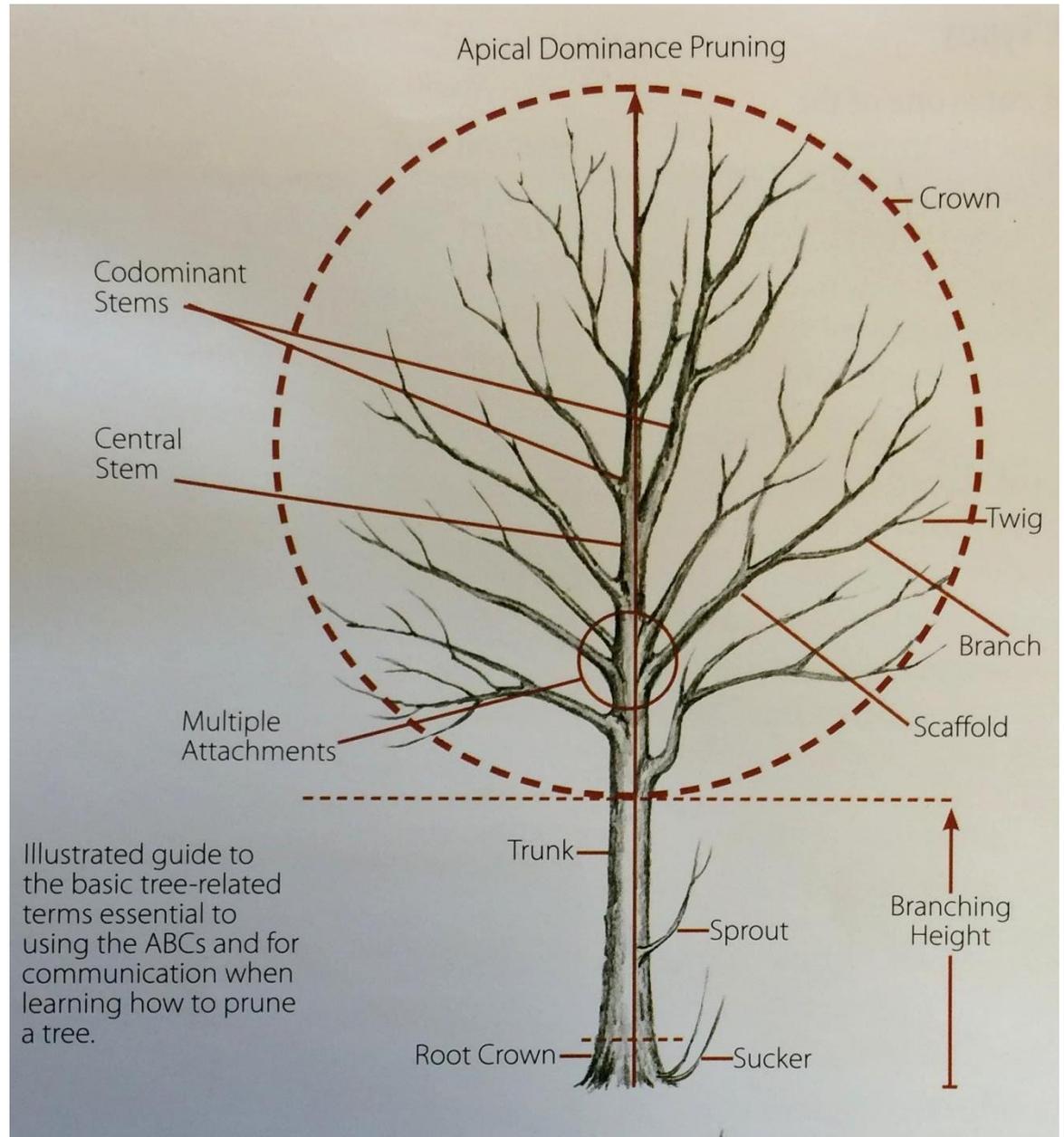
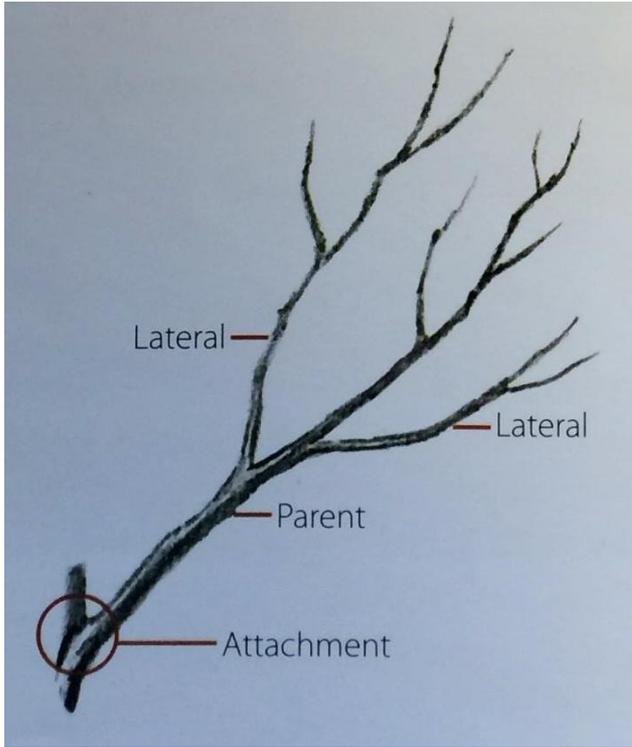


