



# Tailgate Safety Training for Landscaping and Horticultural Services

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

## Safe Use of Hand-Held Tools

**Objective: Use hand-held tools safely.**

### *How to Use This Module*

Workers must understand the proper use of hand held tools to avoid accidents. For this module:

- Read the information below on different types of tools and safe practices for each.
- Ask your supervisor to demonstrate the proper use, care, and storage of tools.
- Identify the hand tools you use on the job.
- Practice safe methods for using your hand tools while your supervisor observes.
- Review the important points.
- Take the True/False quiz to check your learning.

## Background

Wrenches, hammers, pliers. Pruning saws and tools. Crowbars, screwdrivers. Hand hooks, files, and scrapers. Each of these tools might be in your toolbox, and each one needs to be used safely, for the right job.

## General Safety Tips

- Personal protective equipment can help prevent injuries. For more information, see these Tailgate Safety Training modules:
  - ◆ *Protective Gloves*
  - ◆ *Personal Eye Protection*
  - ◆ *Protecting the Head*
- Stop working if safety glasses become fogged. Clean glasses until lenses are clear.
- Don't carry sharp or pointed tools in your pocket unless the tool is in a sheath.
- Even better, carry all hand tools in a toolbox or tool belt.

## Wrenches

Use the appropriate size and type wrench for the nut. Is the nut an English or a metric size? Can a closed-end wrench (also called a box-end wrench) be used for a good fit, or is an open-end wrench necessary to reach the nut? Socket wrenches and ratchets allow turning a nut in a tight location. An adjustable wrench must be used

properly; make sure the adjustable jaw faces the operator. Wrenches are manufactured in many sizes with a leverage length appropriate to the size nut to be moved. It is unsafe to use a length of pipe to gain more leverage. Pipe wrenches and locking pliers are not appropriate for use on nuts because a corner of the nut may be broken.

## Hammers

Use the right type of hammer for the specific job. Never strike hardened steel surfaces with a steel hammer. Use a soft metal hammer or one with a plastic, wood, or rawhide head when striking steel surfaces to align or loosen them. Always wear safety glasses to protect your eyes from small pieces of metal that may fly off the hammer or the object being hit. Inspect all hammers carefully, including large sledgehammers, before use to be sure the head is tight and undamaged. Replace damaged handles; make sure the hammer fits the head properly. Wedge the handle securely in the head and make sure it is free of splinters and cracks.

## Pliers

Never substitute pliers for another tool such as a wrench to complete the task. It may cause the bolt heads to become chewed. Pliers cannot grip nuts and bolts securely and will slip. If working with electricity, use hand insulated grips. Make sure the protective coverings are free from cracks or holes. Use a vise when cutting wire with the pliers. Hold the open end of the wire with your free hand, foot, or other means to prevent the cutoff piece from flying through the air.

## Screwdrivers

- Don't use a screwdriver with wet or greasy hands.
- Don't use a screwdriver to test a battery charge.
- Don't use a screwdriver to chisel or pry or punch.
- Pick a screwdriver with the right size and type of head for the screw.
- Make a starting hole for the screw with a nail or a drill.
- Don't hold the work piece against your body. Steady it on a sturdy flat surface.
- Keep your fingers away from the blade while you're using a screwdriver.
- Don't use pliers or a hammer to force the screwdriver.
- For electrical work, use a screwdriver with a blue handle. It is insulated!

## Pruning Equipment

Use caution when using lopping shears, hand shears, pruning or bow saws, and related pruning tools. Accidents can cause amputated fingers, serious cuts, and significant blood loss.

In particular, use caution when pruning overhead. Limbs or the pruning tool can fall on you, and power lines are a real danger. Contact with a power line can electrocute you. For more information, see the Tailgate Safety Training modules *Electrical Shock* and *Tree Pruning, Trimming, and Felling Safety*.

When storing pruning tools, always keep them locked up in the sheaths provided or in other protective housing units to avoid injury to handlers.

## Saws

- Don't use any saw with a dull blade.
- Some saws have adjustable blades — hacksaw, coping saw, keyhole saw, or bow saw. Make sure the blade is taut before using it.
- Keep the saw under control. At the end of the stroke, let up on downward pressure.
- Hold the work piece firmly against your work surface.

- Keep fingers and hands away from the blade while sawing.
- Oil the blade after you use a saw.
- Don't carry a saw by the blade.

## Chisels

- Always use a sharp chisel — not one with a dull cutting blade.
- If the head of the handle is mushroomed, do not use it.
- If possible, hold a chisel with a holder, not your hand.
- Always chisel away from your body.
- Clamp any small work piece in a vise. Chisel toward the stationary jaw.

## Other Tools

- Always use each tool for the specific job intended.
- Crowbars should be used only for jobs that require prying.
- Files must be cleaned with a file card after use. Do not strike the file against another piece of metal.
- Hand hooks must be kept sharp to prevent slipping when in use. They should be stored with the point in cork to reduce accidents.
- Scrapers must be kept in good, sharp condition for best results.

## Review These Important Points

- Use the right tool for the job.
- Always wear safety glasses/goggles to prevent serious eye damage. For more information, see the Tailgate Safety Training module *Personal Eye Protection*.
- It is unsafe to add more leverage to any tool by use of an extension.
- Use the shop vise when the job requires.

## 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 = F, 5 = T.

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*Name* \_\_\_\_\_

### True or False?

1. Keeping hand-held tools in good condition can reduce job-related accidents. T F
2. It is important to wear the proper eye protection when working with hand-held tools to prevent possible eye damage. T F
3. Using the right tool for the intended job will make the task go quicker and safer. T F
4. Crowbars should be substituted for hammers if one is not available. T F
5. Storing all tools in a tool holder or on the tool rack helps keep blades and points sharp. T F