

# Basic Knife Sharpening Methods

By Kingpin

**Keeping your tools in good shape**

To start off with, let me qualify this article. There are plenty of people in the Rubicon who are very well qualified to talk about knives. I know enough about knives to keep mine as sharp as I want, but I am by no means an expert. One of the best places to learn about knives is the rec.guns newsgroup. If you want to learn anything about knives, spend a while reading the posts there.

It is my opinion that everyone who uses a knife should be able to keep it sharp. There are many different methods of sharpening a knife, and some require no skill at all. A blunt knife is a dangerous tool.

The most commonly used tool to sharpen a knife is a stone. Stones are graded according to how rough they are. Some typical descriptions are 'coarse', 'medium', 'fine', and 'ultra-fine'. Stones can also be described by grit numbers. The higher the number, the finer the stone. There are also different types of stone, such as diamond stones. These sharpen more aggressively, giving a quicker result at the cost of wearing away more of the blade. If you rub your knife along a stone, the stone scrapes particles of metal off the knife blade. The smoother the stone, the more polished the edge will eventually be.

Having a knife 'Razor-sharp' is not always a good thing.

A knife must always be kept sharp to keep it useful, but the degree of polish of the blade should be determined by the most likely use for the knife. For slicing precisely, where you want a clean slice, you should use a polished edge. This would be for shaving, surgery, or making slits in plastic or material. For cutting through fibrous material, such as rope, fabric, or vegetables, a rough edge works best. If you use a medium stone to sharpen your blade, the blade will have microscopic serrations that will hook and tear the microscopic fibres of whatever it is you are cutting.

## *Consistency*

When sharpening a blade, the most important thing is CONSISTENCY. You must hold the blade at exactly the same angle for every stroke you make. If you don't, the edge will not be uniformly flat, and the blade will not cut effectively.

If you want to check how consistently you hold your blade, the acid test is to make it shaving sharp. Use a fine stone and sharpen your blade. If you can get it sharp enough that the hair just falls away from the blade, then you are holding your blade consistently. If you can't get it this sharp, RELAX! It took me a long time to get to this stage.

Consistency comes with practise. If you regularly sharpen knives, you will become more and more consistent, and, with time, you will be able to get a shaving sharp edge. The more often you sharpen your blades, the quicker you will improve your skills.

## *Using a Stone*

There are a few methods of using a stone.

### *Slicing*

To sharpen a knife quickly, 'slice' it across the stone. The blade is held at the correct angle and sliced across the stone as if you were trying to slice the blade through the stone. **Caution:** This is an easy way to screw up the edge of your knife, and scratch the blade.

This is a good, quick method for when you need a knife sharpened quickly, such as when you are skinning and butchering a deer. It will not give you the same quality edge that the slower, more careful methods will give you. To learn to sharpen like this take an old knife and try it several times, until you are confident that it works. Only then should you try your 'good' knives.

### *Sharpening Kits*

To sharpen a knife without learning any new mechanical skills, try one of the Lansky sharpening sets. These clamp onto the knife blade, and hold the stone at a pre-set angle. All that the user needs to do is swipe the stone across the blade, and it sharpens the edge at the given angle. This is simple, quick, and effective.

### *Freehand Sharpening*

To tailor the edge to your purposes, freehand sharpening is an excellent skill to learn. As with all skills, it is not easily acquired. With freehand sharpening, you stroke the blade along a stone without any mechanical aids to help you hold the angle consistently. When you sharpen a knife, the essential requirement is to hold the angle consistently, so sharpening a knife this way is understandably more difficult than using mechanical aids.

The quality of edge that can be achieved by this method is excellent. You can vary the angle and roughness of the final edge, and in addition you can also put different angles and polishes on different parts of the blade. This lets you tailor your knife to your particular situation. You could have the base coarse for cutting rope, the tip with a thick wedge so that it doesn't easily chip, and the middle curve razor sharp for slitting material.

It is essential that you hold the blade consistently. [Seeing a pattern yet?]. Without this, the edge will either take all day to sharpen, or will simply get blunter.

The method I use is to index the back of the blade against my finger for one sharpening stroke, and to index it against my thumb for the opposite stroke. After doing this for a while you will learn where on the finger to place the blade for a particular angle. This produces a uniform angle for each stroke and ensures that you don't start drifting away from the right angle.

You will always *push* the blade along the stone. Pulling it doesn't give as good an edge.

Work on one side of the blade until you've sharpened it enough.

How do you know when you've sharpened enough? If you look along the top side of the blade (the side that wasn't in contact with the stone), you will see a thin line along the very edge of the top side of the blade. This is known as a burr. When you push the blade forward, some metal is scraped off onto the stone, and some curls back onto the top of the opposite edge. If you are using a rough stone, particularly with soft blades, you will be able to feel the burr with a fingernail. The reason that a consistent burr indicates that you've sharpened enough is that the burr will only form when there is complete contact between the edge and the stone. This indicates that you've taken just enough metal off to make the edge smooth. Any less and there's no guarantee that the edge is straight, any more and you're wasting metal. When there is a uniform burr along the ENTIRE edge that you've been sharpening, it is time to turn the blade over and work on the other side.

Once you have a consistent burr on the other side, it is time to begin alternating strokes. Do one or two strokes on each side before turning the blade over. After doing this for a while, you can start to lighten your strokes, or switch to a finer stone if you want a more polished edge.

Achieving a razor sharp blade can take a lot of sharpening. Half an hour of work on a fine stone will usually give you an edge that hair just falls away from, but it can easily take longer than this, depending on your skill, the size of the blade, the previous state of the blade, and on exactly how sharp you want it to be.

Sharpening a blade until it is hair-poppingly sharp is a great achievement. If you can consistently get your blades this sharp, then you can consider yourself an accomplished sharpener.