

Outdoor Skills**Stone-Age Survival**

How to make emergency implements in the field.

by Keith McCafferty

The tools used by our ancestors are typically thought of as crude and rudimentary. But the stone knives, axes, and spears produced by Neolithic cultures are near equals of their modern counterparts in both form and function. In fact, today's sharpest surgical scalpels are made not from steel but from obsidian flakes so fine that they can slice between, rather than through, human cells.

What does this mean for a sportsman? Nothing much, right up until the day you find yourself lost in the wild with no survival tools except those you can fashion from what's around you. With a little know-how, even the woodshop-challenged ought to be able to reduce the stones at his feet into knives that can be used to slay, skin, and dress game animals and fish. Stone blades also come in handy for peeling bark to make cordage, and sawing and whittling other survival tools. They can easily be transformed into efficient axes and spears.

Generally, fine-grained rocks with glassy appearances, like chert and obsidian, will flake into the sharpest blades, perfect for slicing and cutting. However, these are more likely to break apart from repeated use than coarser-grained rocks such as quartzite and rhyolite, which can also be made acceptably sharp.

Discoïdal Stone Knife

Discoïdal stone knives, made by smashing two stones together, are the simplest to make. Look for a smooth, oval-shaped stone with fine pores, such as the quartzite or dark basalt cobbles found along most riverbeds. Then, hold the smooth stone with both hands over a larger rock. Whack the stone an inch or two from its end against the other rock. (Wear glasses if you have them or shut your eyes at the moment of impact.) Recover the sheared end pieces of stone, which should be disk-shaped and sharp along the edge. Use disks 2 or 3 inches across as knife blades. Larger fragments can be used to cut wood or bound to a handle to make an axe.

Chipped-Stone Knife and Spear

Blades chipped from cryptocrystalline rocks such as chert and obsidian are extremely sharp. They are best for arrowheads, spear points, and fine-slicing knives. You can strike flakes from an 8-inch oblong obsidian or chert stone by hitting it with a harder rock. Some of the flakes will be suitable as is for knives.

To make a spear, notch the end of a straight-grained wood stave, place the end of the chipped-stone knife blade in the notch, and bind the end securely with shoelaces, strips cut from clothing, or whatever you have handy.

Stone Axe

This is the most versatile primitive tool, useful for chopping wood and dispatching trapped game, and for throwing at flocked birds or running animals.

To make one, take a discoïdal blade the appropriate size and shape for an axe head. Alternatively, batter a coarse piece of granite or basalt into rough shape by pounding it with other stones and then grind and sand it against smooth stones to produce an edge.

Then make a circular groove along both faces, near the dull edge, by chipping at it with another stone. The handle ends will sit in this channel. Select a piece of straight-grained hardwood the proper length and thickness for a handle. Split the end of the stick, wedge in the axe head where the groove is, and bind them together. You can also shave one end of the stick, loop it back over the head, and lash the end to the shaft.

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