

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—Book Review

The Hot Garden is the latest addition to a growing collection of books authored by Scott Calhoun, Tucson landscape designer, lecturer, and writer. Scott won the 2008 Garden Writers Association Media Award for a previous book, *Chasing Wildflowers*, and I wouldn't be surprised if he collected another award for this book.

The title of the book is somewhat of a double-entendre, referring not only to gardens grown in the hot desert Southwest, but also to Scott's eye-popping garden designs that sizzle with color.

The core area of Scott's Hot-Garden Zone includes the Sonoran, Chihuahuan, and Mohave Deserts of the Southwest, extending north to south from St. George, Utah to Sierra Vista, Arizona and east to west from Odessa, Texas to Palm Springs, California. According to Scott one of the defining features of landscapes in this area is the use of gravel instead of organic materials as mulches. [Incidentally, Sierra Vista, Bisbee, and Nogales are

described as lying on "the wetter edges of the Hot-Garden Zone" because of their high—over 14 inches—annual precipitation!]

The Hot Garden: Landscape Design for the Desert Southwest by Scott Calhoun, Tucson: Rio Nuevo, 2009, 192 pages.

The book is written in a breezy, occasionally irreverent, but always entertaining

and informative style and is stunningly illustrated on nearly every page with color photographs of plants and hot gardens. Scott's basic message is that gardens should strongly reflect a sense of place. In the Hot-Garden Zone—this means creating natural gardens featuring native plants and accented with rocks. Scott implores his readers to put on their desert eyes and learn to enjoy and appreciate the muted colors, sparser vegetation, and exposed geology of the desert. Garden designers should hike into the local mountains and canyons, observe, and let Mother Nature be their design teacher. A good pair of boots—and, I would add, a digital camera—are essential components of a garden designer's kit.

In addition to reflecting the natural ecology of the desert, hot gardens
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should also reflect the cultural heritage of the local area. In the desert Southwest this means incorporating Mexican and Native American themes.

Inspired by French painter Jacques Majorelle, Mexican architect Luis Barragán, and Phoenix landscape architect Steve Martino, Scott advocates the use of bright, bold colors on walls as dramatic backdrops for native plants. His philosophy is summarized in the formula: *Colored Walls + Native Plants = Garden Magic*. He explains the use of a color wheel to pair plant colors with wall colors to achieve maximum impact and illustrates the effects with photos showing silver and green yuccas against an “Imperial Palace Yellow” wall, totem pole cacti dancing against a purple “Bossa Nova Blue” wall, and red miniature roses climbing a tangerine-colored wall. Scott’s discussion of the use of colored walls was one of the highpoints of the book for me.

Of course there is more to hardscaping than walls and paint. Scott also discusses other hardscape elements to turn up the temperature in a hot garden, including paving and mulching materials, furniture, labyrinths, lighting, ramadas, water features, shade structures, garden art, and more.

No landscaping book would be
(Continued on back page)

Robert E. Call

Robert E. Call
Extension Agent, Horticulture

Carolyn Gruenhagen
Editor

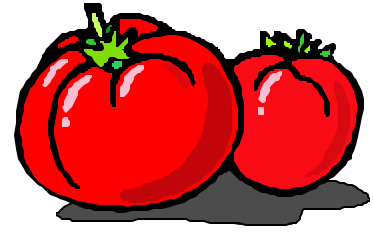
Home Canning—Do it Correctly—Part 2

Use only proper canning jars and lids; save that old mayonnaise or applesauce jar for something else. Be sure the jars and lids are scrupulously clean—your canning book will give the details. Lids are usually of two pieces, the sealing lid itself, typically a flat metal piece with a rubbery seal, and a threaded metal ring that holds the lid in place during processing until a vacuum seal is formed. The rings are not a part of the actual seal and should be removed from the jar once the seal is accomplished. Removal of the rings eliminates the possibility that moisture trapped between the seal and the ring could cause corrosion of the sealing lid itself. Jars and rings may be reused while lids are one time use only.

Note that processing times begin once the water bath returns to a vigorous boil after placing the jars into it, not at the time you place the jars into the water. Similarly, processing times for a pressure canning begin once the proper pressure is achieved, not the time at which you placed the jars into the canner.

Be sure and thoroughly scrub and clean all foods being prepared for canning. Get all dirt off the cucumbers or zucchini. Discard produce that is damaged or rotted in any way. There's no point in trying to get an extra jar or two of food at the risk of serious illness.

