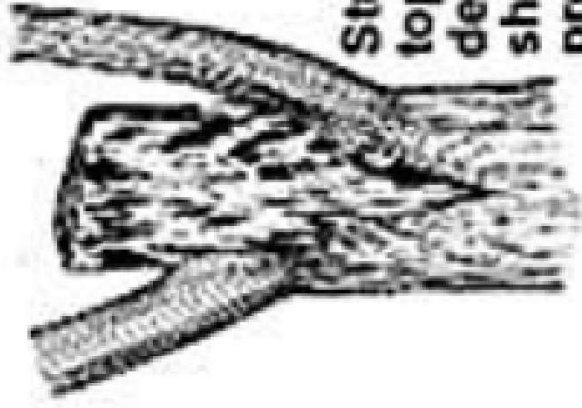




Stubs left from topping usually decay. The shoots that are produced below the cut are weakly attached, and often become a hazard.













3. Establishing Good Tree Structure

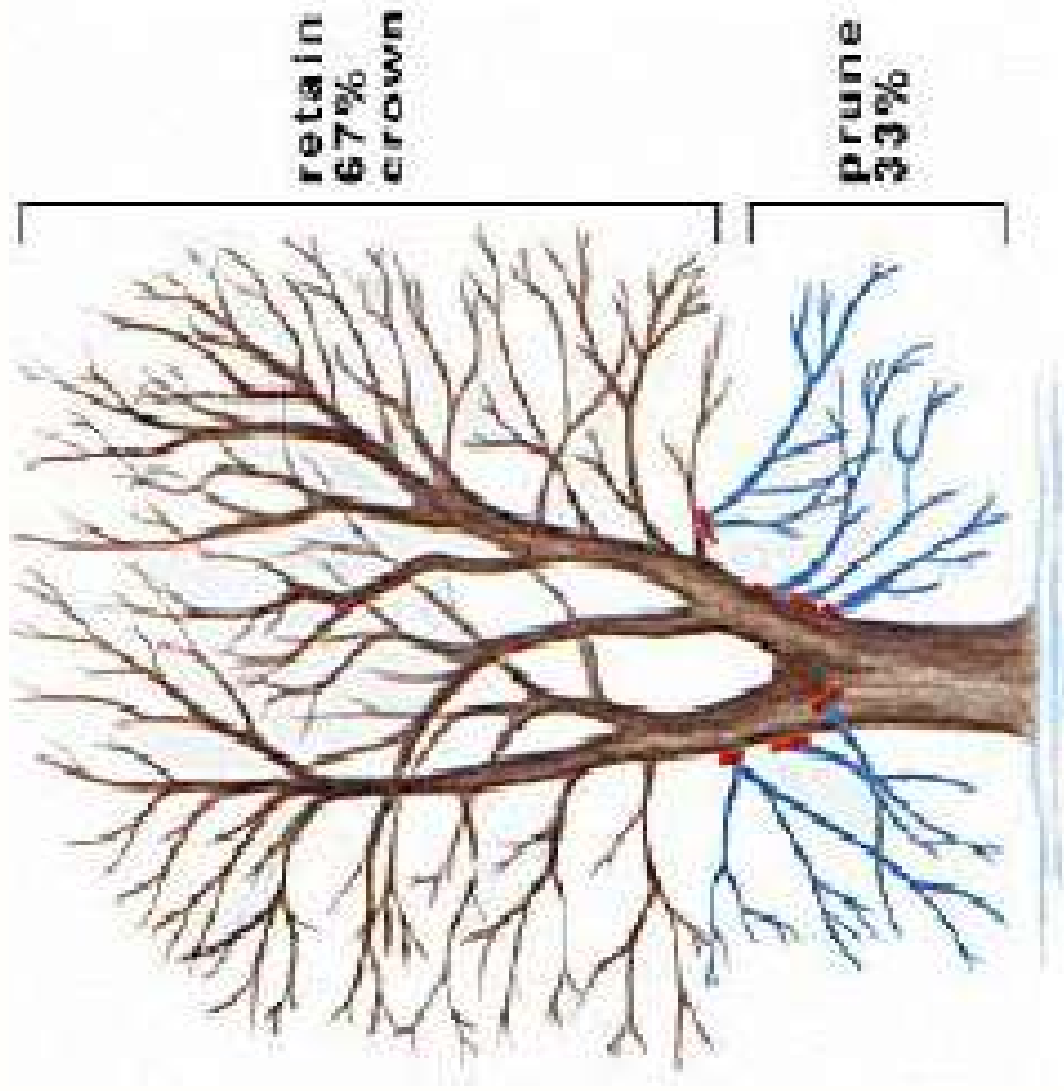
- Trunk development
- Branch unions
- Scaffold structure and permanent branch selection



