

Greetings

I hope you're well, surviving, and looking forward to the upcoming weeks and months.

Meetings and Announcements

UCCE Kern County Office Situation--UCCE is still working!

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: Gardens and Design Resumes

In December I continue making weekly Zoom presentations on gardens and landscape design, augmented with a bit of history. These presentations are Thursdays at 4:30 pm, and are mostly based on photos from our past horticultural tours. The next presentation, December 10, will focus on landscapes and design in Kiev, with a note about history of that city. The following week, December 17, we plan to view the UCLA campus with its notable garden and move toward a more water conserving landscape. After that, I plan to take a two-week break, resuming in January. Based on participant response, I also plan to add talks on climate change and organic agriculture. The meeting ID and password remain the same. If you didn't receive, please send me an email, jfkarlik@ucanr.edu, and I'll send you the Zoom connection info.

39th Annual Landscape Management Seminar

At this point we've put on hold our 39th annual landscape management seminar. We want to offer eight hours of PCA credit and allow attendees to meet in person. Right now, we can't do those things. Perhaps we can schedule for later in the spring.

Annual Fruit Tree Pruning Demonstrations

I suppose it's obvious, but due to the current situation and stay-at-home orders we can't offer our annual fruit tree pruning demonstrations this year. Sorry. The trees, like yours, will continue to grow.

A Note About Irrigation

In winter, water demand by landscapes falls to its lowest value for the year due to cooler temperatures and less solar radiation. However, the winter season is shaping up to be dry, meaning there may be a need to continue irrigation, perhaps at weekly intervals. I would like to turn off my home system, as I usually do by December, but I haven't done so thus far.

Winter Pruning of Outdoor Roses

In December / early January on the valley floor of Kern County, annual winter pruning will be needed for hybrid teas and grandifloras. The time of pruning can be delayed in mountain areas until the coldest weather has passed, but before bud swell occurs.

Rose pruning in home gardens and landscapes can be a simple matter requiring relatively little time. As for other woody plants, pruning is used for roses to invigorate the plant and direct its growth, but the amount of pruning depends on rose type and purpose in the landscape.

Broadly speaking, most roses grown outdoors can be divided into two groups. Roses grown for cut flowers include hybrid teas and grandifloras, for example, the classic varieties 'Peace,' 'Oklahoma,' 'Mister Lincoln,' and 'Chrysler Imperial.' The shrub- or landscape-type roses are grown as floriferous shrubs, for example, the varieties 'Pink Simplicity,' 'Knock Out,' and 'Flutterbye.'

For hybrid tea and similar roses, we remove dead, diseased and damaged wood as well as older canes showing poor vigor. Canes severely affected by scale insects can also be removed. The rose plant can be thinned, removing central canes to favor 3-5 canes growing toward the outside. Although a standard recommendation is to make cuts at a 45° angle just above an outward-facing bud, it is not necessary for plant health to be so precise, since roses have many dormant buds and can form new buds readily. For hybrid teas and grandifloras, about 10-15 minutes per plant should be enough time for pruning. In other words, don't worry too much about exactly how and where cuts are made. An exception to that statement would be pruning for show roses and, of course, we are not talking about greenhouse flower production where pruning is specific per variety. The function of the rose plant in the landscape should influence the amount of pruning. Roses used for screens or accent plantings can be lightly pruned so as to retain their size, removing perhaps 1/3 of the height. Pruning a rose to shorter canes does result in longer flower stems, if that is important to you.

Shrub- or landscape-type roses should be treated as floriferous shrubs, and should not be pruned back to a few short canes as hybrid teas can be. Dead wood should be removed. Older canes can be removed, and (gasp) a hedge trimmer can be used for speed to shorten long canes and make the plant a bit smaller in size. Use of a hedge trimmer, however, does not imply that plants should be formed into little globes or boxes, diminishing their aesthetic value and defeating their purpose in the landscape. Landscape roses are typically (and should be) only lightly pruned, since they function as colorful shrubs, so upright varieties can be left to 5-8 feet.

