



20th Anniversary Commemorative Issue!

The Master Gardener newsletter began as a project for several members of the fall 1989 Master Gardener Class with Vol. 1, No. 1 dated December 1989. Over the years, many Master Gardeners and guest writers have written timely articles for the newsletter. I hope you enjoy revisiting some of the highlights from previous issues.

Carolyn

A Treasure For Area Gardeners

Joyce Gay— March 2004

Here is the garden treasure all area gardeners need to find. Rob Call is the Extension Agent through the University of Arizona who is here to assist farmers and home gardeners with horticultural information. The Cooperative Extension is part of land grant universities throughout the United States established by Abraham Lincoln in 1862. Its agent educators serve as a conduit for dispersing knowledge acquired through scientific research to our communities.

Rob's particular expertise and inclination to educate make him a wonderful resource to home gardeners here in Cochise County whether you want just a nice yard or to grow your own fruit and vegetables. He teaches the Master Gardener course in Sierra Vista each spring and enjoys teaching people who are interested in the subject because, "It is a real pleasure to see the light come on when someone picks up on a new idea."

Rob also speaks at horticultural events throughout the country on his specialty, Pomology, which is the study of tree fruits and nuts. Because he is an avid gardener at his home in Willcox, raising ornamentals, small fruits, and a vegetable garden, he brings hands on experience to his job.

Rob is available to those of us in the Sierra Vista area through the Extension office at the University of Arizona South on Colombo Drive. He spends Wednesday afternoons in this office, but his main office is in Willcox. Because he travels and spends a lot of time working with farmers, he is out of the office frequently, but don't hesitate to leave a message.

Rob lived in Mexico and Argentina for five years before graduating from college. It was lucky for gardeners that Rob decided that pottery was not where he could earn a living when he was at Brigham Young University where he chose horticulture for his Bachelor of Science degree. He earned a Master's Degree in Plant Science from Utah State University with a Master's Thesis on delaying bloom and increasing cold hardiness of peach trees.

After graduate school, Rob accepted a faculty position with the Department of Horticulture at the University of Illinois. He was stationed at Dixon Springs Agriculture Center, a 4,200-acre research facility where he worked with warm season vegetables and small fruits and spent time working to bring research to farmers. Later, to return to the

(Continued on page 2)

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



(Continued from page 1)

West, he managed an 800-acre commercial apple and cherry orchard south of Salt Lake City.

The opportunity to work with University of Arizona Extension came up in Willcox, so Rob, his wife, Suzanne, and their five children moved to Willcox in 1991. Rob likes academia because of the freedom it gives him to “do what needs to be done in the agriculture community” and to work with gardeners.

He polishes his expertise by raising both warm season vegetables such as tomatoes, melons, squash, *etc.* as well as spring and fall crops of broccoli, peas, spinach, lettuce, and radishes. He raises grapes, raspberries, blackberries, and asparagus in addition to peaches. He advocates and uses delineated beds so he can get plenty of organic matter incorporated into the soil to keep it from becoming compacted by walking on it. In these beds, he waters with drip irrigation to conserve water.

Rob said that if he could convince gardeners in our area of just three things, they would be:

1. Learn which plants are adapted to our climate and grow them,
2. Learn about our climate and don't try not to garden very much in the hot, dry, windy months of May and June, and
3. We live in a desert where water is precious so use it wisely and don't waste it. 🌱

Gardeners. Gardeners are usually referred to as “big dreamers.” There is no end in sight for gardeners—once you start there is no stopping. In fact, there are documented cases of people gardening for over 50 years!

Really great gardeners can be easily identified. Ask them about a problem you have, and they will be the first to pass along their mistakes, how they solved them, and as a bonus an additional hour of useful tips.

