



High on the Desert Cochise County Master Gardener Newsletter

Vol. 17 No. 4 APRIL 2006

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

Ah, Shade!

The winter has been glorious here in the Southwest, but what about the spring? Unlike more temperate climates, spring in the Southwest can be brutal. Let's add on severe drought to a brutal spring and it's time to run for the shade.

You and your plants will need some respite during our hot, dry spring season and having a shade structure will keep the sun off you and your plants. While significantly cooling air temperatures, shade structures can add interest to a landscape. Not only will shade cool the temperature, it will also reduce the amount of water plants need.

Locate shade structures to maximize their benefits. If you have lived through a Southwest summer, you know that the west side of a building or wall can sizzle in the heat. If you can, locate shade structures on that hot side and it will serve a double-

duty, it can reduce inside temperatures by 8-10 degrees and it will be cool under the structures.

Creating shade can be as simple as a cloth strung between supports, or as elaborate as a ramada made out of ocotillo canes. Decorative "shade sails" are made of colorful and UV resistant material. Of many shapes, shade sails are tightly attached to sturdy poles or to buildings and provide pizzazz to a backyard. If you want to make your own shade cloth structure, shade cloths can be purchased in garden departments. These cloths are of varying densities and come in black, green or beige. Keep in mind that winds can catch large shade cloths, so have a way to easily detach them during strong winds.

A ramada is an open-air structure with four upright posts and a flat roof. Traditionally made out of natural materials such as mesquite wood for

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the posts and yucca, agave or ocotillo stalks for the roof, ramadas are rustic and provide light shade. Sides can be put on the ramada to protect from afternoon sun or winds.

Trellises and espaliers also create great shade. They can be temporary structures of wires for summer vines to grow up (how about for those beautiful gourds watered by gray water?) or can be made with more durable metal structures. Trellises can provide shade without needing a water guzzling plant (especially if it is on the west side). Diamond lathe panels or shade cloth covered metal framing makes a wonderful respite from the sun.

If shade structures are located on the west or south side of a building, it is preferential to have the shade be temporary. Winter sun which is low to the horizon is very nice to have warm a sun room. Plant a deciduous vine which drops its leaves in the winter or have a shade structure that can be removed until spring.

If you and your pets have enough shade this spring, what about your plants? Bring heat sensitive plants onto the covered patio or to the north side of the house. If plants can't be moved, draping them with a light cloth or a garden variety shade cloth will reduce watering needs.

Don't forget to shade the soil around plants with a 3 inch layer of rock or bark mulch to help keep roots cool.

Every backyard needs shade for plants, people and pets. Be cool, get shade.

Cado Daily, Water Wise Educator

In a Desert Garden

Aloe

I love aloe. They are easy to grow, undemanding, and make wonderful accent plants in the ground and in containers. These plants are African natives; they are succulents and come in all sizes, from miniature to tree forms. In my little garden I grow several different kinds in pots and in the ground.

Most aloes are only borderline hardy in our high desert and need some winter protection. For some species planted under a tree gives enough protection. Those in pots can be moved into a protected area or under an overhanging roof, a ramada or against a southern wall. This will only work in winter. In summer the aloe don't like it quite as hot. That is why it is better to plant an aloe where it can get afternoon shade in our hot summers.

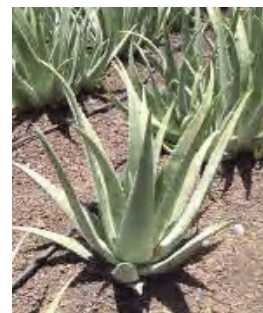
The most commonly grown aloe in our area is *Aloe saponaria* or 'Soap Aloe.' This plant forms rosettes to one foot wide and multiplies through suckers. I have a fairly big clump that needs to be thinned out. Volunteers welcomed. It has just started to blossom and the flowers stalks are quite stunning—orange and yellow. Hummingbirds really like them. The most known and grown plant is *A. vera*, the medicinal aloe. It does fairly well and there are several nice plantings in my neighborhood. They are blooming already. It grows a lot bigger in the ground than it does in a pot. I have a clump growing in a big clay pot. I just love the yellow flower spikes. This plant

