



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 Low-Water Flower Gardener*

Title: *The Low-Water Flower Gardener*

ISBN: 0962823619

Authors: Eric Johnson and Scott Millard

Publisher: Millard Publishing Services, Tucson. Copyright: 1993

I recently attended a Saturday morning Water Wise workshop on landscape design given by Extension Specialist, Cyndi Wilkins. Cyndi, as expected, did an outstanding job introducing a very large subject. As I was looking through one of her handouts, a recommended book list, I discovered a book I didn't already own and had not even read. Horrors!

The book, *The Low-Water Flower Gardener* by Eric Johnson and Scott Millard, has been around for a while and I'm not sure why I had missed it so far.

As soon as I returned from the lecture, I checked the Cochise County Library District Web site

(<http://cochise.lib.az.us>) to see if the book was available for checkout and found that the County library system has a total of 13 copies of the book—at least one copy for each branch library, a sure sign that it was purchased for the library by the Cochise County Master Gardeners. (Did you know that the Cochise County Master Gardeners Association has purchased several thousand dollars worth of gardening books for branch libraries around the County?) The book was available in the Sierra Vista Library, so I checked it out.

The Low-Water Flower Gardener is divided into four sections, each stuffed with lots of practical advice for producing beautiful natural flower gardens in the arid West.

The first section, *Flower Gardening in the Arid West*, discusses in general terms the difficulties of growing perennials and describes fifteen different climate regions found in the

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western U.S. Cochise County falls within the authors' *Arizona Medium/High Deserts (AZMHD)* region, which they characterize as having a definite winter season, moderately warm summers, and a good summer rainfall.

In the second section, *Creating a Low-Water Garden*, the reader is advised to create a plan before creating a garden, a step too many of us forget. Key elements of the plan should include grouping plants by water needs, colors, textures, and forms. A properly planned landscape will be easy to maintain and conserve water, as well as being attractive. One practical trick the authors suggest is to dig planting holes before you visit the nursery to buy the plants. That way you will be sure to have a place for every plant you buy and improve the chances that plants will be promptly installed after you bring them home.

Use native plants where possible and copy patterns found in nature to create a landscape with a sense of place. Arrange plants randomly, use rocks and boulders as hardscape elements, and allow plants to develop natural forms instead of pruning them into un-natural shapes. Strive to create year-round color by intermixing plants with different blooming periods and using annuals to fill in the gaps between the blooming periods of perennials.

The major part of the book is taken up by the *Gallery of Plants*, which includes complete descriptions of over 270 species, ranging from *Achillia* to *Zauschneria*. In addition to the usual list of plant characteristics this section includes a chart showing the

blooming season for each plant—spring, summer, fall, or winter—which makes it easier to create a garden with year-round appeal.

The last section, *Planting and Care*, provides tips on dealing with difficult soils, controlling weeds, selecting planting locations, watering, mulching, fertilizing, pruning, dealing with pests, and propagating plants. Each of these discussions is filled with good ideas to help make your natural flower garden a success.

If you are interested in creating a natural flower garden and live in the arid West, I recommend you check out this book. My only regret is that it has taken so long for me to discover it.

Until next time, happy surfing.

Gary A. Gruenhagen, Master Gardener
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In a Desert Garden

Mexican Honeysuckle – *Justicia spicigera*

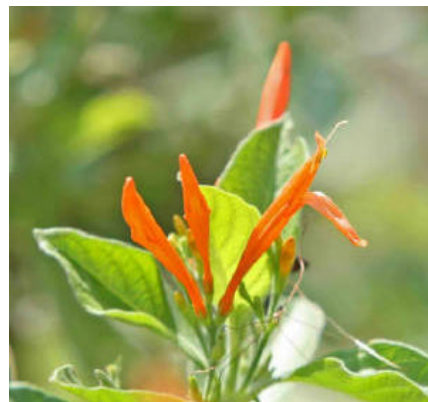
I am always looking for plants that have some interest all year long as I like something blooming or evergreen in my yard at all times. One day on a trip through the nurseries I came across a little plant I just couldn't be without—the Mexican honeysuckle. I just loved the bright orange tubular flowers and the yellow-green leaves. It is an unusual color combination and for some people it might be a little too “in your face,” but it works in my garden.

