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

Branch pulled out of trunk.
Photo courtesy of Ed Gilman.

Trunk wood extending down trunk later in the summer
Physically Stronger Union

- Generally, the branch union is stronger when the branch is small and the trunk is larger.
- The closer the diameter of the branch gets to the diameter of 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
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
The practice of natural target pruning makes use of the branch collar to identify the proper location to remove a branch.
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
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.
The selective removal of branches and stems to decrease the height and/or spread of a tree.
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.
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
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

Before restoration pruning:
- Too many sprouts at one location

Remove indicated sprouts:
- Remove some sprouts
- Shorten other sprouts

After restoration pruning:
- New leader has room to develop lateral branches
Topping creates a hazardous tree
SHOULD BE ANCIENT HISTORY
PRUNING CRAPE MYRTLE
YUCK
In extension we call this “Crape Murder” (Just amongst ourselves)
REMOVE SUCKERS PROUTS 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 ???