A recent peer-reviewed study conducted by Dr. Jim Downer of the University of California Cooperative Extension showed that it is variety rather than pruning that has the most influence on flower number and growth of landscape-type outdoor roses (Downer et

al., 2015, *Acta Horticulturae* 1064: 253-258). There were few differences in plant quality between intermediate pruning treatments (36 or 18 inches height). Severe pruning (6 inches) resulted in significantly fewer flowers in most varieties during the four-year study period. Plants pruned lightly had the greatest number of flowers. Variety selection had the most influence on plant characteristics over four years.

The University of California has three free publications, recently revised and updated, that describe the care of outdoor roses, including insect and disease management. These can be read and downloaded from the UCIPM website, www.ipm.ucdavis.edu. Also, the University has a booklet, *Healthy Roses*, available via its publications catalog at <http://anrcatalog.ucanr.edu>.

While pruning, please be on the lookout in rose plants for the early rose rosette disease symptom of excessive thorniness (photo at right), multiple terminal shoots (called witch's broom), and in a very late stage, the bright red of terminal foliage. I have posted three papers to our UCCE Kern County website (cekern.ucanr.edu) under the heading "Environmental Horticulture/ Environmental Science" that give further information and contain additional photos. These include an Extension publication from Texas A&M, an article from *American Rose* magazine, as well as an article from *HortScience*. Conditions in Kern will affect the spread and development of the disease, so our experience may not be the same as has occurred back east. So far, the occurrence of rose rosette disease has been isolated in Kern County.



Dormant Treatment for Home Fruit Trees and other Plants

Many Kern County residents who have fruit trees decide to apply a dormant treatment during the winter months. While a dormant spray will not harm a fruit tree if applied properly, it is not necessary in many situations. Before applying, we should ask ourselves whether we are just following habit or our neighbor's practices. Dormant sprays can aid in controlling certain insects and diseases. Some common spray materials, such as horticulture oil and lime-sulfur, are classified as organic.

Insect control usually comes to mind first, and scale insects are particularly susceptible to control with dormant oil. Application of horticultural oil can be used to reduce the overwintering population of some other tree pests, but oil is not a complete management program. The oil acts to cover insects, interfering with respiration. Addition of a small amount (1-1/2 - 2% by volume) of an insecticide will improve the effectiveness of the spray. Horticultural oil may be applied to most deciduous fruit species from December 1 to February 1. Plums and walnuts should be treated, if needed, with a delayed-dormant treatment, applied February 1 to 15. For deciduous fruits such as peaches, the insects controlled include San Jose scale, brown apricot scale, soft scale, European red mite (not common in Kern County), and peach twig borer. For apples, some aphid control is also possible. For home citrus in Kern County, dormant sprays are unwarranted. Note that many insects, such as green fruit beetle, codling moth, and most mites, are not controlled

by a dormant spray. Flathead and shothole borers are also not controlled with dormant or any other spray.

Disease control is usually unnecessary in home orchards on the valley floor in Kern County because the dry climate does not favor development of fungal diseases. Additional winter rainfall, more likely further north or in foothill areas, favors these diseases. However, the diseases peach leaf curl and shothole (also called shoot blight) may develop in susceptible varieties of peaches and nectarines during a wet spring, but these can be prevented by prior application of suitable fungicides. Treatment during a disease outbreak is usually not effective because most fungicides act as protectants rather than eradicants. Unfortunately, a single spray will not control both diseases unless applied in late fall or early winter. Peach leaf curl can be controlled with Bordeaux mixture or a fixed copper fungicide, such as COCS or copper hydroxide, applied after leaf fall from late fall and during winter (December and January during the dormant season). Bordeaux mixture is difficult to apply, and some of the liquid copper fungicides are not very effective. If a fixed copper is not available, a lime-sulfur (calcium polysulfide) fungicide can be used. If shothole is a problem, a fungicide should be applied earlier in mid-November to mid-December, but lime-sulfur does not control shothole. Given these limitations and the lack of disease incidence in Kern County, it may be sensible just to skip treatment.

Fireblight, a bacterial disease of apple and pear, is not controlled by a dormant treatment.

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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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