

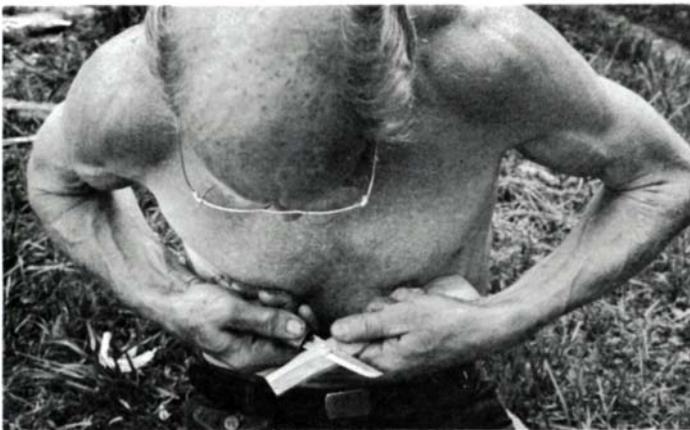
Knife Work

Make the knife and carve a spoon

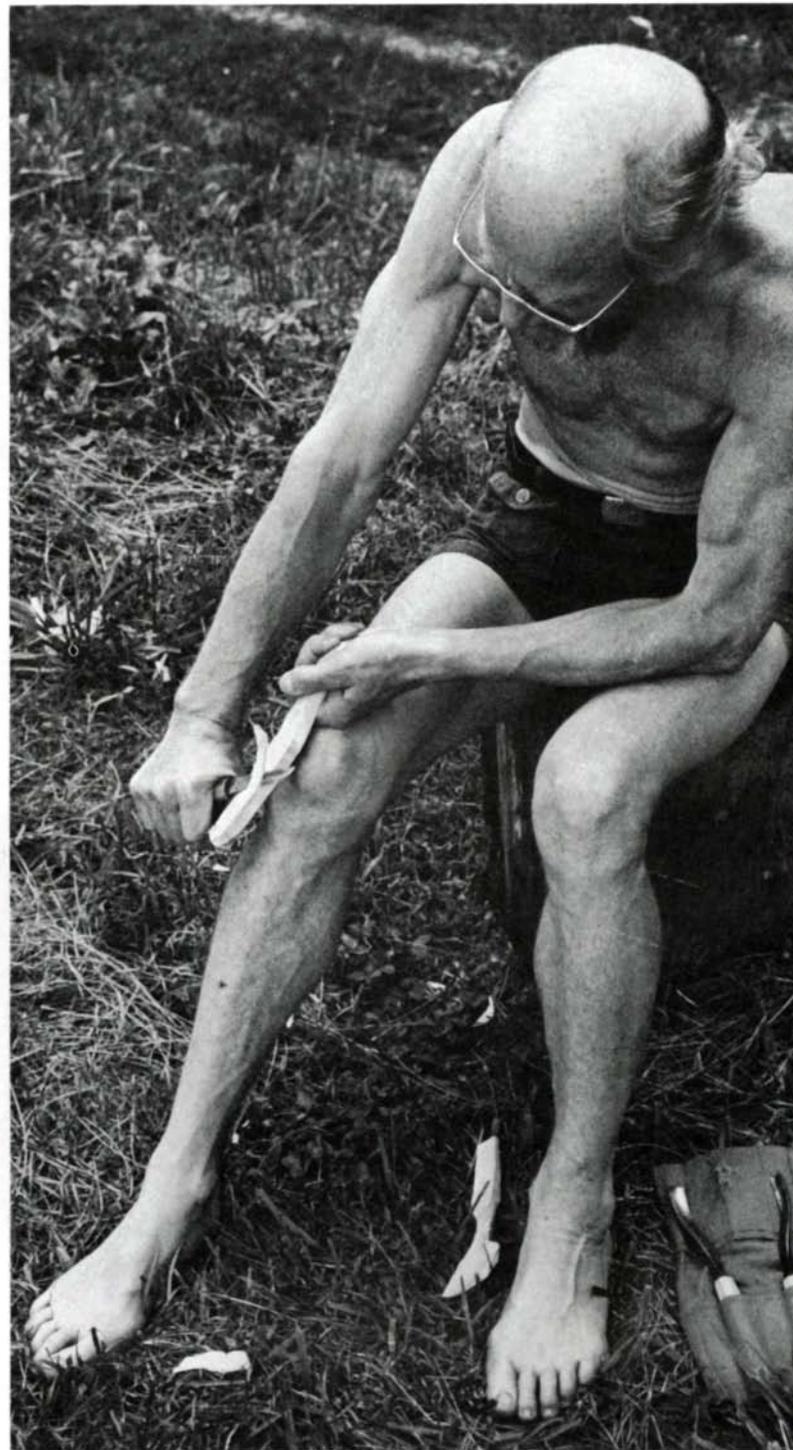
by Rick Mastelli

Winter nights are long in Sweden. When farmers go into the forest to cut the year's firewood, they make a point of also collecting bent limbs and crotches, blanks from which to whittle spoons in the evening months. In rural Sweden many men still wear knives, not as weapons but as ready tools, and it is part of the ritual of conversation to punctuate a sentence with a shaving from a stick. In some parts of the world whittlers carve figures or ornaments, and there are always some who just make chips. In Sweden spoons are traditional, and still popular. The centuries have yielded a deep understanding of hand-tool techniques, as well as of the form of the wooden spoon—together they evidence a refined simplicity.

A week-long workshop I attended last summer focused on these hand-tool techniques. The place was Country Workshops in Marshall, N.C., and the teacher was Wille Sundqvist, a wiry, 57-year-old Swede whose relationship to craft is long and thorough. As a boy he learned to carve by watching his father and grandfather, both of them farmers and winter woodworkers. When he was six years old, he discovered the first principle of knife work while squabbling with his brother. His brother grabbed the knife's handle and he gripped the blade, and when they pulled, he learned indelibly how knives slice. At 20 Sundqvist hurt his back in a forest accident, and so had to find a career other than farming. He went to wood-



Sundqvist uses innumerable knife grips and strokes. These two are among his most powerful, because they slice away from the body and require no 'safety stop' to protect the carver from the blade. At right, the hand that holds the blank rigid is lodged above the kneecap. The knife is held at an angle in the hand such that the stroke leads with the handle, the tip of the blade trails. The slice is powered from the shoulder and back, with elbow and wrist locked. Above, the slice is also from the handle toward the tip, but here leverage against the chest helps power it.



Photos: Rick Mastelli and Drew Langner



Sundqvist demonstrates the grip and stance for grinding an ax. The backing board helps to maintain even pressure on the ax head as it is run diagonally over the grindstone.

working school, where he apprenticed with the illustrious furniture designer Carl Malmsten. Later he taught woodworking at Malmsten's school, and in various elementary and preschool programs, then for ten years he taught others to be woodworking teachers. Since 1969 Sundqvist has been consultant to the Handcraft Society in the province of Västerbotten, researching traditional handcrafts and helping the disabled and the elderly become productive craft workers.