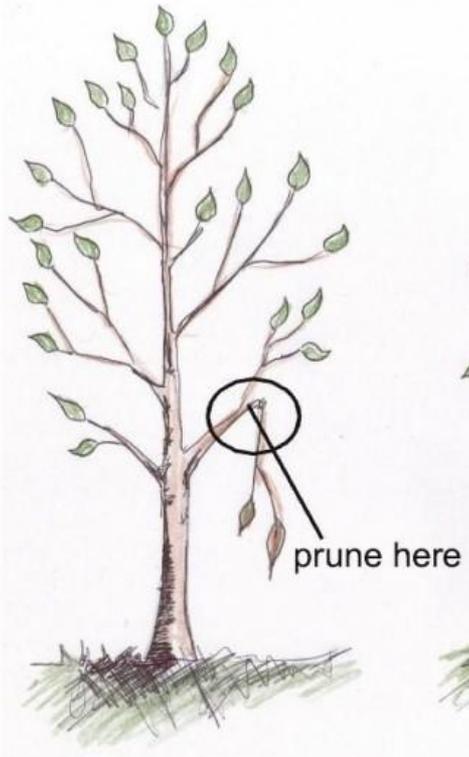
# Pruning Outline

An introduction to the tools and techniques of new tree pruning

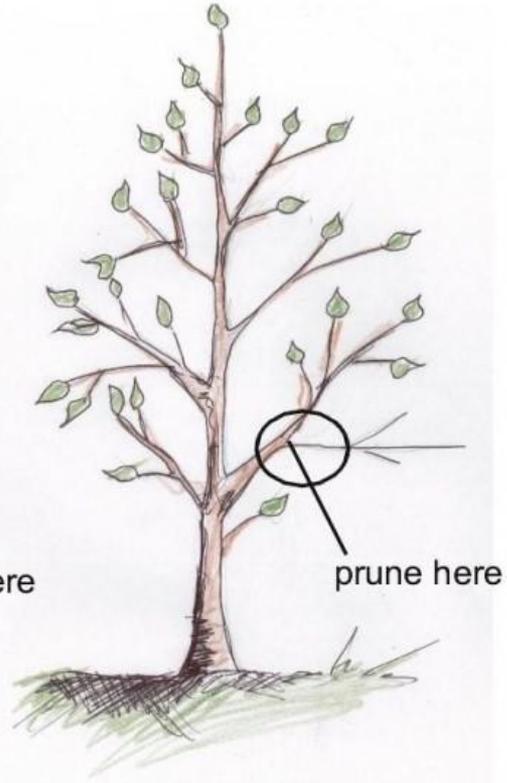


# What to prune for

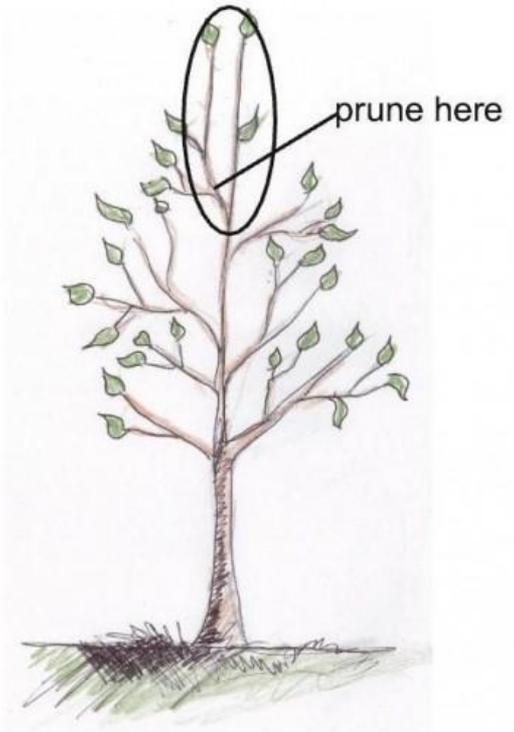
Broken Limbs



Dead Limbs



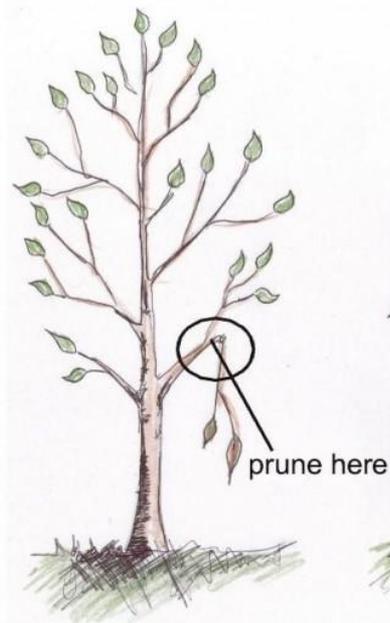
Two Leaders



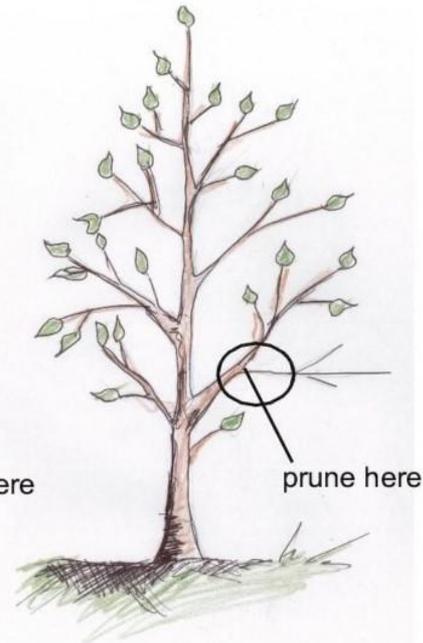
# What to prune for

- **Dead, dying, diseased:** Doing this tells the tree to direct