Trunk Development

- Crown raising
 - ❖ Lion's Tailing
- Crown thinning
- Staking



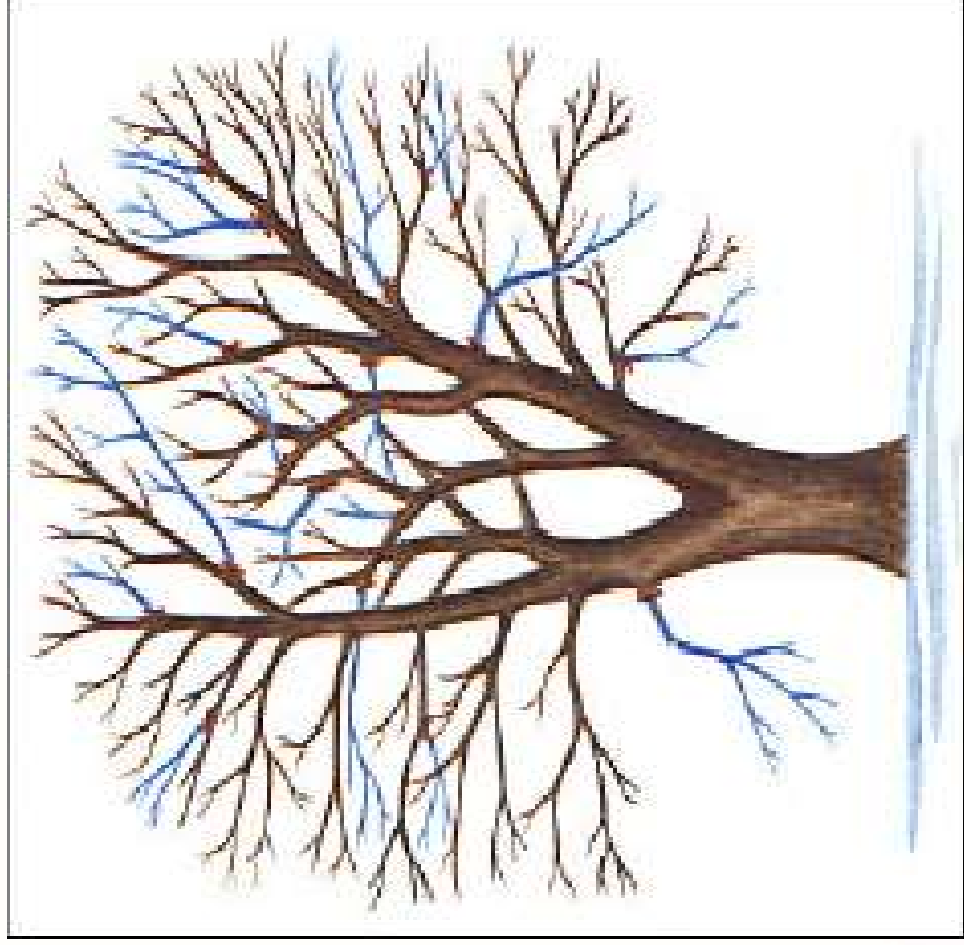




Removing too many lower branches
will hinder the development of a
strong stem = Lion's Tail