I purchased two and planted one on a little island close to a stand of

Opuntia ‘Bunny ears.’ The *Opuntia* pads are green with yellow spines and it looks really nice with the orange flowers and yellow-green leaves of the *Justicia spicigera*. The other plant sits in a half whiskey barrel next to my sunroom under a shade structure along with a *Salvia* ‘Lady in Red,’ a yellow chrysanthemum, and a bright green and deep purple potato vine. The arrangement brightens up this corner.

Mexican honeysuckle might not be hardy in all locations as it is only leaf hardy to 24°F. and root hardy to at least 20°F. This winter, even though it was very mild, the temperature did go down to 15°F on occasions. I covered the one next to the house on very cold nights but the other plant in the open location I left uncovered. Both plants are well mulched. They both did well and bloomed off and on all winter. The six hummingbirds that stayed with me this winter enjoyed the bright orange tubular flowers. This plant grows 2–3 feet tall and can spread to 4 feet. It takes full sun here in the high desert, but prefers a little afternoon shade. It needs good drainage, fertile soil, and a little extra irrigation in dry hot times.

Angel Rutherford, Master Gardener



Justicia spicigera

Celebrate Earth Day—Sierra Vista & Bisbee Farmer's Markets

Come celebrate life on this special spot on Planet Earth during the 4th Annual Earth Day Celebration at the Sierra Vista Farmers' Market on Saturday, April 18. This event, part of the West End Block Party, will take place between 9 a.m. to 2 p.m. at the farmer's marketplace at the NW corner of Wilcox Drive and Carmichael Ave.

There will be lots to interest backyard growers and gardeners this year with three local nurseries bringing native and drought tolerant plants for landscaping that evokes a strong sense of place, as well as increases wildlife habitat and water savings. These will include Peter "Petey Mesquitey" Gierlach with plants from his Spadefoot Nursery near the Chiricahuas, Hereford's Little River Nursery with great cacti and Gary Foss (also of Hereford) with Oaks of the Wild West. This will be a great chance to pick the brains of these experts and discover what will grow well in your yard. Arizona Native Plant Society will have an information booth about growing natives and its great field trips and hikes. With over 25 years working with native plants and seeds in SE AZ, Jim Koweek will be



the event MC as well as host his Arizona Revegetation booth specializing in reseeding projects, native seed sales, and rangeland monitoring.

Two growers will have lots of herb and vegetable transplants to get a head start on spring planting. The Sierra Vista Area Garden Club will host a seed sale. Free organic and southwest seed catalogs can be picked up at the Baja AZ Sustainable Agriculture's booth. Seeds of Change's organic vegetable seed packets will be for sale for a dollar each there as well.

Cochise County Master Gardeners will have an information booth chock full of helpful growing handouts customized for the High Desert. Sierra Vista's Worm Guy, Richard James, will demonstrate how easy it is to raise earthworms to help create great soil even here in the desert. He'll have hands-on worm bins as well as how-to info on creating economical worm homes out of recycled plastic containers that work year-round and worm compost tea to fertilize plants. Richard will also take orders for worms.

For those interested in water-frugal gardening and water harvesting, WaterWise will offer its information and two rain water harvesting specialists will have barrels and larger contain-

ers for sale along with installation services.

All day entertainment for the whole family will include lots of great "solar-powered" fiddle music by the Cochise County Youth Orchestra, the Jones Gang Family Band, master fiddler David Kaemmer, the Arthritis Brothers, and a teen band.

Find out about local groups that hike, bike, bird watch or star gaze. Bisbee's Spooky Tooth Cycles will show how to convert a standard bicycle into a motorized bike with a gas motor that gets 150 miles per gallon or an electric motor with zero emissions and a rechargeable and removable battery.

Learn about the San Pedro River and its special creatures as well as local flora and fauna in surrounding forests and preserves. Stroke a snake or pet a tarantula at Gray Hawk Nature Center's local reptiles and creepy crawlies tent.

