

Lateral Pruning

One thing that makes some walnut wood valuable is something it doesn't have: defects. But defect-free wood can be produced only after a branch has fallen off the tree or been removed. Black walnut trees do not prune themselves readily. Even small branches tend to leave stubs when they die, and large branches may hang on the tree for many years after they die. So lateral branches must be pruned to produce high-value, knot-free wood.

Pruning can begin once the trees are 10 to 12 feet tall, but should be confined to the lower half of the tree stem. Generally, pruning should leave at least half of the tree stem with branches, and the leaf area should be reduced by no more than 25 percent in any one year.

Prune live branches during the latter part of the dormant season, but before the trees start to grow in the spring. Pruning at this time of year minimizes the time that pruning wounds are open to infection. Dead branches can be pruned at any time, but do not cut into the branch collar that generally forms around dead branches. Doing so will create a fresh wound.

Prune branches when they are small, generally less than 2 inches in diameter because small wounds are more likely to heal over without becoming infected. Also, pruning small branches is much easier than pruning large ones. However, if the tree is growing well, even fairly large wounds of 4 to 5 inches can heal successfully.

Continue to prune periodically until at least the first 9 feet of the tree is clear because veneer logs are normally 8 feet long. If you want a large crowned tree for nut production, stop pruning at 9 feet. If wood production is your primary concern, then continue pruning until at least 17 feet are clear so that two veneer logs can be produced.

Target pruning (fig. 1) is the best way to get the benefits of pruning while avoiding the problems.

Several tools can be used for pruning. Generally, the pruning saw will produce the best results. Long-handled pruners can be used on branches 1 inch in diameter or less. Pruning saws can be used on larger branches. When pruning above 9 feet, work from a ladder or use a pole saw. You can also use lightweight chain saws, but be extremely careful to avoid damaging the tree or yourself.

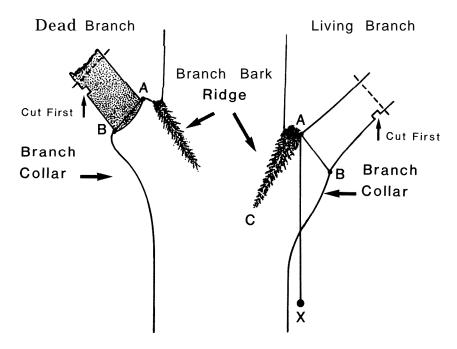


Figure I.-Target pruning steps

- 1. Begin by locating the branch bark ridge.
- 2. Find target A-outside of the branch bark ridge.
- 3. Find target B-the swelling where the branch meets the
- branch collar.
- 4. if B is hard to find-drop a line at AX. The angle XAC is equal to the angle XAB.
- 5. If the branch to be pruned is large, first make a stub cut a few inches from the branch collar.
- 6. Make the final cut at line AB.
- 7. Caution: Do not cut behind the branch bark ridge or cut the branch collar, do not leave stubs, do not paint cuts--except for cosmetics, and do not leave flat top when topping.

The time required to prune depends on the number and size of the branches removed and the equipment used. For 3- to 5-inch diameter trees that have never been pruned, it takes about 3 minutes to prune six branches from the first 8 feet using a hand saw. It takes about 9 minutes to remove 13 branches from the first 18 feet of similar trees.

Keep these two general principles in mind when pruning. (1) Removing live branches removes part of the food manufacturing capability of the tree, and thus can reduce tree growth. (2) Disease organisms can enter the tree through pruning wounds or dead branches. You'll need to take special care that wounds are as small as possible, that healing is promoted, and that tree growth is maintained. If done carefully and correctly, pruning can greatly increase the value of the trees. If done carelessly, it can do more harm than good.