



# High on the Desert Cochise County Master Gardener Newsletter

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

## The Virtual Gardener—Review of *Just Add Water*

Whew! The 15<sup>th</sup> annual High Desert Gardening & Landscaping Conference is over and life can return to normal...whatever that is.

By all accounts, the conference was again a success with nearly 150 paid registrants, 20 unpaid speakers (they work only for food!), and 18 exhibitors. Our biggest hitch was an epidemic of respiratory crud that struck three of our speakers at the eleventh hour and caused a scramble for substitutes. Thanks to our County Extension Agent Rob Call for riding to the rescue.

In the past my March articles have discussed the conference in detail. This year I'm going to do something different and review a book: *Just Add Water: The Realistic Guide to the Land, Landscaping and Gardening In the Higher Elevations of the Great Southwest* by Jim Koweek (2007, Sonoran Wind Press, Whetstone, Arizona).

The author, Jim Koweek, has participated in every one of our fifteen conferences and was a keynote speaker at this year's conference. He has been involved in the green industry in

Southern Arizona for nearly 30 years. After graduating from the University of Arizona in 1978 he began working on a landscape crew and accumulating along the way an encyclopedic knowledge of plants and how they respond to our unique and unforgiving High Desert environments.

Jim's book, a compilation of articles he wrote for *The Bulletin* of Sonoita, Arizona and *The Farm and Livestock Trader* of Whetstone, Arizona over many years, is not a prescriptive tome written at the reader, but an over-the-fence conversation with the writer, for Jim is a self-described "talker on paper." The book is filled with the distilled knowledge of someone who has been-there-done-that with plants in the High Desert of Southeastern Arizona for decades. He tells it like it is—what works and what doesn't work (often learned the hard way by the author himself).

The book is organized around descriptions of the five seasons in our High Desert land—*Summer, Fall,*

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*Winter, Company, and Too Hot for Company.* The names require a little explanation. “Summer” is what Jim calls the rainy season and others call the Mexican Monsoon. “Company” is Jim’s term for that beautiful early spring season here that produces the first flush of growth, wild flowers, and visits from out-of-state friends and relatives. And “Too Hot for Company” is the pre-rainy season period of “dry heat” that turns those spring wild flowers into crispy critters and sends the visitors scampering home again.

Don’t be deceived by Jim’s folksy, down-home style. Behind that façade lies a closet intellectual with the enquiring and perceptive mind of a natural philosopher. Two examples serve to illustrate this point.

Unlike most authors, Jim understands that climate averages in this High Desert land are meaningless. Because we are located in a climatological war zone that separates the tropics from the temperate zone, variability is the name of the game here. As Jim reminds us throughout the book, recommendations for what and when to plant based on averages can only lead to a chance of success in any given year, not certainty.

A second example is Jim’s observation that the land can’t be changed to the way it was without a specific date in mind because it’s always changing. As a geologist by education, I take a longer view of earth history than most and appreciate Jim’s insight. Too often we forget that the earth has a long history and has been changing for every second of its existence. Things only seem constant to us because of the restricted window through which we view them.

Change just **is** and we need to adjust to it rather than fight it because, no matter what, we will never pass this way again.

In addition to Jim’s philosophical insights, what else will you get out of his book? Well, you will pick up a wealth of information about the kinds of plants that grow in this area and their strengths and weaknesses. You will learn how best to care for your plants and make most efficient use of water, our most precious resource in this land of drought. And you will learn how best to combat the numerous pests that threaten your plants. Along the way you will gain a deeper appreciation of our magical High Desert land and the people who love it passionately.

So do yourself a favor. Get a copy of Jim’s book for yourself, and while you’re at it get half a dozen copies for your friends and relatives. Your garden will grow better for it and so will theirs.

Until next time...Happy Surfing.

Gary A. Gruenhagen, Master Gardener  
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*Robert E. Call*

Robert E. Call  
Extension Agent, Horticulture

Carolyn Gruenhagen  
Editor

## Cuttings 'N' Clippings

✧ The next CCMGA meeting is 5:00 p.m. Thursday, March 6 at the University of Arizona South campus, Public Meeting Room. Suzanne Nelson, Director of Conservation, Native Seeds/SEARCH, will talk about *Going Native: Planting Native Seeds*. Her presentation will cover the work of Native Seeds/SEARCH in conserving and promoting the agricultural diversity of the arid Southwest. Suzanne has worked with conserving and managing native plants and traditional crops within the Sonoran Desert bioregion for more than 20 years.

