PRUNING LANDSCAPE TREES

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WHY PRUNE TREES?

Always have a desired result or purpose to prune!

TO REMOVE DEAD, BROKEN OR DISEASED BRANCHES

TO REMOVE CO-DOMINANT STEMS

To improve or adjust tree shape

TO IMPROVE FLOWERING AND FRUIT PRODUCTION.

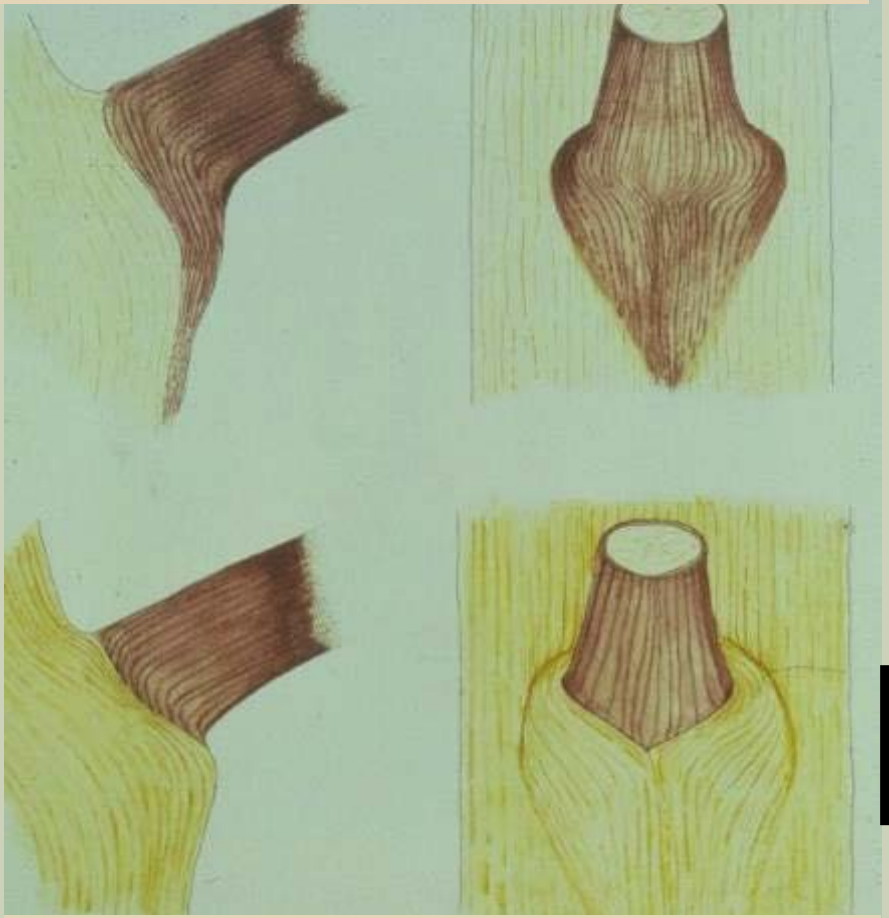
- Timing is important in fruit trees
- For Flowers, know what kind of wood the plant flowers on. (new or old)

TO PROMOTE A SAFE, HEALTHY TREE THIS IS CALLED STRUCTURAL PRUNING

COMPONENTS OF STRUCTURAL PRUNING

1. Create **ONE** dominant leader
2. Keep all branches less than one half the trunk diameter
3. Space main branches along one dominant trunk
4. Suppress growth on branches with included bark

Branch wood laid down on trunk each Spring



Trunk wood extending down trunk later in the summer

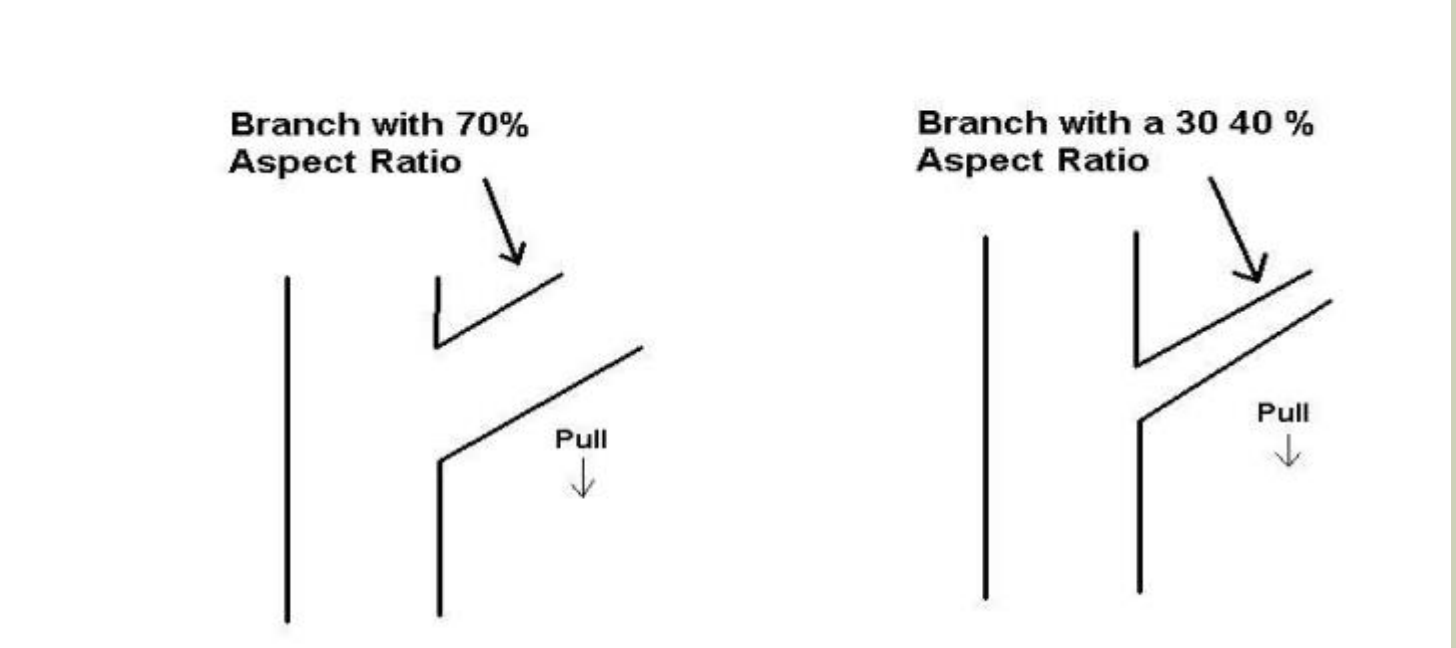
Branch pulled out of trunk.

Photo courtesy of Ed Gilman.