Most foods are canned using the “hot pack” technique while others are done using the “cold pack” technique. Hot or cold here simply refers to the condition of the food immediately prior to putting it into the canning jar. Peaches, for example, are generally cold packed because they would fall apart if handled hot. The difference between hot and cold pack is important. If a



food that should be packed hot is actually packed cold (maybe you thought you'd split the canning work into two days and boil your peas the day before), the recommended processing time will be insufficient to get the entire jar to a high enough temperature. Again, improper processing means a higher risk of infected food.

Pay careful attention to recipe details like head space, which is the space between the top surface of the canned product (or the liquid it is canned in) and the underside of the seal. An improper head space can result in a faulty seal and a contaminated product. Head spaces typically vary between a quarter of an inch to a full inch.

Now, all of this talk makes it sound like canning is a risky, dangerous thing to do. It isn't at all if you follow the recommended procedures and recipes. Millions of people have been canning foods safely at home since at least the late 19th century when the Ball Company first patented canning jars and lids. So, get yourself a good canning book, read it thoroughly, follow the recipes carefully, and get some of that fresh garden produce put up for the cold days of winter!

Bill Schulze
Master Gardener Associate

Cuttings 'N' Clippings

* The next CCMGA meeting is 5:00 p.m. Thursday, **September 3** at the University of Arizona South Campus Public Meeting Room. Darcy Tessman, Cochise County Extension Agent, 4-H Youth Development, will discuss 4-H Gardens in Sierra Vista and Ft. Huachuca and show videos made by the youth in 4H. The public is encouraged to come and hear about our area's youngest gardeners.

* **September 6**, 1:00—4:00 p.m. is the date for the next Xeriscape Garden Tour sponsored by *Water Wise* and the Cochise County Master Gardeners. Call the Extension office (458-8278, Ext. 2141) for maps for this **FREE** tour. Docents will be at each yard to answer questions and plant lists will be available.

* High on the Desert

Mark your calendars for **February 25 & 26, 2010** for the 17th annual High Desert Gardening & Landscaping Conference to be held in the Windemere Hotel & Conference Center, Sierra Vista, AZ. Plans are underway by the Cochise County Master Gardeners Association in conjunction with the University of Arizona Cooperative Extension for another exciting conference!



In a Desert Garden

Plumbago scandens

This month I want to make you aware of a beautiful, smaller plant suited for light shade in different conditions. It is very underused. We mostly are familiar with *Plumbago auriculata* with its light blue flowers reminding us of Phlox. This desert dweller from South Africa is widely used. The *Plumbago* I am referring to is more like a groundcover as it spreads through runners and can be adapted to different soils, water, and light conditions. It is a North American native and can be found from Florida to Arizona, seldom in our nurseries. I wonder why? The plant is absolutely beautiful and as you all know, I am a sucker for blue flowers. It has deep blue flowers that appear over a long time from late spring almost until frost. The variety I got might be a hybrid as it doesn't grow as tall as described in the *Sunset Western Garden*

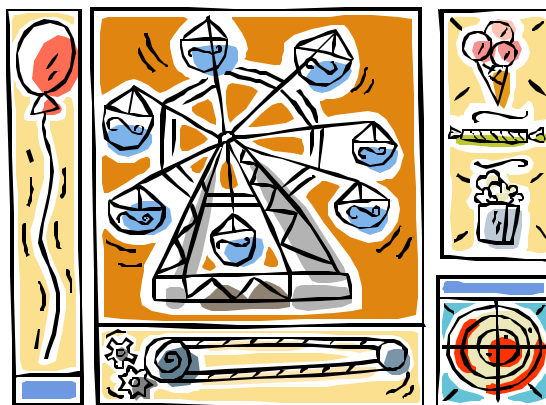
book. It grows only to a few inches and the foliage is deep green changing to red in the cooler seasons. It is a spreader and if the conditions are right, one plant can cover a vast area. The plant I purchased and I cannot recall where, is planted under my roses in my Memorial Garden. Here, over the years it has taken over a big part, covering the bare stems of the roses. The root structure is not very deep and it doesn't interfere with the roots of the roses. The plant is also in competition with the violets. The violets will start blooming in November when the *Plumbago* finally gives up, but will take over again when the violets stop. This month it is at its peak, like a blue carpet it lights up the corner of my garden. Here it gets quite a bit of water, but in another corner of my yard I planted a start under a yellow butterfly bush and it is just as happy with this dry situation.