its energy to the roots and branches that will keep it healthy and help it grow. This also includes broken branches.

Broken Limbs



Dead Limbs



# What to prune for

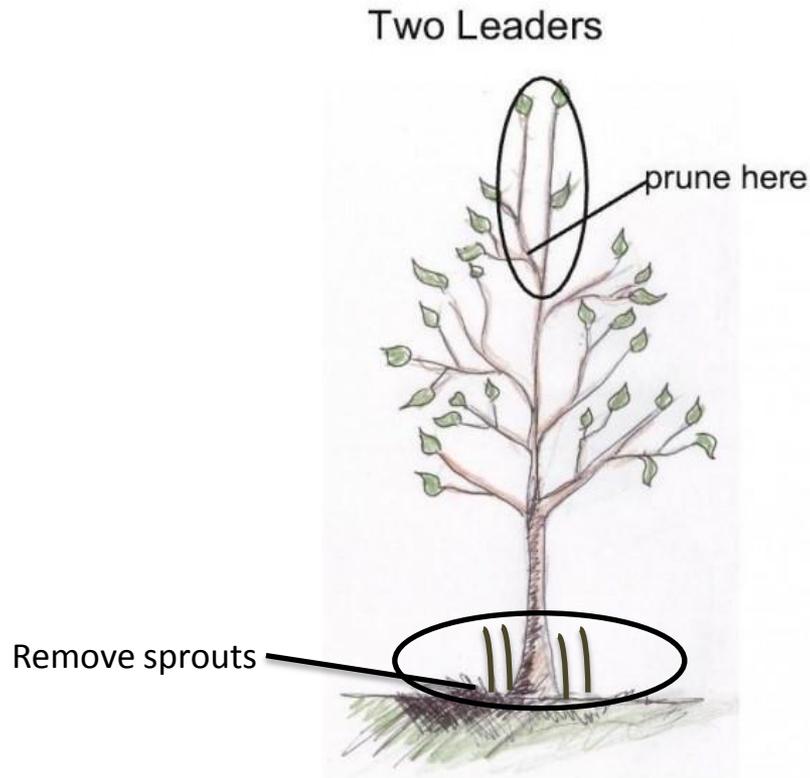
- **Crossing and conflicting:** This helps prevent larger issues in the future when branches get bigger. Giving each branch its own space keeps them from rubbing on each other and creating opportunity for decay in the future.