Usually after a few years in the field, most gardeners develop a passion for one or two subjects. Whether it's propagation methods, integrated pest management, or xeriscape gardening, they are a wealth of information and are highly regarded as ‘Garden Figures’ in the community. As we bravely venture into a new year of gardening here are some resolutions for the New Year: Teach someone—especially a child to garden 🌱 Plant an herb garden 🌱 Save water this year—get a *Water Wise* audit of your home or business (contact Cyndi Wilkins at 458-8278, Ext. 2150) 🌱 Reduce, Reuse, Recycle this year 🌱 Start a compost pile 🌱 Become a Master Gardener (contact the Extension Office at 458-8278, Ext. 2141) 🌱 Plant a tree 🌱 Start a garden journal 🌱 Get into natives—plant a native plant 🌱 Join a garden club 🌱 Start a wildlife garden 🌱 Mark your calendar for the High Desert Gardening & Landscaping Conference in February 🌱 Sow only one squash/zucchini plant this year 🌱 Thank the person who taught you how to garden 🌱

People Profile—Gardeners

Cheri Melton—January 1997

Common names: Green Thumbs, Dirt People, The Manure Party

Range: Since this species has been introduced, it has spread quickly and can be located all over the world. Unfortunately, no cure has been found.

Of all the people in the world, gardeners have got to be one of the most interesting as they are constantly subjecting themselves to all kinds of abuses normal people would not think of tolerating. The first step into the world of gardening is usually small, a few houseplants or turning a postcard

patch of earth into a flower or veggie garden. After minimal success they often decide to cross over into other areas. Usually beginners are soft, both mentally and physically, until the challenges of battling pests and diseases, moving tons of rocks, mourning over dead plants, digging planting holes in caliche, and varmints destroying everything in sight, eventually hardens them up.

Most gardeners develop broad vocabularies, spouting Greek or Latin effortlessly, and of course, speaking that universal language—cussing. Some take the ultimate vow and enroll in classes and become Master

“The love of gardening is a seed that once sown never dies.”

- Gertrude Jekyll

What Master Gardeners Do

Deke Descoteaux—February 2008

The primary mission of Cochise County Master Gardeners is to educate local residents on gardening, including native plants and landscaping, and to provide assistance with gardening-related questions.

In addition, your Cochise County Master Gardeners:

1. Answer several thousand questions from the public every year
2. Publish a monthly newsletter for free that goes out to over 900 subscribers
3. Maintain a popular web site at www.ag.arizona.edu/cochise/mg
4. Sponsor an annual High Desert Gardening & Landscaping Conference
5. Assist the University of Arizona with field trials to test water requirements for plants, and to determine which plants are susceptible to Texas root rot
6. Donate gardening and landscaping books to the Cochise County Library System
7. Answer gardening questions at the Sierra Vista and Bisbee Farmers Markets
8. Provide speakers for organizations who are interested in gardening programs
9. Promote water conservation and the use of native or desert oriented plants
10. Docent the semiannual *Water Wise* Xeriscape tours

Robert E. Call

Robert E. Call
Area Horticulture Agent
Carolyn Gruenhagen
Editor for 20 years!



11. Provide scholarships when funds allow
12. Provide lists of plants specifically recommended for our area to new and current residents, local builders, and landscaping firms
13. Help fund physical improvements to the Cochise County Herbarium, which collects, catalogues, and stores specimens of plants found in our region
14. Help maintain the University of Arizona, South rose garden
15. Remove litter from Campus Drive and a nearby wash each year
16. Donate plants and provide landscaping assistance to various organizations; *i.e.*, San Pedro House, Bisbee's Vista Park

Master Gardeners do not receive any compensation for their volunteer hours. All funding comes from the annual High Desert Gardening & Landscaping Conference and the sale of T-shirts, caps, and other such items.