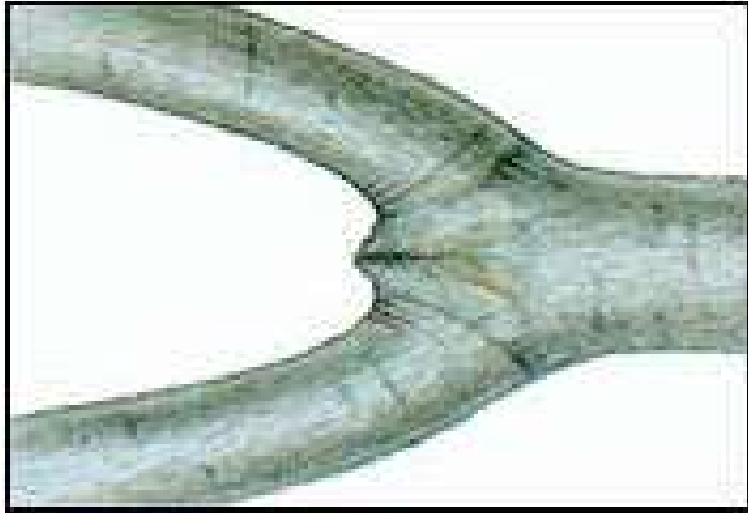
Crown Thinning



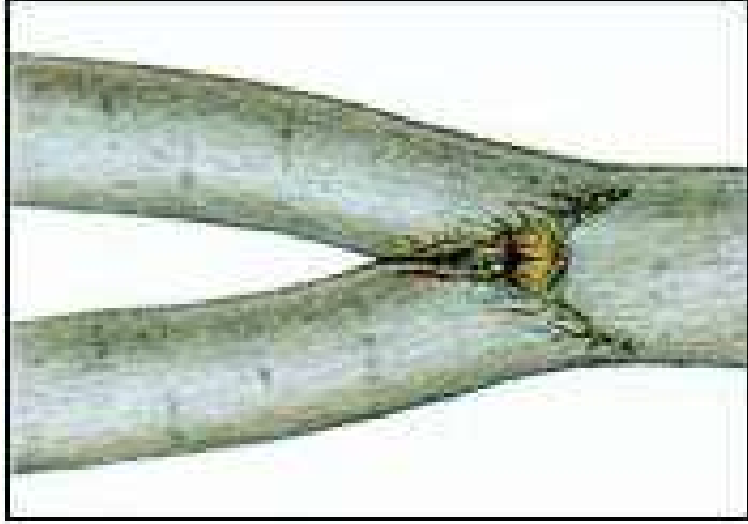
Branch Unions

- Included bark
- Codominant stems





A. U-shaped strong union

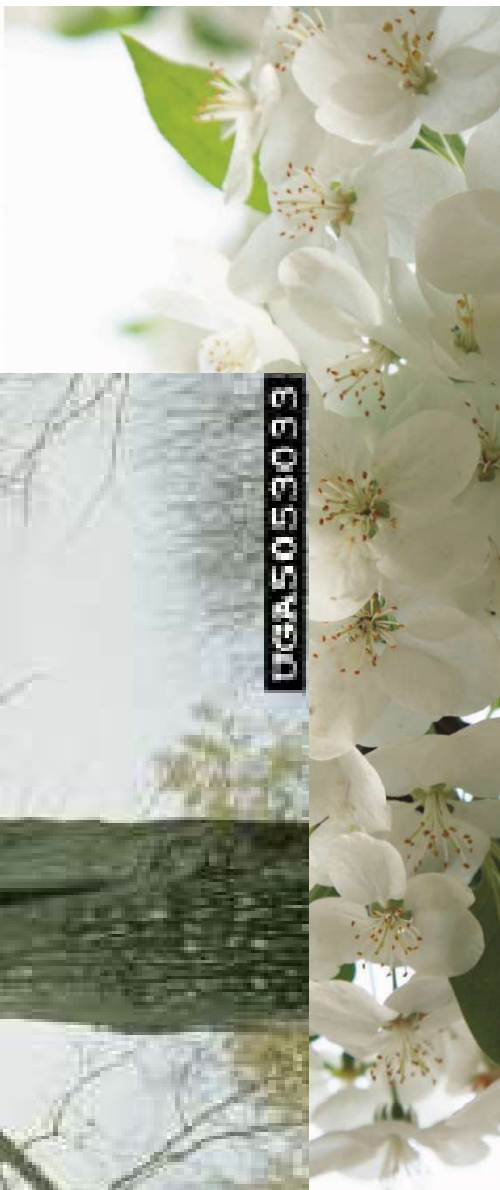


