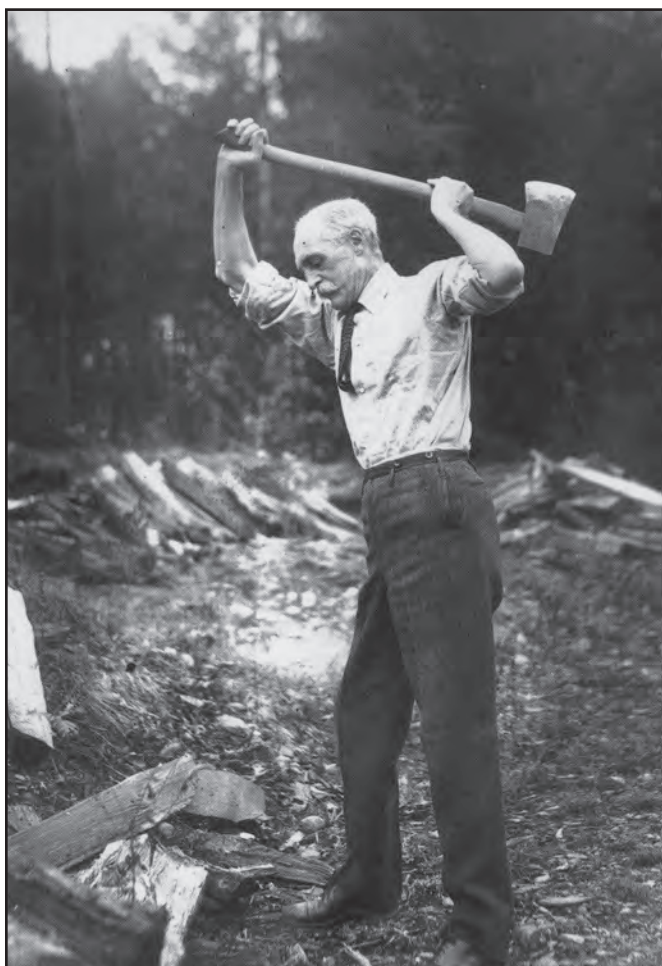


## Chapter 14—Conclusion

The ax is one of the fundamental tools that led to the development of the modern world. As society moves forward at an ever increasing rate, we move further and further away from the traditional skills and tools that helped to build this country.

The Forest Service, other land management agencies, and society as a whole still have a place for traditional skills (figure 14–1); they are not just the working skills that built the country, they are a link to our heritage and to the foundation of who we are as a people. Our ancestors did not lead the glamorous, romantic lives that history sometimes portrays. The work they performed was hard and often dangerous. Those today who choose to learn and master traditional skills help to preserve this heritage for future generations.



As you learn to properly use an ax, a crosscut saw, or any other traditional tool, you learn more than just how to use the tool; you also learn how to think analytically and to solve problems. While the benefits of modern technology are undeniable, they sometimes insulate us from the need to consider how to do a job safely and efficiently. Because axes and other traditional tools are not mechanized, perhaps the greatest benefit they provide is to force us to stop and think before we act. People historically used traditional skills through necessity, but they consequently developed techniques that maximized efficiency and minimized the energy it took to accomplish a task. By learning traditional skills, we gain a greater understanding of cause and effect. This understanding does not just correspond to the use of a tool, but to other aspects of our day-to-day lives.

Figure 14–1—Gifford Pinchot, first Chief of the Forest Service, using a single-bit ax —Courtesy of U.S. Department of Agriculture, Forest Service, Grey Towers National Historic Site



A sharp, well-balanced ax, crosscut saw, or other traditional tool will do most of the hard work if you simply provide a guiding force. Chopping or sawing can be physically demanding, but it doesn't need to be difficult if you don't force the tool and simply allow yourself to become an extension of it. If you learn to develop a rhythm that enables you to move with the tool, focusing on smooth, fluid movements in conjunction with your breathing, you will find the work more enjoyable and rewarding.