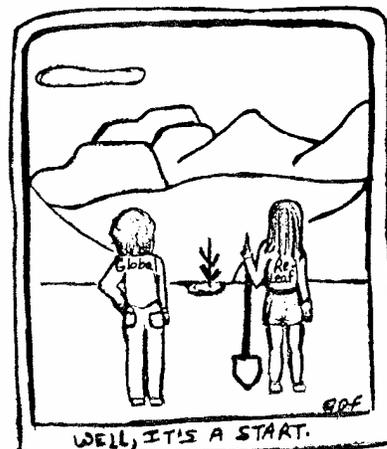
If you would like to become a Master Gardener call the Cooperative Extension at 458-8278, Ext. 2141 or go to the Master Gardener web site at:

www.ag.arizona.edu/cochise/mg

There is a fee for the class. ❁

"I have learned that talking to plants doesn't do squat for them. Watering does. If you don't believe me take two plants. Water one. Talk to the other."

— Jim Koweek, *Just Add Water*



Jackie Dillon-Fast—July 1990



Holiday Wreaths

Barbara Kishbaugh—December 1992

A holiday wreath can be made quite simply by cutting a donut circle in plywood and then using a glue gun to attach pine cones, nuts, dried fruit, fabric, or ribbons. You can also buy straw and foam bases at craft stores and use wire to secure your decorations. Recently I noticed a wreath with pomegranates and it was striking in texture and color. Another was made with dried and painted yucca seed pods. I think the natural grey colors of the pods would be even more eye catching. They are sort of tulip shaped. This wreath was remarkably simple but elegant.

You could probably make a unique wreath with something you have growing around your house! ❁

Gardening in water



Get your hands wet with Angel

Angel Rutherford—December 2001

No garden is entirely complete without a water feature. Every garden needs at least one, whether it is a birdbath, a fountain, a planted tub, or a pond filled with beautiful plants, fish, and frogs. This column will be dedicated to the water garden. Most of you will say that you have enough to do and don't need to add anything else. Maybe I can persuade you how simple, easy, and rewarding a water garden can be. If your time is limited, a small container garden or fountain is all you need. If you enjoy working in your garden, you can allow a water feature to be as much work as you like. A pond offers endless possibilities for adding plants, fish, and other pond animals. If you have young children, a pond can be very exciting for them. Keep in mind, chil-

dren should always be supervised around a body of water and even a shallow pond can be dangerous for toddlers.

Ponds are very appealing but can be time consuming. Water gardening is a hobby that will grow on you. One of the easiest ways to try your hand at gardening in water is to create a miniature pond in a container. The choices of containers are endless and the variety of water plants is big and so is the fun. Water plants are easy to grow and keep in mind they cannot be under- or over-watered. Water plants multiply fast and can be shared.

A water garden attracts all sorts of beautiful and beneficial insects like dragonflies and damselflies. The sound of water is very relaxing. Consider gardening in water as a new dimension and get your hands wet. ❁

How Can I Become a Master Gardener?

One becomes a Master Gardener by taking a 13-week county training program and successfully passing a final exam. You first become a MG Associate and after completing 50 hours of volunteer service, an Associate becomes a full-fledged MG. Topics covered in the classes include Botany, Soils, Pest Management, Vegetables, Plant Problem Diagnosis, Ornamentals, Fruit and Nut Trees, Plant Propagation, and Irrigation and they are taught by University of Arizona Extension professionals and other horticultural experts. There is a cost for the training program which includes the Master Gardener Manual and a T-shirt. The Master Gardener Program promotes food production, landscaping with native plants, and environmental stewardship. The next class is scheduled to begin in March 2010. For more information or to sign up for the class, call Joyce at the Cooperative Extension office at (520) 458-8278, Ext. 2141. ❁

"Volunteers receive no pay—not because they are worthless, but rather because they are priceless!"



2008 Extensionists of the Year

Robert E. Call—April 2009

University of Arizona College of Agriculture and Life Sciences 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 commu-

nity 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! ❁

BUTFIRST Syndrome

Maggie Crist & Cheri Melton—December 2002

I have a condition often found in the Green Thumb Club. The horticulture world is frantically searching for a cure. This is an ailment many of us suffer from and may not as yet have been diagnosed.

However, now you may be able to discuss it with your loved ones and try to explain what really happened to you all those times you tried so hard to accomplish something and didn't.