B. V-shaped weak union

Figure 2. Types of branch unions

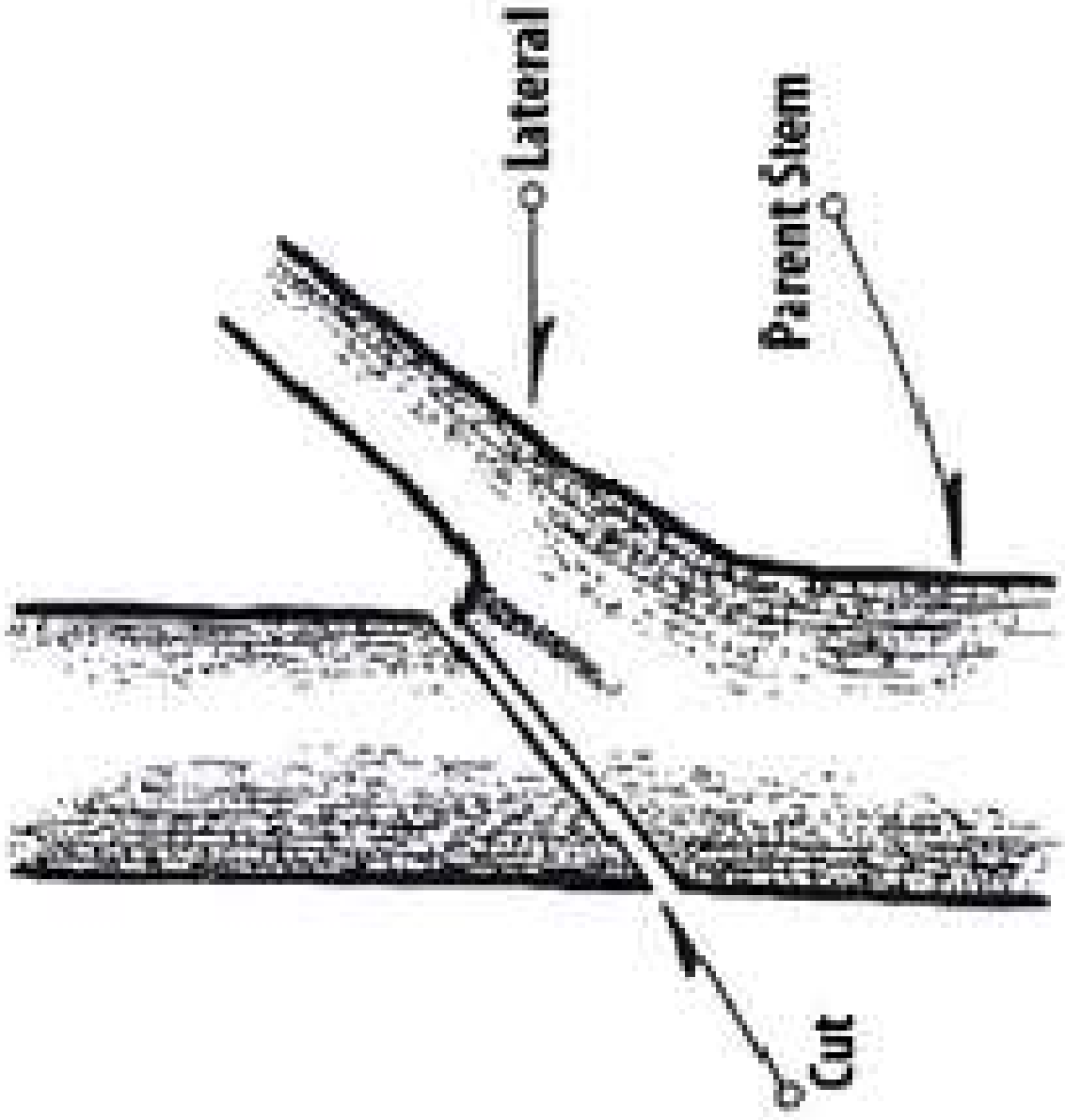






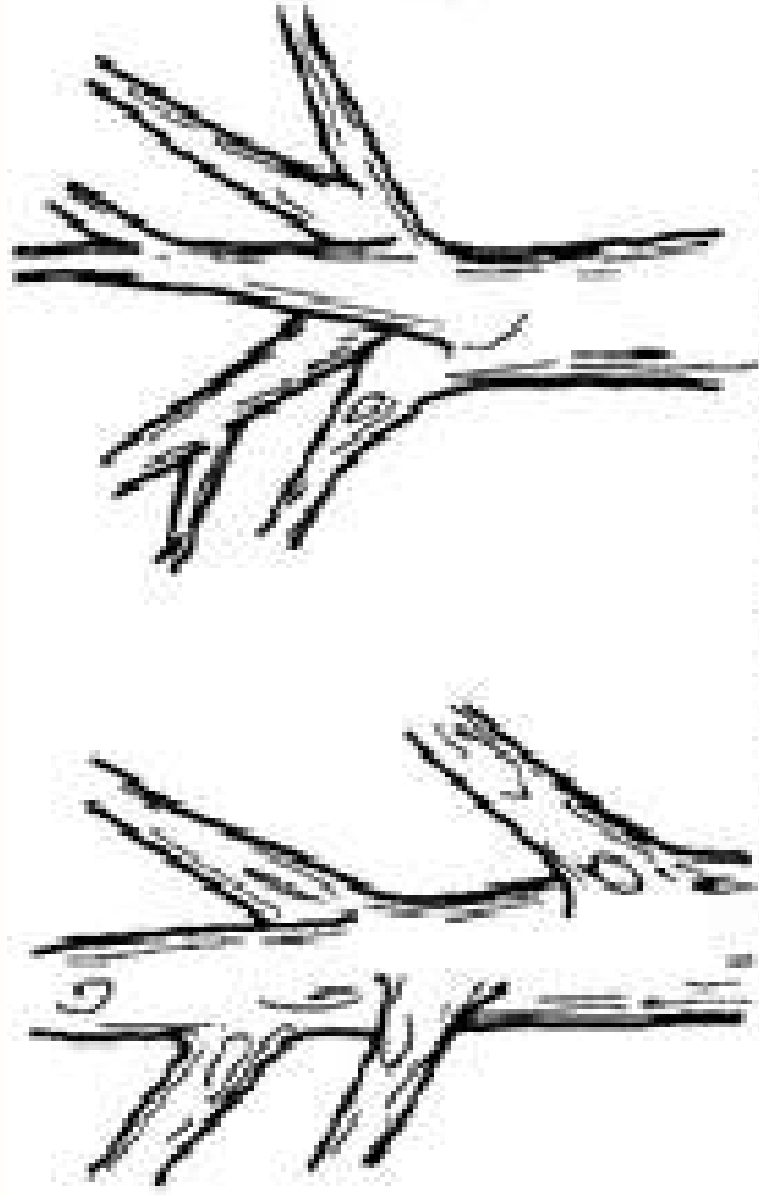






Establishing strong 'scaffold' structure and permanent branch selection





Branches should be well spaced radially and along the trunk as shown in the tree on the left.



How much should you remove?

**NEVER MORE THAN 1/4 - LIVE
WOOD AT ONE TIME FOR BOTH
TREES AND SHRUBS**

ALL deadwood can be

removed at one time.