✧ The March *WaterWise* lecture will be held Saturday, March 8 from 9:00—Noon at the University of Arizona South Campus. If you depend on a residential well for water, this workshop *Got Well Water?* is for you. Topics include: how groundwater works, water quality testing and understanding the results, water treatment systems, well protection and basic well maintenance. Dr. Kitt Farrell-Poe, UA Extension Water Quality Specialist will give the presentation. For information contact Cado Daily at 458-8278, Ext. 2139 or check the web site: [www.ag.arizona.edu/cochise/waterwise](http://www.ag.arizona.edu/cochise/waterwise)

✧ The Episcopal Church in Tombstone is up-grading the landscaping around the 125 year old church and is looking for help. They would like plants and advice. They have put in roses, three trees, and are now working on a bed of herbs found in the Bible—plants that are willing to live in Tombstone. If you are able to help please E-mail

[HMACKAY1@powerc.net](mailto:HMACKAY1@powerc.net)

## Organic Farming—Part I

*Telling a history of organic farming—as with other great movements, such as alternative medicine—requires exploring the interplay between science, social values, economics and the recalcitrance of established organizations to adopt new approaches.*

- Joseph Heckman, Ph. D.  
Professor, Rutgers University

When we started the *Ask the Master Gardener* program at the Sierra Vista Farmer's Market, an orchardist and a rancher both asked how to become certified organic food producers without paying a huge fee to out-of-state certifiers. While researching their questions, I learned that organic food production is one of the fastest growing sectors of farming in the United States, but it hasn't always been held in high regard.

Advocates in England during the early 1900s shaped the organic movement in the United States. Jerome Rodale, a Pennsylvania businessman and farmer, read Sir Albert Howard's books about what we now call organic farming. Rodale said this approach to agriculture hit him like a "ton of bricks." To spread the word about this method of farming, in 1942, Rodale published a magazine called *Organic Farming and Gardening*. He and other Americans also published books about the interrelatedness of living systems. They recommended the use of natural fertilizers from humus and plant and animal wastes rather than the use of industrially produced chemicals. There was such a demand for this kind of information that in 1959, the editors of *Organic Farming and Gardening* published a thick book, *The Encyclopedia of Or-*

*ganic Gardening*. It has been revised and published several times since then and is still regarded as a trusted source of information about organic growing.

Although the magazine and encyclopedia enjoyed success, for many years academia disparaged the organic movement. It was called a "cult," a "myth," and "bunkum." But Howard's and Rodale's ideas persisted, even as farming around the world became increasingly mechanized, and chemicals, especially industrially produced nitrogen, became cheaper. In 1962, Rachael Carson published *Silent Spring*, raising concerns about excessive use of pesticides in agriculture. She argued that pesticides had unintended and harmful effects on a variety of organisms and should be used sparingly. Her book was widely read and even though some in industry criticized Carson, the federal government took steps to investigate and prohibit the use of certain chemicals. Not surprisingly, interest in organic farming continued to grow.

As interest in organic agriculture increased, so did concerns about establishing uniform standards for or-



ganic methods of production and processing. In 1979, the State of California enacted its own standards. This prompted the U.S. Department of Agriculture to publish the *Report and Recommendations on Organic Farming* to increase communication between organic farmers and the federal government. This exchange of ideas resulted in passage of the Federal Organic Foods Production Act of 1990. It set the stage for national standards to assure consumers of consistent quality in organic products.

In 2002, after years of consultation, Congress finally passed legislation establishing the National Organic Program (NOP). NOP guidelines say that the term "organic" can only be used when strict production guidelines are followed. As a general rule, the NOP permits use of all natural (non-synthetic) substances and prohibits the use of synthetic substances. But the National List of Allowed Synthetic and Prohibited Non-Synthetic Substances contains the exceptions to this rule.