It's called the BUTFIRST Syndrome.

It's like when I decide to weed the garden—I start down the beds and notice the penstemons need pruning. Okay, I'm going to do the weeding—

BUTFIRST I'm going to prune the penstemons and the salvias. After that I notice the desert willow tree needs a drink of water. Okay, I'll just finish pruning, BUTFIRST I'll get the hose and water the tree. Now where's the spray nozzle? OOPS! There's the wheelbarrow full of veggie trimmings from last month in the side yard. I'm going to look for that spray nozzle, BUTFIRST I need to put the wheelbarrow of veggie trimmings into the compost pile.

I head for the compost pile, look out over the veggie garden, notice my shade cloth has blown off the lettuce bed. I put the wheelbarrow next to the garage, and darn it, there's the pitchfork for moving the manure pile against the garage.

What's it doing here? I'll just put it away, BUTFIRST I need to fix the shade cloth. Head for garden gate and ACK! I stepped on the dog. The dog needs to be fed. Okay, I'll put that pitchfork away and fix the shade cloth. BUTFIRST I need to feed the dog.

At the end of the day: The shrubs are half pruned...the tree never gets watered...veggie trimmings never make it to the compost pile...shade cloth is still flapping in the wind...spray nozzle is still missing...the dog ate the lettuce...

And, when I try to figure out how come nothing got done all day, I'm baffled, because I KNOW I was BUSY ALL DAY! I realize this condition is serious, and I should get help, BUTFIRST I think I'll read my seed catalogs. ☘

Smile!

Barry R. Bishop—December 1994

This holiday we have got to learn one thing. We have got to learn how to "smile." I speak from experience. I had a heart attack and a stroke, and believe me when I say, "You don't want either." They are no fun and they can ruin your life.

If you are like me, we take ourselves far too seriously. We think how really important we are and that life would really be hampered if we weren't there to make things right. Well, we are important, but not that important and life, yes Virginia, life can go on without us.

Of all things, gardening is great and we are in charge (or are we?). Laugh!

Smile! Enjoy! Gardening is fun, but don't make it something it wasn't meant to be. Don't take yourself too seriously and lose more than just the fun of gardening this holiday. ☘



Geotrophin[®] — A New Hormone

Gary A. Gruenhagen—May 2003

Australian researchers at the University of Woomera have announced the discovery of a previously unknown behavior-modifying human hormone called *geotrophin*[®]. The hormone is produced in the hypothalamus in a complex response to changing circadian rhythms, photo periods, and

accumulating heat units. Although *geotrophin*[®] is produced in all adult humans, the quantity appears to be genetically controlled. Only about 20 percent of the population exhibits a *geotrophin*[®] deficiency.

An increased blood serum level of *geotrophin*[®] manifests itself in an uncontrollable desire to dig in the ground, rake the soil, scatter plant

seeds, and apply water to the soil, especially on late spring weekends. In addition, there may be a strong attraction to plant nurseries and garden shops. Although these behaviors may persist for a few weeks, *geotrophin*[®] levels usually fall off quickly as the days lengthen and heat units continue to accumulate. ☺

The Virtual Gardener—Ask A Master Gardener

Gary A. Gruenhagen—February 2009
virtualgardener@cox.net

According to their mission statement, Cochise County Master Gardeners support the University of Arizona Cooperative Extension Master Gardener Program by providing to citizens researched-based horticultural information appropriate for Cochise County environments about gardening, food production, landscaping, native plants, and environmental stewardship. One of the principal ways Master Gardeners provide this service is by answering questions on these topics.

There are basically three ways you can contact a Master Gardener with your question: you can call the Extension Office (520-458-8278 Ext. 2141) and talk directly to a Master Gardener volunteer; you can drop by the Extension office at the University of Arizona South campus, 1140 N. Colombo in Sierra Vista and talk to a Master Gardener face to face; or you can e-mail your question to the Master Gardener office at

<http://ag.arizona.edu/cochise/mg/question.htm>.

