AN INTERWEAVE PRESS

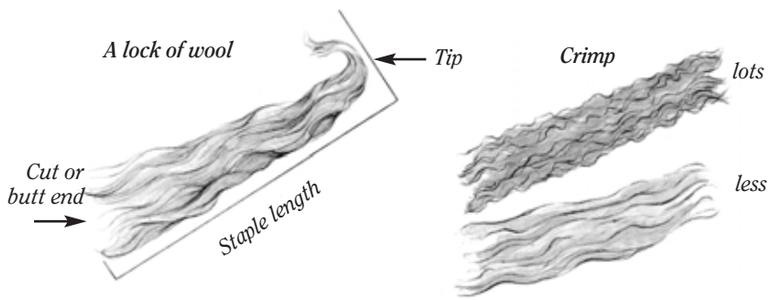
INTRODUCTION TO SPINNING

basic ideas, tools, and terms

Starting with Wool

SHEEP'S WOOL IS THE MOST POPULAR FIBER among handspinners because it is easy to spin and versatile. There are dozens of **breeds** of sheep, such as Lincoln, Romney, Corriedale, Suffolk, and Merino, and each breed produces a unique type of wool. By choosing from suitable breeds, spinners can use wool to make warm, comfortable, and stylish sweaters, scarves, mittens, hats, socks, afghans, rugs, and many other kinds of garments and accessories. One advantage to making your own yarn is that you can choose the qualities in the fiber that you want to emphasize in your finished project. Yes, the results are definitely worth it!

A single **fleece**—one sheep's annual growth of wool—usually weighs between 4 and 12 pounds. A good spinning fleece costs around $4 to $12 per pound. Shepherds who produce good wool pay extra attention to their animals throughout the year. Some put **jackets** or **blankets** on their sheep to keep hay out of the wool; those fleeces may be especially clean, although covering is not essential to the growing of good wool. The best fleeces will have been **skirted** to remove any dirty, stained, or inferior wool; they will also contain only minimal amounts of hay, chaff, or burrs, which are hard to remove.



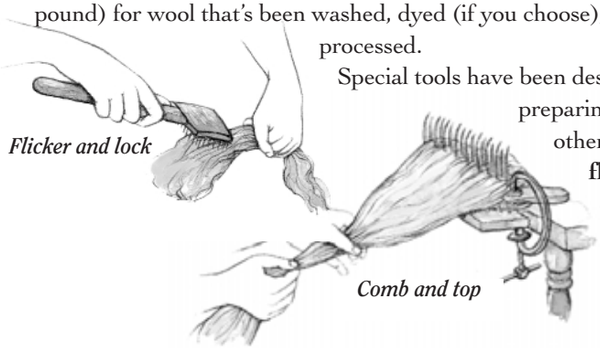
Wool fibers usually group together in clusters called **locks**. By gently pulling a few sample locks out of the fleece, you can determine the **staple length** (or average length) of the locks (usually between 3 and 8 inches), the **crimp** or waviness of the wool, and the count or thickness of the wool fibers (larger numbers indicate finer wool—80s is quite fine, and 40s is coarse). Coarse wool tends to have fewer crimps per inch, and may be scratchy or itchy—but it will be very durable. Fine wool most often has a lot of crimps per inch, and feels soft and comfortable next to your skin, but it does not wear well in a rug. These attributes can be measured precisely, but most spinners just assess them by eye and by feel.

In **raw** fleece, the fibers are coated with **grease** (lanolin and other natural body oils), condensed perspiration, and dust; all this is removed when the fleece is **washed** or **scoured**. Washing your own fiber is easy, although there are a few tricks to it. We suggest that you start with clean wool for your first efforts.[1]

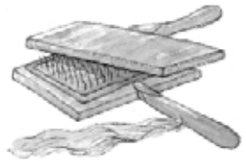
Washing reveals any **luster** or shininess of the wool, and exposes its true **color**, which may be pure white, off-white, yellowish, silver to charcoal gray, jet black, tan, or reddish brown. After washing, fleece can be **dyed in the wool**, or you can dye the spun yarn. Dyeing fleece is fun, because there are many ways to combine different colors into a single yarn with either very subtle or bold **variegation**.

Preparing the Wool for Spinning

Wool is easier to spin if it's **prepared** by separating the fibers into a loose, fluffy arrangement. You can buy a fleece and do the washing and preparation yourself, or pay a little more (usually $15 to $25 per pound) for wool that's been washed, dyed (if you choose), and processed.



