



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 Art of Transplanting

Have you ever changed your landscape plans? Plant selection, based on the inherent abilities of the plant to match my site and meet the desired aesthetics of my ever maturing landscape, has been a challenge. Space and inquisitiveness keep changing my plans.

Over the years I've installed, removed, and transplanted many plants that didn't meet my desires. Few had to go due to natural stresses. More had to go because they outgrew their space in my yard. But most I removed because as they matured I realized they didn't meet my expectations for one reason or another.

I often containerize the plants I remove and barter with other gardeners who have done the same or have purchased plants with good intent but then realize they don't have anywhere to put them. It seems I always have containerized plants around with nowhere to plant them.

Salvage of plants from my yard has taught me a few things I'd like to share with you. Foremost is the proper identification of the plant you are dealing with. This is critical. The possibility that you may be removing something that is in fact desirable and

only lacking true establishment can be frustrating. Also knowing what you have to offer is important to your credibility when bartering for more desirable plant materials. Plant health must also be considered. Stressed plants do not make good candidates for transplant. I always mark the plant with a northerly orientation so it can be planted the same in its new site. I let the soil dry out substantially before digging.

It is important to realize the amount and weight of soil that will be involved in successful transplanting. Plants that are thriving in their present, yet personally undesirable location, will most assuredly have vital feeder roots that radiate out to a greater distance than container sizes used for plants at the same stem caliber in the nursery trade. Of course, root damage and severe stress is to be expected when digging plants out of your landscape, but to what degree is up to you. I try to have the new location ready for salvaged plants arranged so that I can take as much of the root system with the plant and reinstall it as soon as possible. I've found that a sturdy sheet of plywood can be used to slide under a plant that has been dug to desirable circumference and

(Continued on page 2)

Inside this issue:

In a Desert Garden	2
The Virtual Gardener	3
Cuttings 'N' Clippings	4
February Reminders	4

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(Continued from page 1)

raised from a desirable depth to be the best way to transport a plant to its new location. Of high consideration when choosing a new site should be that of similar drainage to the site of excavation and the availability of like irrigation.

If you are bound to containerizing your salvaged plant, you will be obligated to the size of the container. Use the largest container you can find, usually what is called a 15 gallon, for all but the smallest of plants and ground covers. Dig with a sharp spade to the size of the containers circumference and sever any anchor roots to release the plant from the soil. Remember, the more roots you can leave with the plant the less injury and plant stress will occur. Do not force roots into the container. With a stiff nylon brush and sharp by-pass pruners, clean and cut the root system to the size of the container diameter and then again to at least an inch shorter so roots are not in contact with the container. Use the same excavation soil, less the root debris, to fill the void around the root ball in the container, water only moderately for several days, adding soil as needed due to loss of soil porosity. This plant is now ready for its new location and the sooner it gets there, the better. But it can be held for up to a year under nursery conditions while maintaining its orientation.

If the plant to be salvaged is very large, you may attempt a bare-root transplant. This technique allows the removal of the soil, and thus weight, from the root mass. This process is not recommended for coniferous plants. Timing of bare-root transplanting is essential. Again, proper identification of species and with some plants down to "cultivar" is beneficial to understanding just what to expect in consequence from this operation. Complete root pruning at the desired circumference at least six months before digging is preferred. Also, do any structural branch

trimming at this time. This allows the root injuries to begin healing and the plant's physiology to compensate for their loss.

If you must move the plant at this time, you can proceed with excavation around and under the plant, brushing away the soil from the roots. The use of water pressure to remove soil is not recommended while the plant is in the ground. On the other hand, air pressure is a great way to separate soil and roots, but this technique is dangerous due to flying debris.

Once the roots are unattached and free of soil clean and prune all damaged roots. The plant should then be moved to its new location or where it can "heal in" for a month or more. The process of "healing in" requires an area not prone to holding moisture. I use an old shipping pallet. A substantial amount of coarse organic material such as sawdust mixed with sand is needed as a medium. The roots of the bare-root plant must be covered completely with the sand mixture and kept moist, not wet, until planting in the chosen location. Shading roots from direct sunlight is always beneficial but essential when "healing in" bare root plants.