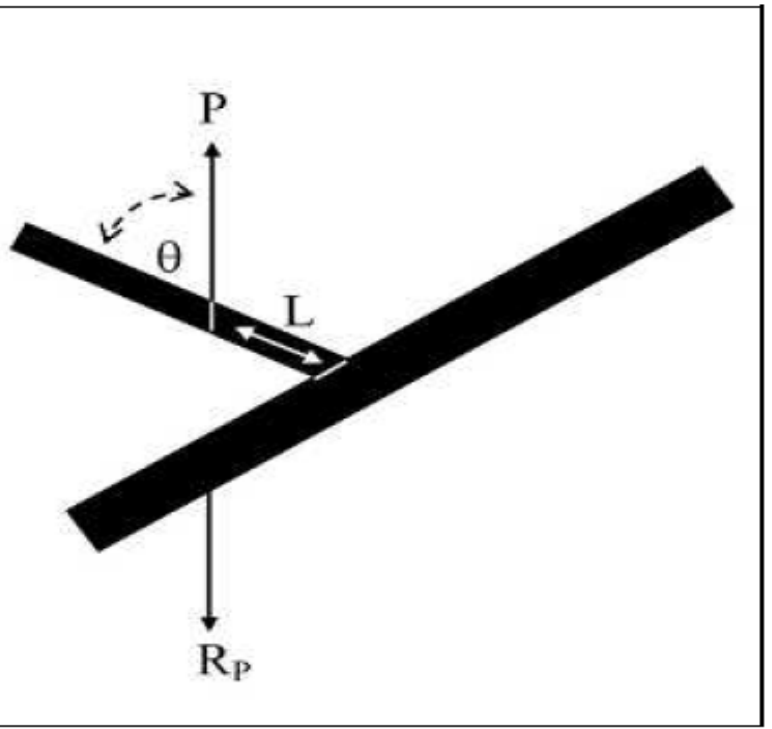
PHYSICALLY STRONGER UNION

- Generally, the branch union is stronger when the branch small and the trunk is larger.
- The closer the diameter of the branch gets to the diameter the trunk, the weaker the attachment.

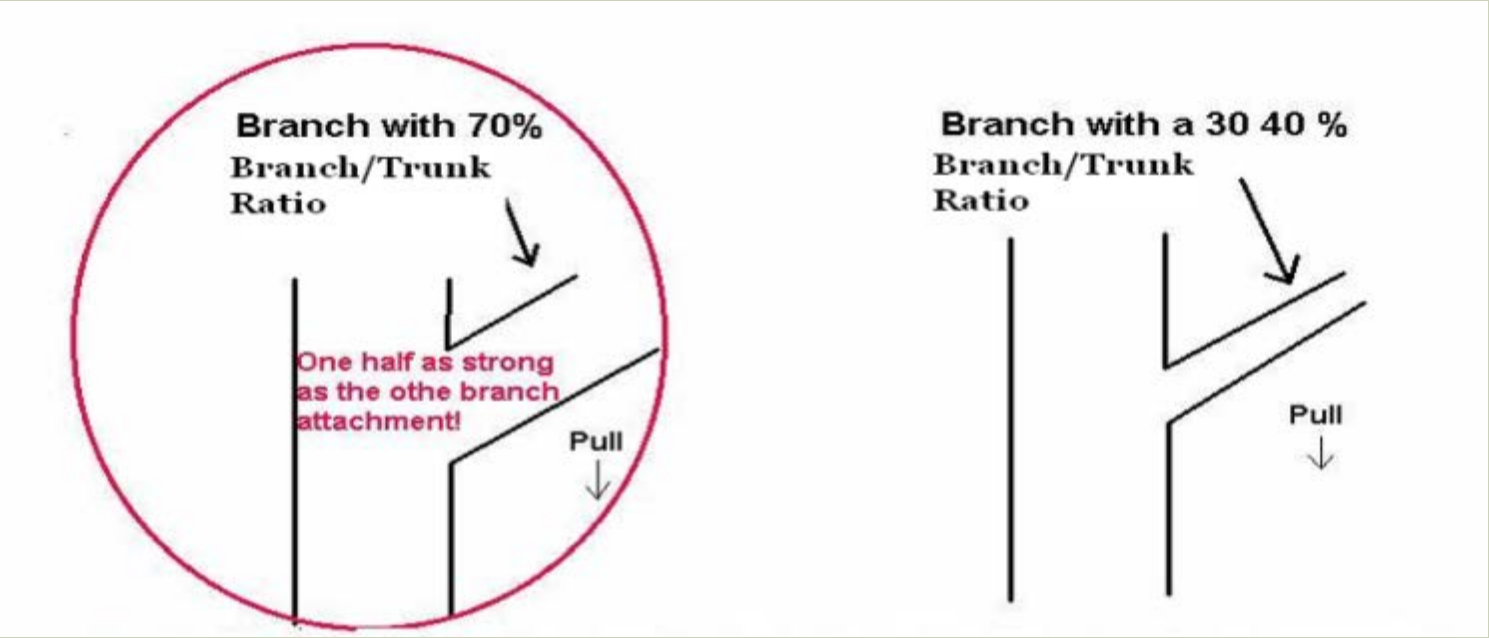
WHICH BRANCH WOULD BE HARDER TO PULL OUT?