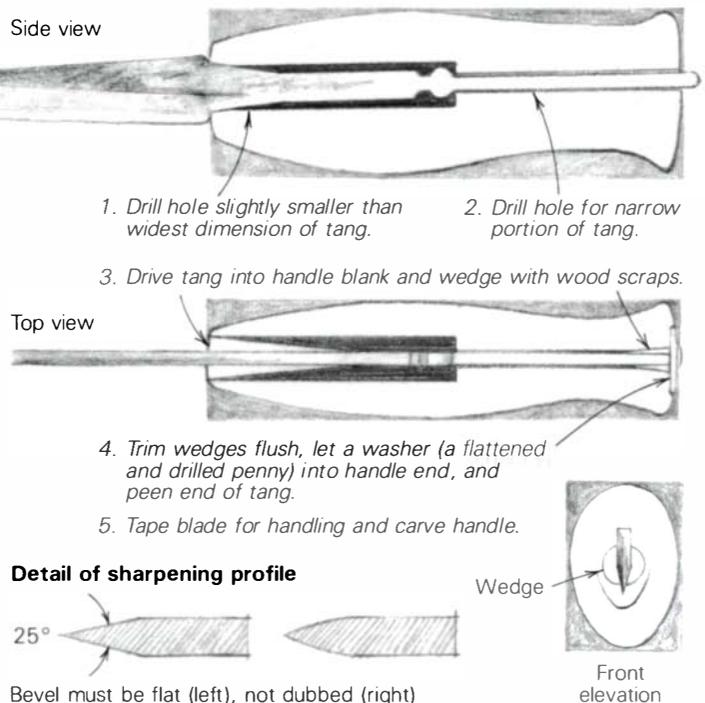
In Sundqvist's hands, ax and knife are powerful, precise tools. Throughout the week at Country Workshops we ten students were awed. Sundqvist could waste thick, measured slabs from an ornery dogwood branch, or with the same surety scribe vigorous detail into a spoon handle. Every inch of the knife blade or ax edge, every contour of their handles, had its purpose and right use. He showed us a profuse variety of traditional grips and strokes—useful not only because they direct the cut but also because they provide built-in safety stops, in that the cuts end when part of the hand or arm comes in contact with the work (or part of the carver's body), thus keeping the knife from slicing flesh. When you are sure of your stop, you can work with confidence and direct more energy into the cut. Not only his hands, but the whole of his body worked. Barefoot, shirtless, in shorts, he showed the interaction between thrust and safety stop, brace and swing, grip and lever. He did not say much; English does not come easy for him. We learned by watching him work.

It's shocking how much we modern craftsmen underestimate the basic tools. Knives sold for carving come with spindly handles and stubby blades, their bevels dubbed round by the buffing wheel. Axes are sold with their bevels made bulbous by a sanding belt, and with handles so skinny that your fingers bottom out on your palm. No wonder we figure these tools are good only for hacking at firewood. The quality of an

artisan's work increases directly with his understanding of and respect for his tools. Thus Sundqvist began by having us make knives. We spent a full day fitting a 3½-in. long, laminated Swedish steel blade into a chunk of applewood, then shaping the wood to fit our own hands. We took another day fitting the knife into a wooden sheath with a leather collar we sewed wet around the knife's handle. After the leather dried and shrank, the knife could be eased out and snapped securely back into place, and afterward it hung from our belts to remind us how handy a knife can be.

We sharpened our tools so there was no rounding at the edge, and no secondary microbevel, for the surfaces that produce the edge have to be flat. Dubbing is right for edges that are meant to split wood; dubbing keeps the tool from sticking in the wood. And a microbevel is okay for a chisel, whose flat back registers the cutting edge. But for a knife, the bevel itself is that registration plane. When it is flat on the wood surface, the edge must be there too, ready to cut. These blades were manufactured by Erik Frost in Sweden and are called Sloyd knives by most woodworking supply outlets. You can see the lamination line halfway up the bevel. The softer steel sandwiching the harder makes the knife less brittle and easier to sharpen. We sharpened to a greater angle than is usually recommended: 25° for knives and gouges, 28° for axes. For knives, the bevels on either side of the blade are equal. For axes, if you are right-handed, you sharpen the left-hand bevel longer than the right, for more surface with which to guide the cut. Axes can be honed by moving the ax head over a stationary stone, but I found it easier to clamp the ax upright in a vise and move the stone over the bevels in small circles. Sundqvist showed us how to keep our eye on the bevel opposite the stone, looking for a thin line of honing oil to be scraped off the stone's surface and to run down the edge. Maintain the finest flow of oil, and your bevel will be flat. This technique also works for honing the carving gouges used to hollow the bowls of spoons. You hold the tool upright in one hand, bevel away from you, and rub the face of a stone

Fig. 1: Plans for a Sloyd knife handle





Making a spoon begins with a green crook that you split at the pith using the ax, driven by a maul, as a wedge (above). The top and bottom of the spoon are shaped first (above right), then the sides (right). Careful, measured strokes, always aimed below the hand that holds the blank, define the basic shape.

up and down, flat against the bevel. Rotate the tool slowly back and forth to present the whole of the bevel to the slip stone, all the while looking for the dribble of oil to leak over the edge. To remove the burr, slip the round edge of the stone up and down, flat against the inside of the gouge.

