

Chapter 12—Maintaining an Ax

If you use an ax properly, maintenance is fairly straightforward and simple. There are only two parts to maintain: the head and handle.

Assuming you have followed this manual's instructions and have properly fitted and tuned the ax to meet your needs, you have invested a considerable amount of time in your ax. Proper maintenance is key to proper performance.

Cleaning and Protecting an Ax

It is a good idea to run a fine whetstone over the cutting edge of your ax at the end of the cutting day (figure 12-1). A few swipes are generally all the cutting edge requires. Most experienced axmen carry a

small whetstone to sharpen the cutting edge. If you chop a log, hone the edge as needed.

At the end of the day, clean any dirt or sap off the ax head. Loggers historically used kerosene to remove pitch. Any petroleum-based or citrus-based solvent or cleaner works. If you use a citrus-based cleaner, be sure to remove all residue of the cleaner before storing the ax long term. The acid from citrus-based cleaners can corrode an ax head and cause rust or pitting. If you do not want to use a solvent, you can use a razor scraper, steel wool, or sandpaper. You may only need a rag to clean the ax head if there is no sap to remove (figure 12-2). When working in wet areas, dry off the ax at the end of the day before you put it away.



Figure 12-1—Running a fine whetstone along a cutting edge.



Figure 12-2—Cleaning an ax head with a rag.



After cleaning an ax head, apply a light coat of oil to preserve the head and prevent rust. Petroleum jelly also helps to preserve an ax head and prevent rust, but it is more appropriate for long-term storage. Remember to dispose of oil- or solvent-soaked rags properly. Oil- and solvent-soaked rags thrown in the trash can build up heat and spontaneously combust.

Wax is another popular protectant for an ax head. A fine, paste wax used for furniture, floors, or cars is suitable for ax heads. A combination of linseed oil and beeswax is an old-time method for protecting an ax head.

Inspect the handle for cracks or splitting and replace the handle as needed. A wooden handle shrinks over time, which may cause some minor checking. This should not prevent you from using the ax, but watch checks if they continue to grow (figure 12-3) and replace badly damaged or cracked handles; they are dangerous. Hot, dry climates cause the wood to shrink more. Linseed oil helps prevent the handle from drying out. Use raw or boiled linseed oil to keep the ax handle well oiled. Some people drill a small-diameter hole several inches into the knob of the head and fill the hole with linseed oil (figure 12-4). The author does not use this method, but some of his peers

