



## Training Young Shade Trees to be Hurricane-Resistant

**Hurricane season is coming up again soon, and it is time to consider the resilience of your shade trees!**

**According to the University of Florida**, pruning can reduce damage to trees in a hurricane. When the canopy of a tree is too dense, it is more likely to bend when exposed to high winds. Allowing winds to correctly pass through the canopy is essential. In their research, reducing the canopy's density reduced trunk movement in a windstorm by one third when compared to unpruned trees.



Well-structured trees have a single trunk going up the center of the tree, strong branch unions without bark inclusion, and a balanced canopy



**Codominant stems** – stems of equal size originating from the same point on the tree make for weak structure.

**Included bark** – bark that is pinched between 2 stems indicates a weak union.

**Unbalanced canopy** – one side much heavier, or most weight at the tips of branches, can cause winds to topple a tree.



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### Suggested tree pruning/training program:

- At planting
- Year two or three
- Year five or six
- Year ten
- Year fifteen

**The longer you wait between pruning, the more severe the pruning will have to be, resulting in defects or disease.**

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### Types of Pruning Cuts:

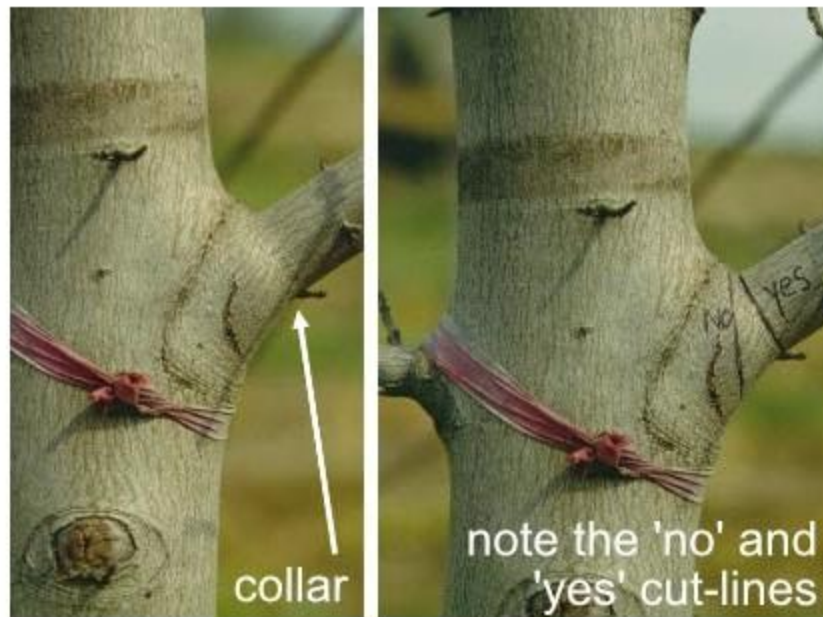
Now that you are aware of what you are looking for in terms of structure for your young tree, let's look at the basic types of cuts you can make:

**Reduction cut** – shortens the length of a stem by pruning back to a **smaller limb**. Do NOT just cut off the end!

**Removal cut** – prunes a branch back to the **trunk or parent branch**

**When making cuts, be sure to leave the collar, which is a swollen area at the base of the branch where it joins the trunk.** This tissue is rich in energy reserves and chemicals that hinder the spread of decay. Good pruning cuts avoid cutting into the collar.





### Pruning Plan – First Five Years

- Do not remove more than **30% of live foliage** at a time. More is too stressful to the tree.
- **Reduce** all branches that are greater than half the trunk diameter in order to control competition for the leader position.
- **Reduce and/or remove** all branches or stems competing with the one selected to be the leader. Always try to keep the center leader dominant.
- **Reduce and/or remove** large, low vigorous branches. Branches that are too low will need to be removed later, which results in greater wound size, which invites defects or infection.
- **Remove** crossed, broken, cracked or severely damaged branches at any time, especially before hurricane season.

**Paying attention to the training of your shade trees when they are young will prevent structural problems later on, and likely result in greater storm resilience and a more beautiful tree.**

Source and for more info:  
Urban Forest Hurricane Recovery Program <http://treesandhurricanes.ifas.ufl.edu>