Of course Master Gardeners will answer general questions about plants, bugs, watering, fertilizing, and such, but where they really shine is in diagnosing plant problems and suggesting solutions to them.

Understand, however, that the description of the symptoms of a problem alone are seldom definitive enough to allow a comprehensive diagnosis. Your doctor can't tell you what's causing your stomach ache unless he knows some additional information such as what you've been eating, exactly where the pain is, what you've been doing lately, and so on. Similarly, the Master Gardener usually won't be able to diagnose the

cause of your plant problem unless he or she has some additional information, so be prepared to offer as much background information as possible to allow a proper diagnosis.

If there is damage to your plant, be able to describe it in detail. Exactly what does the damage look like? Where is it on the plant? How long has the damage been evident? Is the condition confined to a single plant or several? Are any insects present? What do they look like? *Etc.*

Be prepared to discuss the conditions under which the plant is growing. How often does the plant get watered? How much? Has it been fertilized? What kind of fertilizer was used? How much? Has it been sprayed with a pesticide? What kind? What kind of soil is it growing in? How much sun does it receive? *Etc.*

These are just a sample of the kinds of questions the Master Gardener may ask to get the information necessary to diagnose your plant problem and suggest a solution. If you are submitting your question by e-mail, the form on the Web site prompts you to supply the additional information. Be sure to supply all that is requested and appropriate.

Sometimes the Master Gardener may also request you bring a sample of the plant into the office. A few conditions cannot be properly identified without microscopic or even chemical analysis. If it is an insect or bug problem they may request you bring it into the office also.

Most of the time your questions can be answered immediately but sometimes the Master Gardener needs to research them and get back to you with an answer. If Master Gardener volunteers can't answer the question, they will pass it along to Rob Call, the Cochise County Horticultural Extension Agent. And if he can't answer it,

it will be passed on to a specialist at the University of Arizona or elsewhere. In any case, you will get an answer.

Before I wrap this up, I would like to give you a tip for searching past Cochise County Master Gardener newsletters. If you would like to search for a particular topic in the newsletters and are using Google as your search engine, here's how to do it.

Type the words you want to use as your search terms in the search box followed by a space and then this phrase:

site:ag.arizona.edu/cochise/mg/pdf.

Note that you shouldn't leave a space after the colon.

Until next time, happy surfing! ❁

Cuttings 'N' Clippings

❁ The next CCMGA meeting is Thursday, December 3, 2009 at 5:00 p.m. in the Public Meeting Room at University of Arizona South. The speaker is Glenn Minuth on *Revisiting the Bhopal and Virginia Chemical Disasters*.

❁ There will not be a *Water Wise* presentation in December. Watch for them to begin in January 2010.

❁ The High Desert Gardening & Landscaping Conference will be held February 25 & 26, 2010 at the Windemere Hotel & Conference Center in Sierra Vista. Please note that once again there will not be an increase in the registration fee!

Registration forms
 available in January!

Call's Classic Comments

Robert E. Call—November 1999

Q I have several desert brooms (*Baccharis sarothroides*) that are all over my property and I want to get rid of them. How can I do this and not have them come back from the roots?

A Desert brooms are quite prolific. Removing them will keep them from multiplying from seed. However, your neighbors might have their desert broom seeds blow on to your property! A good method of controlling woody plants including desert broom, Siberian elms, mesquite, and others is by using the herbicide glyphosate. This herbicide is marketed most widely as Roundup®

Control: Prepare a small container and place some concentrated Roundup® in it. You must purchase 18 or 41% concentrate Roundup®, not the diluted 0.96% ready-to-use products. Cut down or prune back the plant to be removed close to the ground. Leave a stump if you plan on pulling it out later when the roots have died. With a paint brush or sponge apply the concentrated Roundup® to the cut surface immediately after cutting down the plant. Do not wait or the plant will heal over and decrease the effectiveness of the herbicide. If regrowth occurs prune it back and paint again. Best results are obtained when the plant is actively growing. This treatment is on the Roundup® label under "Cut Stump Treatment." Always read the label of pesticides and use them accordingly.