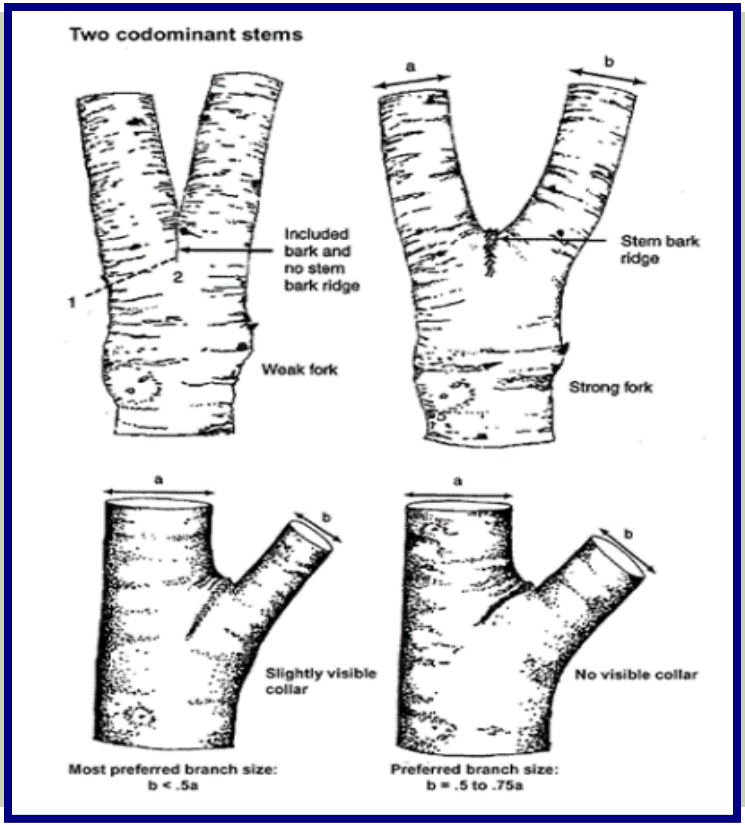
HOW THEY MEASURED IT



THE ONE ON THE LEFT IS THE WEAKER ATTACHMENT



MORE ON ATTACHMENT STRENGTH

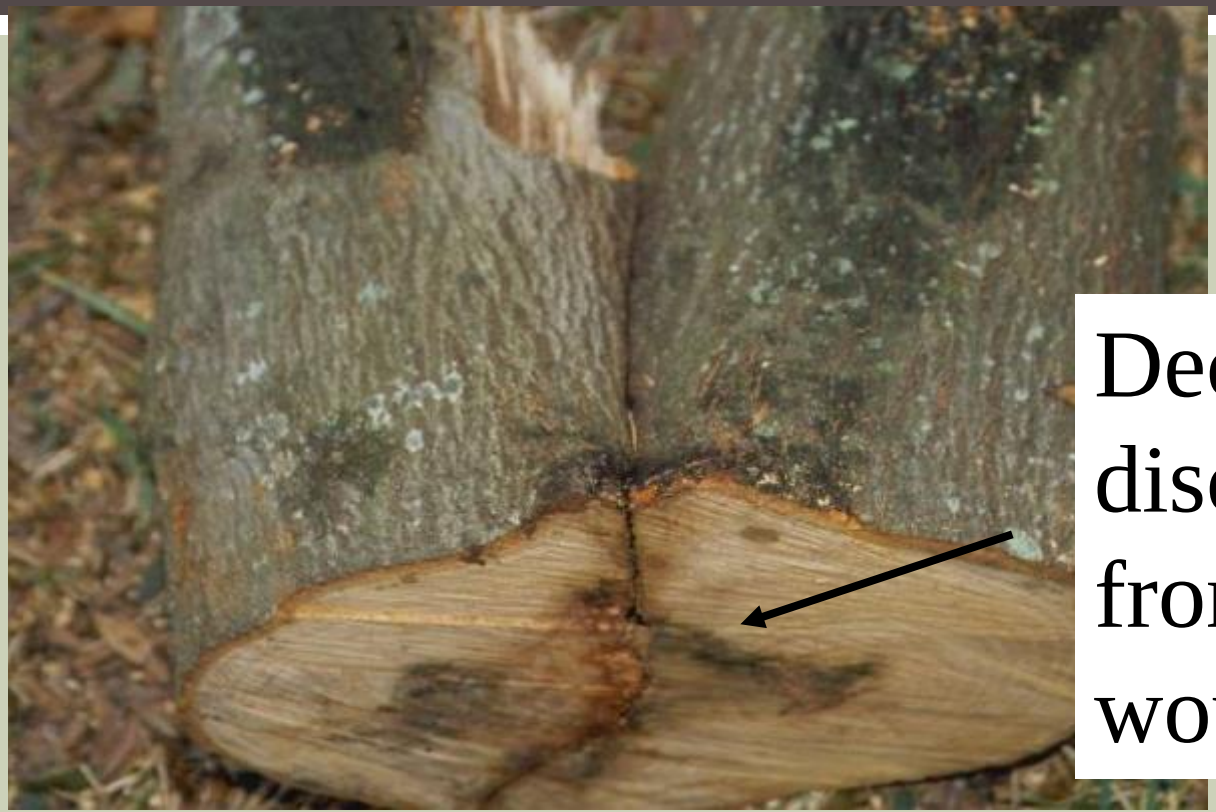


- Codominant stems are not well attached to each other, especially when included bark is present in the union
- Branches are more secure when they are small in comparison to the trunk

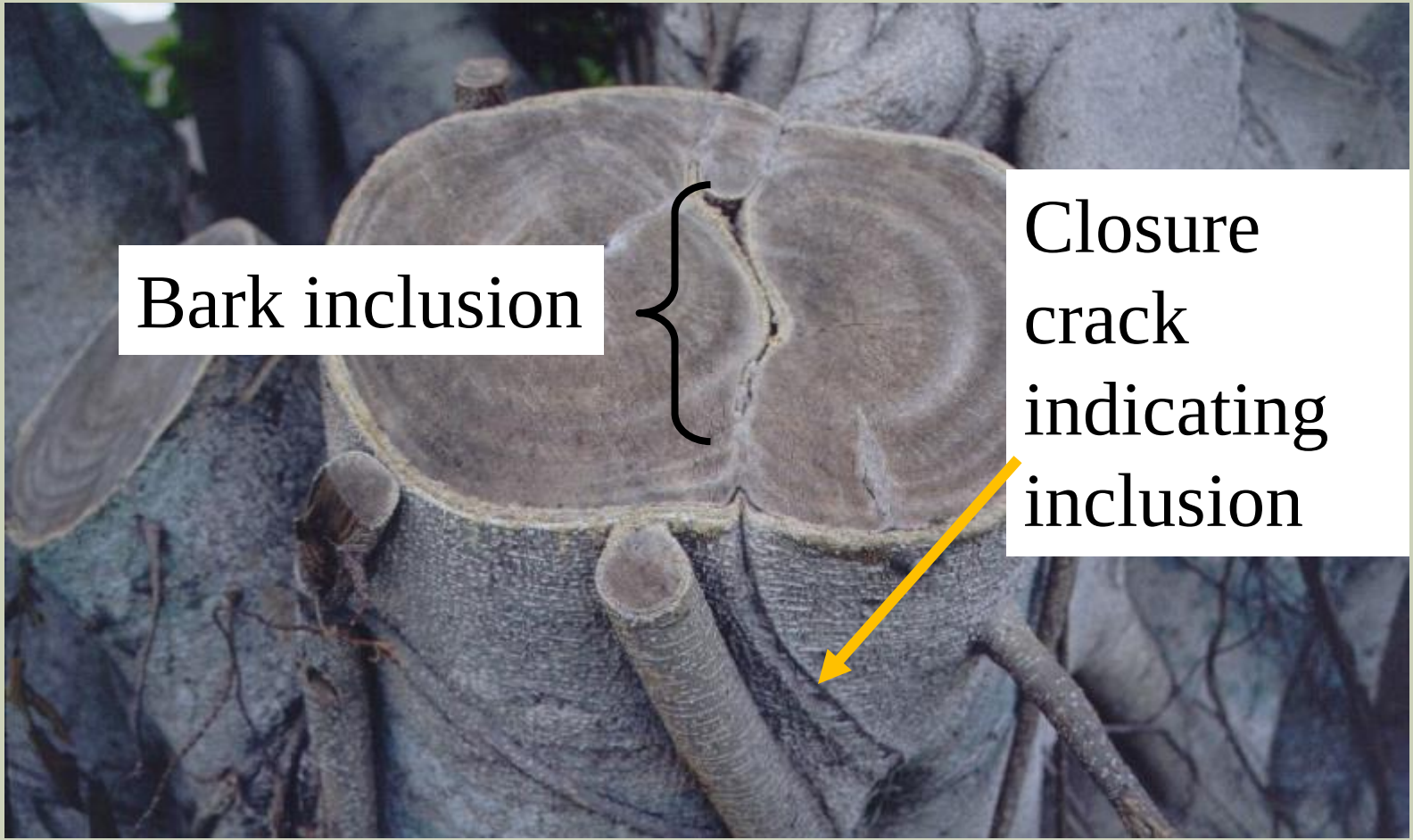
WHAT MAKES CO-DOMINANT STEMS WEAK

Co- Dominant Stems with Included or Embedded Bark

BARK INCLUSION

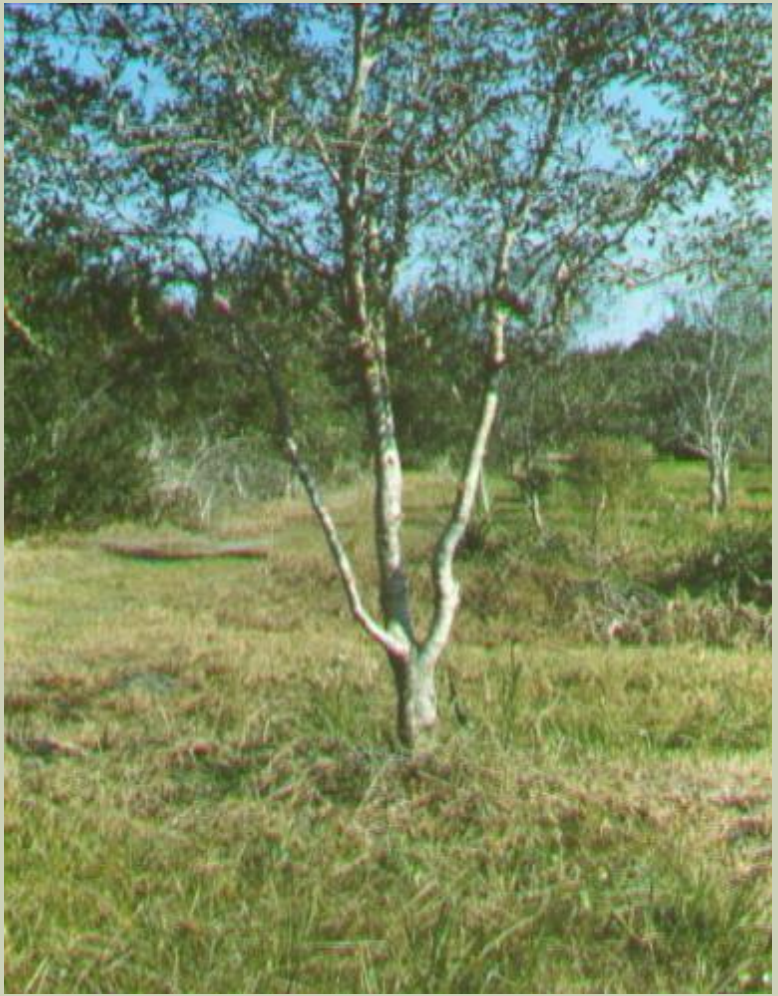


Decay and discoloration from self wounding


Bark inclusion
Closure crack indicating inclusion

CO-DOMINANT STEMS ARE A BIG PROBLEM

- Can form embedded bark
- Loss of branch defense zone at the base of the branch
- Can become a hazardous tree



