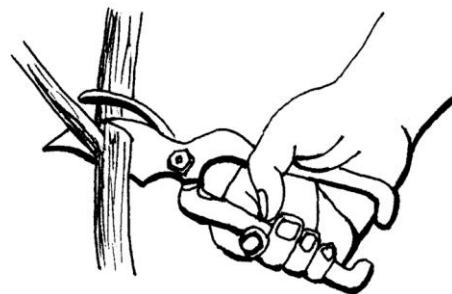
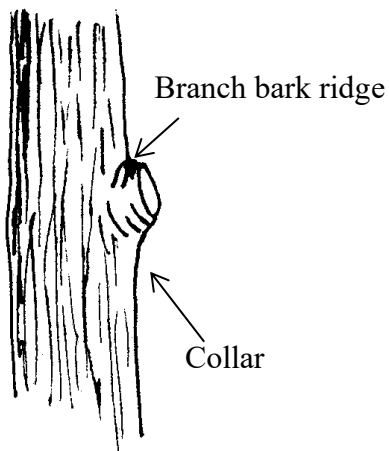




KEYS TO GOOD PRUNING

- SAFETY AND COMMON SENSE. Some pruning requires a certified arborist.
- ESTABLISH CLEAR GOALS. Why is pruning necessary?
- VISUAL INSPECTIONS AND PRUNING SPECIFICATIONS. Know what is being pruned, how it will be pruned and why it should be pruned.
- PRUNING CUTS. The proper pruning cut is key. Wound dressing or tree paint are unnecessary and do not prevent or reduce decay.
- PRUNING TOOLS. Keep your tools sharp and clean. Some diseases are extremely contagious. Sterilize blade or saw between each cut with a disinfectant such as Lysol, Pine-sol or diluted bleach.
- BYPASS HAND PRUNNERS. One-hand pruning shears with curved blades work best on young trees.
- When simply shortening a small branch, make the cut at a lateral bud (slight angle about 1/4 inch beyond bud) or another lateral branch. Search for a bud that will produce branching in desired direction. The cut should be sharp and clean, and made at a slight angle about 1/4 inch beyond the bud.



Cut outside
branch ridge and collar

WHEN TO PRUNE

Timing of pruning depends to a large extent on *why* you prune. Light pruning and the removal of dead wood can be done anytime. Otherwise, here are some guidelines, recognizing that individual species may differ.



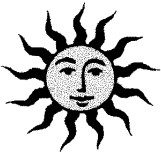
Winter (January-March)

Pruning during dormancy (after leaves fall and before new growth appears) is the most common practice. It results in a vigorous burst of new growth in the spring. Some species, such as maples, walnuts, and birches may “bleed,” or drip large amounts of sap, in the spring. This is not harmful to the tree and will cease when the leaves emerge.



Spring (April-May)

Pruning cuts will result in quick and often excessive regrowth. Spring flowering shrubs such as lilac, forsythia, and spirea should be pruned after blooming. Avoid pruning spring flowering shrubs in fall or late winter, which will result in decreased bloom. Pruning between the time when leaf buds start to swell and when leaves reach their mature size and color can disrupt growth hormones in the tree leading to more water sprouts and very vigorous regrowth.



Summer (June-August)

To direct the growth by slowing the branches you don't want, or to “dwarf” the development of a tree or branch, prune soon after seasonal growth is complete. Another reason to prune in summer is for corrective purposes. Limbs that hang down too far under the weight of leaves can be reduced. Be aware that late summer pruning may stimulate new tip growth that will not have time to harden off before cold weather.



Fall (September-December)

Pruning cuts made in September and early October may result in a flush of vegetative growth that will be too tender to survive the winter. Generally, it is safe to prune after the leaves fall from a plant.

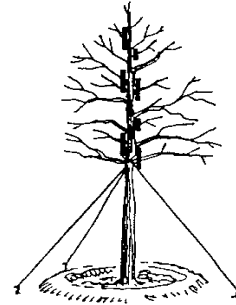
Note: For flowering trees or shrubs that bloom in summer or fall on *current* year's growth, prune in winter. For trees and shrubs that bloom in spring from buds on one-year-old wood, prune when their flowers fade in late spring or early summer.

