest being numerous species of cacti.
3. **Salvage Assessed**—This much smaller group of plants has enough value if salvaged to support the cost of salvaging. This list includes the desert willow, palo verde, ironwood, smoke tree, and several mesquite species.
4. **Harvest Restricted**—Also a smaller group, these plants are protected due to the fact that they are subject to excessive harvesting because of the intrinsic value of products made with their wood or fiber. Included in this group are bear grass, yucca, ironwood, and mesquite

To learn more about the Arizona native plant law, procedures for obtaining a permit for plant removal, transporting native plants, and to view the specific species visit the Arizona Department of Agriculture's website at:

<http://www.azda.gov/ESD/nativeplants.htm>

Book Review— *The New Seed-Starters Handbook*

Professional vegetable growers could probably learn a lot from this book. But *The New Seed-Starters Handbook* was written for folks like us who start tomato seeds in egg cartons, on top of the water heater, and use old Popsicle sticks to mark the rows in our vegetable patch. In the acknowledgements, the author, Nancy Bubel thanks a very long list of professors, extension agents, and other authors for their help. And it is clear that this book is thoroughly researched. In this updated version of *The Seed-Starters Handbook*, it is apparent that the author could hold her own with all those she thanks.

But this book is not for botany professors. It is, instead, a joyously written book for beginning and experienced backyard gardeners. Reading it is like listening in on happy conversations at master gardener meetings or over the refreshments table at the garden club.

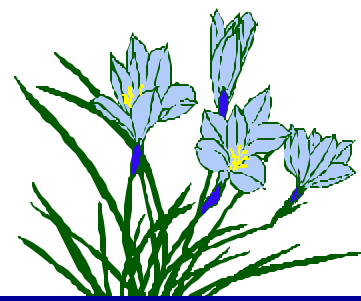
Consider this book a manual of procedures, giving you step-by-step how and when of various planting techniques. Look, too, in every chapter for the principles on which these techniques are based, and count on finding at least a few open-ended questions that might challenge old suppositions or suggest new growing frontiers. There's no one right way to do most of these things, you know. A good many workable options are open to you in planting seeds.

Bubel divides the book into four parts: Starting Seeds Indoors, Moving Plants Outdoors, Special Techniques and

Situations, and Saving Seeds and Making Further Plans. Each of these has several chapters explaining the nitty gritty in a very friendly way. Then Bubel adds a nice resource section that contains an encyclopedia of plants to grow from seeds, and details on growing herbs, flowers, wildflowers, trees, and shrubs from seeds. She also gives us a good list of commercial sources of seeds and garden supplies, a glossary, a bibliography, and a list of recommended reading.

This book was published in 1988 and is still roaring along in popularity. It comes from the long respected Rodale Press, our nation's most steadfast advocate for organic gardening. You can find new and used copies on Amazon.com. And you can also contact the publisher directly at (800) 848-4735.

Terrie Gent, Master Gardener



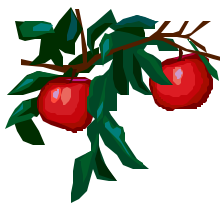
April Reminders

- ◆ Stake new trees
- ◆ Plant cool season veggies
- ◆ Fertilize
- ◆ Prepare for pests

The Agent's Observations

Q How can I tell if my apple, pear, peach, cherry, and apricot flowers suffered freeze damage from freezing temperatures?

A Most of the fruit mentioned will freeze if in full bloom during temperatures from 23 to 28°F. To examine a flower or fruit, remove one from the tree. Make a horizontal cut with a knife through the base of the flower just beneath where the flower petals are attached. If small fruits have already formed cut horizontally through them also. If the center of flower or fruitlet seed tissue is brown in the center then the flower or seed(s) is/are dead. If the flower or seed tissue is green they are alive. If the seed(s) die then the hormonal stimulus that the seed(s) produce which signals fruit growth will not occur; therefore no fruit will be produced. Go around each tree and cut 10 to 20 flowers or fruitlets to determine the percent of survival. If only 5 to 10% of peach flowers survived, there will be a crop. If only 10 to 20% of apple or pears survived you will have a full crop. If more survived you will probably have to thin the fruit in a few weeks to produce large fruit. If



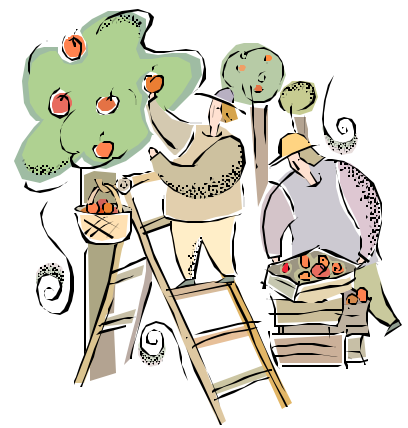
thinning is not done, either by man or Mother Nature's freezes, small, inferior fruit will be produced.

Q How do I thin my fruit trees to get larger fruit?