is very good in easing the pain of a cut or a burn. Just cut the tip of one of those succulent leaves and wipe it over the injury. A very pretty plant is *A. variegata* or 'Tiger Aloe.' The thick, fleshy leaves are dark green, banded and edged with white. Pinkish flowers appear throughout the year. This one makes a good specimen for a pot.

Aloes don't mind growing in between flowers that need a little more water as long as they have good drainage. One of my aloe beds is close to my rose garden and from time to time suckers appear around my roses and are doing just fine. At the moment a clump of *A. striata* or 'Coral Aloe' is blooming. This one I am also growing in a big clay pot. It has sent out a stem with brilliant coral flowers. What a stately plant. There are many varieties that grow small enough to be kept in little pots. Some have different colored leaves from green to yellow to purplish, and they are all lovely, drought tolerant, and easy to maintain.

Angel Rutherford, Master Gardener

Aloe vera



Robert E. Call

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Extension Agent, Horticulture

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Editor

Cuttings 'N' Clippings

* The next CCMGA meeting is 5:00 p.m. Thursday, April 6, 2006 at the UAS campus, Room 503. The speaker will be Dr. Cecile Lumer talking about the Cochise County Herbarium.

* Rainwater Harvesting Systems will be presented Saturday, April 8 from 9:00—5:00 p.m. in Tucson by members of Tucson Permaculture Group & DAWN SouthWest. For information or to register (there is a fee) call Pima Community College at 520-206-6468 or e-mail communityed@pima.edu ref: #61953.

* A *WaterWise* Water Expo will be held April 15 from 10:00—3:00 p.m. at the Ethel Berger Center, 2950 E. Tacoma St. Sierra Vista. See new and innovative water conserving products and services—over 25 exhibits!

* The Sierra Vista Farmers Market will open on Earth Day, Saturday, April 22, in conjunction with the West End Block Party to mark Sierra Vista's 50th Anniversary. The regular farmers market vendors will be there as well as Earth Day demonstrators, exhibitors, musicians, and an opportunity to recycle at the same location, the NW corner of Carmichael and Wilcox, that the market was held at last year. The hours will be from 10:00 a.m.—3:00 p.m. After this opening the farmers market will revert to

High on the Desert

The Cochise County Master Gardeners Association (CCMGA) is awarding two full scholarships to the 2006 High Desert Gardening & Landscaping Conference to be held at the Windemere Hotel & Conference Center May 4 & 5. 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.
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 obtainable from the Cooperative Extension Office at the U of A South campus or on the web site.
5. Entries must be received at the Cooperative Extension Office at the U of A South campus not later than close of business on April 14, 2006.

Entries will be judged by the Cochise County Horticultural Extension Agent and a committee of Master Gardeners appointed by the President of CCMGA. Winners will be notified by April 21, 2006 and the names of awardees will be announced in the May 2006 Cochise County Master Gardener Newsletter.

Thursdays, beginning April 27 from 9:00 a.m. to 1:00 p.m.. For information contact Valerie McCaffrey, Manager, Sierra Vista Farmers Market at (520)378-2973 or vallimac@cox.net.

* The *Water Wise*/Master Gardener Xeriscape Garden Tour will be Sunday, May 7 from 1:00—4:00 p.m. Three gardens in Sierra Vista will be featured. Maps will be available about the middle of April from the Cooperative Extension Office at University of Arizona, South or call 458-8278, Ext. 2141.

* Angel Rutherford will be teaching another Pond Building and Maintenance class on June 3 and 10 from 1:00 p.m.—3:00 p.m. For more information contact Cochise College at 515-5446.