ALMOST TOO LATE TO FIX

- Probably involves very expensive tree work
- Cabling
- Reduction Pruning

PROBABLY GREW FROM A ROOT SPROUT

CAN BECOME VERY DANGEROUS

INCLUDED BARK NIGHTMARES

WHERE TO PRUNE A BRANCH

- We are going to talk about two types of pruning cuts

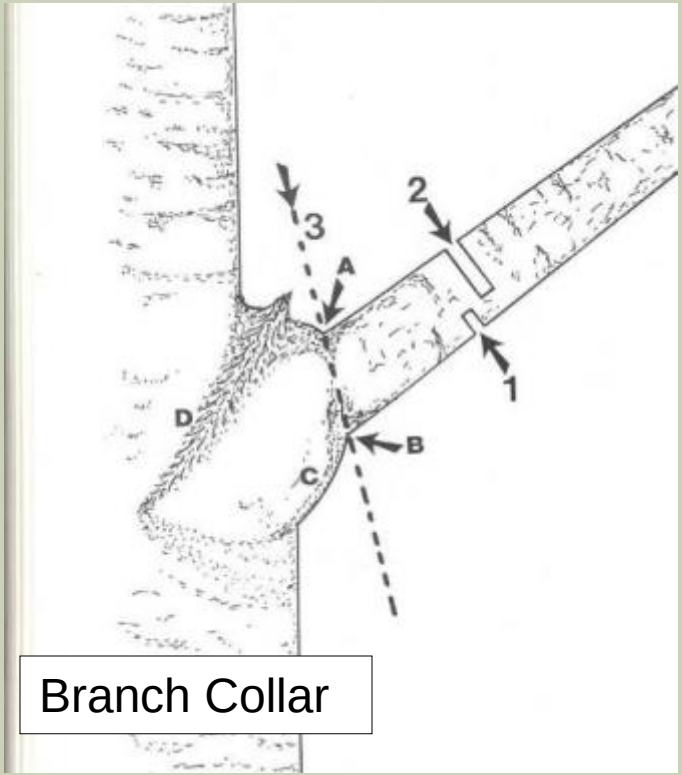
A. Natural Target Pruning (Branch Collar Cuts)

B. Reduction or Subordination Cuts

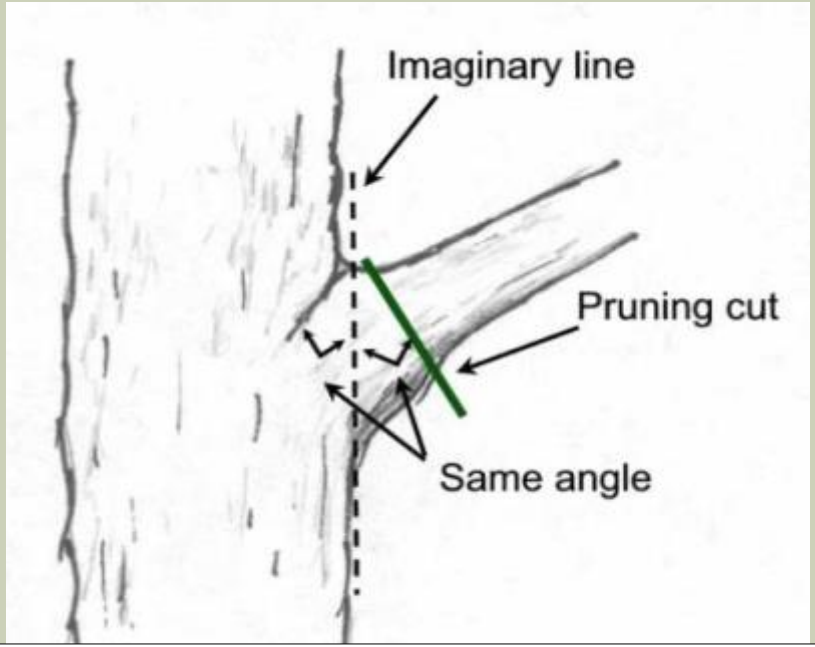
NATURAL TARGET PRUNING

- The practice of natural target pruning makes use of the branch collar to identify the proper location to remove a branch.

PRUNE JUST OUTSIDE THE BRANCH COLLAR



Branch Collar



Sometimes the Branch Collar is hard to find

WHERE TO PRUNE

BRANCH COLLAR

PROPER PRUNING CUT

ONE YEAR LATER

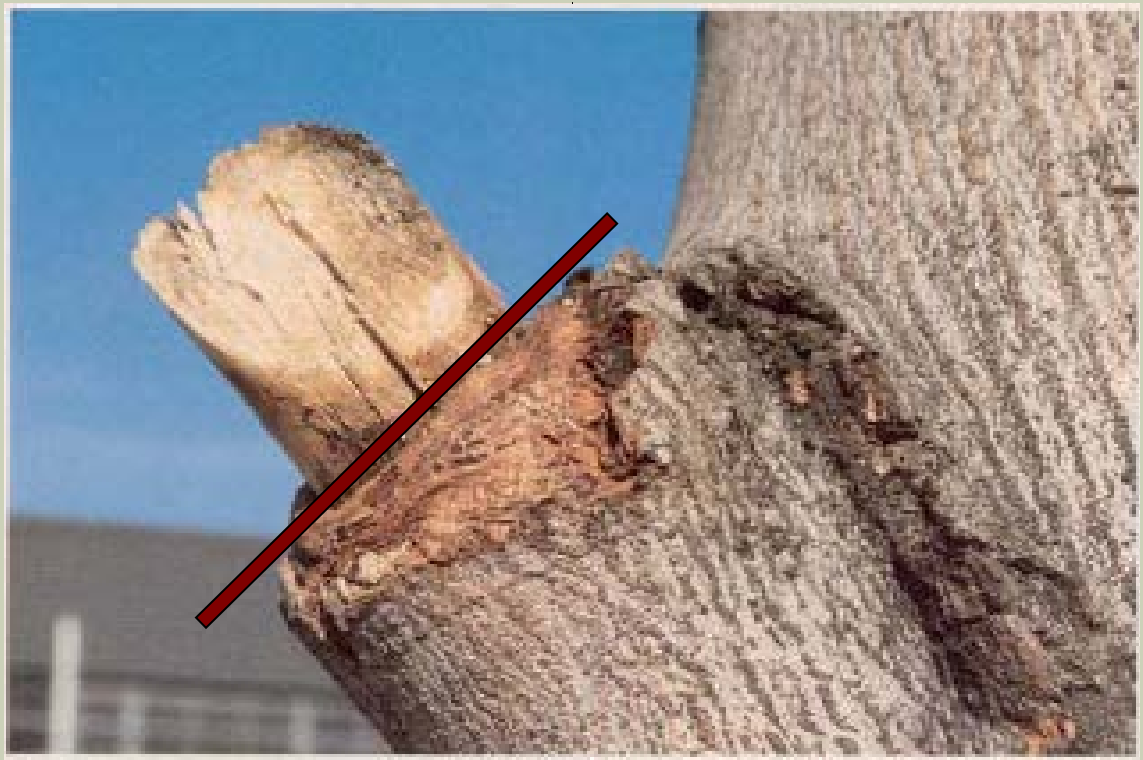
DON'T MAKE FLUSH CUTS

The branch collar is completely removed, and the trunk is now exposed to decay and future structural problems.