**Branches rubbing together create a wound on the branches that the tree has to use energy to heal**



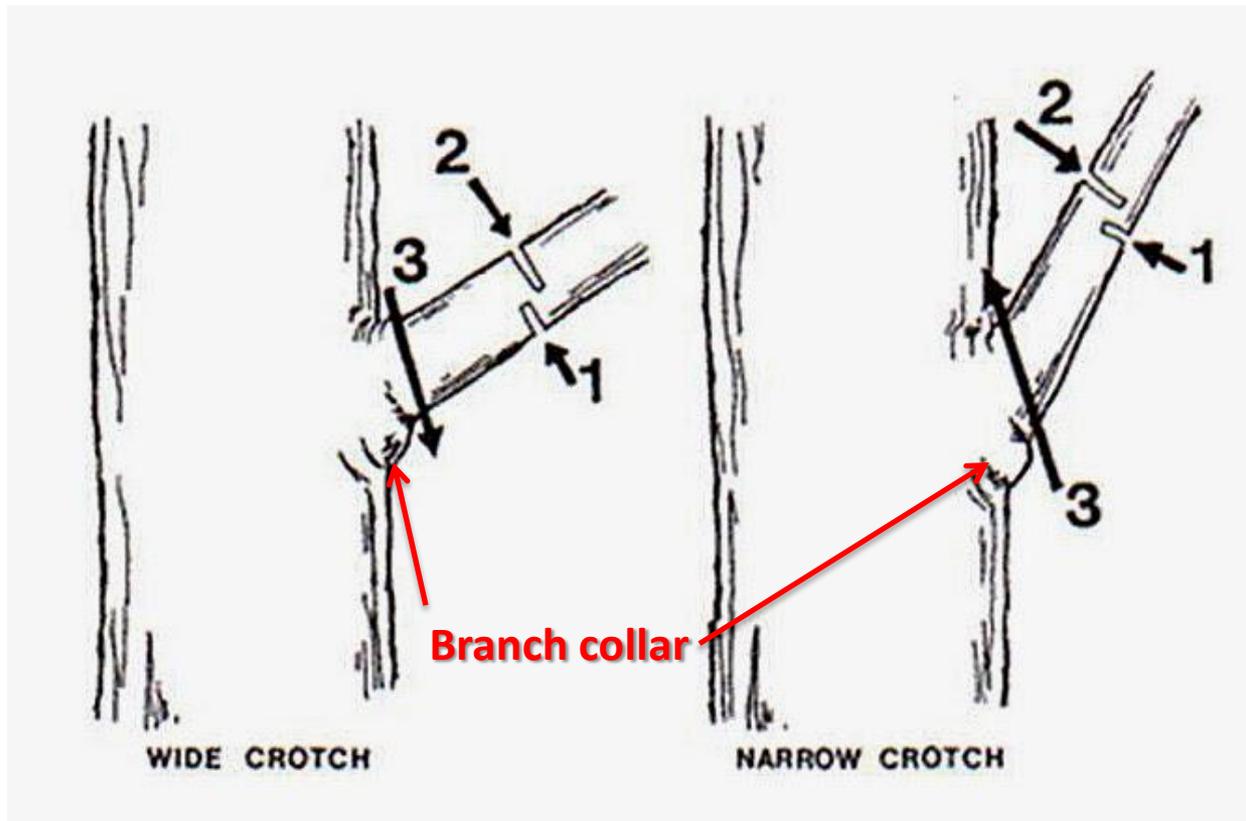
# What to prune for

- **Form:** Remove root sprouts, remove competing leaders. Keep the tree looking and growing like a tree, not a bush.



