Wedges

Figure 11–54—A wedge with a ridged surface.

Wedges come in different lengths. Make sure to use a wedge that is appropriate for the size of the wood you cut. You may not be able to drive a long wedge deep enough into a small tree to provide the lifting power you need, and you may run up against the back of your saw.

Felling and Bucking Wedges

Felling wedges are tapered on one side and flat on the other side, giving them lifting power. Bucking wedges have a double taper, meaning they taper on both sides. They are better for keeping the kerf open when cutting a downed log in two. The forces on bucking wedges spread out equally between the two sides as you drive the wedge in, preventing the saw blade from binding or pinching.

Felling Wedges

Felling wedges generally have a gentle taper. If they taper too much, they create resistance when you drive them into the kerf. Felling wedges are either single taper, double taper, or triple taper on one side only. Single-taper wedges are easier to drive because they have a lower profile. Double- and triple-taper wedges can provide better lifting capacity. Double- and triple-taper wedges are similar to single-taper wedges, but their tapers increase around the middle of the wedge. Be careful not to confuse the taper of felling and bucking wedges. Felling wedges are always flat on one side to provide lifting power when felling trees, whereas bucking wedges taper on both sides to keep a kerf open while cutting a downed log into segments. You place the flat side of the felling wedge on the bottom of the kerf with the tapered side facing up to lift the tree.

Using a Felling Wedge With a Crosscut Saw

Wedges lift a tree so the tree falls into the undercut. They also prevent the tree from sitting back on the crosscut saw and pinching the blade. When you set the wedge lightly into the back cut, it drops out when the tree starts to move (see figure 11–45). When felling a tree, the sawyer should watch the top of the tree and the back cut for any indication that the tree is moving or about to fall.

Properly placing wedges can have a major effect on the direction a tree falls, but understanding the gravitational dynamics involved requires special training. Do not attempt to fell a tree against its natural lean without proper training.

Bucking Wedges

Use bucking wedges to keep the kerf of a log open while you cut the log (figure 11–55). An 8-inch, double-taper wedge is a good general purpose wedge for most bucking situations. An open kerf is important for preventing a crosscut saw from being pinched, stuck, or possibly bent. Bucking wedges may be made of softer material than felling wedges because bucking wedges do not endure the extreme forces and compression that felling wedges do. Many people use felling wedges for both felling and bucking.

Using a Bucking Wedge with a Crosscut Saw

Drive the bucking wedge into the kerf as soon as the saw allows it. Reset the wedge as necessary to keep the kerf open and the saw running freely.

Figure 11–55—Using a wedge to hold a kerf open on a log.

Figure 11–50—Plastic felling wedges.

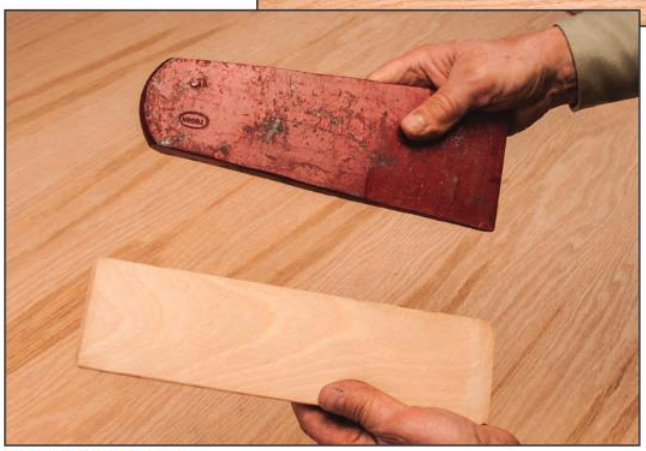

Figure 11–51—A steel wedge (top) and a wooden wedge (bottom).

Some companies make aluminum wedges (figure 11–52) that are acceptable because the softer metal does not damage an ax or saw. Never use a broken or damaged wedge, especially if the back edge is mushroomed (figure 11–53). Mushroomed pieces can break off and cause injury. Wedges come with smooth, textured, or ridged surfaces (figure 11–54). Wedges with smooth surfaces are easier to drive, while wedges with textured or ridged surfaces provide friction that helps to hold the wedges in place.

Figure 11–52—Aluminum wedges.