

## PRUNING

Done well, pruning can produce strong, healthy, attractive trees. Prune only to your level of expertise – leave the larger jobs to the pros! Correct pruning will help a tree maintain safety, develop a strong structure, and enhance the vigor and health of your tree. By creating a strong structure when your tree is young, you've kept your tree vigorous and more able to withstand damage from pests and natural forces such as severe storms.

Since each pruning cut changes the growth of your tree and can damage it, no branch should be removed without a reason.

Light pruning and removal of dead wood can be done at any time. Heavier pruning should wait until your tree is dormant in the late fall and winter.

Here are some tips to guide you in safe, correct pruning.

**1. Most pruning that cannot be done from the ground or a short ladder should be done by a competent arborist.**

**2. Do not stub tree branches.** This is called heading or topping. Instead use a thinning cut; remove the entire branch or cut back to another branch that can assume the new lead. Heading a tree causes several vigorous upright shoots to grow. They are weakly attached and crowded, and the natural shape of the tree is destroyed. Thinning retains a tree's shape. Do not head or "top" a tree to lower its height. Instead, prune by thinning or crown reduction, but only as a last resort.

**3. Do not make cuts flush to the trunk or branch.**

- The small ridge or collar at the base of every branch protects the tree from disease and insects. Cut just beyond this collar, leaving it intact, but don't leave a stub.



*Make clean cuts outside of the branch collar.*

*Good cuts will create wounds that close well.*



- Do not use a wound dressing on the pruning cuts. Pruning cuts do not need wound paint or sealer. Trees seal themselves by setting up a protective boundary between injured and healthy tissue in a process known as compartmentalization of decay. A good pruning cut will seal in a doughnut shape as the branch collar closes around the wound. Wound dressings may be detrimental as they will not stop decay and may actually create a site for decay.

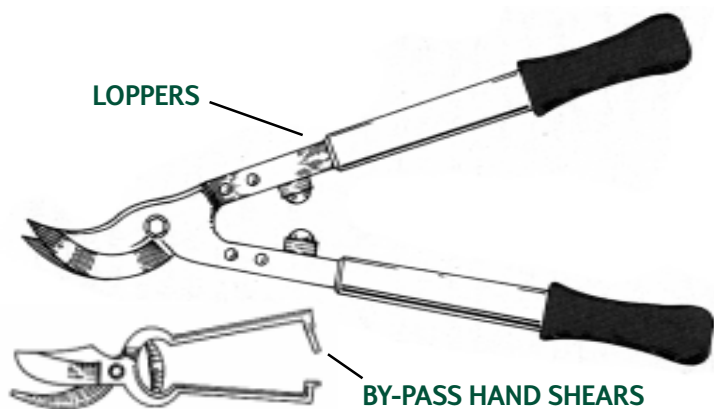
#### **4. Prune for ideal structure with adequate branch spacing to allow for sunlight and air movement and prevent insect damage and disease.**

- Remove any dead, diseased or crossing branches.
- Remove competing limbs and avoid one branch growing directly over another.
- Space branches evenly around the tree in an ascending spiral. Branches should be at least 8-12" apart on smaller and younger trees and at least 18" apart for large growing trees.
- Select branches to keep with wide attachments of at least 45 degrees of attachment to the trunk. Narrow crotches are weak and can split out. Keep side branches from outgrowing the leader.

**Small branches** less than 1 inch in diameter can be cut using by-pass hand shears or loppers. When directing growth, snip to an outward growing bud, leaving no stub.

**Larger branches** greater than 1 inch in diameter can be cut using the 3-step cutting method using loppers or on larger sized branches an appropriate pruning saw. **The 3-step cut** allows removal of the weight of the limb before the final cut and eliminates the possibility of ripping the bark down the trunk.

- 1. Undercut with a shallow notch well outside the branch collar.**
- 2. Cut outside the first cut all the way through the branch, leaving a short stub.**
- 3. Remove branch stub outside the branch collar. A proper cut will not damage the branch collar.**



Always keep pruning tools sharp and clean, in good working condition. This will prolong their life and help you make clean, accurate cuts without tearing your tree.

### PRUNING TERMS

**BRANCH COLLAR** is the slightly swollen area where the branch attaches to the trunk. When branches die or are removed chemicals in the branch collar wall off or compartmentalize wounds to prevent decay.