Source: *Crop Protection Reference 15th Edition*, 1999. C & P Press, New York. Page 1479.

A Psalm for the San Pedro

Van Stetler—January 1996

Please take me to the San Pedro
Where I have been told
Of one of God's blessings
And a brave little river that flows.

Spirited with good intentions
Meandering from South to North,
Crossing the border from Mexico
It flows free, the little giant
That is San Pedro.

Under the watchful eyes of San Jose Peak,
Nestled in the cottonwoods of San Rafael Del Valle
Between the Mules and Huachucas
The river flows toward Phoenix
And the ghostly Gila River.

With only God as my witness
The spirit takes me to the river
On those sublime moonlit nights,
I kneel at the river's edge
And in my dream,
I shed a tear
For the petite San Pedro.

It's going to take a lot of love
But the saints may save you yet,
My little brother,
The brave river,
That is San Pedro.



Arizona Native Plant Law

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.
2. **Salvage Restricted**—This large group of plants is subject to damage and vandalism.

3. **Salvage Assessed**—This much smaller group of plants has enough value if salvaged to support the cost of salvaging.
4. **Harvest Restricted**—Also a smaller group of plants that are protected due to the fact that they are subject to excessive harvesting.

To learn more about the Arizona Native Plant Law visit the Arizona Department of Agriculture's web site at:

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

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture, James A. Christenson, Director, Cooperative Extension, College of Agriculture and Life Sciences, The University of Arizona and Arizona Counties cooperating. The University of Arizona is an equal opportunity, affirmative action institution. The University does not discriminate on the basis of race, color, religion, sex, national origin, age, disability, veteran status, or sexual orientation in its programs and activities. The information given herein is supplied with the understanding that no discrimination is intended and no endorsement by Cooperative Extension is implied. Any products, services, or organizations that are mentioned, shown, or indirectly implied in this publication do not imply endorsement by the University of Arizona.

Cochise County Master Gardeners Association in conjunction with
The University of Arizona Cooperative Extension presents . . .



the 17th annual
High Desert Gardening &
Landscaping Conference

High on the Desert

February 25 & 26, 2010

Windemere Hotel & Conference Center
Sierra Vista, AZ

An educational experience for everyone with an interest in gardening. For information contact
U of A Cooperative Extension • 1140 N. Colombo • Sierra Vista, AZ (520) 458-8278, Ext. 2141
www.ag.arizona.edu/cochise/mg/ • Registration and fee required for conference •

High on the Desert

High Desert Gardening & Landscaping Conference Scholarship Application

The Cochise County Master Gardeners Association (CCMGA) is awarding up to three full scholarships to the 2010 High Desert Gardening & Landscaping Conference to be held at the Windemere Hotel & Conference Center, Sierra Vista, AZ, February 25 & 26, 2010. Applicants are invited to submit an essay on one of the following topics:

- **Gardening for food production**
- **Landscaping with native plants**
- **Environmental stewardship**

Essays must meet the following criteria:

1. 750 to 1,000 words in length.
2. Double spaced and typed on plain bond paper — a disk or CD included.
3. Represent original scholarship and be suitable for publication. All references and authorities cited must be properly attributed.
4. Entries must be accompanied by an official cover sheet available from the Cooperative Extension Office at the UA, South campus or from the Master Gardener web site: www.cals.arizona.edu/cochise/mg
5. Entries must be received at the Cooperative Extension Office, 1140 N. Colombo, Sierra Vista, AZ 85635 not later than close of business on January 15, 2010.

Entries will be judged by the Cochise County Horticultural Extension Agent and a committee of Master Gardeners appointed by the President of CCMGA. The awardees will be notified not later than January 30, 2010 and their names published in the February 2010 Master Gardener Newsletter.