

Best Management Practices for Pruning

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Pruning is the removal of plant parts for a specific Purpose

Plant Parts that may need pruning:

Branches (primary and secondary), **Stems or Trunks, Loose Bark** (Bark tracing), **Leaf, Bud, Flower, Fruit and Roots**

Factors that effect long term plant health and structure:

Age (juvenile, mature or senescent)

Condition (poor, fair or good)

Genus & Species (conifer, deciduous or evergreen)

Growth form/habit and characteristics (fruit, flower, trait)

Purpose in the landscape (ornamental, shade, screening, fruit)

Perspective of person conducting the pruning (amateur or expert)

Timing of pruning (actively growing, transitioning or dormant)

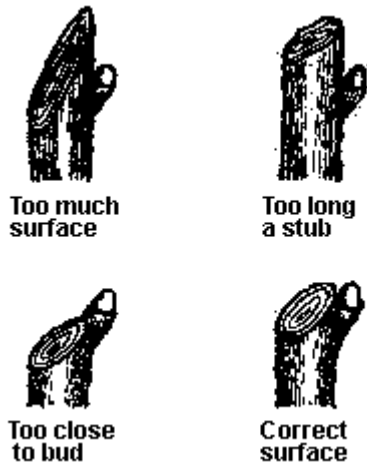
Warning! Pruning must never be done without long term goals for the plants and your property in mind. Identify what it is that you want to accomplish by using the checklist provided above, this will keep you from potentially damaging your plants.

Pruning Principles:

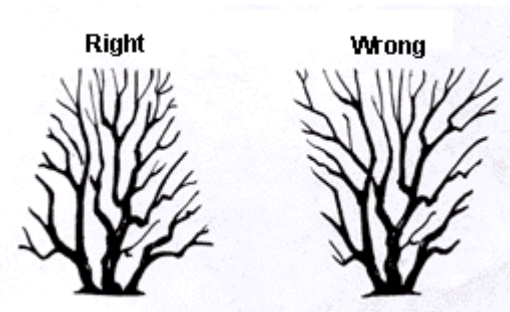
1) Pruning can be accomplished at any time throughout the year, with this said, specific plants and amounts to be pruned will vary; less than (1/4) or 25% during active growth, more than (1/4) 25% during dormancy (including reduction, rejuvenation and coppicing that greatly reduce the crown).

2) Timing of flowering, does the plant form flower buds on old wood (mature stems) or new wood (current season's growth) and when does it flower in the season. Prune plants that flower on new growth in late winter prior to new growth emerging. Prune plants that flower on previous season's growth after flowering. (Rejuvenation pruning of either type of plant can be accomplished during the dormant season with the understanding of sacrificing some flowering for structure).

3) When thinning a branch, you should allow one half (1/2) of the foliage to remain distributed on the lower two thirds (2/3) of the individual branches that make up the plants crown (The crown is the area from the tip of the highest branch to the tip of the lowest branch).

