

Outdoor Tip of the Week Knife Sharpening

Why do you need to sharpen knives? A sharp knife stands less chance of slipping on the material being cut and, because it requires less effort and force to use than a dull knife, you're less likely to cut yourself. Working with a sharp knife is faster and easier, too. It also damages the material being cut less.



When should you sharpen? Most knives don't come sharp. That's because the final few degrees between being able to slice butter and being able to slice paper without effort isn't often achieved with a machine and most knives are produced by those, in a factory. So, sharpening is the first thing you need to do when you buy one.

You can easily tell the difference between a very dull knife and a sharp one, but how do you divine degrees of sharpness once it's sharp enough to cut you? In my experience, testing the blade a sheet of paper is the easiest way.

A note on safety: Never run your finger along a knife blade.

With little to no pressure, run the knife down the edge of a piece of paper held in your hand. A good, heavy-use outdoors blade, pocket knife or kitchen utensil should be sharp enough to easily cut the paper. At this point, the edge is sharp enough for any job and a quality knife will be capable of holding this edge with little maintenance for some time. Making the knife sharper involves diminishing returns on your labor and creates an edge which can be a little delicate. But, if you want to try and make your knife as sharp as possible — a good idea on paring knives and other small blades used for detail work — then you'll want it capable of cutting the paper when held over the upright blade.

The sharper your knife is, the cleaner the slices it'll make and the easier it'll make them.

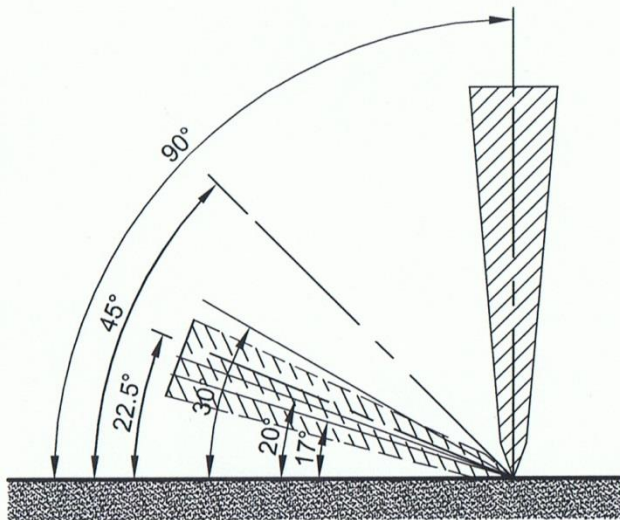
Decide how sharp you'd like a particular knife to be, then try to keep it in that condition. How you do that is covered below.

Whetstones: The oldest and simplest way to sharpen a knife remains as effective now as it was when your grandfather was a Boy Scout.

The basic idea in all knife sharpening is to maintain a consistent angle of contact between the knife and the sharpening medium. You want to sharpen at the same angle your knife came with from the factory. On most quality outdoors blades, that's 20 degrees on each side. 20 degrees will give you a good, strong edge that's not prone to rolling.

What about other blades: an axe, filet knife or x-acto blade? Generally, try to match the angle of the blade as it came to you as new. Otherwise a good rule of thumb is 30 degrees for an axe or machete, 17 degrees for a filet knife, and 12 degrees for razor and X-acto knives.

How to fine the right angle? Start with the knife blade perpendicular to the sharpening stone. Lower it to half the distance to the stone: 45 degrees, half it again: 22 ½ degrees. Move it up a little for an axe, a little lower for a filet knife. Half of the 22 ½ degrees will get you the right angle for the razor.



Where more complex systems help you maintain that 20-degree angle, a wet stone requires you to employ sight and feel. If you're new to this, the best shortcut I can give you is a Sharpie. Use one to color in the knife's bevel — the angled portion of its blade at the bottom, leading up to the edge. Do a couple swipes of the knife on the stone and then examine your edge. If all the Sharpie mark is gone, you're at the correct angle. If there's marker remaining on the top of the edge, it means you're holding the back of the knife too high. If there's marker on the bottom of the edge, where you're trying to sharpen, then you're holding the knife too flat. This method works equally well on other types of sharpeners too.

To use a wet stone, always move the knife edge-first across the stone. Hilt to tip or tip to hilt, it doesn't matter. What does matter is light, even pressure, little more than the weight of the knife. Don't let the tip roll off the end of the stone, this can blunt or damage it.

To sharpen the knife evenly, count your strokes and do the same number on each side. I typically do 20 strokes on one side, 20 on the other, then evaluate the results.

Wet stones are called that because you need to apply a little bit of oil, or water to them, which carries away the microscopic metal shavings you produce by grinding at the edge.

Mouse Pads And Sandpaper: A cheaper, but also very effective method for knife sharpening is to affix sandpaper to an old mouse pad and draw the knife along the paper again at the correct angle, but using a trailing stroke, where you're pulling the edge away from you, the opposite of using a stone or rods; the sponginess of the pad is what makes that possible.

You can use this method for primary knife sharpening or to put the final touch on a blade after you've used a stone. If you're starting with a dull knife, use a medium grit sandpaper like an 800 and work up to a fine grit like a 1200. If you're just putting the final touches on a blade, start with 1200.

The trailing stroke is great at removing the small burs stones leave on edges.

Stropping: The key to no pressure sharpness and a step most people miss. It's also designed to remove any burr or false wire-edge (basically a straight, perfectly aligned burr) and it's what barbers are doing when they run their straight razors up and down leather belts.

You can do it that simply, with an old belt and a trailing stroke. If your maniacal about a sharper than sharp blade, it's worth the time, the results can be phenomenal.

Pull-Through Sharpeners: You'll see these both for kitchen knives and for field sharpening outdoors blades. I don't recommend them, they can pinch the blade, creating burrs, never produce terrible sharp or consistent results and can be very hard to clean the steel residue off of.

Knife Guys: Taking your knives to a guy who sharpens them for a living can be a great idea if you've got a very dull blade, a damaged edge or just too many knives and too little time. A local butcher, market, or any good outdoors store should also be able to sharpen blades at the knife counter.

These guys use grinding wheels or belt sanders to quickly and easily put a solid working edge on a knife. You can use these machines too, but be warned, they take off a lot of steel very quickly, leaving little room for error. You need to be able to maintain that consistent edge angle while using one and while holding the knife securely, so it isn't flung into yours or someone else's eye.

Don't forget to strop your knife when you get it back, if that's important to you.

Scissors: Scissors need sharpening too. To do that, fold up a piece of aluminum foil and cut it to bits. Job done.

The real trick to sharpening a knife is consistency and patience. Maintain that consistent angle, don't be tempted to press hard, open a beer, turn on the TV and settle in for a solid hour or two of Zen-like meditation. And don't be afraid to take it to an expert if you're stuck.