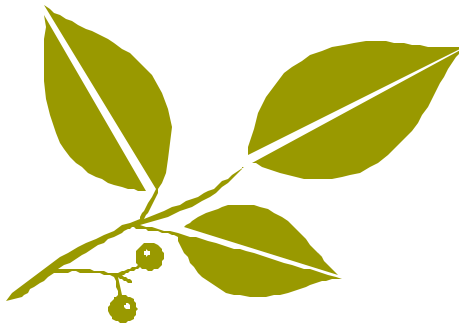
* The SV Area Gardeners Club is working to beautify the Southern AZ Veterans Memorial Cemetery. Anyone wanting to volunteer their services or plants is welcomed and can contact Jim Woodruff at 803-9171 or Janet Brady at 376-3386.

The Virtual Gardener—Cochise County Herbarium

Have you ever thought about how many plants grow in Cochise County? To get a feel for the number, take a walk along the San Pedro or hike up a Sky Island canyon, or just take a good look in the odd corners of your own property and think about how many plants you see. Now think about how much effort it would take to collect multiple specimens of each of the plants in the county, identify them, press and dry them, enter data about them into a database, and store the dried specimens for posterity. That is the mission of the Cochise County Herbarium.

The Cochise County Herbarium, like all herbaria, is essentially a museum of preserved plants. Its collection serves as a reference for botanists involved in identifying and classifying plants, and it also preserves important information about the geographic and temporal distribution of plants in the county, their diversity, their ecology, and their genetic makeup. In addition to serving the needs of researchers, the herbarium also provides a valuable teaching resource.

The Cochise County Herbarium, founded by botanist Dr. Cecile Lumer in 2002, is located in a tiny building at the Plant Sciences Center on the campus of the University of Arizona, South. From this humble structure herbarium curator Lumer and her tiny staff of volunteers conduct the effort to catalog and describe all the plants of Cochise County. And now you can see some of the fruits of their labor on their website . . .



<http://www.cochisecountyherbarium.org>

The Cochise County Herbarium website, like the herbarium itself, is a work in progress. On the website you will find lists of plants collected in Cochise County organized by their Latin names (family-genus-species). Clicking on a genus and species name will bring up a page with data about the specimen, such as the name of the collector, the location where the specimen was collected, and other information. Many pages also show photographs of the specimens, including a view of the entire herbarium data sheet, a closer view of the plant, and a close-up of its flowers/fruit. These thumbnail-sized images can be enlarged to screen size by clicking on them.

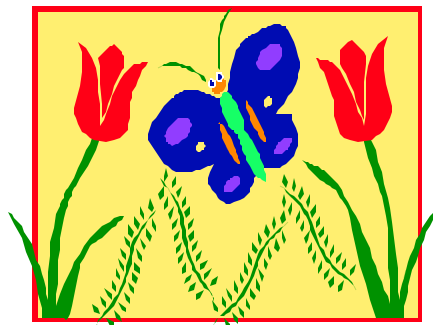
In addition, the site is linked to other plant databases that provide more information about the selected plant than you can imagine, including detailed technical information about their gene sequences, their pharmacology, descriptions of their native habitats and utility in the landscape, and lots of images of the plant. Another interesting link on the site connects to a comprehensive geographic information

system (GIS) for Arizona that shows the distribution of plants, animals, geologic and hydrologic features, and human demographic information keyed to maps of the state.

While you are visiting the website, check out the upcoming events. Dr. Lumer and her volunteers will be leading a wildflower walk on May 13th and starting a six week plant identification class starting on May 19th. All proceeds from these events will be used to support the herbarium.

Until next time happy surfing!