According to the NOP web page, products labeled "100 percent organic" must contain only organically produced ingredients. Products labeled "organic" must consist of at least 95 percent organically produced ingredients. Products meeting the requirements for "100 percent organic" and "organic" may display the USDA Organic seal. Processed products that contain at least 70 percent organic ingredients can use the phrase "made with organic ingredi-

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### March Reminders

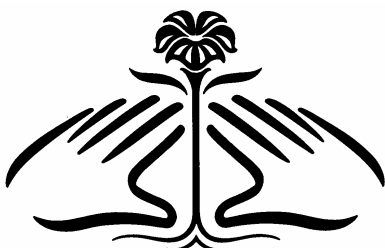
- ◆ Prune roses
- ◆ Start seeds indoors
- ◆ Check cactus for fungus
- ◆ Plant cool-season veggies
- ◆ Reconsider your water usage (Call *WaterWise* for a free audit—458-8278, Ext 2139)
- ◆ Remove and replace winter mulches

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ents” and list up to three of the organic ingredients or food groups on the principal display panel. For example, a soup made with at least 70 percent organic ingredients and only organic vegetables may be labeled either “made with organic peas, potatoes, and carrots,” or “made with organic vegetables.” Processed products that contain less than 70 percent organic ingredients cannot use the term “organic” other than to identify the specific ingredients that are organically produced in the ingredients statement.

The National Organic Program establishes the minimum requirements that organic production and handling operations must meet in order to become accredited by USDA-accredited certifying agents. Information that applicants must submit to certifying agents includes the applicant’s organic system plan. This plan describes (among other things) practices and substances used in production; record keeping procedures; and practices to prevent commingling of organic and non-organic products. The certification standards also address on-site inspections.

Terri Gent, Master Gardener



Master Gardener

## High on the Desert

Our 15<sup>th</sup> Annual High Desert Gardening & Landscaping Conference has come and gone. From all reports everyone had a great time and learned so much. It is with great pleasure that we say, “Thanks! Job well done!” to all the dedicated volunteers of the Cochise County Master Gardeners Association!

### Special thanks to our sponsors

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### Non-Profit/Non-Selling Exhibitors

Cochise County Master Gardeners Association, Ft. Huachuca *WaterWise* & Energy Smart, Sierra Vista Area Garden Club, U.S. Forest Service-Sierra Vista Ranger District, USDA, APHIS, PPQ, *WaterWise*

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### Businesses and Organizations that made the registration gift bags possible

City of Sierra Vista, Cochise County Cooperative Extension, Dewitt Landscape Products, Ferry-Morse Seeds, Gardeners Supply, High Country Gardens, Lee Valley Tools, Ltd, Nature’s Control, Park Seed Company, Select Seeds, Sierra Vista Chamber of Commerce

### Speakers

A great big THANK YOU! We couldn’t have done it without you!

### Committee chairpersons and CCMGA Members

Thanks to all the committee chairpersons and members who gave so much of their time, energy, and talents to make our 14<sup>th</sup> Annual High Desert Gardening & Landscaping Conference successful: **Rob Call, Extension Agent and Program Chair, Dave Barry, Conference Coordinator, Rosemarie Burke, Jim Byrum, Facilities Chair, Dave Crandall, Felice Dayhoff, Deke & Peggy Descoteaux, Gift Bags, Terrie Gent, Anita Gollwitzer, Finance Chair, Jeannine Grabowska, Carolyn Gruenhagen, Gary Gruenhagen, Registration Chair, Karl Hallsten, Larry Kovarcik, Merriane Lange, De Lewis, Cheri Melton, Publicity Chair, Helen Morgan, Angel Rutherford, Sponsor Chair, Doug & Eleanor Templeman, Sarah Turan, Joan Wakefield, Artist, Robert Welton, Centerpieces, Rob Call, Felice Dayhoff, and Lori Kovash.** Thanks also to the Cooperative Extension Staff in Willcox and Joyce Williams in the Sierra Vista office. A special thank you to Master of Ceremonies Jan Groth!

