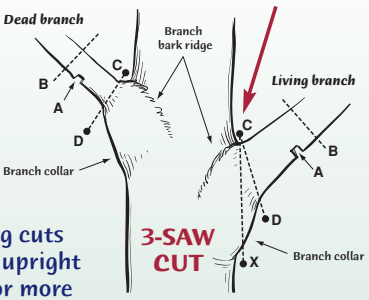
Tree Pruning

Prune Mature Trees Properly for Optimum Tree Health

Proper tree pruning removes dying, diseased or injured wood, crossing or crowded branches and restructures tree shape or reduces tree height. Proper thinning of the tree's canopy can increase light and air circulation within the canopy, reduce the occurrence of some diseases and reduce wind resistance. Pruning also influences the degree of vegetative growth and flower bud formation.

There are two types of pruning cuts: thinning and heading. A thinning cut removes a branch at its point of origin. When thinning to a lateral branch, the branch needs to be large enough to assume the terminal role. Ideally, the diameter of the retained lateral should be 1/3 or more the diameter of the branch removed. Trees pruned with thinning cuts are more open, retain natural shape and allow more light penetration within the canopy.

Heading cuts remove a growing branch back to a bud, remove a lateral back to a stub or cut a lateral not large enough to assume a terminal role. Heading cuts result in vigorous, upright growth from one or more buds just below the cut. These shoots are from latent buds and are weakly attached.



1) Cut part way through the branch at A
2) Cut it off at B
3) Make the final cut along C-D

To remove a limb use a 3-saw cut to ensure a clean, proper cut. See diagram. Avoid heavy pruning. Make pruning cuts just outside of the branch collar. Avoid making large pruning cuts, e.g. 3" or larger.

Do not leave stubs. Stubs allow pest and diseases to invade.

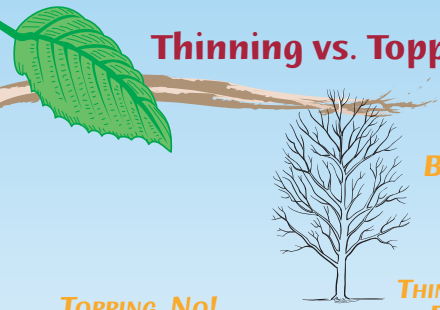
(see reverse)

Pruning is encouraged during winter or dormant months.

Do Not Top Trees!!

Start out right by planting trees appropriate for available space at tree's maturity. Prune a young tree for structure and form during the first 3-5 years.

Thinning vs. Topping



Before Pruning

Topping, No!

1 year later

The topped tree is stubbed and only a remnant of a lovely tree remains.

3 years later

Vigorous upright sprouts emerge. Sprouts are weakly attached and prone to breakage. They are abnormal, grow rapidly, and cause the tree to lose its natural shape.

6 years later

A topped tree is as tall as the pruned tree yet far bushier and more prone to limb failure than originally.

Thinning and Crown Reduction, Yes!

1 year later

If pruned properly, corrective thinning and crown reduction cuts occur but beauty and form are retained.

3 years later

Growth of thinned branches is spread evenly throughout canopy, maintaining its natural shape.

When severely pruned, a tree branch will form many vigorous upright sprouts. These sprouts are weakly attached and look unsightly over time.

6 years later

A properly pruned tree is safer with strongly attached branches, more beautiful in form and its size better controlled.

For more information, refer to the ANR website at http://anrcatalog.ucdavis.edu, call your local UC Cooperative Extension office, or consult a certified arborist.

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