I do not fertilize the plants during these procedures. My studies show that recommendations of major researchers indicate that damage to root tissue by fertilization at transplant is likely for woody perennials.

For most plants, winter dormancy indicates the best time to dig plants, although I have found that transplanting

broadleaf evergreens, such as Sugarbush (*Rhus.ovata*) and Manzanita (*Arctostaphylos.pungens*) in late spring, after flowering, to be highly successful.

For plant installation, please refer to Cooperative Extension publication AZ 1022 *Planting Guideline: Container Trees and Shrubs*.

Moving plants into, out of, and around your landscape can correct mistakes, accomplish desires, and lend to a more beautiful environment of your design. A good plan is great, and change is wonderful.

Happy Gardening!

DeForest Lewis, Master Gardener

In a Desert Garden

The Dalea family: leguminosae
A conversation I had with Priscilla Brodtkin (co-author of *Butterflies of Arizona*) not long ago, gave me the input to write about these lovely desert plants. Like Priscilla, I love butterflies and in my garden my Dalea species bloom almost all year long and I find butterflies even in winter on warm days on them. The Daleas are still underused and sometimes not easy to find in most nurseries. There are several species in this family which are very drought tolerant and cold hardy and have great interest for a desert garden and rabbits do not like them. My front garden is kept very natural and consists of drought tolerant and easy to care for plants. Here I grow two species of Dalea. Next to the dry creek is *Dalea greggii*, trailing indigo bush. It rambles between the rocks and cacti and every year it covers a bigger area. This plant is native to the Chihuahuan Desert. It is a trailing evergreen groundcover that can spread up to 6 feet in a single plant. It roots as it spreads. The plant is covered with small gray leaves and has tiny purple flowers. It flowers heavily in the cooler season but I find flowers on it all year long. It makes

(Continued on back page)



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Extension Agent, Horticulture

Carolyn Gruenhagen
Editor

The Virtual Gardener—Planning Your Landscape

What's a High Desert gardener to do when it's dark, dreary, and cold outside? The traditional thing to do is to spend the time looking at seed catalogues, and that's a great way to pass those long winter nights. But here's another suggestion. How about getting started designing that landscape you've always wanted?

Landscape planning requires a little time out in the yard measuring and observing things, but a lot of the work can be done at the desk or kitchen table. The University of Florida and University of Missouri Cooperative Extension services offer two great publications to get you started.

The University of Missouri publication provides a no-frills description a basic five-step planning process. The University of Florida publication describes basically the same planning approach but devotes more space to a discussion of the artistic elements of design. The five basic steps described in the University of Missouri publication are:

- Develop a list of existing and desired outdoor features
- Draw a base plan
- Outline major landscape areas
- Locate desired features in the proper landscape areas
- Develop the final landscape plan

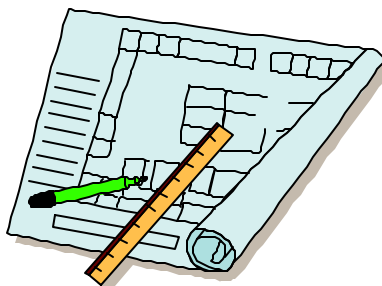
Developing the list of existing and desired features involves careful observation of what you've got and some blue-sky brainstorming about what you'd like that you don't already have.

In looking at what you already have, be sure and note negative as well as positive things. For example you may have a great view of a neighbor's trashcans.

That will have to go. Also note some of the things that may influence what you can and can't do on your property. Where are the shady and sunny spots? Where are the low spots where water and cold air may pool? What is the soil like?

When it comes to boking at things you'd like to have that aren't there already, let your imagination go wild. Don't worry about how to do it, when to do it, or how much it costs. And get everybody involved in the brainstorming process, including the kids. The more ideas you come up with the better. Later on you can let the left-brain take charge and work out those nagging practical details like, "How are we going to do this?"

