

#### In a Desert Garden

Zauschneria – Epilobium Hummingbird trumpet

If you want late summer and fall color this plant is for you. Hummingbirds just love the tubular flowers in many shades of red. This is not really a tidy plant and it fits better into informal and wildlife gardens. In my front yard which has a very natural desert look. I grow Zauschneria arizonica, which has an upright growth habit to 3 ft. with bright orange flowers. It freely self-seeds itself all over the yard. It has a rather spindly appearance because it gets little to no additional watering and I never fertilize it. It still blooms and attracts its fair share of Hummingbirds. In my backyard I have a

big stand of Z. californica growing

to 2 ft. tall and 6 ft. wide, blooming in abundance as it gets additional irrigation. I guess the 10 ft. tall spineless Opuntia growing behind it has tapped into the same source, but it makes a great impression. This corner of my yard is lit up

with the bright s c a r l e t flowers. Z. californica has self-seeded itself into another corner of my yard and guess where, on the foot of another tall spineless cactus. There I grow another one of the same specie, Z. sepentrionalio. This one is low growing and has silvery foliage and bright orange flowers. These plants will light up your yard and provide color until frost.

Angel Rutherford, Master Gardener

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# **Christmas Tree Recycling**

The City of Sierra Vista's Department of Public is sponsoring a Christmas Tree Recycling Program this year that will run from December 26 through January 17, 2005. You may drop off your cut trees at the Mall at Sierra Vista in the designated location on the north side of the mall next to the current recycling site. It will be open 24 hours a day. The trees will be processed into a high-quality soil supplement that can be used in your garden.

If you have a live tree and would like to donate it, you may call Bryan Manning at 458-7922. The City's Parks Department will plant it in one of the many public areas throughout the city. The tree will be picked up and cared for until a suitable planting location can be determined.

Robert E. Call

Robert E. Call Extension Agent, Horticulture

> Carolyn Gruenhagen Editor

## High on the Desert

The 12<sup>th</sup> annual High Desert Gardening & Landscaping Conference will be held at Buena High School in Sierra Vista on the afternoon of March 4 and all day Saturday, March 5. The conference will feature many expert speakers covering "everything you want to know and more" about High Desert gardening. Registration forms will be available at the Cooperative Extension office about the middle of January. For more information call the Cooperative Extension at (520) 458-8278, Ext. 2141.



We hope to see YOU there!

#### **Cuttings 'N' Clippings**

\* The next CCMGA meeting is 5:00 p.m. Thursday, January 6, 2005 at the University of Arizona South campus, Room 508. Cado Daily of the *Water Wise* Program will be the guest speaker.

\*\* Water Wise Workshops will begin with the first of 2005 on January 8 from 9:00 to 11:00 a.m. at the University of Arizona South campus, 1140 N. Colombo Ave. The title of the workshop is What is Our Water Challenge? Why is it so Important? For more information contact Cado Daily at the Cooperative Extension, Ext. 2139.

\* A Pond Building and Maintenance class will be held at Cochise College on January 29 from 1:00 to 5:00 p.m. For more information and to register call (520)515-5492.



#### The Virtual Gardener—Straw Bale Hothouse Update

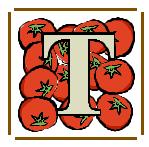
Back in November I described a straw bale hothouse I had constructed to see if I could grow tomatoes this winter. Yesterday I ate the first fruit of my experiment, and there are at least a dozen more tomatoes currently ripening on the vines. Not only that, but there are lots of blossoms on the plants that promise to set into even more tomatoes over the next few weeks.

All in all I have six tomato plants, all Romas, planted in potting soil in 5-gallon nursery pots. The choice of Romas, as opposed to some other variety, was made for me because they were the only variety left in the store when I got around to buying the plants late in the season. I fertilize them with time-release fertilizer "prills" and water them by hand every couple of days.

So much for my successes. Now for the challenges:

The first challenge that comes to mind is maintaining the proper temperatures to keep the plants alive and productive. Although tomatoes will survive through a wide range of temperatures above freezing, they are only productive between temperatures of 55°F and 90°F. Outside this range they will not set fruit.

Believe it or not, I have had temperature problems at both ends of the spectrum. On a sunny afternoon with the plastic rolled down across the front of the bales, the temperature inside the enclosure has risen to as high as 132°F. When the ambient outside temperatures are warm enough, I send the tomatoes out



to play in the sunshine in front of the hothouse. If the ambient temperatures are too cool, I roll the plastic up and leave the tomatoes inside the enclosure during the day.