A Most fruit trees produce more flowers, which if properly pollinated, will produce more fruit than the tree can mature. Cell division within the fruit occurs for only two to six weeks, depending on variety, and then cell division stops. Cells enlarge over the rest of the growing season, usually two to five months depending on variety. Think of the fruit as a "package of cells." By thinning fruit during the cell division period there are fewer fruit but more cells per "fruit package." Tree leaves can only manufacture enough food to produce a certain number of fruit cells. The question becomes one of having a lot of small "packages" or fewer large "packages."

Fruit and nut trees will abort excess fruit in May in southeastern Arizona. During June in other parts of the nation fruit abortion occurs and is called "June drop." For a full crop of apples and pears only 10-20% of the fruit needs to mature; for peaches or nectarines only 5-10%.

To thin apples and pears use scissors to cut off or fingernails to pinch off excessive fruit at the stem. For peaches and nectarines



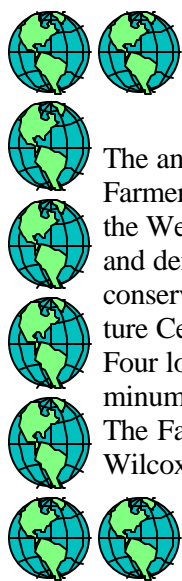
use a "Kentucky Bumper." This is a broom stick with a piece of split garden hose attached at the end. Wiggle the hose around the fruit. Fruit will rain down! Finish thinning by hand to achieve proper spacing. Thin so that one or two fruit are spaced about six to eight inches apart on branches. Generally it takes 30 to 40 leaves to produce enough photosynthate (food) to mature a fruit. Thinning is not practiced on almonds or other nut trees, apricots, cherries, figs, or plums, however they will experience "June drop."

Robert E. Call
Extension Agent, Horticulture

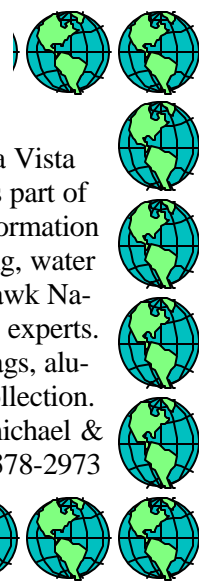
Want to keep the birds happy this spring? Drape short lengths of string over shrubs and scatter soft materials around—you'll help "feather" their nests!

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Earth Day Celebration



The annual Earth Day Celebration will be held at the Sierra Vista Farmers Market on April 19 from 9:00 a.m. to 2:00 p.m. as part of the West End Block Party. There will be Earth-friendly information and demonstrations on composting, solar cooking, recycling, water conservation. Also, snakes and creepy crawlies by Gray Hawk Nature Center and an author's tent will feature books by local experts. Four local bands will provide fiddle music. Bring plastic bags, aluminum cans and ink cartridges for a tri-school recycling collection. The Farmer's Market is located at the NW corner of Carmichael & Wilcox ~ For information contact www.bajaaz.org or call 378-2973

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6. Irrigate Efficiently. Use drip irrigation wherever possible to cut down on water usage.

7. Maintain the Landscape Appropriately. Once you have installed your Xeriscape, check it periodically to make sure it is doing what you intended. Be sure to check your irrigation system for leaks.

For on-line information on Xeriscaping, search Google for the term "Xeriscape" or go to

<http://www.xeriscape.org/whatis.html>

*Cado Daily, WaterWise Educator
Gary A. Gruenhagen, Master Gardener*



Xeriscape Garden Tour



The next Xeriscape (Low Water Landscape) Self Guided Tour will be held on Sunday, May 4, 1:00—4:00 p.m. The tour is sponsored by *WaterWise* and Cochise County Master Gardeners. Free, low-water use landscapes, called Xeriscapes (pronounced Zir- ih -scapes - remember, there is no "zero" in Xeriscape!), can be colorful, evergreen, soft, easy care and wildlife friendly. Come see beautiful and creative Xeriscape landscapes. When you visit these yards, you will be astonished at how much choice you have in creating your very own water wise yard. Docents will be at each yard to answer questions and plant lists will be available. Bring a camera! Maps will be available mid-April. Contact Joyce at 458-8278, Ext. 2141 for information.

For Cochise County Residents: *WaterWise* Specialists are available to visit your home or business and help you do what you want, but water

more efficiently. To schedule a FREE on-site visit, call the *WaterWise* Program at any of the four county locations listed below. A qualified water conservation educator will visit your home or business and give tips specific to you.

University of Arizona South
1140 N. Colombo
Sierra Vista, AZ, 85635
520-458-8278 x 2141
cdaily@ag.arizona.edu

Cochise County Building
450 S. Haskell, Willcox, AZ 85643
520-384-3594

U of A Douglas (Douglas Library)
558 E. 10th St., Douglas, AZ
85607
520-364-4146

NRCD Office (by ALCO)
306 S. Ocotillo, Benson, AZ 85602
520-586-3467