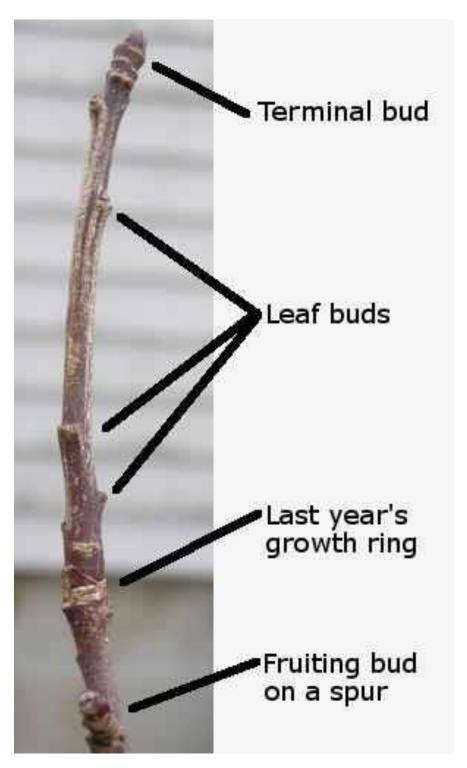
Summer Pruning:



- Dormant: Pruning done during the dormant season tends to have an invigorating effect on tree growth.
- Summer: Pruning done during peak growth times tends to slow growth by removing leaves that manufacture nourishment. However, too much summer pruning can damage a tree.

Summer Pruning:

• Post/Pre-Dormancy periods: Pruning during the spring (post-dormancy) and fall (pre-dormancy) is generally the least desirable time as the plant is most vulnerable during those times.

4 Seasons of Pruning

- 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.

https://s3.wp.wsu.edu/uploads/sites/2076/2015/07/C109-Keys-to-Good-Pruning-14.pdf

4Ds:

- Damaged: Broken branches.
- Dead.
- Diseased.
- Dysfunctional: Sucker, Water sprout, Interfering branch, Crossing or vertical, Upward or Downward, Double leader.

Thinning cuts - cutting out a whole branch or shoot back to its origin.

- Opens light channels.
- Increases fruit production and quality.

Heading cuts – cutting off part of a branch or shoot.

- Tends to close off light channels.
- Decreases fruit production.

Summer Pruning:

References:

- •https://extension.oregonstate.edu/crop-production/fruit-trees/tree-pruning-basics
- •https://s3.wp.wsu.edu/uploads/sites/2076/2015/07/C109-Keys-to-Good-Pruning-14.pdf
- •https://s3.wp.wsu.edu/uploads/sites/2076/2017/07/C111-Pruning-Evergreens-15.pdf
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- •Pruning & Training, The American Horticultural Society, Christopher Brickell & David Joyce.