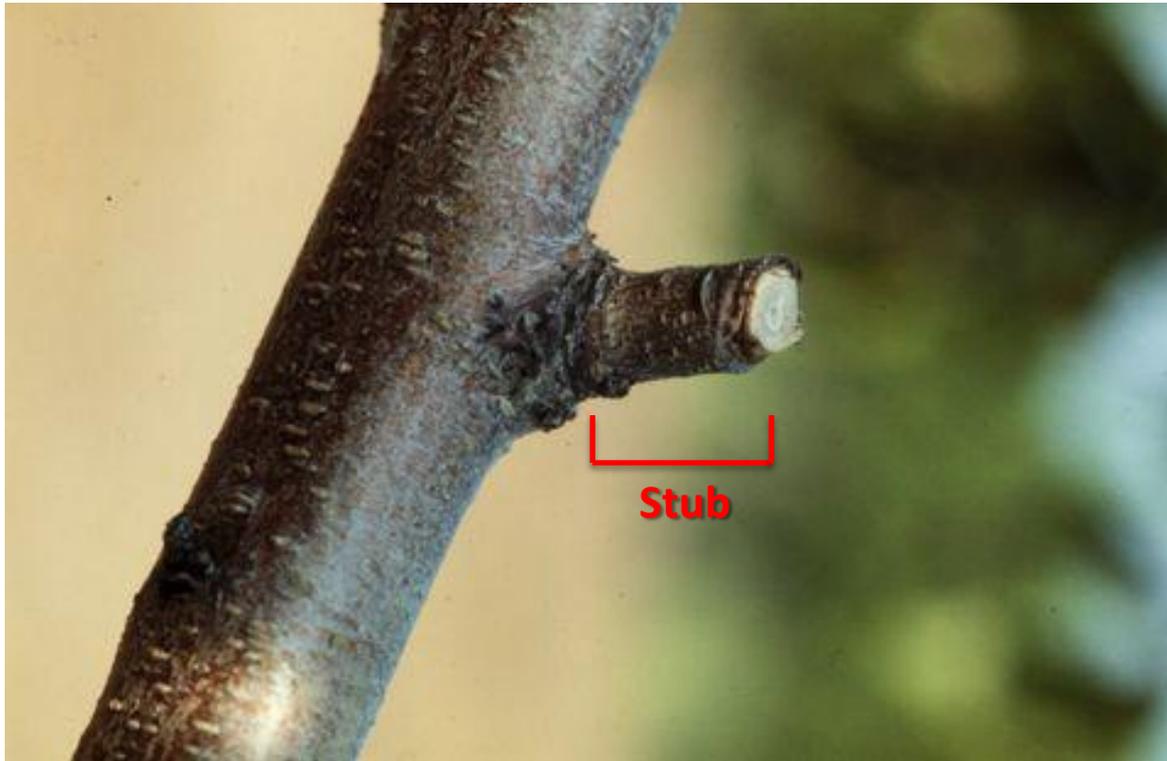
# Technique

- **Branch collar:** All pruning cuts should be made outside of the branch collar. This will encourage proper healing, and minimize the chance for decay.



# Technique

**DO NOT LEAVE STUBS!**

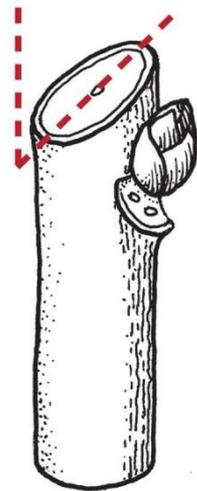


This will make it harder for the tree to heal the wound made by pruning.

# Technique

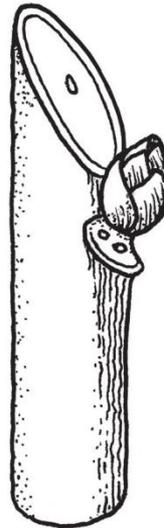
- **Paying attention to your cut:** The location and angle of your pruning cut are important in keeping the tree healthy. Too low of a cut and too high of a cut could cause the branch or twig to die, allowing rot and decay to form.

## Right cut

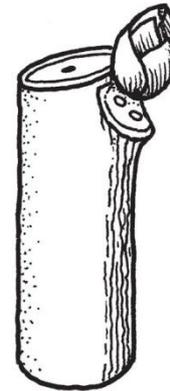


45° angle,  
1/4" above bud

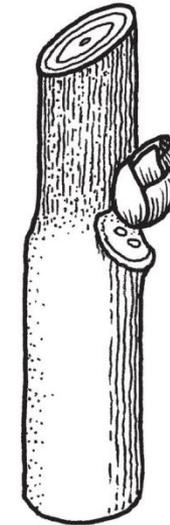
## Wrong cuts



wrong angle,  
cut should follow  
direction of bud



too low,  
bud may die



too high,  
stub may rot

# Technique

- **1/3 rule:** Any branch you cut back to must be at least 1/3 the diameter of the branch you cut off