**Thanks to all of you!  
YOU made it happen!**

## The Agent's Observations

**Q** How long can I wait to prune my fruit trees, blackberries, grapes, ornamental shrubs and rose bushes?

**A** **Fruiting trees and plants** should have major pruning during the dormant season, after rest is completed. In Cochise County that is usually after January 1st. If pruning is done too early plant damage from cold temperatures and freezes can occur. Fruit trees can be pruned until flower pedals fall in the spring. However, honeybees will be visiting the blossoms while pruning is being done. The time may be past for some stone fruits; *i.e.* almonds, apricots, cherries, peaches, plums and nectarines. For pome fruits; *i.e.* apples, pears and quince pruning can also continue until bloom is completed. A publication entitled, *Pruning Fruit Trees in Home Orchards*, is available at the Cochise County Extension Offices.

**Small fruits**; *i.e.* blackberries, currants, gooseberries, grapes and raspberries, are best pruned during the dormant season. Blackberries and raspberries bear fruit on smooth, one year old canes. The rough, two year old canes need to be removed at ground level because they have fruited and are dead. Leave five to eight canes per lineal feet of row. Thinning out weak canes can be done through bloom.

Currants and gooseberries should be pruned while dormant. Remove wood that is three years old at ground level or cut them back to a main branch. Grapes can be pruned through bloom but have a tendency to "bleed". This is not as detrimental as one might think. It is better to prune grapes a little late than letting them grow in to a knurled mass! Grapes are produced on two year old wood. Cut the smooth, one year old canes back to five to eight buds from the trunk. These canes will bear the fruit this year. The rough canes, with peeling bark, are two years old and bore fruit last year. Cut them back to the trunk. A publication entitled, *Growing Grapes at Home*, is available at the Extension Offices.

**Ornamental shrubs** generally are pruned after flowering; however some species have other requirements. Consult a good pruning book like the *Sunset Pruning Handbook* or call the Extension Offices for proper pruning times.

**Roses** are dormant pruned except in the case of climbing roses which are pruned after flowering. A pamphlet entitled *Roses for Arizona*, discusses pruning different classes of roses and is available from the Extension Offices.

**Q** I have a small pomegranate bush that I planted about five years ago. It is currently about four feet high. I fertilize every spring. This plant had a couple of blossoms the second year. The last two years there were quite a few flowers, but not many fruits. How do I get more pomegranate fruit?

**A** Be patient! Pomegranates do well in the High Desert. As your pomegranate bush becomes more mature it will produce more and more flowers and then fruit. There is nothing you have to do but wait. As the plant matures remember to dormant prune each winter by removing a couple of the largest ground shoots. Those that are over five years old tend to be less



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Arizona State Parks Wildflower Hotline—(602) 542-4988  
2008 Wildflower Ranger Cam—[www.azstateparks.com](http://www.azstateparks.com)

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productive. Younger branches produce better fruit. However, do not prune until the plant starts fruit production. To prune your young plant remove only problem branches. This will help encourage earlier maturity of the plant and flowering. Heavy fertilizing slows maturity and fruiting of trees and plants. Apply small amounts of nitrogen fertilizer in the spring, perhaps a couple of tablespoons, depending on the fertilizer. Too much fertilizer will slow down fruit production and increase vegetative growth. Pomegranates require regular applications of water similar to an apple tree or non-desert landscape shrubs.

*Robert E. Call*  
*Extension Agent, Horticulture*



## Improved Planting Standards

1. Planting hole should be three to five times the diameter of the root ball and no deeper. The sides of the hole should be rough or sloping. Trees develop a root system that extends one and a half to four times the canopy diameter and lies within two feet of the soil surface. This lateral root system supports the tree and absorbs water and nutrients. Transplanting practices should encourage root spread.
2. Set the top of the root ball at or slightly above the soil surface. Trees planted deeper than the root ball tend to subside as irrigation compacts the soil beneath the root ball.
3. Remove the tree from the container. Avoid lifting the tree by its trunk. Disentangle and spread any roots that had circled in the
4. container. Score the sides of the root ball to encourage lateral root growth.
4. Place the tree in the hole and backfill. Do not add amendments to the soil. Do not tamp with your feet. Form irrigation borders (if used) just outside the root ball. Amended backfills tend to restrict root spread and reduce top growth. Amended backfills also tend to wick water away from the root ball.
5. Spread mulch on the soil surface to a depth of three to four inches. Keep mulch away from the tree trunk.
6. Do not prune unnecessarily. Root initiation and growth is stimulated by stem buds and leaves. Therefore shoot pruning reduces root growth and prolongs establishment.