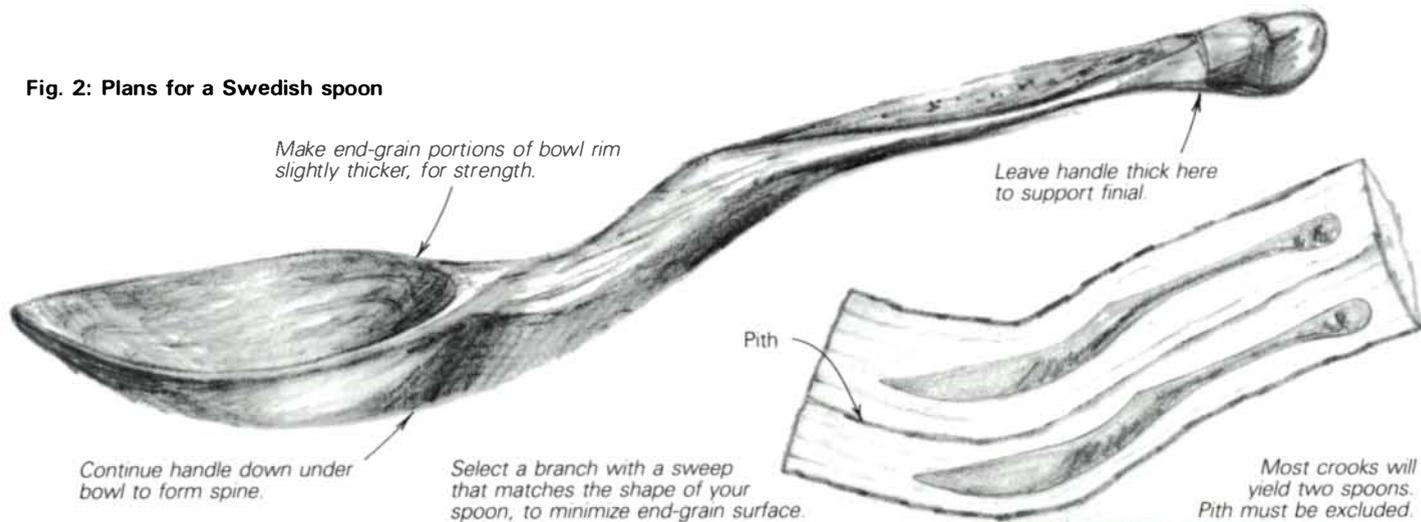
Any close-grained, dense wood will make a good spoon. The natural curves of branches make for a stronger utensil, because the grain can follow the shape. We had a pile of green crooks and crotches to work: rhododendron, dogwood, black birch, apple. At times it seemed that the spoons we were making were only vehicles for practice with knife and gouge. Eventually the tool and hand would work effortlessly for a while, and the infinite possibilities of the spoon would replace the challenge of simply using the tools. How make a lump of wood hold food, be comfortable to the hand and mouth, please the eye, enjoy use? The bowl of the spoon needs to be thin, to fit the lips, and so for strength it ought be oriented to minimize end grain. The stem of the spoon should position the bowl below the plane of the handle, and to satisfy the eye it should be narrow, so for strength it ought be thick and continue down like a spine, supporting the bowl. The top of the handle should be thin, to fit the hand, so for strength and visual balance it should be wide. A wide

surface calls for decoration, so at the top ("to keep the eye from flying off," as Sundqvist puts it) you need a finial. Making a spoon, you learn how deep is the challenge—design that is infinite with possibilities, all coordinated by tradition and function. Suddenly, the wooden spoons you buy at the supermarket are two-dimensional.

It's surprising how much like a spoon you can shape a branch with only an ax. First the ax splits the branch in half (you drive it with a maul, like a wedge), to ensure that the pith will not be part of the spoon. The trick for the rest of the ax work is to support the blank solidly on the chopping block and far enough forward so that an overswing will not end in your leg. Hold the blank so that the thrust of the stroke is below your fingers. You shape the side view of the spoon first, including most of the bottom of the bowl, then you define the outline of the bowl and handle. This order gives you more stock to hold on to longer. The strokes that shape the stem near the beginning of the bowl are the most critical, because an overswing here can easily crack the bowl. For a more mincing stroke, you hold the ax closer to its head.

