TECHNICAL BULLETIN

Prepared By The Davey Institute



PROPER PRUNING OF TREES

Proper pruning improves the health and appearance of trees and prolongs their useful life by removing undesirable branches which are dead, weakened, interfering, diseased or insect-infested.

TYPES OF PRUNING: The Davey Tree Expert Company recognizes four general classes of pruning which define the type and degree of recommended pruning.

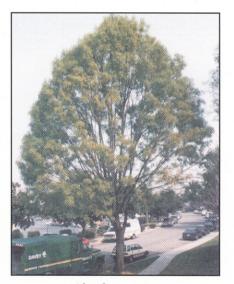
- **Aesthetic or Fine Pruning** is the thorough removal of undesirable branches over 1/2 inch in diameter. This includes selective thinning to lessen wind resistance (see photos).
- Maintenance or Standard Pruning is the removal of undesirable branches over 1" in diameter.
- **Hazard Reduction Pruning** is the removal of undesirable branches over 2" in diameter. This class is recommended where safety considerations are paramount.
- Crown Reduction Pruning, also called natural or drop crotch pruning, is the proper reduction in the height or spread of the tree canopy.
- Crown Raising is the removal of lower branches in order to provide clearance.

TOPPING vs. THINNING: Proper pruning is not to be confused with the disfiguring practice of "topping". Topping (heading, stubbing, hatrocking, etc.) is the indiscriminate removal of a tree's main leader and branches resulting in stubs. The cut surfaces of the stubs do not close readily, and accelerated internal decay develops. The resulting flush of multiple epicormic branches (watersprouts) from the stubbed branches form terminals that are very weak. Topping leaves a tree highly susceptible to damage from strong winds, sunscald, winter injury, insects and diseases.

Thinning is the correct method for removal of branches to their point of attachment to the trunk or another branch sufficient in size. This method eliminates unhealthy and unsightly stubs, resulting in an open, airy, natural appearance to trees. Thinning requires more skill and time to perform than does topping. Trees that are properly pruned and thinned will live longer and should not need to be pruned a soften as trees that have been topped.



Before pruning



After fine pruning

WHEN TO PRUNE: Maintenance pruning of most shade trees can be done anytime. severe pruning, however, should be done in late winter or early spring before new growth begins. Pruning trees like birch and maple, which seep profusely from cut surfaces in the spring, is sometimes delayed until the fall, although the loss of sap is seldom injurious. Pruning of trees susceptible to certain vascular diseases, like American elm and certain oaks, should be avoided during the activity period of beetles which spread the diseases.

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