Tree Limbs

**Under 2 inches (5 cm) in diameter –
go ahead**

**Between 2 inches – 4 inches (5-10
cm) in diameter – think twice**

**Greater than 4 inches (5 cm) in
diameter – have good reason!!**



4. Pruning Roots



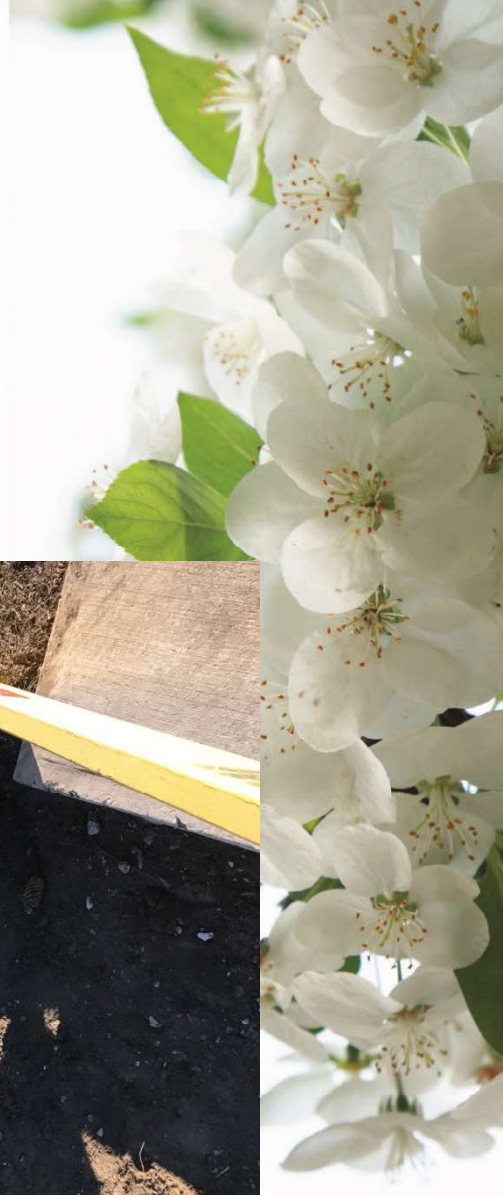


*** CUT ROOTS CLEAN AT THE EDGE**
*** NOTIFY PARKS IF YOU HAVE MORE**
THAN A FEW ROOTS BIGGER THAN
5CM (2 “)











5. Pruning conifers

Pines, Spruce, Fir, Larch



Do we have to prune conifers?
Perhaps not.
Shearing – xmas tree farm
Directional pruning – its too close
to my sidewalk



6. Types of pruning

- Crown thinning
- Crown raising
- Crown reduction



7. Topping and Tipping –

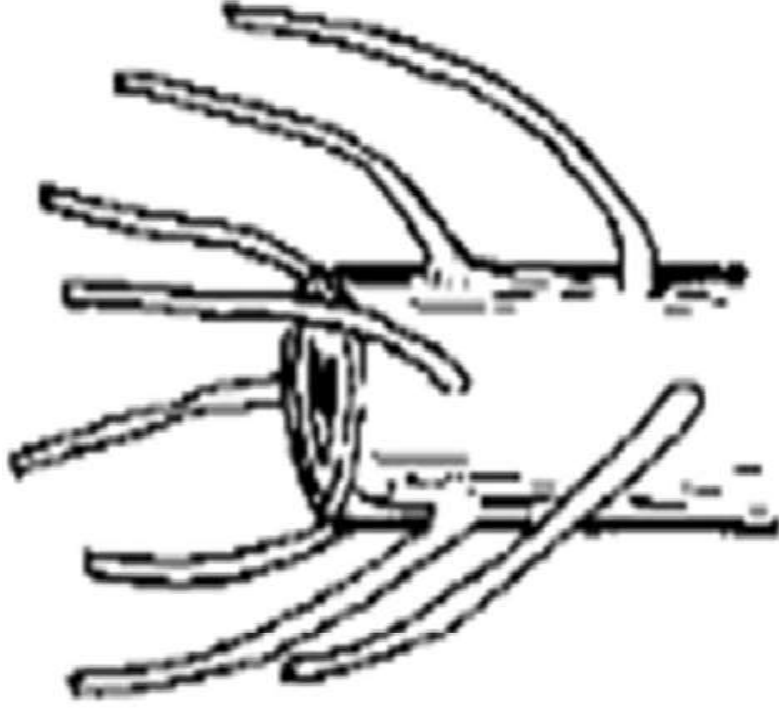
POOR PRUNING PRACTICES!!



The destructive effects of topping include:

- “Starved” trees
- Creation of weak shoots
- Added stress for the tree
- “Sunburned” trees
- Poor aesthetics
- Higher maintenance costs





**New shoots develop
profusely below a
topping cut.**



A tree which has lost its head will never recover
it again, and will survive only as a monument
of the ignorance and folly of its tormentor.

~George William Curtis





7. Insects and Diseases

- Black knot
- Fireblight
- Dutch Elm Disease
- Cottony Ash Psyllid
- Yellow-headed Spruce Sawfly
- Larch Sawfly









**PREVENT
DUTCH ELM DISEASE**



STOPPED

**HOTLINE
403-342-8234**

Staking trees and when to take it off



Staking should be removed after one year and used only for newly planted trees that cannot stand their own







Questions?

More information about tree pruning and care:

www.isa-arbor.com

www.stoppeded.org

www.treesaregood.org



THANKS FOR LISTENING