At night, of course, the problem is reversed. Outside ambient air temperatures have dropped as low as 17°F at our house during the last two months so it's been a challenge to keep the tomatoes from freezing.

To keep the tomatoes warm during these cold nights, I added some thermal mass to the hot house to help moderate the interior temperatures by placing a 15-gallon plastic tank filled with water inside the enclosure and painting it with flat black paint to better absorb heat. On the days when the tomatoes are outside, I keep the plastic rolled down to heat the interior as high as it will go to raise the temperature of the water and store the heat for nighttime release. Water temperature can go as high as 100°F on a sunny day, although 80°F to 90°F is more typical.

Keeping the interior temperatures up overnight requires more than just a tank of warm water. In addition I have had to insulate the open top and south sides of the enclosure. I used 3/4 inch

thick sheets of Styrofoam insulation sandwiched between sheets of foil-clad bubble insulation. The air temperature inside the enclosure usually stays 10°F to 20°F warmer than the outside air temperature, but on very cold nights I have supplemented the passive heat with heat from a small thermostatically controlled electric heater. So far, so good.

Stay tuned for more updates in the future. In the meantime, check out the following Web sites for additional information on temperature requirements for growing tomatoes:

http://faq.gardenweb.com/faq/lists/tomato/2000083030027695.html

http://www.oznet.ksu.edu/dp\_hfrr/extensn/problems/Tomato,LackofFruitSet.htm

http://www.mobot.org/gardeninghelp/hortline/messages/3650.shtml

Until next time—Happy Surfing.

Gary A. Gruenhagen, Master Gardener gruenha@sinosa.com

"If we had no winter the spring would not be so pleasant; If we did not sometimes taste of adversity, prosperity would not be so welcome."

-Anne Bradstreet

# Planting and Caring for Bareroot Trees and Shrubs

During Southeast Arizona's winter season, local nurseries will be offering bareroot trees and shrubs for sale. For the price conscious consumer, bareroot trees and bushes are an economical way to acquire additional plants. Some plants and certain varieties will only be available in bareroot form. With proper care and handling, the gardener can be just as successful with bareroot as with containerized stock. And one can be assured when buying bareroot plants that you will never have to deal with a root bound plant!

When purchasing bareroot stock, inspect the plants carefully. Bareroot plants can never, ever be allowed to dry out. This includes all the time from when they were initially removed from the soil at the grower until you, the consumer, plants them once more. Never purchase plants whose roots do not look plump and moist. The retailer should have taken the time to carefully prune any damaged roots and stored them in a moist medium. If it looks like this was not done. keep on a walking—because this could very well indicate possible other problems with their handling of the bareroot stock. One should also check the trunk and branches for signs of desiccation.

Most bareroot stock that you see in retail centers will be severely pruned. There is considerable debate about the efficacy of this within the industry. My



personal experience has shown that it doesn't make much of a difference when the plants are properly planted and cared for except with certain persnickety plants like pecans. Pecans should come with as much of the tap root intact as possible (this means you will be digging to China to plant them). Here in SE Arizona, I believe that pecans are a 50/50 proposition in bareroot with a great many variables weighing heavily against success for the home grower. I would buy containerized stock if possible. But due to scarcity of local sources, you just might have to gamble and give bareroot a shot.

I recommend that you have holes dug in anticipation of your purchase. The sooner you get your bareroot trees into the ground the better. If you are unable to plant immediately, put them in a shady area and cover their roots with a moist medium. I generally soak the roots in a mixture of "superthrive" (or similar product) and water for an hour or so before planting. The planting hole should be adequate to fully accommodate the plant's root structure. It is always advisable to dig wider than deeper. A hole 16" by 24" is generally adequate. Always check the planting hole for proper drainage before planting. Once dug, fill the hole with water to the brim twice. Drainage of 3" an hour is acceptable but 6" per hour is better. If the hole is not draining well, vou must do whatever is necessary to provide adequate drainage.

That could involve digging deeper, providing drainage holes through the compacted barrier, and/or adding gypsum to the planting mix (contact MG office for specific guidance).

Save the dirt from the planting hole. Mix a small amount of compost and a handful of soil sulfur into this dirt. Take some of this backfill mix to make a small mound in the hole over which the plant's roots will rest. WARNING! Make sure that you do not plant too deep. Examine the bark below the graft carefully and plant at the same depth as the plant was originally. I guarantee that your plant WILL **DIE** if planted too deep. Drive a stake (use wood—much easier to remove once no longer needed) into the hole to secure the plant. You do not want the plant's delicate new roots to be disturbed by high wind Fill in the hole with your back fill mix; water in thoroughly. Use excess soil for a watering berm around the plant.

