

Tree Training Cue Card

Training young trees through pruning promotes structurally sound growth and overall health. Use the following pruning practices to train young shade trees.

Shade trees that grow to be large are more structurally sound and cost-effective to maintain when trained with a central dominant leader that extends 30 feet or more into the crown (Fig. 1, left). Vigorous, upright branches and stems that compete with the central leader can become weakly attached (Fig. 1, right).

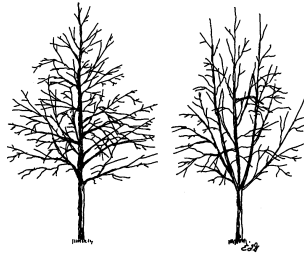


Figure 1. Good tree structure (left); poor structure (right).

Prune newly planted trees to one central leader by shortening competing stems (Fig. 2). All branches and stems should be shorter than the central leader after pruning is completed (Fig. 2, right).

Trees with branches spaced along the central leader, or trunk, (Fig. 1, left) are stronger than trees with branches clustered together (Fig. 1, right).

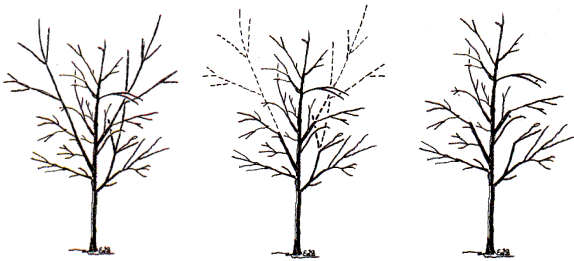


Figure 2. Shorten competing stems to improve structure.

Shorten or remove branches that are larger than half the trunk diameter at planting and every few years thereafter. Removing these branches helps create a strong tree because it shifts growth into the central leader. The central leader should be more visible in the crown center after pruning (Fig. 2). Shorten branches that are nearly as large as the central leader (Fig. 3, bottom right branch) because they compete with the leader and can be weakly attached. Smaller branches (Fig. 3, top) do not need pruning because they will not compete with the trunk.

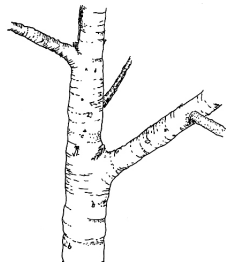


Figure 3. Reduce large branches (lower right); leave small branches intact.

Shorten the largest low branches when the tree is young to keep them small (Fig. 4). These shortened branches will be removed later for clearance; removing small branches creates smaller wounds with less likelihood of decay.

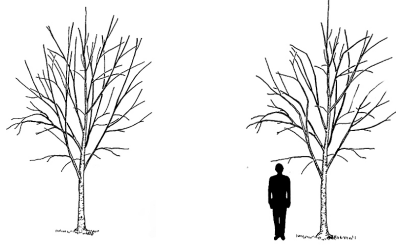


Figure 4. Shorten larger low branches to concentrate growth in the leader and improve tree structure.

Reduce or shorten large or long stems and branches back to a live lateral branch (Fig. 5) to slow growth on the pruned branch. This shifts growth to the central leader, creating sound structure.



Figure 5. Reduce a stem back to a live lateral to slow its growth.

Remove larger branches by making three cuts (Fig. 6). This prevents the bark from peeling or splitting off the trunk below the cut. Make the final cut back to the branch collar (enlarged area around union of branch and trunk).

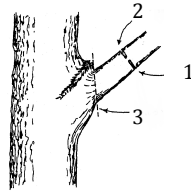


Figure 6. Remove large branches using three cuts.

Structural Pruning Checklist

1. Develop and maintain a central leader.
2. Identify the lowest branch in what will become the permanent crown.
3. Prevent branches below the permanent crown from growing larger than half the trunk diameter.
4. Space main branches along the central leader.
5. Reduce vigorous upright stems back to lateral branches.

Pruning Safety

Prune from the ground using proper tools and safety equipment. Do not prune near power lines.

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