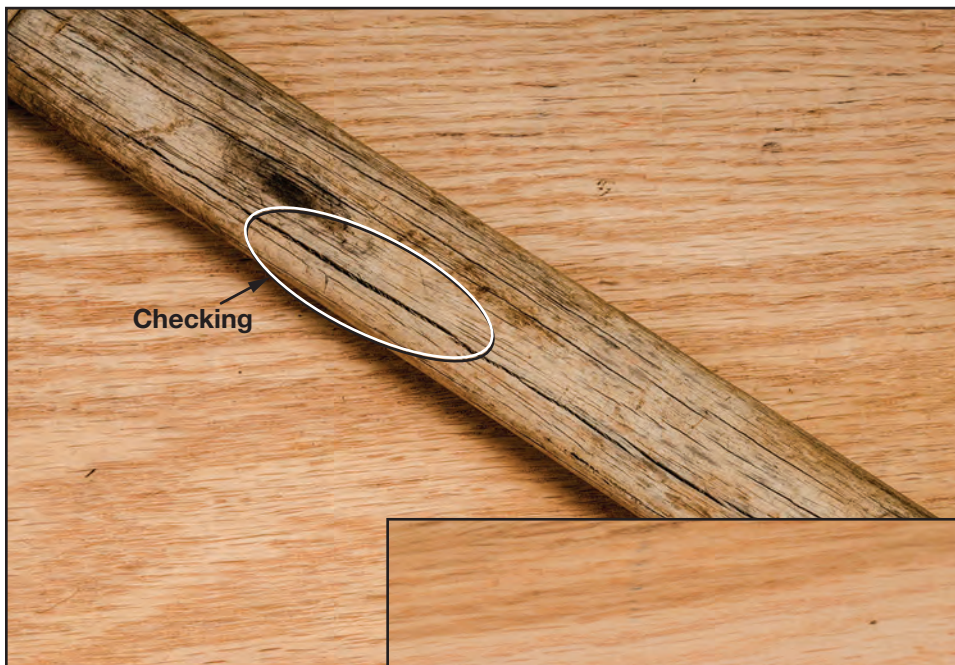
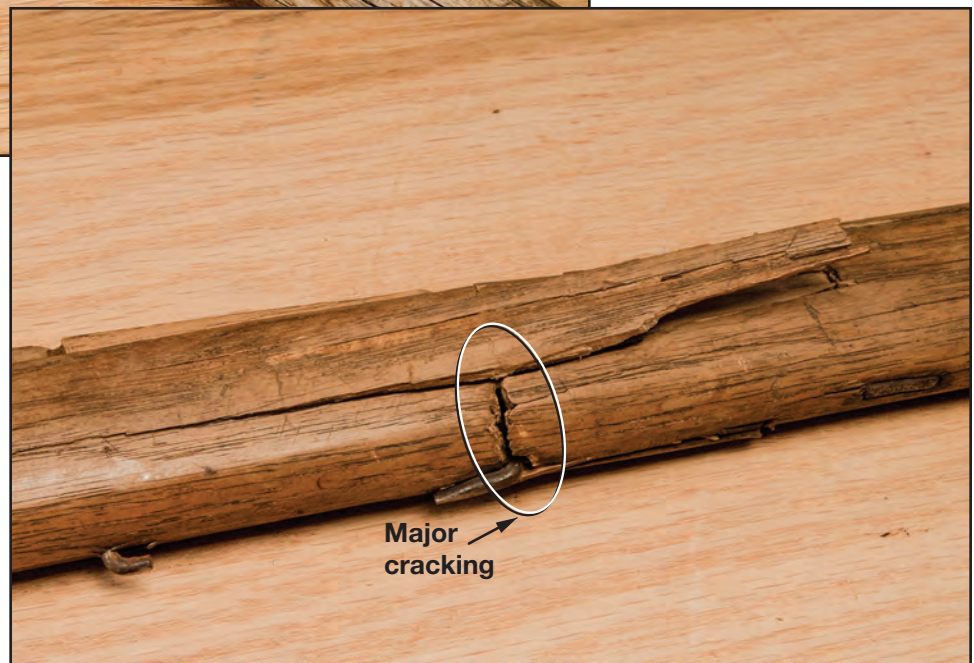


Figure 12-3—An ax handle with checking (left) and an ax handle with major cracking (below).



do. The handle eventually absorbs the oil. Use a short wood screw or wooden plug to cap the hole.

Sand an ax handle with fine grit sandpaper or steel wool as needed. Keeping the belly and back portions of a handle smooth helps prevent splinters or

blisters on your hands. A smooth handle also helps to keep your ax stroke smooth because the handle glides more easily through your hands. You can leave the throat rougher where your fixed hand rests to help prevent the ax from sliding out of your hands (figure 12-5).



Figure 12-4—Drilling a small hole into the knob of an ax handle and filling the hole with linseed oil enables the handle to absorb the oil over time.

