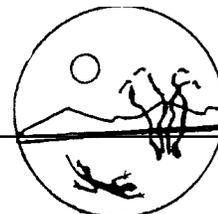


High on the Desert

Cochise County Master Gardener

Newsletter



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

Garden "Prep" Time - Part II

Last month we discussed the preparation of your vegetable beds for spring and summer planting. We left off with the advice of adding a lot of organic material to the bed in order to enrich the soil so that it is not too sandy or too heavy with clay.

Another benefit of adding organic material is that it will provide your plants with some of the nutrients they need to grow and thrive. Vegetables are heavy feeders, and you will probably have to amend your soil with some type of fertilizer. Actually, we are getting a bit ahead of ourselves here because there should not be anything in the garden yet that needs fertilizer unless you planted some cool-season vegetables.

By now you should have begun your cool-season vegetables such as peas, lettuce, radish, spinach, broccoli, and cauliflower for harvesting in late March, April, and May. Spring brings strong winds and plants may need some protection from both winds and cold

nights. May and June tend to be very hot so you should make sure these vegetables are harvested prior to that time. Another good time to plant cool-season crops is in August for harvesting in the fall.

"You should not waste your time during the spring. . ."

Warm-season crops such as corn, peppers, tomatoes, squash, and melons are best planted in July. However, waiting for July is hard. Waiting for July is a valid and true test of maturity and patience. Waiting for July is one of the cruelties one sometimes has to impose upon a vegetable junkie, and it hurts even to say it because we also want to start planting all crops now. Crops that are planted in late spring will be severely stressed because of dry and windy weather. Since July is usually the beginning of the free water season (rain) and your plants and your wallet will be very happy that you waited.

You should not waste your time during the spring though. While you are waiting, you can start

designing your watering system. There are many different types of systems ranging from standing around with the hose in your hand to fancy timer systems. A drip system will be most efficient and is relatively inexpensive and easy to install. One of the easiest and most efficient systems is the simple soaker hose which attaches to your garden hose. You place a soaker hose out in the garden around your plants and turn on the water very slightly before you go to bed, and when you wake up your garden will be thoroughly watered. This takes some getting used to because the water will be on for what seems an eternity, but this method is not wasteful and is very efficient. Drip systems can be found at most hardware and gardening centers. (See the March 2000 newsletter for more information on drip systems.) Remember, if you wait until July to plant your vegetables you will need very little supplemental water, but you will want to have an efficient system in place for the times when Mother Nature doesn't cooperate.

*Laura Ribic
Master Gardener Associate*

Cochise County Cooperative Extension

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Growing Roses in the High Desert

Yes you can grow beautiful roses in the high desert; however, this will require some work on your part. Roses are not a plant that you can slap in the ground and then forget about. So if you want to have a low maintenance garden, roses are definitely not for you. But if you desire spectacular color, breathtaking aromas in and around your garden, and you aren't afraid of doing a little work and messing up your manicure occasionally then roses can't be beat.

Roses love humus rich soil, sun, and require regular water. So preparation of the planting site is essential. I generally dig a two foot by two foot hole. Save the dirt from the hole! Check the hole for drainage. Nothing will ruin your day more than seeing your gorgeous rose collapse from root

Correction

The first paragraph of *Drip System Basics* in the March 2000 newsletter should have read . . .

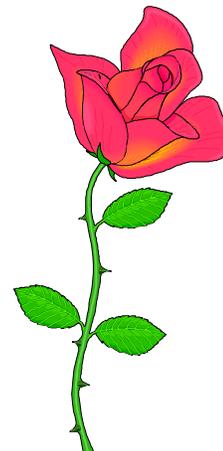
Efficient use of scarce water resources should be the number one goal of all gardeners in the high desert. One can avoid use of supplemental water by planting only native/adaptive plants or by using water harvesting techniques. Nevertheless, many of us will have plants on our land that appreciate/need some supplemental water to thrive. Also during periods of drought (like right now), a lot of our native and adaptive plants also appreciate some additional water. One of the most effective ways to provide supplemental water in the landscape is by installing a drip water system.

rot. I usually fill the hole to the brim with water twice. After the second fill the water must drain at least two inches an hour. If it doesn't then you must do whatever it takes (throwing TNT in and yelling "fire in the hole" is against the law, sigh) to improve the drainage. You can dig deeper, excavate drainage holes, or use amendments such as pelletized gypsum and products such as "alka-liche" to improve the drainage. Take half the dirt and mix in an equal amount of humus. Adding soil sulfur at this time is also helpful to mitigate later problems with chlorosis. Use this mixture as your backfill mix. Never mix manure in your planting mix; you could damage the delicate root system of your new rose. I don't recommend any fertilizer until your rose has been growing in its new home for at least two months.