Watch the sun cook a pot roast or bake bread in solar ovens or fry an egg on a solar hotplate. Solar ovens and solar cookbooks will also be for sale. Cooking in sun ovens, that reach over 400° F., saves on fuel and home cooling, is easy and very practical especially for gardeners who can

(Continued on back page)

April Reminders

- ◆ Stake new trees
- ◆ Plant fast growing cool season veggies
- ◆ Fertilize
- ◆ Prepare for pests
- ◆ Start plants from seed

Robert E. Call

Robert E. Call
Extension Agent, Horticulture

Carolyn Gruenhagen
Editor

Attack of the Girdlers—Part 2

Impact

Are mesquite girdlers harmful? This is debatable. In general, they seem to cause no significant health problems for larger trees, but they can be considerably debilitating on young or smaller trees. One example has been cited where 40% of all branches up to one inch in diameter on a single tree were girdled². Certainly, they choose prime, young branches, which leads to disfigurement of the tree and hampers normal growth. The tree quickly produces new growth, but it is very often this new growth that becomes the girdlers target in a year or two.

In addition, while their girdling does not kill a tree outright and may stimulate new growth, the method of girdling is akin to lopping or heading, a highly undesirable pruning practice. It cuts off the natural growth of healthy branches and encourages the sprouting of smaller, weaker side growth. Also, it reduces the photosynthetic intake of the tree until new growth emerges.

Two researchers at New Mexico State University, Benjamin Duval and Walter Whitford, conducted a study on mesquite girdlers and concluded that girdlers may be playing a significant role in desertification. Duval claims, “Although the desertification process was likely started by overgrazing cattle, the ecosystem engineering impact of the mesquite girdler could finish off the process.”

The gist of their findings was that the damage from girdlers caused the mesquite trees to generate new growth, which in turn drew nutrients from the surrounding soil, depriving grass of neces-

sary nutrients in the process³. This is only one study and is not conclusive; still it will be interesting to follow subsequent research on this topic.

Although there may be some, no evidence was found that twig or mesquite girdlers provide a meaningful beneficial function in the ecosystem.

Control

The best method of controlling girdlers is to cut off and burn the girdled branches every autumn or winter. Where burning is not allowed, the branches should be disposed of at a public waste transfer station, where the branches will then be ground up. The objective is to remove and destroy the eggs and the larva, which occasionally remain in dead branches for up to three years.

Girdlers can fly and are mobile, so this will not prevent girdlers from coming in to attack your trees next year. However, removing this year's eggs will greatly reduce the number of girdlers hatching and mating next year on your property. This would

minimize the amount of damage caused in the future and reduce the time you spend trimming each subsequent year.

For prize trees or where infestations are particularly heavy, chemical controls can be used, but these should only be applied as a last resort. Their effectiveness is minimal. Aside from the dangers involved in using pesticides, you have to catch the girdlers just as they emerge, and as mentioned earlier, they do not hang around after laying their eggs, so they are difficult to find and isolate.

Other Sources

Day, Eric. Twig Girdler/Twig Pruner. Virginia Cooperative Extension, 1996.

Rice, Marlin E. and Bastiaan M. Drees. Twig Girdlers. Texas Agricultural Extension, 1990.

Sutherland, Amy. “Small desert beetle found to engineer desertification” from Bio-Medicine Abstract, March 27, 2008.

Texas Cooperative Extension. Twig Girdlers. From Drees, B.M. and John Jackman, Field Guide to Texas Insects. Gulf Publishing Company, 1999.

“Mesquite Biological Control: Stem Girdler, *Oncideres rhodictica*.” CSIRO Entomology (2007).

http://www.ento.csiro.au/weeds/mesquite/stem_girdler.html

Bret Galloway, Master Gardener
(Note: Scholarship winner to the 2009 High Desert Gardening & Landscaping Conference.)

²Rogers, Ken E. The Magnificent Mesquite. University of Texas Press (2000), p. 33.

³Duval, B.D. and Whitford, W.G. “Resource Regulation by a Twig-Girdling Beetle Has Implications for Desertification”, April 2008 issue of Ecological Entomology, Vol. 33, Issue 2, pp. 161-166. (Abstract only.)