BAD CUT- CALLED A FLUSH CUT

Wound wood does not develop evenly.

PRUNE STUBS AT THE “NEW” BRANCH COLLAR

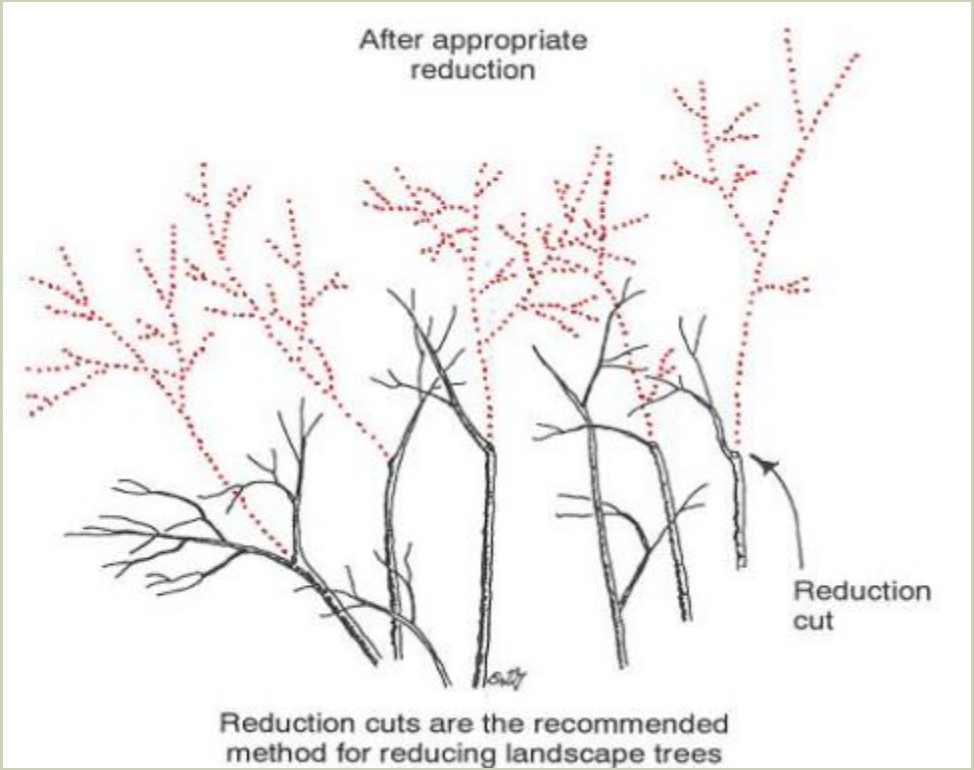


REDUCTION

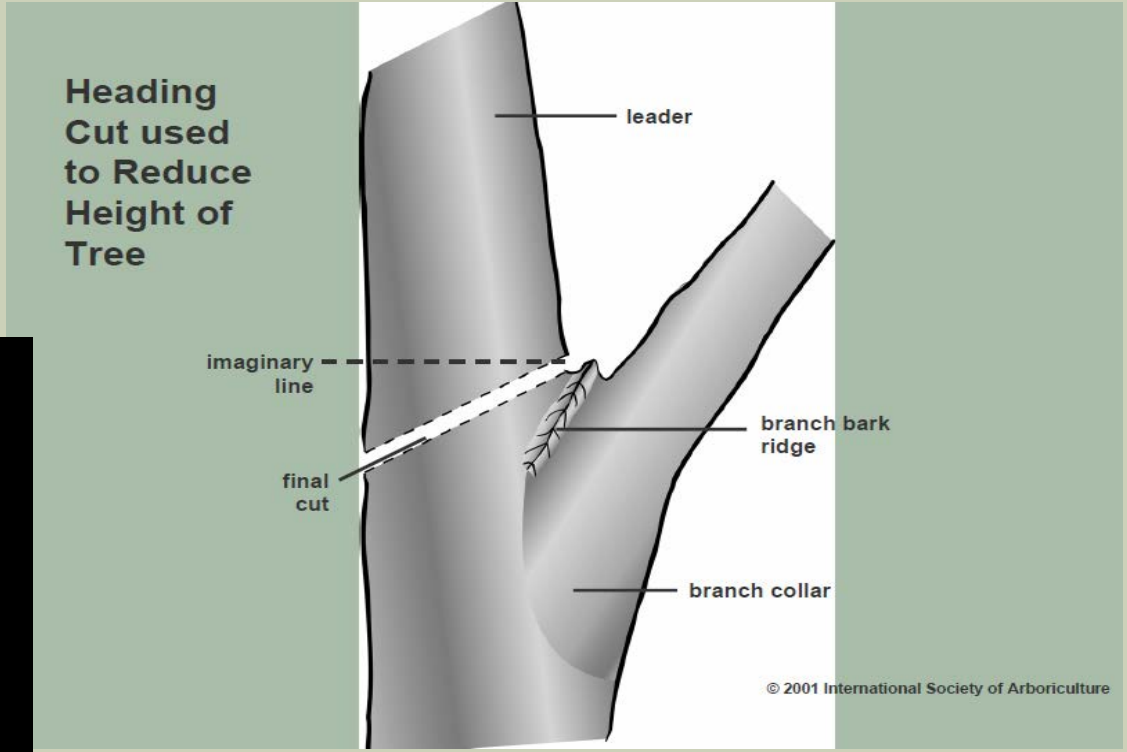
- A reduction cut reduces the length of a stem or branch by removing the terminal portion back to a living lateral branch of equal or smaller diameter.
- The cut should be made just beyond a lateral branch that is large enough to prevent excessive death of sapwood, decay, or visible bark death.

REDUCTION CUT PRUNING

- The selective removal of branches and stems to decrease the height and/or spread of a tree

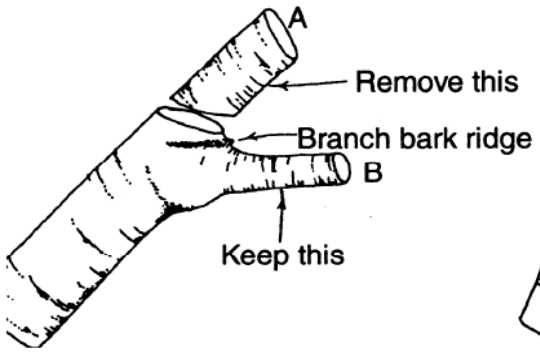


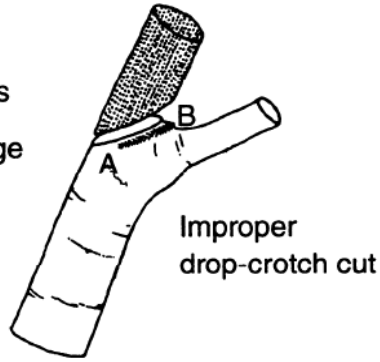
REDUCTION CUTS



The remaining branch should be at least 1/3 the diameter of the removed limb

Shorten Branches with Reduction Cuts





- Reduction cut/cutting to a lateral (drop-crotch cut).
- Shortens a limb or branch back to a smaller lateral branch or similarly sized limb.
- Used in structural pruning or reducing tree size.
- Remaining lateral branch should be 1/3 to 1/2 the diameter of the branch removed.

