University of California Agriculture and Natural Resources

The Green Scene

CE

Making a Difference for California

September 2016

Fall 2016 Horticulture Classes Offered by UC Cooperative Extension

We're off to a good start with our fall horticulture classes. Our goals are to enhance and expand green planting and to reduce pesticide application. We will especially focus on water conservation, including how to estimate plant water needs and how to irrigate. We'll have fun, too, in our class discussions.

It's not too late to join either class.

Horticulture I for Landscapes, Gardens, and Orchards is being offered Mondays, 5:30 – 8:30 pm, meeting at our UCCE office, 1031 S. Mt. Vernon Ave.

Horticulture III for Landscapes, Gardens, and Orchards is offered Tuesdays, 5:30 – 8:30 pm, also at our office. Topics will include xeriscape, plant propagation, soil properties, weeds and herbicides, and field trips.

If interested in either class, please contact the Cooperative Extension office at cekern@ucdavis.edu, or 868-6200.

Horticultural Tour 2017: Iceland

Please consider joining our group for a visit to Iceland, July 15-22, 2017. From what I know of Iceland, I expect the landscape to be somewhere between scenic and spectacular.

Why Iceland? Plants growing outdoors in the far north have adaptations to conserve water, since the root ball may be frozen for several months. Such adaptations



are similar in many instances to those found in plants of arid areas. Because of its location on the mid-Atlantic rift, Iceland was built by volcanoes and is the world's leader in use of



geothermal energy for greenhouse production. That location also makes Iceland one of the few places where one can stand on land where Earth's crust is being formed. As a bonus, for those of us who live in Kern County, July is usually quite warm locally. In contrast, we can expect Iceland to have delightfully cool weather.

What I want to do is form a group now so we have space reserved with the tour operator in Iceland. I will indicate my interest via a deposit, and you can, too. The details for this visit are

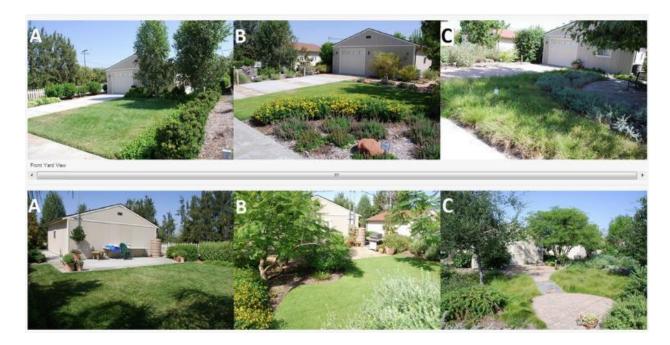
Please contact me if questions, ifkarlik@ucdavis.edu or 661 868-6220.

Future Classes

I plan to offer Horticulture V in the spring of 2017 beginning February. I think it is now possible to mark it on your calendar if you're interested, although I have not decided what day of the week to offer it. The class should be fun and interesting, since horticulture is fun and interesting.

Water Conservation and Aesthetic Preferences for Landscapes

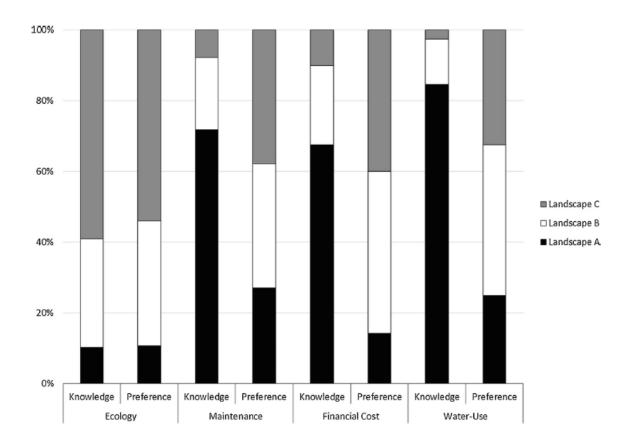
There was a very interesting paper published about landscapes and why people prefer certain styles to others. I'd like to mention aspects of that paper for your interest. (The full citation is Hayden, L.; Cadenasso, M.L.; Haver, D.; and L.R. Oki. 2015. Residential landscape aesthetics and water conservation best management practices: Homeowner perceptions and preferences. Landscape and Urban Planning 144: 1-9.)



The three demonstration landscapes shown above were planted at the UC South Coast Research & Extension Center. They represent different plant types and approaches toward additional water conservation. Type A represents something typical—you've likely seen a landscape like this with turfgrass comprising much of the surface area. Type B is a move toward a more Mediterranean look, with less turf and use of shrubs. Type C moves further toward a natural landscape, that is, one more closely resembling the ecosystem of SoCal. Use of mulch and absence of turf are features. There are other features, too, that

aren't so obvious, such as the use of slot drains in the driveway of B (and presumably C) and the use of drip irrigation in C.

After a field day at the UC center, visitors were given a survey to gauge their knowledge and preference for the landscape types. Some of the data are shown here:



In this figure, "knowledge" means how much respondents thought they knew about the landscape in relation to the criterion. For example, respondents were confident about their knowledge of water use in A, the financial cost of A, and the maintenance of A. "Preference" means how much respondents liked the landscape type.

I want to call out a few other highlights of the responses. Overall, respondents strongly preferred Landscape B, which contained an intermediate level of best management practices. The B type was also the type most closely matching their home landscape for most people. However, when asked about specific features of the landscapes, such as use of plants, plant choices, drip irrigation, and so forth, the components of Landscape C prevailed. Also, with regard to water use, Landscape C was chosen over the others. So why wasn't Landscape C chosen overall?

In a paper published in 2008 (let me know if you want the full citation), it was found that homeowners would compromise water conservation and costs to achieve what they think is aesthetically attractive. Part of their rationale is what the neighbors have and what they think the neighbors will think, since most people seem unwilling to do something quite different from their neighbors. (I find that interesting, since probably in converse the neighbors are concerned about what others think of them.)

One conclusion we may draw is that to move toward additional water savings, either people have to make landscaping changes with less regard to how they think they'll be perceived, or that the aesthetic norms have to change. In other words, what is considered to be desirable, even attractive in a landscape will have to change if deeper cuts in water use are to be attained. As an example, in Bakersfield it seems people often prefer bare soil beneath shrubs because it looks "neat," but mulching clearly lowers evaporation and improves conditions for plant roots.

There is much more in the Hayden paper, and if you're in the business of landscape design or water conservation, I suggest you read it in full.

John Karlik Environmental Horticulture/Environmental Science

Disclaimer: Discussion of research findings necessitates using trade names. This does not constitute product endorsement, nor does it suggest products not listed would not be suitable for use. Some research results included involve use of chemicals which are currently registered for use, or may involve use which would be considered out of label. These results are reported but are not a recommendation from the University of California for use. Consult the label and use it as the basis of all recommendations.

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