

Sharpening Knives.

Some thoughts from Dal Birrell.

From the outset, let me assure you that I am no expert on sharpening knives. There are probably as many views on how to sharpen a blade as there are good carpenters & cabinet makers, let alone bow hunters & barbers. This very short article is just one person's experience. I'm always ready to learn more tricks.

It's a good idea to read whatever you can find in good woodwork publications on the subject of selecting whetstones, oil stones & the like, & about the techniques involved in getting angles correct. Finding the recommended sharpening gear can be difficult. Most hardware stores don't carry good sharpening stones, & many have never heard of water stones. You will have to ring specialist suppliers to get what you need.

First let's consider the knives. These can be roughly divided into two groups, those made from hard steel (those that laugh at files) & those made from soft steel (those that are obviously softer than files, e.g. "Green River" & similar) Actually the hardness varies across a continuous range, but thinking "hard" & "soft" works well enough. Hard steel blades take a very fine edge & can hold it for a relatively long time. However, they can take a long time & a lot of care & practice to sharpen to that razor edge. Soft steel on the other hand will not take a razor edge, but will take a nice sharp serrated edge which is relatively quick to form & to resharpen.

A soft steel knife with a fine serrated edge formed by a medium flat bastard file & either a medium steel or diamond hone is about all one needs to skin & butcher a carcass. A few flicks on the steel whenever the edge dulls will keep it sharp for a long time. The finely serrated edge cuts skin, connective tissue & muscle perfectly; often better than a razor edge, & is less likely to "ding" (hole) the skin. Good butchers' knives are of this type. They are relatively cheap & easy to find & to keep sharp. A non-porous handle such as plastic, is preferable to wood because bacteria are not absorbed & therefore not able to cause food poisoning in meat cut up by the knife.

Hard steel knives can be things of beauty & frustration. They are often quite expensive to buy & need more skill to sharpen. I have a number of such knives, both folders & fixed blades, which I've used over many years. Good quality Japanese or Norton water stones or some soft Arkansas in several grits are ideal stones for them. A good compromise would be a combination 600 / 1000 grit Norton water stone. Oil stones are cheaper, but not as good. Stones need to be kept flat by rubbing on "wet & dry" paper on a thick sheet of glass. Once sharpened, these knives usually blunt by turning over rather than wearing away their fine edges. Their edges can be straightened using a fine steel, or much better by using an "etched steel". An etched steel is easily made from a worn out fine flat file, by removing the serrations on a flat oil stone, then after removing all oil & grease, paint on normal iodine (as used for cuts etc). Allow to dry, then gently rub with fine steel wool (the surface rusts). Repeat this treatment about ten times, until you can see that the surface is distinctly etched (although it will feel smooth). Oil to prevent rusting. The knife edge can be "sharpened" by stropping on the etched steel. By not repeatedly regrinding the blade, you save a lot of time & effort, as well as not wearing away the precious blade.

A while ago, I came across a method of sharpening hard steel knives in a magazine article, possibly in the SSAA's "Australian Shooter" magazine. If I could remember the details I'd pay due homage. Basically, the author recommended grinding a finer (reduced angle) edge than the 25° usually recommended, on a stone, & then simply finishing with a steel. A hollow ground knife can be laid "flat" on the stone for grinding, with both the edge & the top of the hollow wearing away. This gives a very even angle along the blade. Well, I had an old G96 hollow ground knife with which I was never happy. It isn't hard enough, or the blade is too thick to form a proper cutting angle, & I could never get it sharp enough. The

method worked so well on that blade that I've used it on a couple more hard knives, including two "Puma" folders with excellent results.



Enlargement of a soft blade, showing file marks & steeled edge at the top.



Section of a hard hollow ground blade sharpened as described in the last paragraph.