Special tools have been designed for preparing wool and other fibers. A **flicker, flick carder,** or **pet comb** (average cost for the latter is under $10) is excellent for loosening individual locks and pulling out any short or weak fibers. **Flicking** works best for a fleece with distinct locks and a staple length of 4 inches or more. **Mini-combs, Viking combs,** and **English wool combs** (cost $50 to $150, and up) work best for wool with locks that are at least 4 inches long. You can comb several locks at a time. **Combing** is a separating process—it removes any short fibers as it loosens and aligns the long fibers. After combing, the long fibers are pulled into a smooth, continuous strand called a **top** (the short fibers are set aside for a different use or discarded); fibers can be pulled off with your fingers, or through a tool called a **diz** (a small disk with a hole in it). A few mills are set up to do combing, and sometimes you can buy commercially combed tops of wool or other fibers.



Handcards and rolag

Handcards or **carders** (average cost $30 to $65) are good for preparing medium to short wool (staple length 4 inches or less); **drumcarders** (cost $150 to $500 or more) can handle short, medium, or long wool, depending on how they are set up. **Carding** is a blending process, good for evening out the variations in color, crimp, or length between different parts of a fleece; for blending different colors of dyed fleece; and for combining wool with mohair, angora, or other fibers. Wool can be lifted off a carder as a fluffy, pillow-like, rectangular **batt.** Spinners sometimes roll batts into slender tubes called **rolags** or pull them lengthwise into long strands called **slivers** or **rovings.**[2] The carding process can easily be automated, and there are dozens of small mills around the United States that sell carded batts or rovings; some will custom-card wool that you supply.

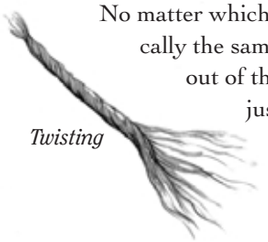
Drumcarder and batt

Making Yarn

Many kinds of spinning tools are available today—everything from simple wooden handspindles to high-tech electric spinners, from antique wool and flax wheels to modern wheels. The diversity of spinning tools is a wonderful story in itself, but it's important to remember that in **handspinning,** it's the skill and sensitivity of the spinner's hands that shapes the yarn. The spinner is in control; the tool is just an assistant.

[1] *Many of us didn't, however, and if what you've got is raw fleece, you don't have to rush to the store for clean stuff. If you're washing your own wool, remember the following: don't agitate, don't change water temperatures suddenly, and don't scrub. If you do all those things, you will produce felt, not clean, spinnable wool, and you'll find yourself embarking on a different craft voyage. See the Essentials department about washing wool (pages 14–16) in the Summer 2000 issue of* Spin·Off.

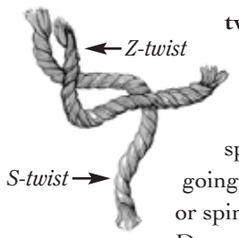
[2] *When used with reference to commercially prepared fiber, the terms* top, sliver, *and* roving *are often applied interchangeably, although there are technical differences between these forms of fiber preparation.*



Twisting

No matter which tool you use, the process of spinning is basically the same. The first step is **drafting** or pulling fibers out of the prepared lock, top, batt, or roving. Drafting just a few fibers at a time makes a very thin yarn; drafting many fibers makes a thick yarn. **Twisting** the drafted fibers makes yarn. Twist holds the fibers together so they don't slip apart or rub loose; one of the spinner's skills is determining the appropriate amount of twist for a given yarn. At the start, you want enough twist to make the yarn strong . . . and not so much twist that the strand you are spinning turns itself into independent corkscrews. After drafting and twisting a length of yarn, you can let it **wind onto** the bobbin of the spinning wheel or wind it onto a spindle by hand, then start drafting and twisting more yarn. When you finish spinning one batch of fiber, you make a **join** by splicing on a new supply. A careful join is invisible in the finished yarn.