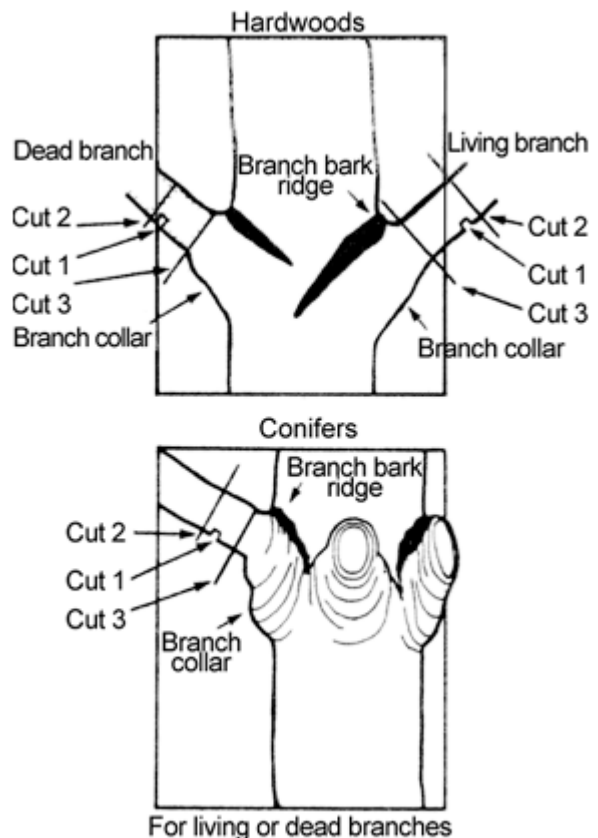


4) Sharp tools are a must for pruning; dull tools damage tissue and provide points of entry for diseases and insects. Apical dominance is the use of the plants own growth regulator produced in the terminal bud to suppress lateral and dormant buds providing the terminal bud to grow faster than laterals. When pruning off a terminal bud, it is best to prune back to a larger lateral branch or bud that can assume apical dominance, this is done when redirection of growth is your goal. Remember pruning is an ongoing activity over the life of your plants.



5) Prune for structure as well as aesthetics, failure to do so may result in having neither in the life of your plant. Be judicious in you pruning decisions, timing and practices, learn from your past mistakes and improve your skills, practice makes perfect.

6) Limbs or canes of woody plants should be pruned at the branch collar, branches over 1 inch in diameter should be removed using the (3) three step cut method as shown in the diagram. Step 1 is an undercut approximately $\frac{1}{4}$ of way into the underside of the limb to be removed (several inches away from point of final cut), the second cut is on the top side a $\frac{1}{2}$ inch in front of your under cut, this will allow the limb to be removed without tearing the bark. The final cut is made at the branch collar or at the point that the limbs diameter begins to increase as it nears its point of attachment.



7) Pruning should be accomplished at the branch ends on the outer portion of the plants crown as well as within the interior of the crown. Thinning cuts will provide light and air to penetrate the crown limiting the low light and persistent wet conditions responsible for disease occurrence. Proper sanitation of tools and infected plant parts are a must in breaking the disease and insect cycle.



Additional Best Management Practices

Tools I recommend are by-pass hand pruners, folding handsaws with tri-cut blades for 2-3-inch branches you can easily reach, pruning saws with tri-cut blades for 3' limbs and above. Root pruning should only be done with a specialized tool that will not become dull when it encounters rocks or soil (Corona tool company makes an all-purpose pruning tool that resembles a sheet rock knife, I would recommend it for root pruning and nothing else). Overhead pruning of branches 12-15 feet above the ground can be accomplished from the ground with an extension pole saw and / or pole loppers with the use of proper safety gear (hard hat, and safety glasses). A professional arborist should be called to perform aerial work above 12-15 feet or any pruning that may require climbing.

Regular disinfection and cleaning of pruning tools between plants being pruned will prove to be a great defense against spreading disease and will also remove sap deposits providing easier operation of the pruner and saw. A solution of 1-part bleach to 10 parts water will work fine (a cloth rag will be useful in the process and steel wool may be necessary for stubborn deposits). A 3 in 1 oil or WD-40 should be sprayed on tools for lubrication and after cleaning for long term storage.

Prior to pruning you should set up a tarp or collection device to place your cuttings on or into, this will serve two purposes, one will be to gauge the amount of plant material you are pruning (25 % or more), two it will assist in the proper sanitation of any pest or disease affected material, not to mention making clean up a simplified process.

If hiring a professional arborist, you should ask for a certificate of insurance and a copy of their certification or at least ask to see if they are a NJ Board Licensed Tree Expert, ISA Certified Arborist or Licensed Tree Care Operator. A testimonial or reference from an existing client they have worked for, will ensure that a qualified professional will be responsible for the oversight of the pruning. Remember in the green industry the rule is buyer beware!