PRUNING FOR SHAPE

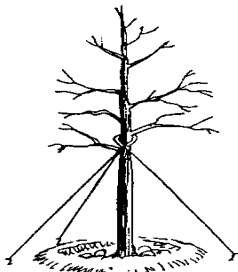
Trees benefit from light thinning. Removing competing branches, or portions of limbs that compete for space and light. Tips: When in doubt stop and ask questions. Do not prune any tree the same year it is planted or moved.

What to Prune: In-growers and Protruders

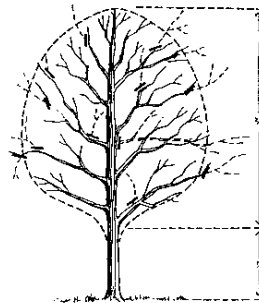
When a crown is dense, look for limbs that turn inward, and those that that extend beyond the “natural” outline of the crown. The overall branch shape should be out and down. Do not over prune. Always maintain at least $\frac{3}{4}$ of the tree as the live crown.



Before pruning

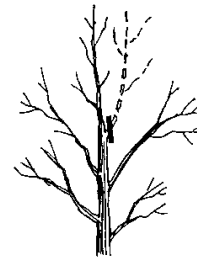


After pruning



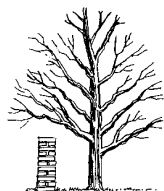
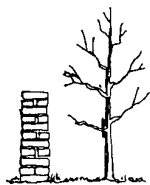
What to Prune: Double Leaders

Protect the leader from competition. In trees with co-dominant leaders, shorten or remove the branch with defects.



Prune for Function: Prune trees for future growth

Imagine the tree in the future. Example: A limb growing toward a chimney, remove it early in the tree's life. The pruning wound will be small and wound closure will be quick. Remember limbs grow from their last growing point. The height of a branch attachment to a trunk will never change.



of healthy corrections.

Prune for Strength

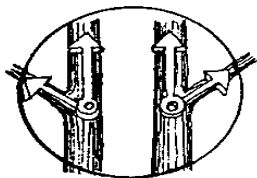
Remove only damaged, diseased, dying or dead branches the first year. The second year begin to establish a clear branch scaffolding system with good branch attachment. Pruning for good attachments and establishing a scaffold branches avoids poor structure. Pruning for strength also prevents future

Prune for Strength: Branch Angles and Size



Narrow angles equal future weakness. The effect is similar to hammering in a wedge. To prevent this and future problems, remove or correct one of the two branches.

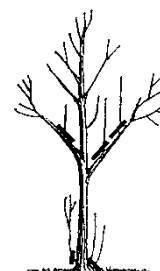
Branch angle orientation should grow from a 10 or 2 o'clock position from the main trunk. Lateral branches should be no more than 1/2 to 3/4 the diameter of the trunk.



Trunk growth will strengthen and solidify good branch attachments.

Prune for Strength: Water sprouts and suckers

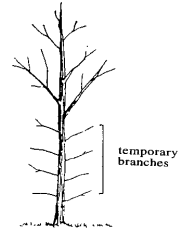
These "parasite" sprouts can occur at the base or inside the crown. Water sprouts grow in the canopy and suckers at the base of the tree. Unwanted sprouts are unsightly and are weakly attached and rob the tree of resources. Consult with Spokane Master Gardeners for management options.



Prune for Strength: Temporary Branches

Temporary branches are limbs that grow below the lowest permanent branch.

Temporary branches protect young bark from injury and add taper and strength to the trunk. Remove the temporary branches before they become large and vigorous.



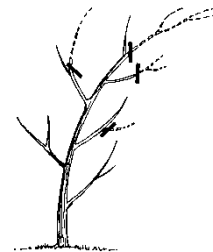
Prune for strength: Rubbing Branches

Branches that rub against one another cause wounds, decay and notches. Remove the least desirable branch.



Prune for Strength: corrective pruning

Young trees deformed by wind may be corrected by pruning. Cutting deformed tree leader back to establish a more central point. If the bend is slight, staking for one growing season may provide a less invasive solution.



Prune for Strength: Proper Pruning cuts



proper cut



too close to bud



too far from bud/poor angle



too far from bud

Diagrams provided by Tree City USA.