Once you've settled on a basic list of things you'd like to do, you need to figure out how everything is going to fit together on the ground. For this you need a base map drawn to scale, showing at a minimum the property lines and the house. Other details such as out-buildings, walks, parking areas, trees, major shrubs, and whatever else you want to include can also be shown on the map. The base map is also a good place to record the locations of underground utility lines once you have had your place Blue-Staked (call 1-800-782-5348 for free Blue Stake service).



It's a lot easier to push a pencil around a sheet of paper than to push dirt around the yard, so the next couple of steps are to lay out on your base map, the areas you want to create in your yard. That way you will have your design figured out before you start digging.

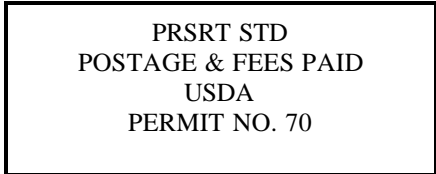
At first you just want to figure out the rough sizes and locations of the areas where you want to place things in your yard. At this point you are interested in making sure everything fits in the space you have available and that the traffic flow from area to area makes sense. For example, you wouldn't want to route your outdoor dinner guests by the trashcans on the way to the table. After you determine the major layout, you can begin planning the individual areas in detail.

The University of Florida publication will give you lots of great ideas for making the landscape attractive, including how best to arrange trees and shrubs, how to choose flower colors that work well together, and the many other things that go into making a beautiful yard.

Here are the URLs for the two publications:
 University of Missouri: <http://muextension.missouri.edu/xplor/agguides/hort/g06901.htm>
 University of Florida: http://edis.ifas.ufl.edu/scripts/htmlgen.exe?DOCUMENT_MG086

Until next time, Happy Surfing.

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(Continued from page 2)

a wonderful groundcover especially on slopes but it doesn't like to be walked on. The flowers are not very showy from far away but at a close-up look they are very pretty and Butterflies love them. The other plant of this genus I grow in this area is *Dalea pulchra*, purple bush Dalea. It is another evergreen, a shrub growing to 4 feet tall. The leaves are dainty, hairy and silvery gray. Purple flowers are on the branch tips and come in the cool season—late winter into spring. This is nice and gives my garden winter interest and gives the butterflies something to munch on. In my yard this plant self-seeds itself quite freely. As it is not a demanding plant I have let it seed, but sooner or later I have to dig some starts up. A very similar plant is *Dalea frutescent*, black Dalea, another evergreen. Somewhat smaller in scale, the flowers are bright purple and the foliage is lacy and green. Then there is *D. bicolor*, indigo bush. This one is deciduous and grows 6-8 feet tall with silvery leaves and deep blue autumn

flowers. I once purchased a little low growing shrub with bright yellow elongated flowers and lacy green foliage Dalea from Peter Gierlach, I think he called it Prairie Gold. It flowers in autumn and is absolutely lovely. Unfortunately I cannot find any reference on it anywhere. If any of you come across it somewhere, it is certainly worth growing.

Angel Rutherford, Master Gardener

Note: Angel will be teaching 3 classes at Cochise College—February 14, *Water Gardening—An Introduction*, March 6, *Pond Building Basics*, and June 19, *Water Gardening—Plant Selection*. For more information contact Cochise College.

February Reminders

- ? Prune roses
- ? Plant bare-root trees

Cuttings 'N' Clippings

* Cochise County Master Gardeners Association (CCMGA) next meeting will be February 5 at 5:00 at the UAS Campus, Room 106. Rob Call, Extension Agent will be the guest speaker.

* The February 7 *Water Wise* workshop will be presented by Gary Gruenhagen and Christina Garaas on *How I Designed My Yard*. This workshop will be held at the Sierra Vista Police Station Training Room, 911 N. Coronado Dr. from 9:00—10:30 a.m. and will be limited to the first 45 people who arrive. For a complete list of workshops go to www.ag.arizona.edu/cochise/waterwise/events.htm or contact Cado Daily at the Cooperative Extension, Ext. 2139.