Ę

University of **California** Agriculture and Natural Resources

Making a Difference for California

April 2021

The Green Scene

Meetings and Announcements

Yes, the usual: Our office on Mt. Vernon Ave. is currently open to the public. **In accordance with the public health emergency declared by the County of Kern, all visitors are required to wear face coverings in all public places until further notice.** Many of us advisors will be alternately in the office and working from home, and I have answered many questions via email, and new queries come in regularly from Kern residents as well as from those who live much further away. Email is the best way to reach me, my address is jfkarlik@ucanr.edu.

Weekly Zoom Presentation

My weekly zoom presentations on gardens and landscapes is running. These presentations are Thursdays at 4:30 pm and are mostly based on photos from our past horticultural tours. The next presentation, April 22, will be a visit to Nice, France, with its Mediterranean landscapes. If you didn't receive the Zoom log-in information, please send me an email, jfkarlik@ucanr.edu, and I'll send you the meeting ID and password.

Horticultural Study Tour XI: Wales, Edinburgh, Northern Scotland

As you know, we've had to cancel Hort Tour XI due to Covid. We had hoped we might reschedule for 2021, but that seems infeasible. Accordingly, and so we might see spring bloom, we are looking at spring 2022 for this tour. It will be retitled Horticulture Study Tour XII, and we plan to offer essentially the same itinerary listed for Hort Tour XI.

Saving Water (And \$) in Home Landscapes, Gardens, and Orchards

Another dry year is underway. Although agriculture uses the majority of California's developed water (water that is piped at some point), about half of water used in urban areas is used outdoors, and of that fraction, about half is used for landscape irrigation. Excessive irrigation is wasteful and can lead to turf and landscape diseases. However, it is not necessary to do a landscape makeover to save water, nor will modifications necessarily result in water savings. The key to saving water in outdoor plantings is irrigation scheduling. Modifications to a landscape are of no benefit for water conservation unless the irrigation amount is reduced.

Although water conservation is a large topic, here are a few tips and ideas for saving water in landscapes and other outdoor plantings:

• Check the system

Periodically run the irrigation system during the day to check for missing heads, broken risers, and sprinkler coverage. Repair as necessary.

• How much to water?

Water needs of plants in home gardens, landscapes, and orchards change by a factor of 10 from winter to summer. Therefore, irrigation schedules should be changed at least four times per year: spring, summer, fall, and winter (when perhaps the system can be shut off).

Irrigation amounts are usually expressed as depth of applied water. In winter, about 0.02 inches per day are needed in the Bakersfield area, while in summer the value rises to about 0.25 inches per day. These values do not mean water needs to be applied every day. Weather conditions will affect water needs of plants.

You can measure how much water your sprinklers deliver by placing cans or coffee mugs in the landscape and running sprinklers for a set amount of time. You can also estimate total landscape water use from your water bill by considering water use during winter months as the baseline indoor value, and water in addition as used outdoors. That assumes sprinklers are shut off during winter.

Irrigate and monitor. In other words, check soil moisture between irrigations with a shovel, soil probe, or screwdriver, and adjust the irrigation schedule accordingly.

• How often to water?

Irrigation scheduling is a combination of <u>frequency</u> (how often) and <u>duration</u> (run-time). As a rule-of-thumb, plan to fill a plant rootzone and then irrigate again when about half the water has been used. Therefore, set run-times for each irrigation zone and then add or subtract days depending on season of the year.

• When to water?

Early morning is best since wind speeds and temperature are low, and less evaporation and wind-loss occur.

• What about mulches?

Mulches, such as wood chips or shredded leaves, help save water by reducing evaporation from soil.

• What about turfgrass?

Turfgrass is water-thrifty if irrigated carefully. However, turf is often over-irrigated, so reducing the area of turf may lead to water savings. Experimental data show warm-season grasses, such as bermudagrass and the UC release 'El Toro' zoysia, offer water savings over cool season turfs, such as tall fescue or bluegrass. Buffalograss is even more drought tolerant, but not often planted in California.

• What about "drought-tolerant plants?"

Research-based water-use data do not exist for many plants. Therefore, we often infer drought tolerance from seeing where a plant grows in nature. However, many California natives and plants adapted to desert conditions do not perform well under irrigated conditions. These plants may be susceptible to root rot, for example, if irrigated. <u>Drought-tolerant plants, per se, do not save water</u>. Saving water is accomplished by changing irrigation schedules.

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 <u>are not</u> a recommendation from the University of California for use. Consult the label and use it as the basis of all recommendations.

The University of California, Division of Agriculture and Natural Resources (UC ANR) prohibits discrimination against or harassment of any person in any of its programs or activities on the basis of race, color, national origin, religion, sex, gender, gender expression, gender identity, pregnancy (which includes pregnancy, childbirth, and medical conditions related to pregnancy or childbirth), physical or mental disability, medical condition (cancer-related or genetic characteristics), genetic information (including family medical history), ancestry, marital status, age, sexual orientation, citizenship, status as a protected veteran or service in the uniformed services (as defined by the Uniformed Services Employment and Reemployment Rights Act of 1994 [USERRA]), as well as state military and naval service. UC ANR policy prohibits retaliation against any employee or person in any of its programs or activities for bringing a complaint of discrimination or harassment. UC ANR policy also prohibits retaliation against a person who assists someone with a complaint of discrimination or harassment or participates in any manner in an investigation or resolution of a complaint of discrimination or harassment. Retaliation includes threats, intimidation, reprisals, and/or adverse actions related to any of its programs or activities. UC ANR is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment and/or participation in any of its programs or activities without regard to race, color, religion, sex, national origin, disability, age or protected veteran status. University policy is intended to be consistent with the provisions of applicable State and Federal laws. Inquiries regarding the University's equal employment opportunity policies may be directed to: John Fox, Affirmative Action Compliance Officer and Title IX Officer, University of California, Agriculture and Natural Resources, 2801 Second Street, Davis, CA 95618, (530) 750-1343. Email: jsafox@ucanr.edu.Website: http://ucanr.edu/sites/anrstaff/Diversity/Affirmative Action/.