*Before enlightenment, chop wood, carry water.  
After enlightenment, chop wood, carry water.*

—Zen quote

### Forest Service Traditional Skills Training

Hopefully this manual will assist you to further your interest and develop your skills in safely using axes and other associated tools. If you wish to learn more about using axes and traditional skills, the Ninemile Wildlands Training Center (figure 14-2) on the Lolo National Forest in Montana offers classes about ax and crosscut saw use. The classes are available to Forest Service employees and the public. The [Ninemile Wildlands Training Center](http://www.fs.usda.gov/detailfull/lolo/home/?cid=STELPRDB5085919) website <<http://www.fs.usda.gov/detailfull/lolo/home/?cid=STELPRDB5085919>> lists class descriptions and schedules.



Figure 14-2—An instructor at the Ninemile Wildlands Training Center presenting a course on ax use.



## Glossary

For a more extensive list of terms associated with axes and edged tools, visit [Yesteryears Tools “Glossary of Terms,”](http://www.yesteryearstools.com/Yesteryears%20Tools/Glossary%3A%20Axes,%20Edge%20Tools,%20etc..html) available at <<http://www.yesteryearstools.com/Yesteryears%20Tools/Glossary%3A%20Axes,%20Edge%20Tools,%20etc..html>>.

### b

**barber chair**—a tree with a heavy lean that splits lengthwise up the stem during felling.

**bird’s mouth**—a large, horizontal “V” cut in the trunk of a tree.

**buck**—cut a log into sections.

### c

**calks (also known as caulks, corks, or corked boots)**—boots with short metal studs in the soles that provide stability and gripping power, especially in wet conditions or when standing on a log.

**cant**—slope. Also a log with at least two riven or sawn sides.

**cant hook**—a traditional logging tool consisting of a wooden handle and a moveable metal hook. Used for handling and turning logs and cants.

**checks**—natural cracks in wood.

**checks (or face)**—the sides of an ax head.

**chop**—use an ax against the grain of wood to separate pieces.

### d

**desiccant**—moisture-absorbing pack used for long-term storage of items.

### f

**file cut**—the roughness or fineness of file teeth.



**glut**—traditionally, a wooden wedge used to “chase” a split down the length of a log.

**grain side**—the smooth side of a leather hide.

**grind**—the area just behind the cutting edge of an ax head.

**hamon line**—the temper line on an ax head.

**heel of an adz**—the end opposite the head.

**keen edge**—the sharper edge of a double-bit ax.

**knob**—the heel of an ax handle.

**peavey**—a wooden-handled steel tool with a sharp point and a hooked arm used to move logs.

**pinning**—metal shavings that build up and clog the cutting teeth of a file.

**poll**—the butt end of a single-bit ax head.

**push filing**—straightforward filing.

**rasp**—a type of file with a series of individual, very coarse teeth.

**redrifting**—reshaping the eye of an ax head.

**runout or cross grain**—grain that does not run the full length of an ax handle.

**rustaroon**—stain made from linseed oil and rust particles/steel filings. Rustaroon primarily stains the lignan in wood, resulting in a lighter color than vinegararoon.



## S

**shoulder**—the portion of an ax handle where it flares to fill the eye of an ax head.

**sound a tree**—check to ensure a tree is sound by thumping it with the poll of an ax.

**split wood**—using a maul (or sometimes an ax) and wedge to separate pieces of wood along the grain.

**spring poles**—bent branches or small saplings held in place by a downed log.

**staggered off jeans**—jeans with the hem removed.

**straightforward filing**—push filing.

**stunt edge**—the thicker edge of a double-bit ax.

**suede side**—the flesh side of a leather hide.

**swarf**—particles of metal released through the stoning process.

## t

**tempered edge**—the hardened edge(s) of a single- or double-bit ax.

## v

**vinegaroon**—a solution made from vinegar and rust particles/steel filings. The solution interacts chemically with lignan while the rust finds its way into the pores of the wood, turning the wood brown.

