HEALTHY FOOD SYSTEMS • HEALTHY ENVIRONMENTS • HEALTHY COMMUNITIES • HEALTHY CALIFORNIANS

University of California
Agriculture and Natural Resources
Making a Difference for California

The Green Scene

UCCE

July 2019

Horticultural Study Tour XI: May 2020

Our eleventh horticultural study tour is planned for May, 2020, to visit the extraordinary gardens of Wales and Scotland. We are now well past our operating-minimum number of participants for all three segments. In fact, we have reworked transportation to include more people, but that means only about seven more. If you want to go, please don't delay too long in signing up.

In summary, we plan to begin in the London area with free time and then proceed west, first to visit Wisley Garden, the flagship garden of the Royal Horticultural Society. We continue west, stopping to see Stonehenge, perhaps the world's most famous prehistoric monument, and Salisbury Cathedral, begun 1220 AD, still a working church and one of the finest examples of gothic architecture in the UK.

We then proceed to Wales, which has quite a mix of gardens, promising to be scenic, interesting, and fabulous. Then, for those interested, we continue to Scotland, specifically Edinburgh, for several days, including a visit to the Royal Botanic Garden and the National Museum, with its superb displays of geology and Earth history. We are then planning to go north to Crathes Castle with its outstanding formal and informal gardens, and then to Orkney Island to see the best-preserved prehistoric village in northern Europe, and also to see the Ring of Brodgar, both dated to about 3000 BC. Then, we work our way west and south to the Island of Skye and coastal gardens.

I'd like to thank Travel Gallery of Pasadena for again handling the business arrangements for our horticultural tour. The tour itinerary, pricing and registration information are available on the Travel Gallery website at https://www.travelgallery.com/hort-wales-2020. (If the link doesn't work, you can copy and paste, or just go to travelgallery.com and then "join your group" and you'll find it.)

2019 Horticulture Classes—Beginning August

I am planning to offer two horticulture classes this fall. The first will be our classic Horticulture for Landscapes, Gardens, and Orchards level I class, covering many of the situations and questions encountered in home landscaping and food production. That class is to run for 15 weeks, beginning Tuesday, August 27, with start time 5:30 pm, here at the UC Cooperative Extension office, 1031 S. Mt. Vernon Ave.

Also, I plan to offer a special topics class, with subjects reflecting input received from past horticulture class participants. Some of the topics include hydroponics, no-till agriculture, turf weeds and diseases, horticulture in Thailand, plus, of course, the Amazing Video showing water movement in soil. This special topics class begins Thursday, August 29, with start time 5:30 pm, and also at the UCCE office.

Cost for each class is $75.

The syllabi for both classes will be posted to our UCCE website at http://cekern.ucanr.edu/.

Xeriscape Principles for Water Conservation

In the mid-1980s, there was a strong movement in California and elsewhere toward water conserving landscapes. There were conferences held in the Central Valley, the Bay Area, Los Angeles, and northern California to promote the use of drought-tolerant plants and a then-new design approach called xeriscape. That word comes from the Greek word ξηρος, transliterated xeros, meaning dry, coupled with –scape, as in landscape. 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. Those 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 ranked differently for our area. I re-order them, and then I will comment on each.

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

Efficient irrigation: This has to be the key to any attempt at water conservation, for without attention to irrigation scheduling supported by irrigation design and maintenance, the other points have no value. Plant selection of itself 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 for soil so temperatures can be cooler, promote root growth, and suppress weeds. Bark or other organic mulches are preferred. Adding mulch is an easy step that confers direct benefits.

Planning and design: I take this to be design that allows 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: Turf is quite water-thrifty. When driving west from the Mississippi River into the Great Plains, trees become infrequent but grass remains. Turf is more water-thrifty if it is a warm-season grass, and if it 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: That 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 situations in landscapes soil nutrient contents are adequate and soil analysis may not say much about how to save water. Understanding soil texture, that is, proportions of sand, silt, and clay, can inform irrigation duration and frequency so as to wet soil but limit runoff.

John Karlik
Environmental Horticulture/Environmental Science