Mesquite tree girdler

Cuttings 'N' Clippings

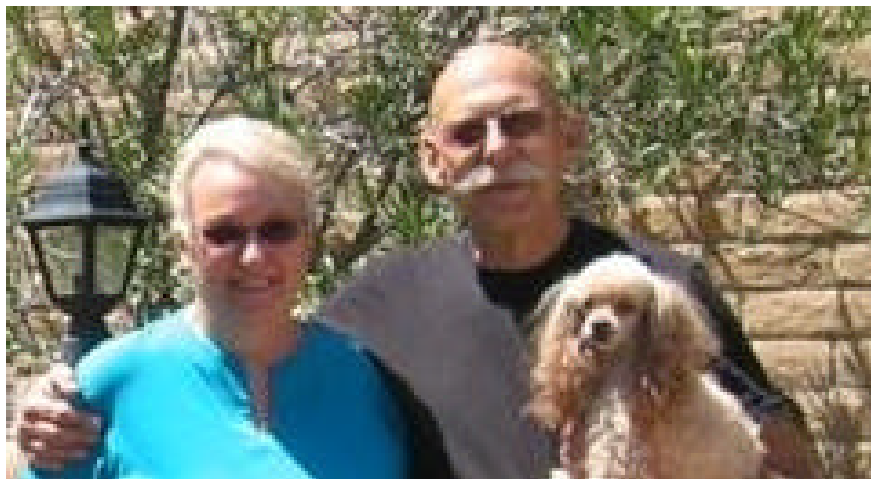
✧ The next CCMGA meeting is 5:00 p.m. Thursday, **April 2** at the University of Arizona South Campus Room 508. Terrie Gent, Master Gardener, will talk on *The Beginner's Guide to Agaves*. She will discuss the habitat of this unique plant, its importance to both man and animals, and how to grow these in pots or in your yard.

✧ Two free WaterWise presentations are coming in April. *Irrigation 101* will be presented by Cado Daily and Cyndi Wilkins, UA Cooperative Extension WaterWise, on **April 4** from 9:00—11:00 a.m. at the University of Arizona South Public Meeting Room. Drip irrigation systems are great if you know how to use them, but are water-wasting if you don't. At this hands-on presentation you will learn about the basics of drip irrigation systems. On **April 18**, *How Do I Water* will help you learn how to assess a plant's water needs to keep your landscape healthy and your water bill down. This talk will be by Rob Call, Cochise County Cooperative Extension Horticulture Agent.

✧ The 4th Annual Earth Day Celebration at the Sierra Vista Farmers Market will be held on Saturday, **April 18** from 9 a.m. to 2 p.m. in conjunction with the West End Block Party. See related article on Page 3. Look for the Cochise County Master Gardeners!



The Agent's Observations



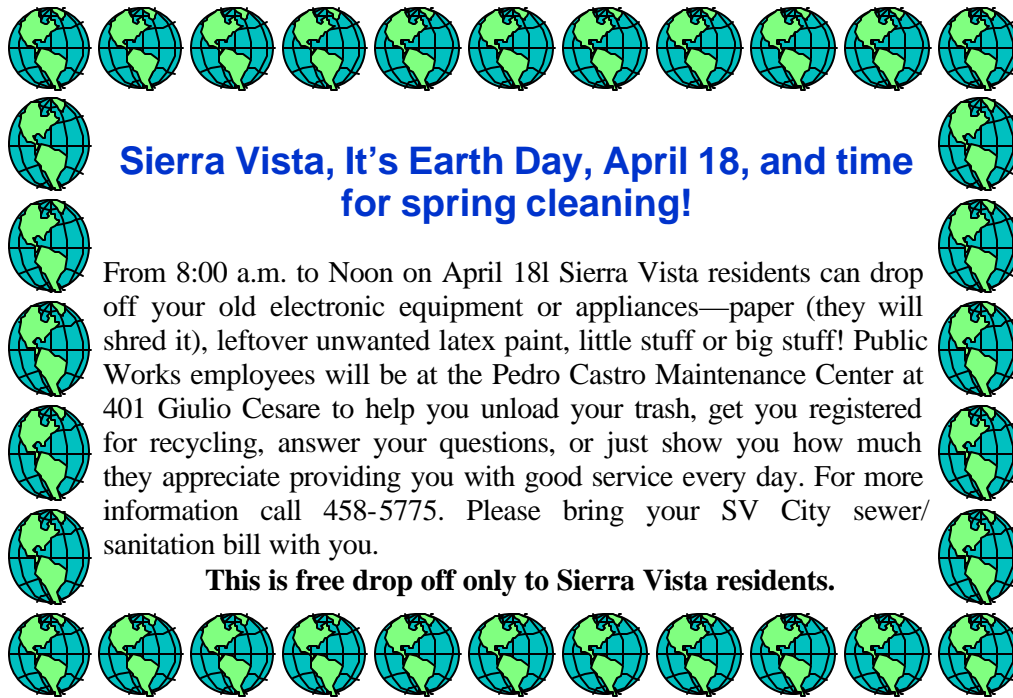
The College of Agriculture and Life Sciences at the University of Arizona has selected Gary and Carolyn Gruenhagen as the 2008 Extensionists of the Year. The award is given annually to person(s) who have contributed time and talent to citizens of their community and state and who have been an advocate for Arizona Cooperative Extension and the College of Agriculture and Life Sciences. The award will be presented at the College of Agriculture and Life Sciences' Annual Spring Awards Banquet on May 8, 2009. Congratulations Gary and Carolyn!

