University of California Agriculture and Natural Resources

The Green Scene

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Making a Difference for California

Meetings and Announcements

Fall Horticulture Class—Tehachapi

I am pleased to announce a fall horticulture class to be given in Tehachapi. The meeting location will be the Valley Oaks Charter School (we met there in 2014), on Thursdays, 5:30 – 8:00 pm, beginning August 30. I thank Valley Oaks and its principal, Tom Karnes, for cooperating for this class. Valley Oaks Charter School is located at 20705 South Street. That's near the Golden Hills / Old Town area. Cost will be \$75. We strongly recommend that interested students register on-line at http://ucanr.edu/hortclass. If you are unable to register on-line, you can use the mail-in registration form. A draft syllabus is available here.

Xeriscape Principles for Water Conservation

Although we currently have a reprieve from severe drought restrictions for landscape irrigation, water conservation will remain a necessity in California. In the mid-1980s there was a strong movement in California and elsewhere toward understanding, developing, and promoting water-conserving landscapes. There were conferences held in the Central Valley, Los Angeles, and northern California to promote the use of drought-tolerant plants and a then-new design approach called xeriscape. From the Greek word $\xi\eta\rho\sigma\varsigma$, $x\bar{e}r\sigma s$, "dry," the idea was to conserve water while maintaining an aesthetically attractive landscape. About that time, seven principles were enunciated by the National Xeriscape Council, apparently originating with Denver Water and its associated volunteers. Since that time, the principles have become widely incorporated into landscape design. These principles are the following:

- Planning and design
- Soil analysis
- Appropriate plant selection
- Practical turf areas
- Efficient irrigation
- Use of mulches
- Appropriate maintenance

I think these are useful principles for water conservation, but I think they should be ordered differently to reflect their importance, especially for our area. I re-order them as follows and then comment on each:

- Efficient irrigation
- Use of mulches
- Planning and design
- Appropriate plant selection
- Practical turf areas
- Appropriate maintenance
- Soil analysis

Efficient irrigation: This is the key to any attempt at water conservation, for without attention to irrigation design and scheduling, the other points have no value. Plant selection, etc., does not save water. It's irrigation scheduling that results in water savings, and so this principle is first and more important than the others.

Use of mulches: Mulches reduce surface evaporation, provide insulation so soil temperatures can be cooler, and suppress weeds. Bark or other organic mulches are preferred over rock or plastic. Adding mulch is an easy step that confers direct benefits.

Planning and design: I interpret this point to be about zoning of the irrigation system for plants; that is, placing plants with similar water requirements on the same line or valve. Otherwise, the more needy plants cause irrigation to be increased for all plants on the line.

Appropriate plant selection: Plant selection is important in this context only to the extent that plant selection allows irrigation to be reduced. In almost all landscapes, modifying the irrigation schedule results in large water savings, and further modifications, such as changing plants, result in additional but smaller savings.

Practical turf areas: Actually, turf can be quite water-thrifty. When driving west from the Mississippi River into the Great Plains, trees become infrequent but grass remains. Warm season grasses need less water than cool-season grasses, with water savings if a warm-season grass is irrigated according to best practice. In most home landscapes, irregular turf areas and lack of uniformity of the irrigation system result in overwatering. Reducing turf areas may result in less applied water.

Appropriate maintenance: This point could apply to any landscape. However, mowing height will affect turf water need, and tree pruning can result in more or less shade.

Soil analysis: Soil is what it is. Soil analysis can say something about the physical or chemical situation, but in many landscape situations soil nutrient levels are adequate and soil analysis may not say much about how to save water. Sandy soils have less water holding capacity and hence need to be irrigated more frequently than do soils of finer texture, e.g., silts and clays.

Early Announcement--2019 Horticultural Study Tour: Thailand

I am in the process of developing an itinerary for our next (10^{th}) Horticultural Study Tour, this time to Thailand. Our approximate date frame is mid-February, 2019, since the weather in Thailand is cool and dry at that time.

Thailand is home to a number of botanic gardens, and a visit would provide exposure to the fascinating culture of Asia. The best definition I have ever seen of sustainable agriculture comes from the demonstration farm at Mae Rim, near Chiang Mai. I would expect that our group would visit Bangkok and Chiang Mai, and we may also arrange a side trip to Angkor Wat in Cambodia. Lodging and other expenses tend to be relatively low in Thailand.

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