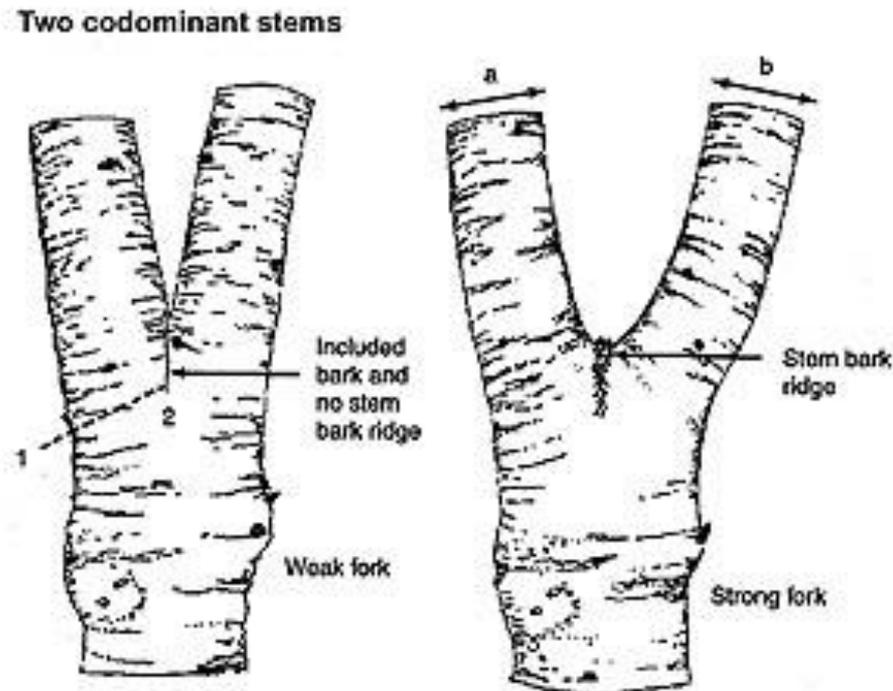


**No, this branch is too small to cut back to**

**Yes, this branch is large enough to cut back to**

# Technique

- **Get rid of weak branch unions:** On a tree, there are strong branch unions (U-shaped), and weak branch unions (V-shaped). We want to get rid of the weak branch unions early on in a tree's life. This eliminates the risk of branches breaking out of the tree as they get larger and heavier.



# Technique

- **10% or less:** On newly planted trees, do not remove more than 10% of the tree's live branches and leaves. The young tree needs all of the help it can get from its leaves to stay healthy and continue growing. Only prune what you need to in order to keep the tree healthy and encourage good form.
- Set cut branches aside to keep track of how much you've removed

# Tools

- **Hand pruners:** For small cuts. No more than ½” diameter branch



- **Loppers:** Can be used for larger cuts. No more than 1½” diameter branch



# Tools

- **Pole pruners:** Used to make cuts higher in the tree that would otherwise be out of reach. No more than 1½" diameter branch



# Tools

- **Hand saws:** Used to make cuts that would otherwise be too large for any of the pruners. Good to use while cutting deadwood larger than a pencil. Cutting deadwood with pruners can quickly dull the cutting edge, using saws to cut the deadwood helps keep your other tools sharp.



# Personal safety

- Personal Protective Equipment (PPE)

Example:

1. Gloves
  2. Safety glasses
  3. Hardhat
  4. Reflective vest
  5. Proper foot wear
- When pruning, you should be wearing all necessary PPE
  - Use the right tool for the right job. Using the wrong tool could result in an injury to yourself or a crew member.
  - Take your time with your pruning cuts and be aware of your surroundings

# Personal safety

- Before entering a work site, look around
- Look up for:
  1. utility lines near your work area
  2. broken or hanging branches in large trees that could fall
- Look down for:
  1. Sharp or broken objects
  2. Holes or ditches in the ground
- Look around for:
  1. Potentially dangerous animals
  2. Potentially dangerous situations
- If any hazards exist, tell your crew leader

# Things to remember

- Pruning is a wound, so never take more than you need
- Be able to explain every pruning cut, and why
- Make proper cuts so wound wood can develop
- Be aware and observant of potential hazards to you and others