*Angel Rutherford,
Master Gardener*

Cochise County Fair

"CORN TO BE WILD"

Celebrating 85 years of Critters, Crafts & Competitions



The Cochise County Fair will be held at the fairgrounds located on Leslie Canyon Road, North of Douglas from September 24 to 27. See their web site

www.cochisefair.org for information, schedules, and the complete fair book.

Desert Broom—Part 2

Comment by Robert E. Call, Area Horticulture Agent:

There was some confusion from the previous article in this series published last month, August 2009, (see:

[/http://ag.arizona.edu/cochise/mg/pdf/Aug09.pdf](http://ag.arizona.edu/cochise/mg/pdf/Aug09.pdf)) concerning desert brooms. There are at least two native species in the southwest and California. They are *Braccharis sarothroides* and *Braccharis pilularis* respectively. The author refers to the southwest native species as “Spanish broom” and that is not correct. This is the problem with common names. Wikipedia lists some 46 species of *Braccharis*

(<http://en.wikipedia.org/wiki/Baccharis>). There are several species that have been imported for various reasons. These were addressed by the author of these articles, Dr. Robert Welton.

Part 2

Preventing post-fire establishment and spread: The USDA Forest Service’s *Guide to Preventing Invasive Plants* states that establishing a weed-free burned area is the most effective and least costly control method. This can be accomplished through careful monitoring, early detection and eradication, and limiting invasive plant seed dispersal into burned areas by:

- ◆ re-establishing vegetation on bare ground as soon after fire as possible,
- ◆ using only certified weed-free seed mixes when revegetation is necessary,
- ◆ cleaning equipment and vehicles prior to entering burned areas,
- ◆ regulating or preventing human and livestock entry into burned areas until desirable site

vegetation has recovered sufficiently to resist invasion by undesirable vegetation,

- ◆ detecting weeds early and eradicating before vegetative spread and/or seed dispersal, and
- ◆ eradicating small patches and containing or controlling large infestations within or adjacent to the burned area.

In general, physical and mechanical control methods are likely to be effective only when Spanish broom is young. The Nature Conservancy’s *Element Stewardship Abstract on Spanish Broom* provides a general overview of physical and mechanical control methods that may be effective for controlling infestations.

Pulling with weed wrenches is effective for small broom infestations or in areas where an inexpensive, long-duration labor source is dedicated to broom removal. Hand pulling Spanish broom plants may be most practical and effective when the stand is one to four years old and plants are small enough, as long as roots are removed and follow-up treatment of seedlings is done. The optimal season for pulling may be July to September when plants are experiencing water stress. When plants have matured to small tree size they cannot easily be removed with hand tools.

Nilsen¹ suggests that machines such as brush hogs are probably impractical for Spanish broom removal since it commonly occurs on steep slopes and because the trunks of Spanish broom grow rapidly to a size outside the range of effectiveness for this technology. Saws can be used to cut plants with larger stems; however, Spanish broom has a great facility for sprouting from a saw cut even when the cut is close

to the ground. When brush hogs or saws are used to cut Spanish broom stems, sprouting should be expected. Among all the mechanical methods, saw cutting is least likely to be effective in preventing sprouting. Pruning off stems and then immediate application of glyphosate as a “stump treatment” has proven effective.

There are no USDA approved biological control agents for Spanish broom. Domestic goats are said to be effective at controlling re-establishment of broom. Herbicides are effective in gaining initial control of a new invasion (of small size) or a severe infestation, but are rarely a complete or long-term solution to invasive species management as they do not change conditions that allow infestations to occur.

Considering the broom’s dead-wood fire hazard and its amazing ability to overtake native species, it may be detrimental to Arizona’s landscape.

Reference:

¹*Invasive Plants of California’s Wildland* by Erik Nilsen

Robert Welton, Master Gardener



September Reminders

- ◆ Keep on watering!
- ◆ Plant cool-season flowers and veggies
- ◆ Start shopping for bulbs (The bulletin *Bulbs for Southern Arizona* is available from the Cooperative Extension offices.)

The Agent's Observations

Q Some of our peaches have bumps and ridges in them. They are not ripe yet. What has caused this? We have watered and fertilized the trees as directed.



A Peach fruit was brought into the office. It was determined that the damage was caused by insects with piercing mouth parts and is called "catfacing." These marks and deformations are most likely caused by stink bugs or leaf-footed plant bugs. The fruit is still fine to eat when it is ripe.