When it is time to fertilize, do so on a regular basis—roses are heavy feeders. If using packaged fertilizers follow the accompanying instructions carefully. This is not the time to be thinking if one cup is good then two will be twice as good. You don't want to Kentucky fry your rose especially after all your hard work. I use fertilizers specifically for heavy bloom. Look for high phosphorous content. High nitrogen will cause weak, leggy growth and little bloom. Organics can be used—bone meal is a good source of phosphorous; however, do NOT use bone meal if you have dogs. I speak from experience—my three Scotties will dig relentlessly looking for that hidden "bone" that must be under the rose!

Build a watering berm with the remaining dirt from the hole around the rose. Fill this with mulch to a depth of 3 to 4 inches. Make sure

to keep the mulch away from the base of the rose. This heavy layer of mulch will cool the root zone and decrease watering requirements—a very good thing. Remove and renew mulch annually.



Critters love roses! Protect from marauding deer and rabbits. Don't have a coronary when you see neat little semi-circles in your rose leaves. It's just the work of the leaf-cutter bee who loves rose leaves for nesting material. This is quite harmless and a very seasonal thing. So don't even think about going on a crusade to kill bees or other beneficial insects. Aphids and thrips are a common problem of roses in the high desert. Use soapy water to control aphids. Some control of thrips is possible with soapy water also but all infected buds should be snipped and discarded. Spray your roses with a forceful spray of water in the early morning once a week during the summer to discourage infestations of spider mites. However, do not wet the foliage of roses in the evening because powdery mildew is an ever present problem here. Use 1 tablespoon of baking soda in one gallon of water and spray every three days for two weeks. Usually this will work if you haven't let the problem get out of hand.

(continued on next page)

Your other options are use of fungicides such as wettable dusting sulfur, lime sulfur spray, or bordeaux mix (copper sulfate). Again read labels carefully to avoid phytotoxicity and offing not only the offending fungus but yourself as well. These fungicides are useful to combat other fungal diseases of roses as well.

Select good quality roses when you shop. Look for grade #1 or at minimum grade #1.5. Various roses have different heat tolerances and should be so indicated on the label. Select your planting site accordingly. I find that my white roses burn significantly all summer. Learn the difference between grandifloras, hybrid T's, floribundas, hedge roses, shrub roses, mini, climbers, rugosas, etc. and select the type that will work for you. If you have questions, ask before you buy.

Cut off spent blossoms (go to first set of five leaflets and cut diagonally across stem). Do major pruning in the winter or early spring before the rose buds out. If you must do heavy pruning at a different time, seal the cut with pruning tar to prevent insect access to the wounded area.

Then after all the hard work, kick back and enjoy the awesome beauty and fragrance of your rose garden.

John Phillips
Master Gardener



Robert E. Call
Extension Agent, Horticulture
Carolyn Gruenhagen
Editor

Recycling II

Recently we discussed the ease of recycling or reusing newspaper, corrugated cardboard and yard wastes. Did you know that in Cochise County you could recycle aluminum and tin cans, magazines, and white paper?

To find out where to take recyclable items in Sierra Vista see the city's site at <http://208.55.147.179/Departments/PublicWorks/pwenv-recycle.htm> or contact the City of Sierra Vista at (520) 458-3315 for a copy of the Sierra Vista Recycling Directory pamphlet.

Outside of Sierra Vista contact the Let's Talk Trash Program at (520) 432-9479. If interested in learning more about recycling contact the Waste Reduction Educator at (520) 432-9426. The educator speaks to community groups, conducts school programs, assists with home composting, and assists with community recycling events.

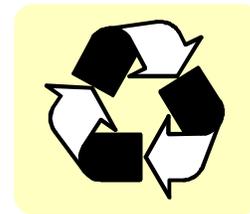
When recycling be sure to put only those items requested into the marked bins. I was very pleased to see that a cardboard recycle bin had been added to the Sierra Vista Wal-Mart recycling station. But that joy turned to dismay when I found that it had been contaminated with plastic jugs and garbage. Recycling is a privilege—not a right. When the system is abused it will be taken away and we will be left with no choice but to throw all our garbage into the landfills.

