University of CaliforniaThe Green SceneAgriculture and Natural Resources

November 2018

Meetings and Announcements

Making a Difference for California

Group is Forming for 2019 Horticultural Study Tour: Thailand

Our group is forming nicely for the planned 2019 horticultural tour to Thailand. The majority of participants have expressed an interest in Cambodia as well, so we will offer that extension. If you want to go, I would encourage you to let me and Travel Gallery know. We are starting to see hotel space limitations in Chiang Mai due to the Flower Festival, and I think it's important to secure air with a favorable routing. We will start to close participation in this group on Nov. 15, although it may be possible to add later.

Thailand is home to a number of botanic gardens, and a visit would provide exposure to the fascinating culture of Asia. Our itinerary begins with departure from Los Angeles on Saturday night, January 26, and arrival in Chiang Mai. We plan to visit a number of landscapes and gardens, including Bhubing Palace, Wat Doi Suthep, garden Siribhume, Queen Sirikit Garden and others. There will also be visits to handicraft factories. Our timing also coincides with the Chiang Mai Flower Festival. From Chiang Mai we proceed to Bangkok to visit the Grand Palace, Support Foundation, and have a day trip to the River Kwai. This tour concludes Friday, February 8, but there will be an optional extension to Phnom Penh and Angkor Wat that extends to February 12. You can copy and paste this link to the Travel Gallery website: <u>https://www.travelgallery.com/hort-tour-thailand</u> Travel Gallery has graciously offered to handle the business arrangements for this tour as they have for previous tours, and without their participation the tours would not have been possible.

Please feel free to call me with any questions, 661 868-6220.

December Pruning Demonstrations

We invite you to come to our annual fruit tree pruning demonstrations, this year held Wednesday, December 12, and Thursday, Dec. 13, at the orchard adjacent to the UCCE office, 1031 S. Mt. Vernon Ave., Bakersfield. The demonstration will begin at 12:00 noon each day, led by Mohammad Yaghmour of University of California Cooperative Extension. Trees include apple, apricot, cherry, and almond, and Mohammad will also show how to prune grapevines.

The beneficial climate of Kern County allows residential planting of many deciduous fruit tree species. Unlike shade trees, deciduous fruit trees should be pruned every year before bud swell for optimum growth and yield. Pruning need not be complicated, but if pruned incorrectly the yield of fruit will be reduced or eliminated, and the life of the tree will be shortened. Pruning diagrams or photographs in books or on the Internet may be helpful, but seeing pruning in three dimensions and being able to ask questions are advantages for those who attend one of the demonstrations.

We will also be offering our publication on pruning of deciduous fruit and nut trees, as well as publications on fruit varieties and fertilizer for fruit trees.

37th Annual Landscape Management Seminar

The 37th Annual Landscape Management Seminar is planned for February, 2019, at Hodels. We expect a number of visiting speakers covering a range of topics and updates. Abate-a-Weed is cooperating as a sponsor for this meeting and is handling registration. We will apply for eight hours of PCA credit for this meeting, including two hours of laws.

Pruning Shade Trees

Autumn days bring cooler temperatures, fall color development in the landscape, and the sound of chain saws echoing through city streets. Although shade trees may be pruned in autumn as a matter of routine, pruning should not be considered an annual necessity, especially if structure has been established when trees were young. Many shade trees will grow well without annual pruning, and severe pruning is damaging to most tree species. The first question to ask before pruning is "Why?" Pruning should proceed only if specific reasons exist and clear goals have been established.

Pruning may be required for the following reasons:

- **Structure:** Shade trees should have a central leader with scaffold branches spaced one to three feet apart. Branches should have wide angles of attachment to the trunk. Competing branches should be removed. Establish a dominant leader by shortening competing leaders, especially in young trees.
- Health: Diseased, damaged or rubbing branches can be removed.
- **Safety:** Branches which pose a hazard should be removed. Examples are branches that interfere with driver visibility at street corners and those which hang low over sidewalks. The sail area of trees may also be reduced to lessen the chances of uprooting during windstorms.
- **Appearance:** Many trees have interesting trunk and scaffold forms. Exposing the form of the tree can enhance its appearance. Trees that have been pruned correctly retain a 'natural' appearance and usually don't obviously look as though they have been pruned.

Two types of pruning cuts, *heading* and *thinning* cuts, should be used. These have opposite effects on tree structure, and in most situations pruning should be done with a combination of both. A heading cut shortens branches and removes the terminal bud. The terminal bud (at the end of a branch) is dominant (apical dominance) and governs growth of laterals. If the terminal bud or shoot is removed, lateral buds will break and lateral branches will grow faster; therefore, bushy growth results. Heading main branches to the same point every year, as is often done with mulberries, is known as pollarding. The resulting numerous branches are weakly attached and do not extend to great height nor block out much sky. In northern Europe, sunlight is at a premium and pollarded trees provide ornament in city squares. However, pollarding dwarfs trees and limits shade, and some species can be killed outright by this practice. The popularity of the pollarding style in Bakersfield is perhaps a triumph of tradition over thinking.

A thinning cut removes a smaller branch at the place of attachment to a larger branch. Thinning opens the tree crown while retaining larger limbs, and preserves a

"natural" appearance of the crown. Many trees, including pines, oaks, and magnolias, respond poorly to heading cuts and new branches originate with difficulty. These tree species, especially, should be thinned and not headed, if pruned at all. Keep the central leader and key structural branches to preserve a framework within the tree crown.

The placement of the pruning cut directly affects how much decay may later occur in the trunk. Trees do not have a healing process comparable to what occurs in animals or people. Damaged tissue is not repaired but rather sealed, i.e., compartmentalized, followed by growth of replacement tissue. The first line of defense of trees against decay fungi is a layer of tissue identified by the branch bark ridge, visible in some species as a raised collar close to the trunk around each branch. A cut should be made just outside this ridge. The former practice of cutting branches as closely as possible to the trunk did produce callus growth, but the first line of defense was breached, allowing decay-producing organisms to enter. When a tree is topped, several lines of defense are breached, and direct entry to the heartwood of the tree is possible for decay fungi. Therefore, topping should be avoided unless absolutely necessary. If severe topping is necessary, perhaps tree removal is a better choice followed by replanting of a smaller species.

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 and is 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/.