**CROWN CLEANING** refers to removing the deadwood, broken or diseased branches, and “water sprouts.”

**CROWN THINNING** selectively reduces the density of the top of the tree and opens the lower canopy to light and air which benefits the inner leaves and can aid the health of the tree.

**CROWN REDUCTION** or drop crotching can temporarily lower the height of a tree that has become taller than is appropriate for the site. Cut back to a lateral branch that is at least  $\frac{1}{3}$ -  $\frac{1}{2}$  the diameter of the main branch.

**CROWN RESTORATION** is used to reshape a tree to give it stronger structure and improved health. This technique is used to correct improper pruning done in the past or to overcome canopy damage.





## NO TOPPING

Never top your tree! Topping is the practice of removing major portions of a large tree's crown by cutting branches to stubs or to the trunk. Some homeowners think their tree is too big and therefore, unsafe; some believe it is good for the health of the tree; some simply planted the wrong tree in the wrong place (under utility lines, for example) and need to "whack" it back into its space. Tree topping shortens the life of your tree, creates weakly attached limbs prone to breakage and disfigures your tree.



*Topping shade trees can cause serious damage to your trees while creating safety problems from the resulting weakly attached water sprouts. NEVER top a tree.*

## HOW TO HIRE AN ARBORIST

Hire someone who is licensed, bonded, and insured. Examine these credentials and feel free to check with the appropriate agencies to verify the validity of the credentials. Remember that almost anybody can obtain a business license, and that alone is no guarantee of quality. Do ask for references and take time to check them out.

Get more than one bid and examine the written specifications of the bids. **ASK QUESTIONS!** If you are not familiar with the terminology used, ask for clarification. Take your time and select a company that is reputable. Determine the best combination of price, work to be done, skill and professionalism to protect your investment.

Membership in professional organizations demonstrates a willingness on the part of the arborist to stay abreast of arboricultural information. It is not a guarantee of satisfied work, so check references.

Remember that improper tree care can take many years to correct itself. If pruning is too severe, it may never be corrected. A reliable arborist will try to talk you out of topping a tree if it is requested. Never allow a climber to use spikes or spurs to climb your tree unless it is scheduled for removal. Hire an arborist as if your tree's life depends on it!



*Some jobs require a professional arborist.*

## COMMON DISEASE PROBLEMS for SACRAMENTO AREA MATURE TREES

### ANTHRACNOSE

Anthracnose is an airborne fungal disease that attacks new shoots and leaves as they emerge in the humid air in spring. Local tree species affected include Modesto Ash, California and American sycamores, and London plane. The infection results in leaf loss thus denying the tree the food from photosynthesis and thereby weakening the tree. The fungal spores overwinter in the fallen leaves and twigs. The disease can be controlled with good sanitation practices: rake the fallen leaves and twigs in when they drop, especially in the fall. Fungicides are generally only effective on Modesto ash.



*Mistletoe weakens the tree and makes it susceptible to other diseases.*

### MISTLETOE

Mistletoe is a parasitic infestation spread by birds carrying seeds from tree to tree. It should be pruned yearly either by removing infested tree limbs with thinning cuts or selective removal from your tree. Mistletoe is a neighborhood problem and if you remove mistletoe and your neighbors don't it will return sooner to your tree. Join together with your neighbors and begin a comprehensive program to eliminate it from your neighborhood.