Robert E. Call, Extension Agent, Horticulture

Xeriscape Garden Tour May 3, 2009 ✧ 1:00—4:00 p.m.

The next Xeriscape (Low Water Landscape) Self Guided Tour will be held on Sunday, May 3, 1:00—4:00 p.m. The tour is sponsored by Water Wise 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.

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Sierra Vista, It's Earth Day, April 18, and time for spring cleaning!

From 8:00 a.m. to Noon on April 18! Sierra Vista residents can drop off your old electronic equipment or appliances—paper (they will shred it), leftover unwanted latex paint, little stuff or big stuff! Public Works employees will be at the Pedro Castro Maintenance Center at 401 Giulio Cesare to help you unload your trash, get you registered for recycling, answer your questions, or just show you how much they appreciate providing you with good service every day. For more information call 458-5775. Please bring your SV City sewer/sanitation bill with you.

This is free drop off only to Sierra Vista residents.

Celebrate Earth Day (Continued from page 3)

tend the pot outdoors and enjoy appetizing aromas that fill the yard.

A local author's tent will feature Tucson naturopath and vet educator, Dr. Lisa Newman, who will be selling and signing her book, *Three Simple Steps to Healthy Pets, the Holistic Animal Care Lifestyle*. Local native plant specialist, Jim Koweek will also sign his book *Just Add Water, the Realistic Guide to the Land, Landscaping and Gardening in the Higher Elevations of the Great Southwest*.

Over 50 farmers' market vendors will offer local naturally-raised meats, fresh produce, honey and nuts, home-style canned goods, desert health foods, handmade soaps, natural body care products, herbal remedies and holistic pet food and care.

Great food will include breakfast burritos, hot soup and sandwiches by Dragoon Market Cafe, pulled pork and chili beans by Mike's Cowboy BBQ, and Chili Chuckwagon from McNeal.

To support and promote recycling in Sierra Vista there will be a special one-day collection at Earth Day of plastic grocery bags and aluminum cans by the Huachuca Mountain Elementary School, Sierra Vista Middle School, and Apache Middle School. They have a very successful on-going recycling program that brings needed funds to the schools.

Sierra Vista's Cake Janssen, clothed in a wardrobe made from recycled materials, will offer mini-classes on making attractive vegetable and flower pots from recyclables.

Any organization or individual wishing to join in the Earth Day

celebration with an information booth or display about the natural world, outdoor recreation, or earth-friendly activities is invited to participate in Earth Day at no charge. Reserve a space by sending a message to

Valerie.McCaffrey@bajaaz.org.

Bisbee Farmers' Market will host an Earth Day Celebration the following Saturday, April 25. It will include a Maypole ceremony, live music, Mexican food and BBQ, a clothing exchange, a kid's activity booth, solar cooking, native plants and garden starts, and an expanded farmers market.

Valerie McCaffrey, Special to the Cochise County Master Gardener Newsletter. Valerie is the Sierra Vista Farmer's Market Manager