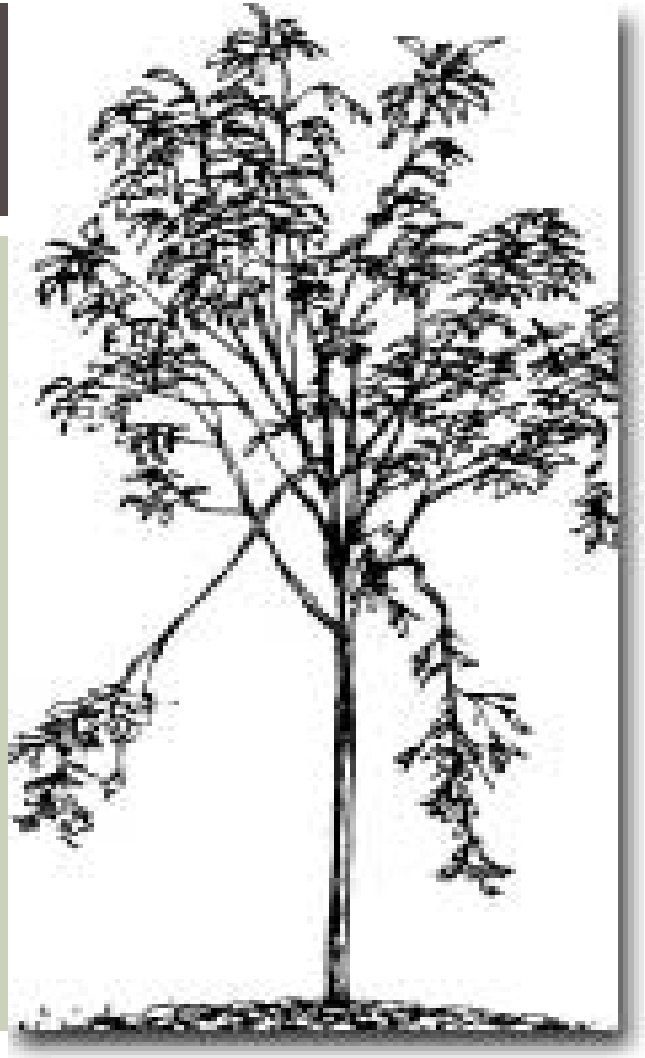
REDUCTION CUTS

A reduction cut removes a stem back to a lateral branch.

PRUNING (TRAINING) YOUNG TREES

STEP ONE

- Remove broken, dead, diseased, dying branches.



REMOVE CROSSING OR TOUCHING BRANCHES

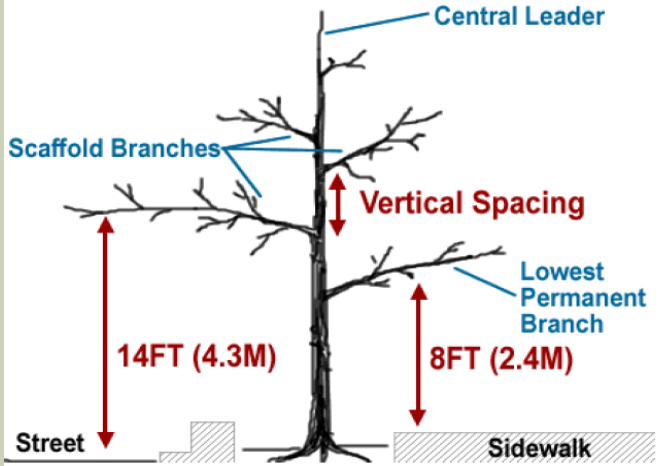
STEP TWO

- Select a branch to be a leader

WHERE TO PRUNE

STEP THREE: CREATE SCAFFOLD BRANCHES

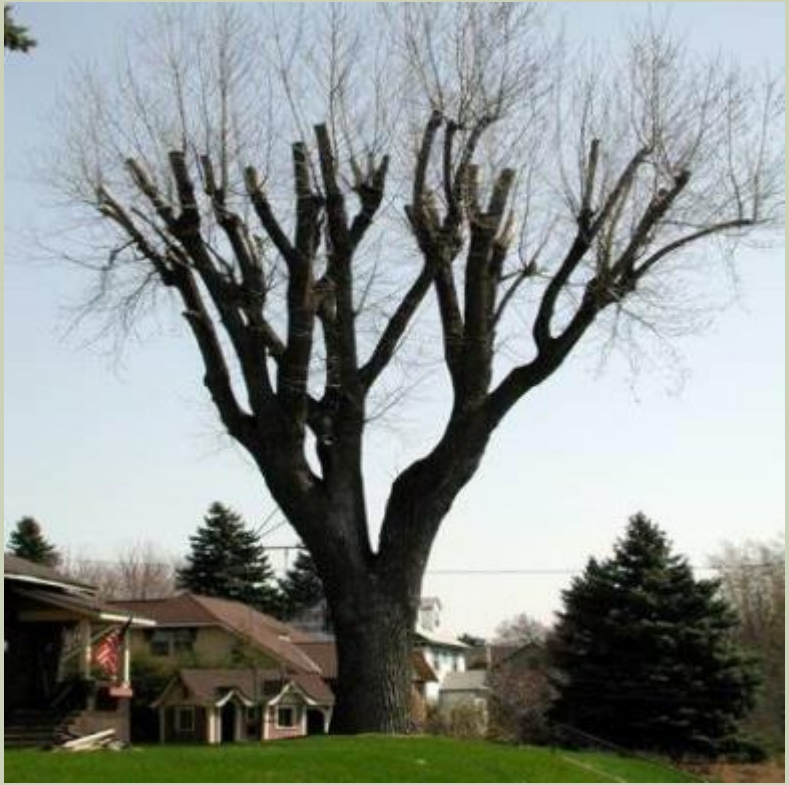
Creating Space for Permanent Branches



- 6-12 inches apart for small maturing trees
- 18-36 inches apart for large maturing trees