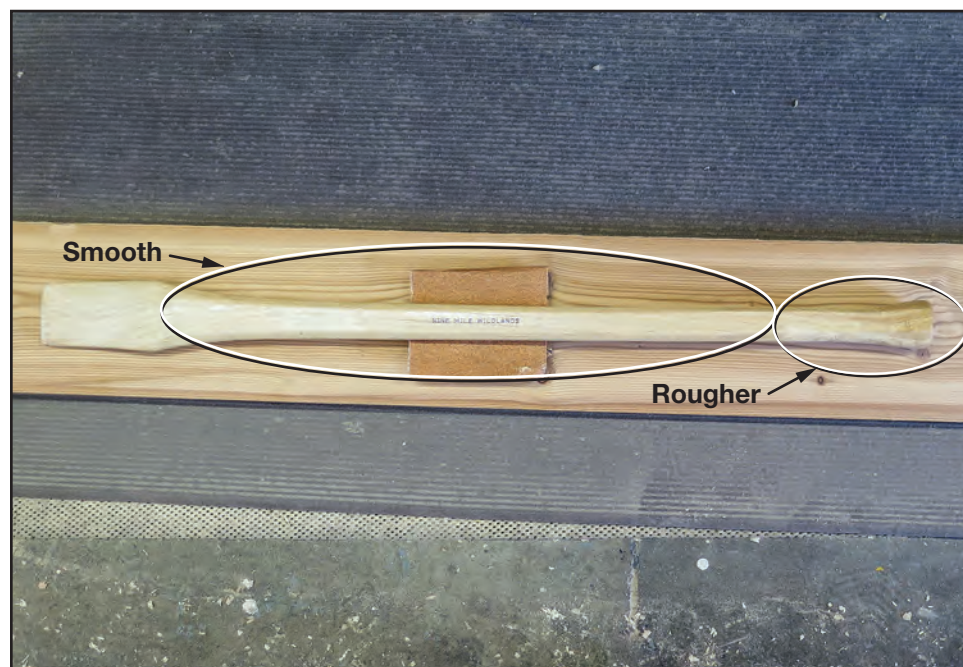
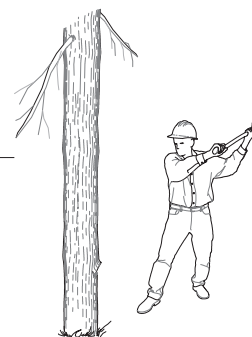


Figure 12-5—Smooth the belly, back, and sides of an ax handle and leave the grip and knob rougher.



Ensure that the ax head and handle are tight. If the head becomes loose, you may be tempted to soak the ax in water to make the handle swell. This temporary fix is ill advised. As the wood inside the eye of the ax head swells, the head constricts the handle, crushing wood fibers that never fully recover. After the handle dries out, the head will be looser than when you started.

The best option for fixing a loose head is resetting the wedge by giving it a few taps with a mallet, or you may have to remove it and replace it with a thicker wedge (figure 12-6). Keep in mind that metal wedges crush fibers and do not expand or contract with the handle, so you should always use wooden wedges. For safety, pin the ax head all the way through the ax handle (figure 12-7).



Figure 12-6—Using a new, thick wooden wedge and a mallet to tighten a loose ax head.



Figure 12-7—An ax head pinned to a handle.



Storing an Ax

Store an ax in a dry (but not arid) environment. A garage, shop, basement, or closet is a suitable place for an ax. If possible, use pegs or hooks to hang the ax so that it hangs straight (figure 12-8). Store axes so that air circulates around the entire tool.

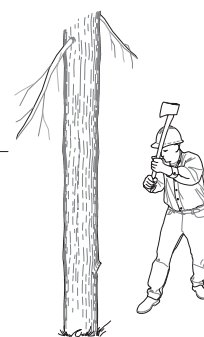
Leaning an ax against a wall may be acceptable for a short time, but is not appropriate for long-term storage. An ax handle leaning against a wall for extended periods can potentially bend due to fluctuations in humidity. If you must lean an ax against a wall for a short period, you should lean it as close to a 90-degree angle as possible (figure 12-9).



Figure 12-8—Axes hung on pegs.



Figure 12-9—Axes leaning against a wall at roughly a 90-degree angle (left) and an ax leaning against a wall at too great an angle (right).



Ideally, you should store an ax in the same environmental conditions in which you use it (e.g., an unheated garage). Some people use ax boxes (figure 12-10) for long-term storage in dry environments. A closed box in a wet environment may retain moisture, requiring a desiccant (moisture-absorbing pack). This may not be the best option in wet or humid areas, which can cause the head to rust. Storing an ax indoors next to a woodstove may be the best option for an ax head, but could cause the handle to dry out and shrink.

Use an ax box or other secure method when transporting axes to the field. In case of an accident or sudden stop, you do not want unsecured axes flying around or out the back of the vehicle. If you do not have an ax box, find another method to safely store or secure the ax for transportation. Also, make sure the ax has a sheath. Keep the sheath on the ax until you get to the worksite.

“[Appendix B—Technical Drawings](#)” provides drawings for a number of different sheaths.



Figure 12-10—Axes in an ax box.