## w

**wedge kerf**—the slot at the top of an ax handle.





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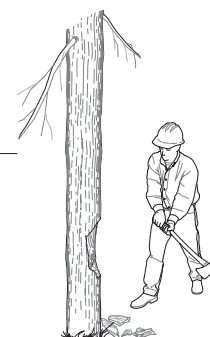
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## Additional Resources

### *General Information*

#### **Abraham Lincoln Presidential Library and Museum**

<https://www2.illinois.gov/alplm/pages/default.aspx>

#### **The-Axe-Hole**

<http://theaxehole.com/>

#### **Early American Industries Association**

<http://www.earlyamericanindustries.org/>

#### **Forest Service Smokejumpers**

<https://www.fs.fed.us/science-technology/fire/smokejumpers>

#### **National Museum of Forest Service History**

<http://www.forestservicemuseum.org/>

#### **National Smokejumper Association**

<http://smokejumpers.com/index.php>

#### **Ninemile Wildlands Training Center**

<http://www.fs.usda.gov/detailfull/lolo/home/?cid=STELPRDB5085919>

#### **Smithsonian Institute, National Museum of American History**

<http://americanhistory.si.edu/>

#### **Stihl Timber Sports**

<http://www.stihlusa.com/stihl-timbersports/>

#### **Tuatahi Racing Axes and Saws**

<http://www.tuatahiaxes.com/>

#### **University of Montana: The Crosscut Sawyer training course**

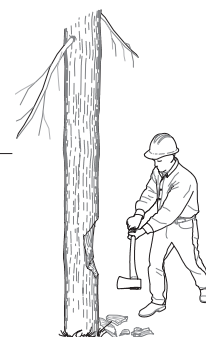
<https://www.campusce.net/umextended/course/course.aspx?c=335>

#### **University of Washington Libraries Digital Collections: Kinsey Collection**

<http://content.lib.washington.edu/clarkkinseyweb/index.html>

#### **Yesteryears Tools**

<http://www.yesteryearstools.com/Yesteryears%20Tools/Home.html>



## ***Ax Handle Manufacturers and Suppliers***

### **Beaver-Tooth Handle Company**

<http://beaver-tooth.com/>

### **House Handle Company**

<https://www.househandle.com/>

### **Omaha Knife**

<https://omahaknife.com/12-axes>

### **Seymour Midwest**

<https://www.seymourmidwest.com/>

### **Tennessee Hickory Products**

<http://www.tennesseehickoryproducts.com/>

## ***Ax Manufacturers and Suppliers***

### **American Ax Manufacturers**

#### **Council Tool**

<http://counciltool.com/>

#### **Whiskey River Art and Trading**

<https://whiskeyrivertrading.com/>

### **Foreign Ax Manufacturers**

#### ***Australia***

**Keech** (distributed by Carson Bosworth—email only)

[carsonbosworth@yahoo.com](mailto:carsonbosworth@yahoo.com)

#### **Snedden's Fencing Products**

<http://www.ruralfencing.com/>



*Canada*

**Magard Ventures, Ltd.** (distributors of Arvika and Oxhead axes)

<http://www.logbuildingtools.ca/contact.html>

*Germany*

**Helko North America**

<http://www.helkonorthamerica.com/>

**Ox-head Ax Company** (distributed by Carson Bosworth—email only)

[carsonbosworth@yahoo.com](mailto:carsonbosworth@yahoo.com)

*New Zealand*

**Tuatahi Racing Axes and Saws**

<https://www.tuatahiaxes.com/>

*Sweden*

**Gransfors Bruk**

<http://www.gransforsbruk.com/en/>

**Wetterlings Axes**

[http://www.wetterlings.se/the/index.php?option=com\\_content&view=article&id=88&Itemid=57](http://www.wetterlings.se/the/index.php?option=com_content&view=article&id=88&Itemid=57)

*Vintage Ax Restorer*

**Northwest Axe Company**

<https://www.nwaxeco.com/pages/about-us>

*Wedge Manufacturer*

**Grandview Aluminum Products, Inc.**

<http://www.gapalum.com/chainsawwedges.html>

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Additional Resources