### OAK GALLS AND OAK WORMS

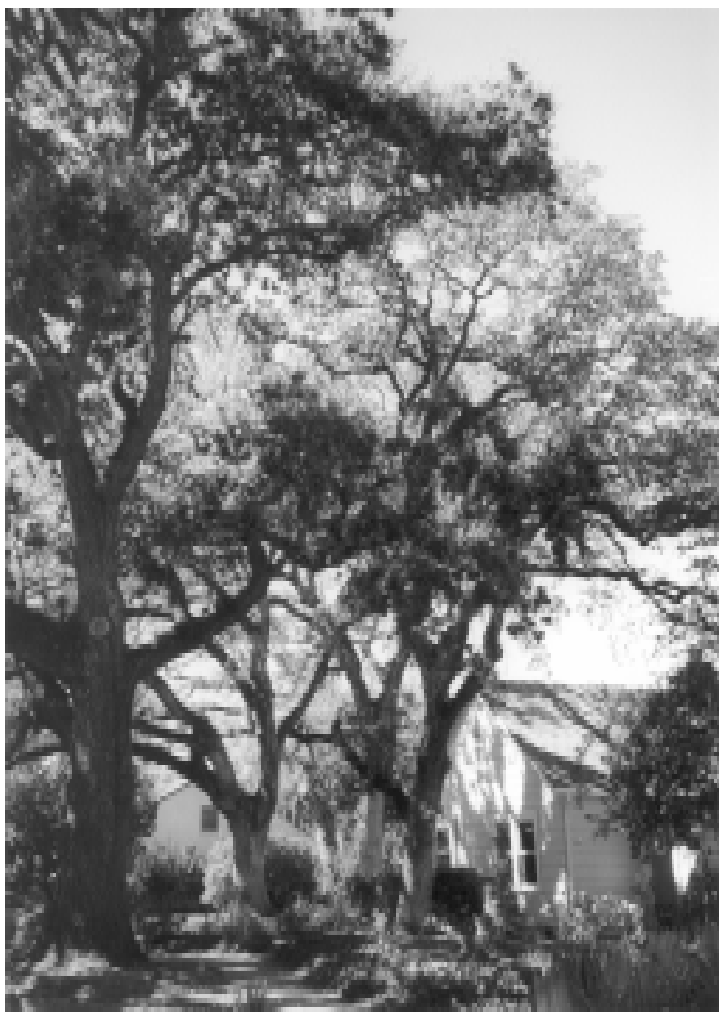
Both problems, while a nuisance, do not harm your oaks. Oak worms last six weeks during some springs. There are no effective controls for either.

## FRUIT PRODUCTION

Birds and bees do not think of flowers and fruit as a problem. But flowering trees planted too near sidewalks, patios, drive ways and swimming pools can present landscape messes. An arborist may be able to spray certain trees with a hormone-inhibiting spray to prevent fruit set. Timed correctly and applied thoroughly, fruit production may be largely curtailed. Sprays must be applied each year before fruit set.

## DUTCH ELM DISEASE

DED is a fatal fungal infection that affects certain species of elm trees. The best method of control is to remove infected trees before the disease can be spread by bark beetles. If you are interested in helping prevent the spread of the disease, join the Save the Elms Program by calling the Sacramento Tree Foundation.



*Healthy trees fit into the urban environment.*

## Mature Tree Reference Guide

Sacramento Tree Foundation main office and information on tree care classes and volunteer training (916) 924-TREE • [www.sactree.com](http://www.sactree.com)

Stewardship Hotline – For tree care questions regarding young shade trees planted through Tree Foundation Programs – (800) 924- LEAF

SMUD Tree Division Line Clearance and Free Mulch – (916) 732-5854

City of Sacramento Tree Services – (916) 433-6345

Sacramento County Tree Coordinator – (916) 874-5278

International Society of Arboriculture Western Chapter ISA Office – (530) 892-1118

UC Cooperative Extension Master Gardeners – (916) 875-6913

Roseville Urban Forest Foundation (916) 774-5666

## Helpful Print Resources

*Arboriculture: Integrated Management of Landscape Trees, Shrubs, and Vines*, Richard W. Harris, James R. Clark, Nelda P. Matheny, Prentice Hall, 1999.

*Pirone's Tree Maintenance*, John R. Hartman, Thomas P. Pirone, Mary Ann Sall, Oxford University Press, 2000.

*Modern Arboriculture: A Systems Approach To The Care Of Trees And Their Associates*, Alex L. Shigo, Shigo and Trees, Associates, 1991.

*Pests of Landscape Trees and Shrubs: An Integrated Pest Management Guide*, Steve H. Dreistadt, Jack Kelly Clark, Mary Louise Flint, University of California, 1994.

*Sunset Western Garden Book*, Kathleen Norris Brenzel, Sunset Publishing, 2001.





**The mission of the Sacramento Tree Foundation is to promote the importance of trees and community action in improving the quality of life and enhancing the unique character of the Sacramento region.**

**Our vision is to work with the community to create a legacy of trees for future generations.**

**OUR PROGRAMS INCLUDE:**

- **COMMUNITY SHADE**
- **MISTLETOE MANAGEMENT**
- **NEIGHBORHOODS**
- **NATURE**
- **SACRAMENTO NORTHERN RR PARKWAY**
- **SAVE THE ELMS (STEP)**
- **SEED TO SEEDLING**
- **REGIONAL URBAN FOREST STRATEGY**
- **COOL COMMUNITIES**
- **SHADE TREE PROGRAM**