

Tailgate Safety Training for Landscaping and Horticultural Services

Agricultural Safety Program, 590 Woody Hayes Drive, Columbus, OH 43210

Tree Pruning and Ladder Safety

Objective: Use safe procedures for tripod, closed-top, extension, and straight ladders.

How to Use This Module

Workers can use different kinds of ladders to prune and trim trees. Each type of ladder requires safe practices. For this module:

- Read the information below on safe practices for tripod, closed-top, extension, and straight ladders.
- Ask your supervisor to demonstrate how to use a tripod, closed-top, extension, and straight ladder.
- Practice using different ladders while your supervisor observes.
- Review the important points.
- Take the True/False quiz to check your learning.

Background

Before workers begin working from ladders to prune trees, they should be properly trained. Landscape maintenance crews should include an experienced person to simplify and expedite ladder moving. Moving ladders can cause extra work and may lead to additional accidents.



Tripod Ladders

Tripod ladders are designed for soft and uneven terrain. With three legs, they offer the greatest stability. They lack spreaders, locking devices, steel points, and safety shoes. The top of the ladder can be made of a combination of wood or metal.

Tripod ladders have these features:

- Single back leg provides relatively stable support on uneven terrain.
- Steps are at least 27 inches long and should have a metal angle brace.
- Maximum flare on the top to bottom rails (averaging 2-1/4 inches per foot) is required to stabilize the base.
- A wide foot on the rails is provided to control excessive penetration in soft soil.

Improper setup and use of tripod ladders leads to many accidents, including falls:

- The top of a ladder is not a step and should never be used as a step.
- Only one person should be on the ladder at a time.
- This ladder is not a general-purpose ladder and should only be used by a landscape maintenance crew for pruning operations.
- The back of a tripod ladder should be towards the center of the tree or shrub, allowing for additional support if the worker slips.

Closed-Top Ladders

A closed-top ladder has two rails that come together at the top. This closed top makes for an easy fit into a tree limb crotch. The closed top also increases stability. Workers should be sure that the closed top fits securely into the tree limb crotch.

Step Ladder

- Be sure the spreader is locked before you climb on the ladder.
- Never stand on the top or the top step of a stepladder.

Extension and Straight Ladders

- Extension and straight ladders can be safe for tree pruning with optional equipment:
 - ◆ Steel spikes to keep the base from slipping/skidding.
 - ◆ Rubber sleeves on the upper rail sector to reduce branch abrasion and the possibility of slippage along the tree limb.
- Make sure the base of the ladder is level and firmly placed on the ground. Use the Four-to-One Rule for proper positioning: For every 4 feet of rise, the base of the ladder should be 1 foot away from the object the ladder is resting against. For details on the Four-to-One Rule, see the Tailgate Safety Training module *Proper Use of Ladders*.
- Secure the top of the ladder to the tree so it allows access above the branch being cut. Allow for any upward movement of the branch once the branch is cut.
- Never stand on the top three rungs of an extension or straight ladder.
- Always face the ladder and hold onto the side rails with both hands when going up or down.
- Use a safety rope to raise and lower tools.
- Keep your body centered between the rails of the ladder while working.
- Never use a ladder in a strong wind.
- Consider using a full-body harness or safety belt.

Overhead Electrical Hazards

- **Check for overhead power lines!**
- Stay at least 10 feet away from power lines.

- If you work near electrical power lines, always use a wooden or fiberglass ladder. Never use a metal ladder around power lines.
- See the Tailgate Safety Training Module *Overhead Electrical Hazards*.

Review These Important Points

- Tripod ladders are a source of accidents.
- The top of the ladder is not a step.
- The back of a tripod ladder should be aimed toward the tree or shrub center.
- Everyone using a ladder should have proper training before work begins.

About These Modules

The author team for the training modules in the landscape and horticultural tailgate training series includes Dee Jepsen, Program Director, Agricultural Safety and Health, Ohio State University Extension; Michael Wonacott, Research Specialist, Vocational Education; Peter Ling, Greenhouse Specialist; and Thomas Bean, Agricultural Safety Specialist. Modules were developed with funding from the Occupational Safety and Health Administration, U.S. Department of Labor, Grant Number 46E3-HT09.

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Answer Key: 1 = T, 2 = T, 3 = T, 4 = T, 5 = F.

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Name _____

True or False?

- | | | |
|---|---|---|
| 1. Never stand on the top step of a ladder. | T | F |
| 2. Everyone using a ladder should have training. | T | F |
| 3. Moving the ladders as little as possible will save time and prevent accidents. | T | F |
| 4. Landscape maintenance teams should include an experienced person to simplify and expedite ladder moving. | T | F |
| 5. Tripod ladders can be used as a general-purpose ladder. | T | F |