Underbucks

Underbucks help hold the saw in position when the saw is cutting from underneath the log. They also act as a fulcrum. A good sawyer can cut as fast—or faster—from underneath a log as from the top. When the sawyer applies a downward pressure on the handle, the saw is forced up into the log.

Axes for Underbucking

Axes are often used to support the saw when underbucking. Axes used for underbucking typically have a straight, but slightly modified 36-inch wooden handle.

You can modify an ax for underbucking by cutting two series of three notches on one side of the handle about 6 inches from the end (figure 41). The grooves are far enough away from your gripping hand that they won't affect you when you chop with the ax. The series of three notches, placed about an inch apart, will allow you to line up one of the notches with the cut. The notches should be 30 to 45 degrees off perpendicular to allow room for the saw between the ax handle and the log. The shallow notches should not be cut into the grip portion of the handle.

Because it has a symmetrical handle, a double-bit ax is often the tool of choice for underbucking. Some less-experienced sawyers like to use a single-bit ax as an underbuck because they can drive the head with a single-jack hammer to better position the ax handle. I prefer the double-bit ax because of the versatility of having two blades.

Often a sawyer will dedicate a less-than-favorite ax to underbucking by flat grinding the cheeks of the ax head to a wedge shape. This shape allows more of the head to stick firmly into the log. This is great for underbucking, but ruins the ax for chopping because the blade sticks on every chop. However, if one blade of a double-bit ax is modified in this way, the other blade will remain usable for chopping.

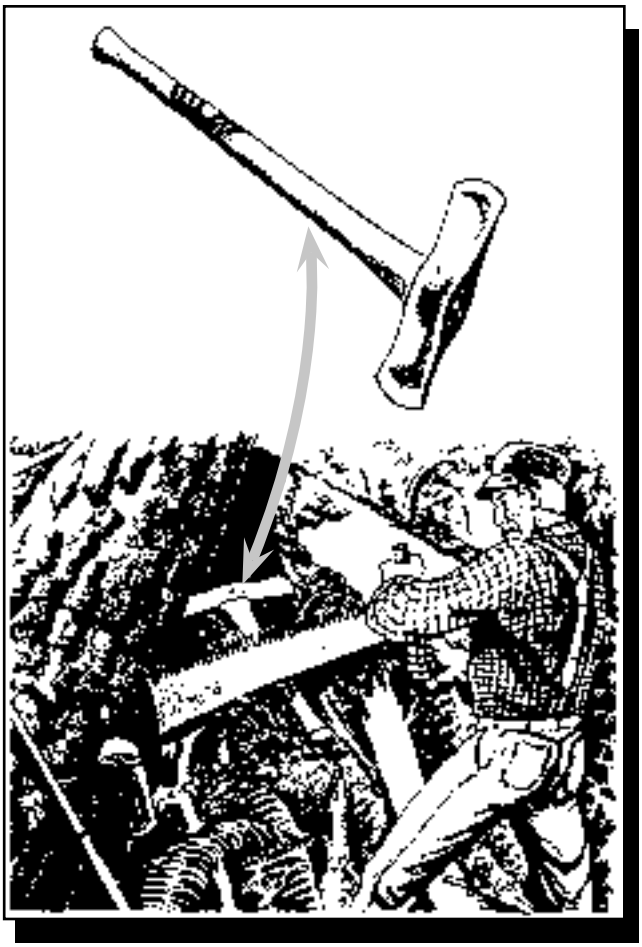

Figure 41—A double-bit ax that has been modified and grooved for underbucking. Usually a less-than-favorite ax was dedicated to this purpose.—Now You're Logging, *by Bus Griffiths, with permission of Harbour Publishing, Madeira Park, BC, Canada*

Figure 42—This vintage mechanical underbuck helps hold the saw up so it can cut from beneath the log. This is one design of many that were available.

Mechanical Underbucks

Sometimes mechanical underbucks (figure 42) are used instead of an ax. Some underbucks attach to an ax, others are sheaves that fit over an ax handle, and still others are

stand-alone tools. Most underbucks have a groove or roller on the end to serve as a guide for the back of the saw. This groove or roller needs to be adjusted properly to align the saw cut.

Vintage underbucks are hard to find. Homemade underbucks are easy to make out of a small leaf spring, a clamp, and a pulley. Custom underbucks also are available.

Mechanical underbucks are thought to increase production because they reduce friction as the saw traveled over the ax handle. But many buckers do not use them because they do not want to pack heavy tools through the woods.

I have a small vintage underbuck that clamps onto the ax handle. It allows the saw back to run in a sheave groove. I believe this lightweight underbuck, coupled with a modified, thinner ax head, is the best solution for much of our trail work.

A MTDC report by Chuck Whitlock, *Crosscut Saw Underbucking Tool* (2002), shows how to fabricate a similar lightweight underbucking tool (figure 43). This new model is not as good as my vintage underbuck. It would benefit by having a larger bearing surface on the ax, and a different clamp tightener that does not interfere with the saw at certain angles.

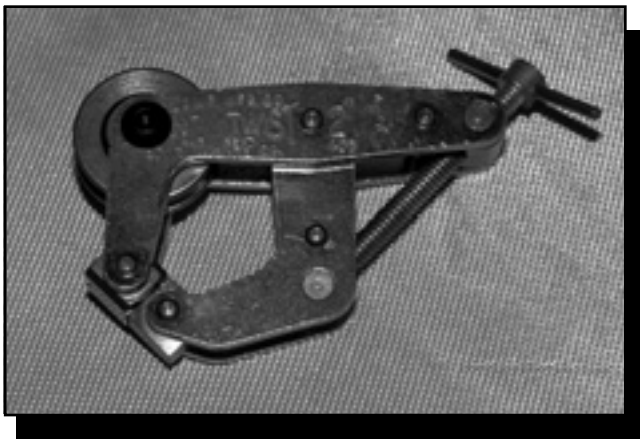

Figure 43—The MTDC underbuck features a 2-inch clamp with a shielded steel pulley. It attaches to an ax handle.