

Pruning Young Trees

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Pruning

- Urban trees develop large lower limbs without pruning and are more susceptible to storm damage
- When done correctly, pruning helps prevent problems from occurring without hurting the tree
- Beginning when trees are young (1-2 years after planting), use pruning to direct growth



Young Tree Pruning Methods

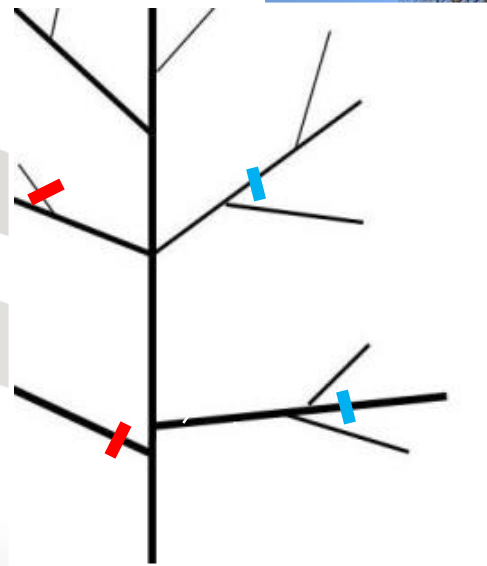
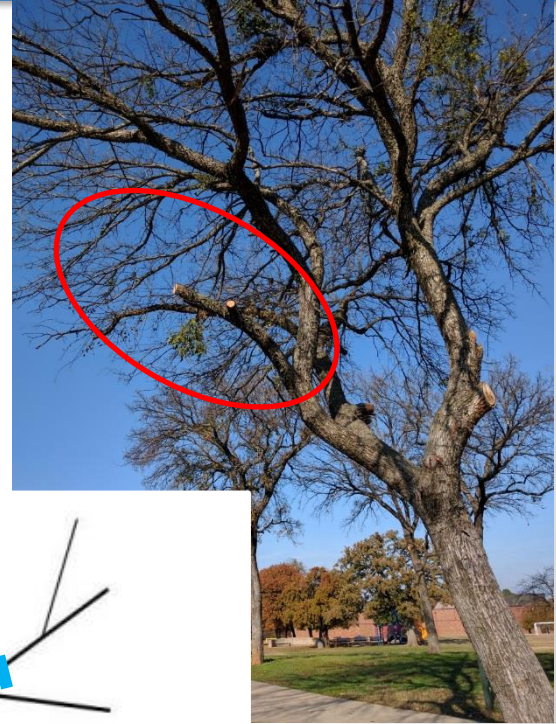
- For hardwoods:
 - Maintain narrow crown shape and single leader
 - Mix removal and reduction cutting
 - Prevent limbs $>1/2^{\text{th}}$ the stem diameter from developing
- For conifers: prune by removing lower limbs

Proper Collar Cut



Pruning Cuts

- Always make cuts near a node/branch junction
- Don't leave stubs that could become a problem
- Cuts at nodes are either reduction or removal cuts
- Reduction pruning is removing the **larger** limb at a junction
- Removal pruning is removing the *smaller* limb at a junction



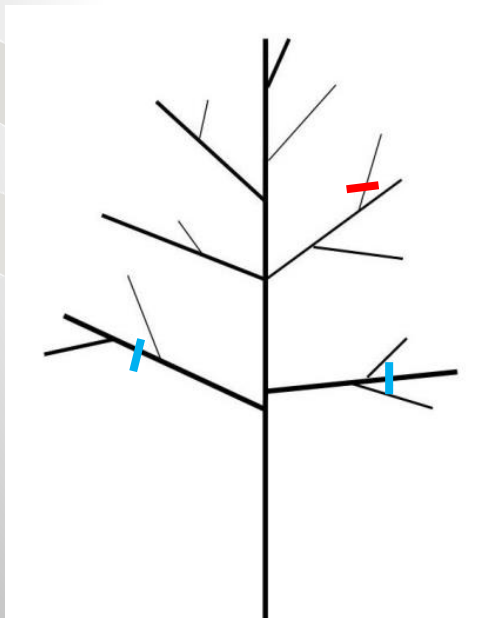
Reduction Cuts

- Cuts the larger branch at a junction
- Mimics natural tree growth by reducing branch length
- Maintains good appearance without as much harm to the tree
- Helps prevent storm damage by reducing wind leverage
- Could be used to cut back a branch that is touching a house
- Should not be used on conifers due to their growth patterns