Control: Exclusion using netting or shade cloth can keep these true bugs out of the fruit. An insecticide can also be used. Please read and follow all label directions.

Reference:

ufinsect.ifas.ufl.edu/stink_bugs/stink_bugs.htm

Q There are quite a few grasshoppers that are showing up on our plants. They are big and mostly black with colorful marking highlights. We have been smashing them morn-

ing, afternoon and evening! They seem to really like our salvias and desert willows. We have smashed well over 100 of these grasshoppers. What are they and can they be controlled?

A These are horse lubber or Mexican general grasshoppers (*Taeniopoda eques*). These large colorful grasshoppers hatched in the spring and go through several molts to reach the size we are seeing now. There is one generation per year. They will cluster in groups and then disperse as the fall approaches.

Control: Exclusion with netting or shade cloth is an effective method to protect plants. They are difficult to control using pesticides because of their large size. Squashing them is really the most effective method. There are some bait products that need to be spread around a large area. One contains *Nosema locustae*, a natural occurring bacterium and another contains the insecticide malathion as the active ingredient. *Nosema* is marketed as NoLo Bait and is not fast acting. The grasshoppers have to ingest it, get sick and then die. At best 50% of the grasshopper population will be killed in a given year. The malathion bait can be spread outside of a vegetable garden or planting bed and will control the hoppers.

Reference:

http://www.epa.gov/pesticides/biopesticides/ingredients/factsheets/factsheet_117001.htm

Q Our summer squash plants, crook neck, zucchini, and patty-pan were growing well and we have harvested them. Now they are wilting and the more we water we give them it does not stop them from wilting. What is going on?

A Your plants have most likely been fed on by the southwest squash vine borer (*Melittia calabaza*). It is a clear winged moth. If you look carefully you will see some saw dust like plant material on the stem or ground. This is where the egg has hatched and bored into the stem. They feed in the stem causing the wilting you are seeing. When mature the larvae will leave the stem and spin a cocoon and emerge as an adult. You can try splitting the stem length ways and find the larvae and smash it. Tape up the stem and hope the "plumbing: that connects the roots and leaves has not been damaged to much. An insecticide containing *Bacillus thuringiensis* (B.t.) is an effective control if the larva eat some of it. I hear some have had success using a syringe and squirting some diluted B. t. in to the entry hole.

Reference: *Insects of the Southwest*, 1994. Floyd Werner & Carl Olson. Fisher Books, Tucson, page 66.

Robert E. Call

Extension Agent, Horticulture

Fall Xeriscape Tour



September 6, 2009
1:00—4:00 p.m.

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complete without a discussion of plants and Scott's is no exception. The longest chapter of the book, *Designing with Desert Plants*, is devoted to descriptions of native and desert-adapted plants by type—trees, shrubs, ground covers, *etc.* Interspersed with the descriptions are notes on landscape plants with edible parts as well as tips on installing plants, saving money on plants, and plant palette suggestions for specific areas within the Hot-Garden Zone. The chapter ends with a 19-page table of all the plants discussed in the chapter giving their size, hardiness, water use, and a brief note from Scott about each.

In the last chapter of the book, Scott covers the various strategies and techniques for conserving water in your landscapes. The first consideration, of course, is to

choose low water use plants. But beyond that, Scott describes a host of other ideas for saving water.

Two copies of *The Hot Garden* are available in the Cochise County library system, one in Sierra Vista (SW 635.952 CAL) and the other in Benson (712.0915 CAL). The book is popular, however, so be prepared to wait awhile for it to become available for you to read.

To sample some of Scott's other writing check out his Web site at <http://www.zonagardens.com/landscape/press/> where you will find an extensive sampling of magazine articles written by Scott as well as reviews of his other books.

Until next time, happy surfing.

Gary A. Gruenhagen, Master Gardener
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Fall Xeriscape "Lingering" Tour

Fall is a beautiful time in the valley grasslands and in the foothills of the Huachuca Mountains. Because of that the tour this fall is designed to encourage you to linger at the sites. Two of the landscapes are large and spacious while the third is cozy and intimate. Paths meander through "naturescapes," flower beds, succulent islands and rainfed vegetable gardens beckon; and shade trees cooling an artistic patio will tempt you to sit awhile to enjoy the beautiful landscapes and mountain views. Call the Cooperative Extension Office at (520) 458-8278, Ext. 2141 for a map to this free tour.