There are fourteen sites in Tucson that accept newspapers, magazines, brown paper bags, white paper, corrugated cardboard, aluminum, tin, glass and plastics #1 and 2. These sites are located at

the City of Tucson web site at <http://www.ci.tucson.az.us/webinfo/guide.018.htm#solidwaste>

Looking at the bottom of the container can identify plastics. There is a recycling symbol with a number inside it. If the number is a 1 or a 2 then it can be recycled. You will be amazed at the amount of plastics that fall under this category. A look around my house includes milk jugs, water bottles, aspirin and shampoo bottles, ice cube trays, household detergent container, and even plant containers!

Since spring is upon us and you might be in excess of these plant containers may I suggest that you recycle them back into the community by taking them to the Plant Sciences Center located at 1140 N. Colombo, behind the University of Arizona South. The center gladly accepts unbroken containers and reuses them in plant projects.



Remember -
Reduce,
Recycle,
and Reuse
to Restore
our Mother
Earth!

Cheri Melton
Master Gardener

Cuttings 'N' Clippings

➤ Cochise County Master Gardeners Association meets April 5 at the ACE Hardware training room (behind Domino's Pizza) at 5 p.m. The speaker is Vay Finn, adobe master.

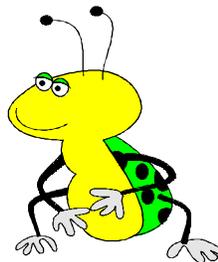
The Agent's Observations

Q I have several pine, cypress, junipers, and spruce trees that have sap “leaking” from the leaves. Others are drying up, especially those planted three to five feet from the house. The needles are falling off and part of the tree is bare. The trees are well watered. What is the problem?

A The tree is probably infected with spider mites and aphids. This can be determined by placing a white piece of paper under a branch while giving the branch a quick tap. Spider mites will be dislodged, fall on the paper, and look like little moving specks. Also, larger soft bodied insects called aphids might be dislodged. Spider mites are not insects but arachnids, members of the spider family. With a magnifying glass you can see that these tiny creatures have two body parts: a head and an abdomen and eight legs. There are numerous species of spider mites, both harmful and beneficial. Spider mites thrive in hot, dry weather and may produce spider webbing. Trees planted too close to a house and on the south and west facing sides will receive reflected heat. In the afternoon the sunlight is reflected off of the house on to the trees, heating them up and providing a perfect environment for spider mites.

There are many species of aphids also. These insect have piercing-sucking mouth parts. Tree nutrients they feed on and do not use are excreted as “honeydew” and are

sticky. This sugar containing substance is sap that has been “run through” the aphids. If you notice a high number of predator insects, i.e. lady bugs, lacewings, *etc.*, on the affected trees they are there for a reason. They are feeding on the high populations of spider mites and insects. If the ecology of your “urban forest” becomes out of balance because of environmental conditions or other reasons like improper pesticide usage, rapid increases of spider mites and aphids can occur.



Control: When proper cultural practices are used predacious mites normally control harmful mites. Lady bugs, lacewings, their larvae and other predators will control aphids. If spider mites and/or aphids become a problem, washing them off with a hard stream of water will help control small infestations. This will also temporarily change the environment they are living in. Insecticidal soaps are also a good “soft” control measure. You can purchase or make your own insecticidal soap. Combine a couple of tablespoons of liquid dishwashing soap per gallon of water in a sprayer. This solution must wet the “critters” you want to control; it has no residual effect. Dormant oil sprays applied during early spring also help keep these animals in check. Apply a small amount as a test to see if plant tissue is damaged, if not apply to the entire tree(s). Dusting sulfur is labeled for mite control and is an organic

treatment. Care must be used when using sulphur during high temperatures because burning of plant tissue may occur. Chemical miticides are available as “hard” control measures for severe infestations. Care must be used if using insecticides to control spider mites. Remember spider mites are arachnids not insects. Overuse of insecticides will cause resistance in spider mite populations and also kill many beneficial insects. You might (pun intended!) be “shooting yourself in the foot” if you over use insecticides to control spider mites. Over time insecticides will not. **Remember to always follow the label instructions carefully when using any pesticide.**

Robert E. Call
Extension Agent, Horticulture

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

- Gertrude Jekyll

Need hours?

