Climbing Spurs
Throw ball
Body thrust
Footlocking
Single Rope Technique (SRT/SRS)
Work Positioning

No matter what technique you use,

- Remember that the climbing line is more than a safety device
- A good climber uses the rope to ascend into and descend from the tree
- Also use it to access branch tips, maintain balance, and move freely in tree
- The rope enables the climber to use both hands without any loss of stability
- Use both hands for working since your weight is on the climbing line
- Maintain three points of contact with the tree (climbing line counts)
Tools in a Tree

- Pole pruner/saw, cabling hardware, other tools.
- Ground workers send up tools to climber
- Clove hitch or slip knot is commonly used

- Hang them so the sharp edge is away from you
- Secure chainsaws with a chainsaw lanyard for use in a tree
- Keep two hands on the saw when cutting and shut off the chainsaw and engage chain brake when moving to another position
Emergency Response and Aerial Rescue
Emergency Response and Aerial Rescue

3.2.4 Employees who may be faced with a rescue decision shall receive training in emergency response and rescue procedures appropriate and applicable to the work to be performed, as well as training to recognize the hazards inherent in rescue efforts.
Key Points

- Aerial rescue is the process of safely bringing an injured or unconscious worker in a life-threatening situation to the ground.
- There must be a minimum of two climbers on the site capable of aerial rescue.
- Electrocution, heart attack, heat exhaustion, insect/animal attack, blow from swinging limb or chain saw could leave a worker dangling helplessly in a tree.

Aerial Rescue Flowchart.pdf
What to do...

- Assess the situation and have someone call for emergency help immediately
- Give the exact location of the accident and nature of emergency
- Be sure to tell operator if it involves a high-angle rescue or electrical hazards
- *Never risk becoming a second victim or putting others in danger*
3.2.5 For field crews involving two or more workers at a work location, at least two workers trained in first aid/CPR shall be available.
Rigging Equipment
Fundamental Rigging Techniques
Types of Cuts

Drop cut, snap cut, hinge cut
Drop Cut

- Classic 3-point cut dating back to the early years of arboriculture.
- Recommended technique for removing large limbs:
  - The first cut is an undercut approximately $\frac{1}{8} - \frac{1}{4}$ deep.
  - The second cut is made directly on top of the first
  - The third cut removes the stub

*Note:* This was originally taught by making the second cut (top cut) further out on the branch. This can create a kerf and pull the chain saw out of the climber’s hand.
Figure 1.13  When using the classic 3-point drop cut to remove a large limb with a chain saw, the saw bar may become pinched as the limb falls. This can pull the saw out of the climber’s hands. Making the top cut directly above the bottom cut can reduce the likelihood of this problem occurring.
Snap Cut (Mismatch Cut) Cont.

Figure 1.14 Snap cut (mismatch cut). The cuts overlap from either side. After the chain saw has been shut off and put away, the section of wood can be broken off manually.

Figure 1.15 A variation of the snap cut can be used to remove the final stub of a limb.
Hinge Cut

- A variation of standard tree-felling techniques that employs the use of a notch and back cut to form a hinge and “steer” the limb.
- Recommended technique for swinging a limb around rather than simply dropping the branch to the ground:
  - The first cut is a felling top cut to begin the notch.
  - The second cut is the bottom or undercut to finish the notch.
  - The third cut is a stepped up back cut following standard felling techniques.

Note: Unless the limb is properly rigged with a load line, there is a limit to how much the climber will be able to swing it before it drops. If the hinge is formed too far up the side of the limb, it may be ineffective, and the hinge may break before the limb swings.
Figure 1.16 A hinge cut can be used to help control the swing or drop of a limb. Kerf cuts on the sides limit fiber tearing.
Resources to consider

Organizations:

- Tree Care Industry Association
- International Society of Arboriculture
- ISA Texas

Literature:

- Basic Training for Tree Climbers DVD and workbook
- Tree Climbers’ Guide, 3rd Edition
- The Tree Climber’s Companion
- Arborist Equipment
- Safe Work Practices, A Collection of CEU Articles
More Resources

Suppliers

- SHERRILLtree
- TreeStuff
- WesSpur Tree Equipment

Knowledge

- ClimbingArborist.com
- TreeBuzz.com
- ArboristSite.com
1) A “rope inside a rope” is better known as a:
   a) Hollow-braid line
   b) 12-strand line
   c) Double-braid line
   d) 3-strand line

2) A Prusik loop is used:
   a) To tie in with the secured footlock method
   b) To attach a tagline to a limb
   c) As an arborist block for lowering limbs
   d) To cable, small, multi-stemmed trees

3) A separate, short length rope used to tie the friction hitch in an open climbing system is known as:
   a) Prusik loop
   b) Split-tail
   c) Work-positioning lanyard
   d) Rope sling

4) The first steps of the emergency response process are to:
   a) Assess the situation and call for emergency help
   b) Shut off the electricity
   c) Reach the victim and begin first aid
   d) Reach the victim and secure him or her for descent

5) The classic three-step cut used to remove limbs is also called the:
   a) Drop cut
   b) Jump cut
   c) Hinge cut
   d) Topping Cut