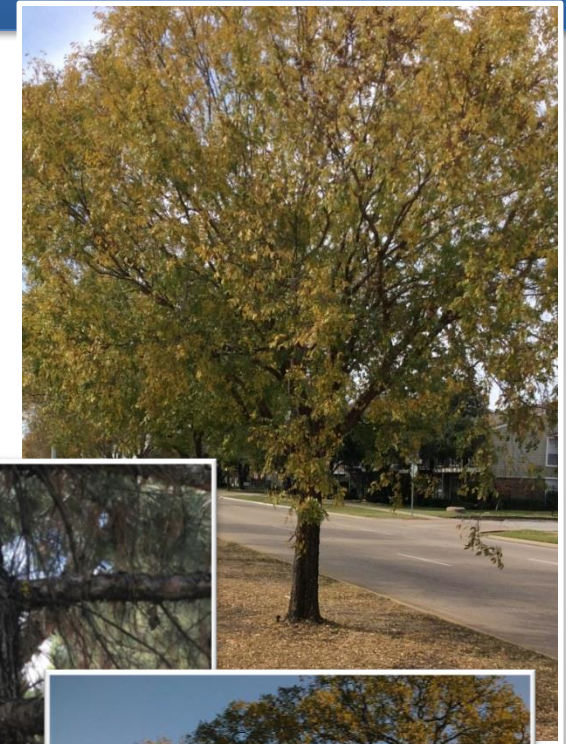
Reduction Guidelines

- Do not remove more than 60% of branch foliage
- Cut where the leave branch is at least 1/10th the diameter of the cut
- Focus on reduction cuts for younger tree pruning, removing those branches as necessary in later years when the tree is taller



Removal Cuts

- Cuts a smaller branch off at a junction, or removes a branch at the trunk
- For most large trees, branches under 7-9 feet are temporary and removal is the best way to:
 - Increase visibility, safety, and home value
 - Reduce future pruning needs
 - Eliminate certain pests & disease (ex. mistletoe)
- Weigh removing large branches against benefits such as shade
- Remember: you can remove branches but you can't put them back, so decide ahead of time how you want the tree to look



Removal Guidelines

- Lower branches can be removed if they are nearing $\frac{1}{2}$ the diameter of the main stem
- If branches are over $\frac{1}{2}$ to nearly the same diameter as the main stem, it is recommended to reduce them first
- Especially want to remove branches with weak structure, such as included bark
- Know which branches you want to remove eventually
 - It's best to remove temporary branches before they grow larger than 2-3" thick to prevent large wounds to the tree



General Pruning Guidelines

- When pruning:
 - Don't remove more than 25% of canopy foliage in one year
 - First pruning: 10-15% foliage removal
 - Young trees: 15-25% foliage removal
 - Mature trees: <20% foliage removal
- Follow a schedule to prune young trees
 - Use calendar reminders to prune every 3 years
- Prune mature trees only as needed
- Over-pruning and pruning too frequently can be more harmful than not pruning at all



Example



This reduction pruning keeps lower limbs from extending and helps the tree grow tall. If all of the lower branches were completely removed it would be damaging to the tree.

For More Information

- The University of Florida Urban Forest Lab
<http://hort.ifas.ufl.edu/woody/pruning.shtml>
- Tree Fund learning webinars
<http://www.treefund.org/webinars>