Master Gardener or Master Gardener Associates who need hours are encouraged to be docents on the Xeriscape Garden Tour, Saturday, April 29. The tour is from 9:00 a.m. to 1:00 p.m. and a few hours of orientation will be needed. You may also earn hours by volunteering at the Plant Sciences Center at the University of Arizona South. If you are interested, please contact Cado Daily at the Sierra Vista Cooperative Extension Office.

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Itchy Fingers!

It's that time of year again—spring! My fingers become itchy at the new possibilities spring brings. Time to repair/expand/maintain irrigation. Time to work compost into the veggie beds so they are ready for July warm season planting. Time to switch to black oil sunflower seeds as the cowbirds have arrived. Time to wait for May Day to prune back winterkill on the plants. Not much time to wait for the return of hummingbirds and butterflies. Time to plant? March and April the winds blow, then the sweltering heat of May and June will be before us until the blessed sound of summer rains hitting our uplifted faces to the sky brings joy to the desert in July.

I have found that planting from March to June is a challenge in the high desert. Often what happens is the plant is shocked from being transplanted from container to ground, then the winds beat them down—wilting them and the gardener often applies more water to an already saturated soil which the plant can't take up. If the plant hasn't died from root rot by May it is then blasted with heat.

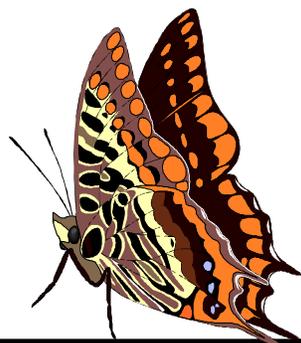
If you have the same problem as I do try this. Buy plants and keep them in containers on the deck and care for them as a nursery plant. Hold them over until July and plant. I have not lost a plant yet from this method. Cactus, agaves, and yuccas prefer to be planted during May and June. The warm soil induces these plants to root and by the time the rains come, they have extended their rooting systems to take advantage of the rains.

This is also the time I love to reread a great Southwest garden book. As a ritual I read Janice Emily Bowers *A Full Life in a Small Place and other essays from*

a desert garden. This delightful read covers 16 essays about her small Tucson garden that will make you laugh, cry, and perhaps change the way you look at your garden and the world. A new favorite book this year is *A Natural History of the Sonoran Desert* by the Arizona-Sonora Desert Museum. We share many of the same flora and fauna as the Sonoran Desert which makes it a fascinating 592 page book on how the desert lives.

Note: Diamond JK Nursery in Sonoita is having their plant sale April 4 - 8. Everything is 10% off including plants, irrigation supplies, native seeds, and bedding plants. They also recycle your old black nursery containers.

Cheri Melton
Master Gardener



APRIL REMINDERS

- ▶ **STAKE NEW TREES**
- ▶ **PLANT COOL SEASON VEGGIES**
- ▶ **FERTILIZE**
- ▶ **PREPARE FOR PESTS**



Upcoming Conferences

The Western Region Master Gardener Conference will be held October 14 - 16 at the Mesa Conference and Community Center in Mesa, AZ. The Cochise County Master Gardeners are involved by seeking to recognize Master Gardeners in the Western Region who have made a difference in their communities by honoring them with a "Search for Excellence" award and a scholarship to the conference. Watch for more details on the Master Gardener web site and in this newsletter.

The Xeriscape Council of New Mexico is completing plans for the Xeriscape Conference 2000, October 20 - 21 at the Albuquerque Convention Center. Keynote speaker will be Sandra Postel, Director of the Global Water Project in Amherst, Mass. and author of *Last Oasis: Facing Water Scarcity*—the book that was used as the basis for the closing segment in the TV series on *The Cadillac Desert*. Watch for more details on this also.

Of course there is our own Cochise County Master Gardeners Association High Desert Gardening & Landscaping Conference in February 2001!!!

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2000 Spring Xeriscape Garden Tour

sponsored by

WaterWise & Cochise County Master Gardeners Association

Saturday, April 29

9:00 a.m. – 1:00 p.m.

Each landscaped area has special and unique features!

For a tour map call the Cooperative Extension office in Sierra Vista at
458-8278, Ext. 141 or stop in and pick up a map before noon
April 28. Maps will also be available the morning of the tour at the
Sierra Vista Library.