DON’T TOP A TREE

TOPPING RESULTS IN DECAY



AN EXAMPLE

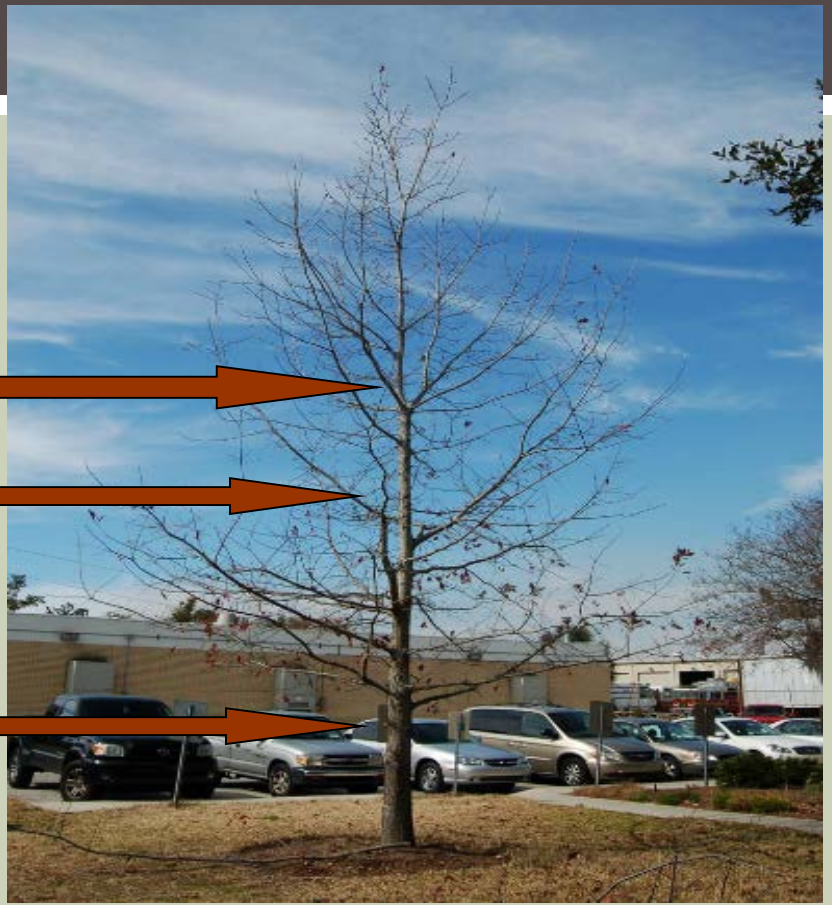
WE IDENTIFIED THREE PLACES TO PRUNE

SLOW DOWN VIGOROUS BRANCH USING REDUCTION CUT

REMOVE CO-DOMINANT STEM

RAISE LOW LIMB FOR CLEARANCE

BEFORE AND AFTER



PRUNING LARGE TREES

Do not exceed 25% removal of foliage per year.

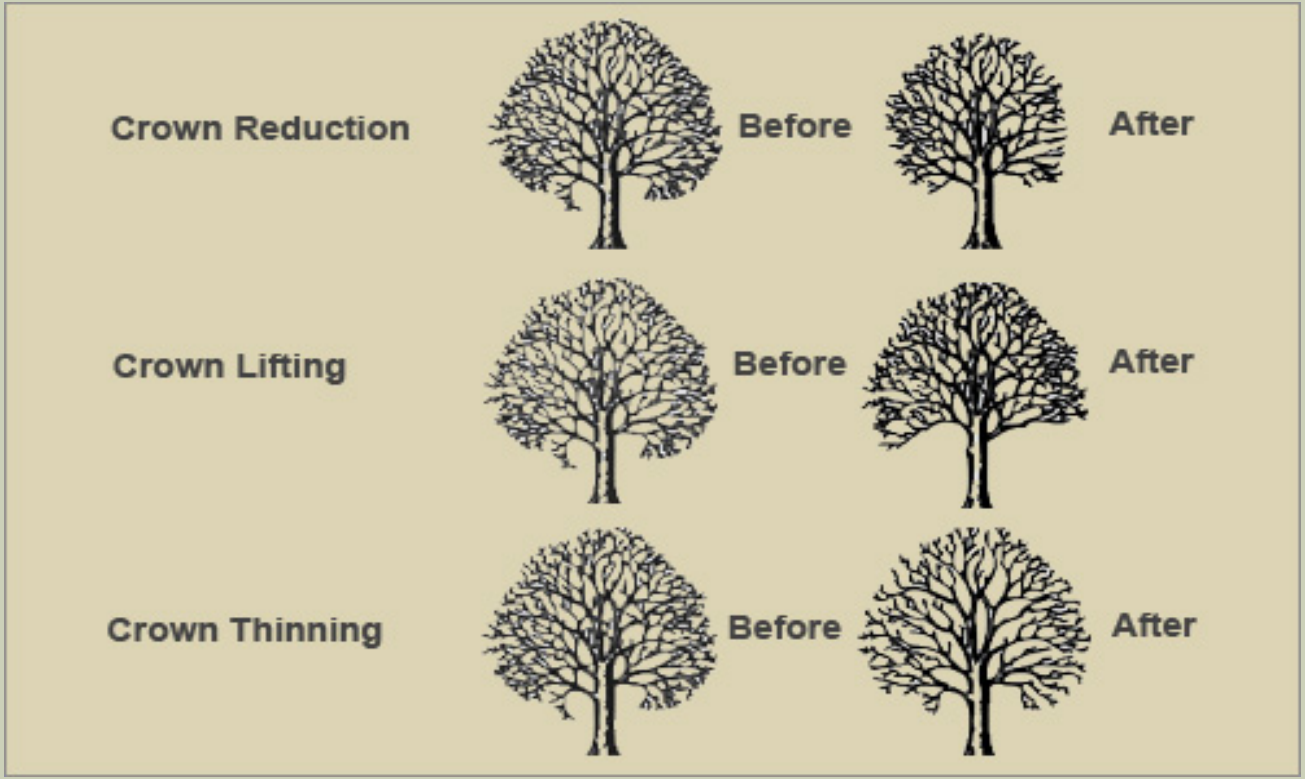
However, the older the tree, the smaller this number should be. Food Factories are precious to Sr. Trees.