Gary A. Gruenhagen, Master Gardener
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April Reminders

- ◆ Stake new trees
- ◆ Plant cool-season veggies
- ◆ Fertilize
- ◆ Prepare for pests

The Greenhouse Effect—One Man's Opinion Part I

Current evidence suggests global temperatures have been rising slowly for some years. While the short term increase in temperatures is beyond doubt meteorologists and others can not be certain if this is a short term phenomenon that will be reversed or if it is indeed a long term trend. Any number of theories suggest this increase in global temperatures is unrelated to any reversible human activity. However, for the sake of this discussion let us assume it is indeed a longer term warming trend mankind can address.

Such a term trend would be catastrophic for mankind and the animals and plant life that populate our globe. Any real increase in temperatures would almost certainly create a northward and southward shift in the ideal growing zones on our planet. It could also create havoc in the current tropical zones as beneficial plant life in those areas came under "stress" or simply disappeared. Any such shift in the growing zones would, in the longer term, require a massive shift in the human and infrastructure resources necessary to harvest worldwide food stuffs. In the United States one can imagine dramatic changes in the Great Plains states as well as such smaller breadbaskets as the San Joaquin Valley in California.

The capital required to relocate farming infrastructure around the world would be mind-boggling. The shift in agricultural infrastructure currently sited on individual farms, more centralized grain elevators and similar storage facilities, food processing plants and the transportation systems to support these would all require new investments at the same time. This infrastructure has grown to meet current farming practice over an extended period of time. Moving it en masse over even a medium term period would strain worldwide capital markets particularly those in the underdeveloped world. Not only would the capital requirements be huge they would come at a time when existing farmland values could plummet sending many current farm and farm related enterprises into bankruptcy.

A shift in farming infrastructure is challenging but the human toll on any significant shift in farming "zones" is even more daunting. While the family farm in the United States has given way in many areas to large investor owned farms this is not

the case in many other parts of the world. Even the investor owned farms in the United States need human beings to operate them and these people live where crops are grown now. It is even harder to imagine the consequences of shifting the farming zones in third world. Could China, India or other similar agricultural intensive economies even survive such a shift?

However, all these significant problems pale when compared to the changes human beings might face coping with even a partial melting of our polar ice caps. Changes in ocean levels are predicted by some to inundate truly huge tracts of ocean front land around the world. Low lying areas are often highly populated and/or heavily farmed. The loss of these vast tracts of land would disrupt economies around the world and further exacerbate food supply shortages in many countries.

Readers who cannot accept or do not believe politicians worldwide and environmental radicals on both sides are part and parcel of the problem and a major roadblock to any real solution should stop reading here.

Douglas Templeman, Master Gardener

(Editor's Note: Part II will appear in the May 2006 Cochise County Master Gardener Newsletter.)



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Asparagus

Nearly 95 percent of the 200 million pounds of fresh asparagus grown in the U.S. comes from California, where the harvest begins in February and peaks in March, April, and May. Here are some asparagus facts:

- ◆ The name asparagus, derived from Greek, means “sprout” or “shoot,” and the vegetable belongs to the lily family.
- ◆ Asparagus cultivation began more than 2,000 years ago in the eastern Mediterranean region. Greeks and Romans prized it for its herbaceous flavor, succulent texture, and the



medicinal qualities it was believed to have.

- ◆ In the 16th century, asparagus gained popularity in France and England, and early colonists brought it to America.
- ◆ King Louis XIV of France so enjoyed this delicacy that he ordered special greenhouses built to produce a year-round supply. That led to the asparagus being called “the food of kings.”
- ◆ The first documented production of asparagus in California dates from 1852.
- ◆

13th Annual Conference High on the Desert

It's not too early to register for the 13th annual High Desert Gardening & Landscaping Conference sponsored by Cochise County Master Gardeners Association in conjunction with the University of Arizona to be held Thursday and Friday, May 4 and 5, 2006 at the Windemere Hotel & Conference Center in Sierra Vista. More than 20 speakers will be featured and there will be non-profit vendors and vendors with garden related items. Registration forms are available on the web site and Cooperative Extension Office. There is a fee for this conference.