Be careful not to overwater! Deciduous plants use very little water during dormancy. Water just enough to maintain the soil moist (not wet). Once the plant starts to leaf out, increase watering amount and frequency. In addition, once the plant leafs out, be prepared to protect from late freezes. Bareroot plants seldom have enough stored energy to leaf out more than once or twice.

Bareroot roses need a little more attention. The canes must stay moist to ensure budding. The growers recommend frequent misting. I usually allow (Continued on back page)

#### The Agent's Observations



Can I save my poinsettia for next Christmas? Will it bloom again?

You can save poinsettias (Euphorbia pulcherrima), but they make fairly drab houseplants. To get them to "bloom" next year requires a lot of effort. Most people are better off putting them in the compost pile and purchase a new plant for the next holiday season. The red, pink or white "blooms" are really not flowers, but rather bracts. The yellow centers of each "bloom" are the real flowers. When the leaves drop in late winter or early spring cut the stems back to two buds and reduce watering so the plant will dry out. Store in a cool place until frost danger is past. In the spring keep the plant on a sunny patio for the growing season. Fertilize and water as a normal houseplant. Plants may grow much too large for indoor use and become "mother plants." Take late summer tip cuttings from the plants that are at least five nodes long. After treating the ends with rooting hormone plant them in potting soil keeping them moist but not wet. Wholesale suppliers take cuttings from "mother plants" and sell them to greenhouses who then grow them out. For "blooming" in time for the winter holidays place the new plant in 14 hours of total darkness and 10 hours of light starting in early October. Continue this daily ritual for 10 weeks. The bracts will go from green to red, pink, or white.

Don't miss a day or the color change will not occur. This is why most people will leave the growing and "light and dark" work to nurseries. Buying new plants for the holidays from a retailer is much easier!

Robert E. Call Extension Agent, Horticulture



## What is a Master Gardener Anyway?

The Master Gardener program began in King and Pierce Counties of Washington state in 1972 when an overworked Horticultural Extension Agent, Dr. David Gibby, began training volunteers to assist him in providing support to the community. Dr. Gibby's program was simple and effective. In exchange for a promise to donate a certain number of hours service, he gave volunteers specialized, university-level training in horticulture. Word of his success in recruiting volunteer support soon spread to other communities and today Master Gardener programs are flourishing throughout the United States and Canada.

In 1987 Horticultural Extension Agent, Dr. Deborah Young started the Master Gardener program in Cochise County. The current agent, Robert Call, continues the program, teaching the thirteen week Master Gardener course. Prospective Master Gardeners who take the course study such topics as soil, pest management, botany, gardening, landscaping, and environmental stewardship. Upon completion of the course the person provides educational leadership to the community by donating fifty hours of volunteer hours.

In the summer of 1996, Cochise County Master Gardeners formed a non-profit organization to support the educational mission of the Cooperative Extension. The goal of the organization is to promote food production, landscaping with native plants, and environmental stewardship. The Cochise County Master Gardeners Association (CCMGA) in conjunction with the University of Arizona Cooperative Extension will be holding their 12th annual High Desert Gardening & Landscaping Conference on March 4 and 5, 2005. For more information call the Cooperative Extension office in Sierra Vista (520) 458-8278, Ext. 2141 or in Willcox (520) 384-3594.

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only 2 weeks after planting for the roses to show budding on the canes (increase this time if it has been consistently cold). If not, I go into emergency mode and surround the new roses with an old nursery container (bottom cut out) or box that I fill with damp wood shavings. Cover the canes completely. Every few days, gently dig into the shavings. Remove the shavings at the first sign of budding. (I have never lost a rose when following this procedure). Again protect newly leafed out roses from late freezes.

John Phillips Master Gardener

(Note: this article is reprinted from the January 2002 Cochise County Master Gardener Newsletter.)



#### January Reminders

- > Winter prune
- > Remove old mulch & replace
- > Dig tree holes
- > Prepare soil for spring
- > Water periodically
- > Stratify seeds
- > Fertilize asparagus
- > General garden clean up

# **Keep Your Birds Happy All Year**

In the winter . . . recycle your Christmas tree as a bird shelter in the winter garden. It'll keep the birds snug during storms and on chilly nights.

In the spring . . . help the birds build a cozy nest by draping short lengths of string over shrubs and scatter white feathers, dog combings, and other soft materials.

-Backyard Birdwatcher