THERE ARE GENERALLY SPEAKING 4 TYPES OF PRUNING FOR LARGE TREES

- Crown lifting
- Crown thinning
- Crown cleaning
- Crown reduction

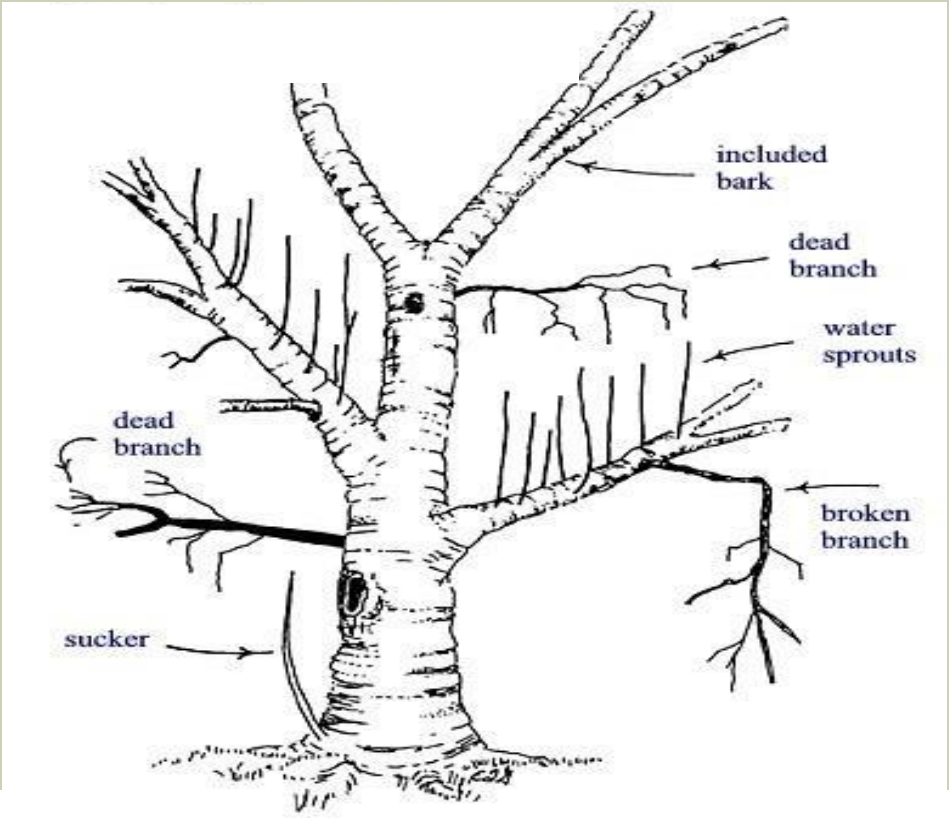
….Or a combination of pruning types

PRUNING TERMS



CROWN CLEANING

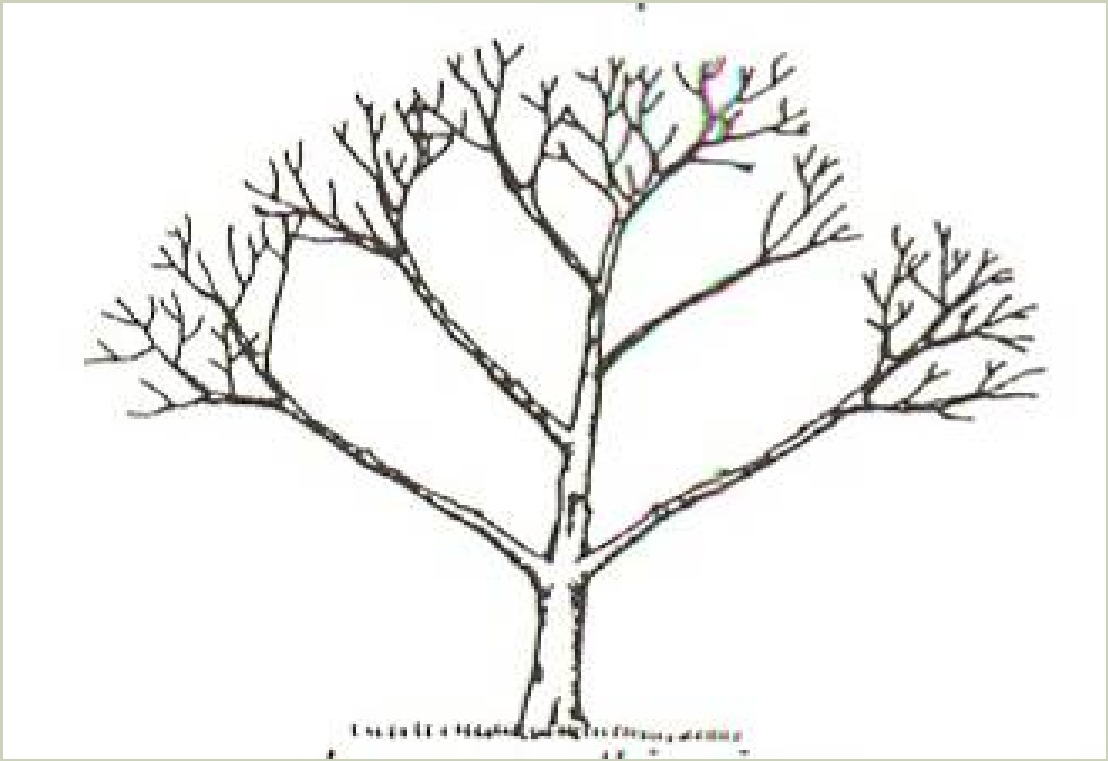
- Remove dead, cracked, diseased, hazardous limbs.
- Usually reserved for trees that should be removed but aren't for various reasons



BEWARE: LARGE LIMB CUTS

- Removal cuts on large trunks can result in large pockets of decay.
- Reduce the large low limbs instead of removing them where this is practical.

LEAVE INTERIOR BRANCHES



INAPPROPRIATE THINNING

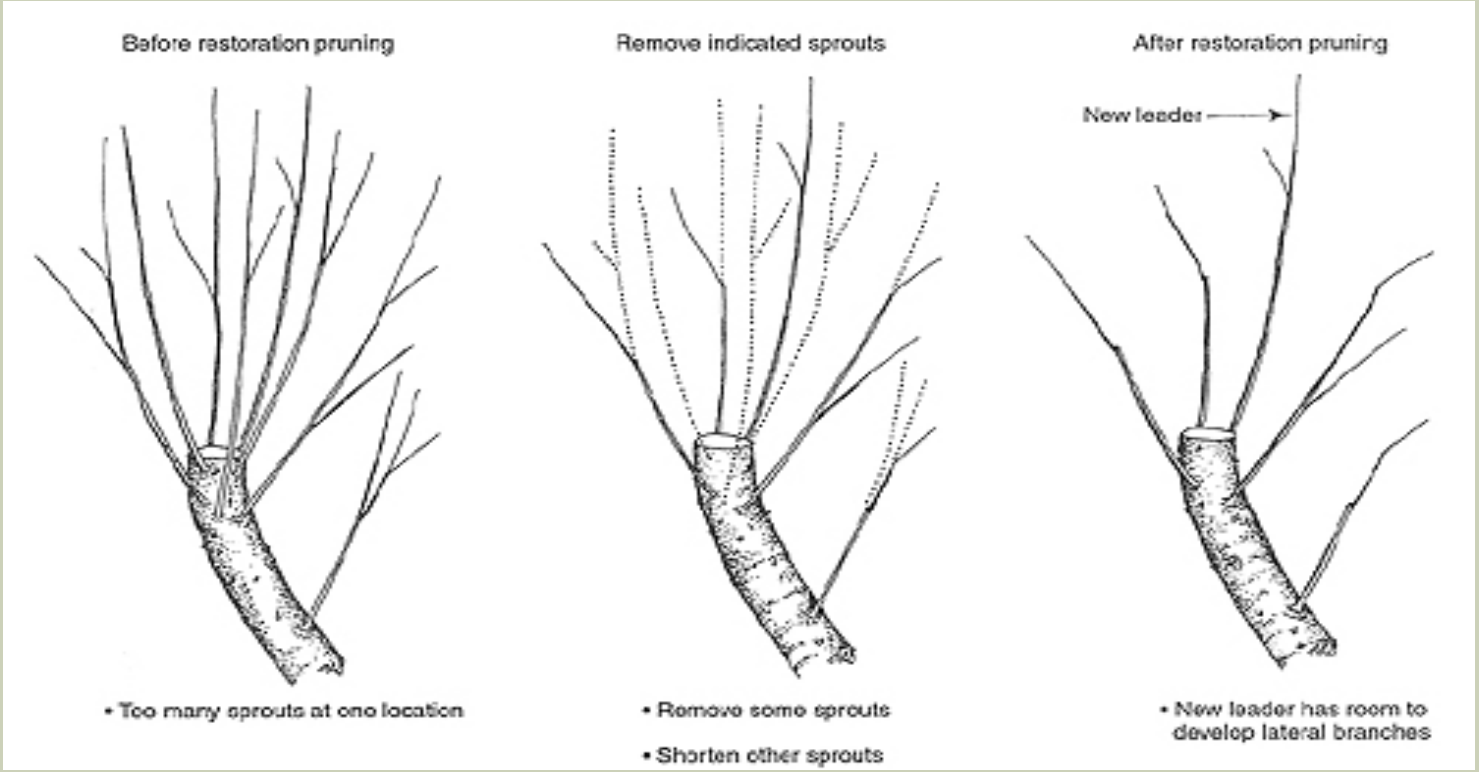
Lions-tailing: trees with foliage concentrated at the tips of branches because inner branches were removed.

- More susceptible to hurricane damage
- Difficult to restore

LIONSTAILING

MORE LIONS TAILING EXAMPLES

RESTORATION PRUNING



Topping creates a hazardous tree

SHOULD BE ANCIENT HISTORY

PRUNING CRAPE MYRTLE

YUCK

CRAPE MYRTLE

In extension we call this
“Crape Murder”
(Just amongst ourselves)

REMOVE SUCKER SPROUTS AND PRUNE TO 3-5 BASES

REMOVE CROSSING BRANCHES

PRUNE OUT SPENT FLOWERS AND UNWANTED LIMBS

BEFORE AND AFTER

LOOKS NICE

WOUND DRESSINGS DO NOT DO ANYTHING,

in fact
they
may be
harmful

Why??

Any Questions ???