Now you sit down with your knife and a couple of gouges. The green wood cuts like cheese. The diverse grips for safe, forceful knife and gouge work are recorded in the photos of

Fig. 2: Plans for a Swedish spoon



Most of us pare by slicing from the stout end of a knife toward the tip. Sundqvist gets greater power arcing the blade from tip to handle, often using his thumb for leverage. Each stroke has its safety. Above, the thumb is held out of the knife's direction on the spoon end. At right, Sundqvist modifies this stroke to slim the middle of the spoon's handle by repositioning the thumb 90° to the stroke and rotating the knife in the palm about 30° toward the blank. Short, arced strokes stop before the thumb is touched.



It doesn't take long to shape the blank with the knife before it's time to hollow the bowl. Gripping the gouge as shown at left keeps the stroke short and safe. Most of the strokes are cross-grain, and they stop when the hand contacts the spoon. The rim of the bowl calls for special grips. The knife grip above may look dangerous, but it has its safety and is surprisingly controlled. The trick here is to put your little finger on the flat of the blade, which positions the beel of the hand along the back. Then both arms are braced against the ribs, and the hands move together like a pair of scissors. With the wrist cocked, it is not possible for the knife to reach the body.



These two strokes are both powered by the hand not holding the knife. They show how Sundqvist uses the whole length of the blade: the stout portion for heavy cuts, the tip for fine work. At top is the still-green blank. Wet wood is easier to shape, but to smooth the surface, the spoon is first dried overnight. Dry wood, above, frays less.



Gift spoons warrant decoration. Sundqvist first pencils in the shapes and letters, then uses the tip of the knife locked at about 60° to the surface, first in one direction, then the other, to remove a triangular chip of whatever length.

Sundqvist at work. Most of these positions feel strange at first, but by the time the calluses form, you have a physical memory. Your body reaches for the necessary posture to handle that excess of wood at the rim. For the underside of the handle, it reaches for another position. You don't think about it, you feel for it. But each time before you power the stroke, you think, *where is this edge going to stop?*, and you balance the tensions, or you adjust your hands so the edge doesn't end in your flesh. It's absorbing work. The conversations I enjoyed late into the night, unable to release my work for the day, were indeed punctuated with shavings.

When the shape of the spoon is there, you rub the blank with a boiled potato to fill the pores and forestall checking. The blank dries over the stove until morning. Green wood is easy to carve, but it is trouble to smooth. The next day you lightly go over your dry blank with the knife, and then you sand, until your spoon is fit for hand and lip.

Sundqvist was a remarkable teacher. He would devote himself entirely to one student at a time. He would listen to your question or watch you work for a moment. Then, unable to tell you what to do, he would show you. It was unnecessary to explain to him what shape you had in mind. He would see it in the blank. It may have taken you half a day to realize what you were doing, but he knew in half a minute—you would see what force could be exercised, how much wood could be made to disappear, if only you held the knife *this* way. It was unnerving at first to hand over that precious lump of wood, with all your feeble little nicks in it, and then watch great chunks of it fly. But it was your own vision Sundqvist handed you back. And then he would hold your hands in his and shape them to the task.

He cared about every piece of worked wood. The more effort that had gone into it, the more valuable it became. There were no mistakes we could make nor defects in the wood we could uncover that did not summon his healing energies. I watched him painstakingly patch a misbored hole in a knife handle, even an incipient check in a spoon bowl. The pieces hardly seemed worth the trouble—they still looked like ax offal. But he saw them as works, and his fixes made them all the more valuable. When finished, they were special pieces, marked by their making. Craftsmanship, Sundqvist demonstrated, is measured as much by the mistakes you correct as by the ones you avoid. □

Rick Mastelli, associate editor of Fine Woodworking, wrote in issue #33 about Country Workshops' post-and-rung chairmaking week.

A Sundqvist spoon, traditional craft.