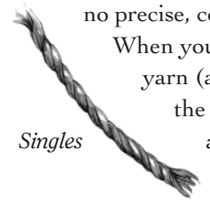
Join



Z-twist

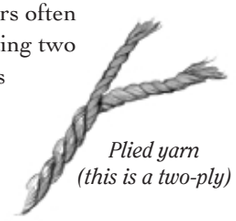
S-twist

Turn the wheel (or spindle) one way and you get **Z-twist** yarn. Turn it the other way and you get **S-twist** yarn. By convention, most spinners turn the wheel clockwise (Z) to make yarn from loose fiber, but the only rule is that if you *start* spinning in a given direction you need to keep going that way until you've finished with that bobbin or spindle (reversing directions untwists your work). Depending what type of fiber you're spinning, the steps of drafting and twisting may be done separately and in sequence, or they can flow together into a continuous process. Spinners working with combed, long-staple wool often draft by moving their hands just a few inches—about half the length of the fibers—in a gesture called a **short draw.** Then they deliberately guide the twist into the drafted fibers, making a smooth, dense **worsted** yarn. Spinners using short-staple wool that has been carded and rolled into rolags may use a **long draw,** moving one hand back and forth with a full swing of the arm, simultaneously drafting and twisting up to three feet of fuzzy, puffy woolen yarn before winding it on. You'll see many variations and combinations of these techniques if you watch different people spin; as with most decisions in spinning, what's "right" is whatever works best for the individual spinner and the fiber. Because drafting methods can be so unique, there is no precise, consistent way of describing them.

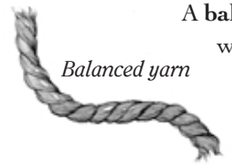


Singles

When you turn loose fiber into yarn, you make a **singles** yarn (a single strand), with the fibers all twisted in the same direction. Singles yarn can be finished and used as is, but spinners often take an extra step, twisting two or more strands of singles together to make **plied** yarn, which is usually stronger, more uniform, and easier to handle than singles. The simplest plied yarn twists two singles together in the opposite direction to their original spinning (Z singles, S plied).



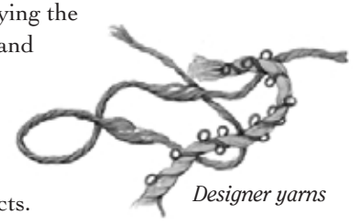
Plied yarn (this is a two-ply)



Balanced yarn

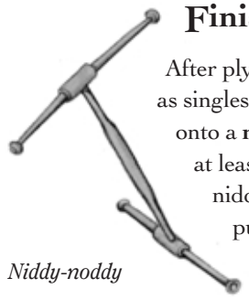
A **balanced** yarn is a special type of plied yarn, where the twist used in plying exactly balances the twist used in spinning and straightens out the fibers. A balanced yarn is very calm and doesn't kink at all.

Basic spinning and plying techniques produce "plain-vanilla" yarn, lovely in itself and useful for all kinds of knitting, weaving, and other projects. A plain-vanilla spinner can achieve plenty of variety simply by using different types of wool (in natural or dyed colors), by varying the thickness and twist of the singles, and by choosing whether or not to ply the yarn. For even more variety, there are advanced techniques for making fancy **designer** yarns, with unique texture and color effects.



Designer yarns

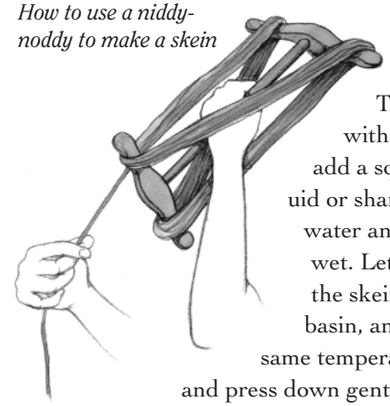
Finishing Wool Yarn



Niddy-noddy

After plying—or after spinning, if the yarn will be used as singles—make the yarn into a **skein** by winding it onto a **niddy-noddy** or **skein winder.** Tie the skein in at least three places before you remove it from the niddy-noddy. Wool yarn usually gets softer and puffier when you wash and dry it, and it also **shrinks** in length—usually 10 to 25 percent, but sometimes even more. It's a good idea to wash yarn and let it shrink

How to use a niddy-noddy to make a skein



before you use it, whether you are knitting, weaving, or doing something else.

To **wash** the skein, fill your sink with comfortably warm water and add a squirt or two of dishwashing liquid or shampoo; set the skein on top of the water and press it down gently to get it wet. Let it soak for a few minutes. Lift the skein out of the water, drain the basin, and fill with rinse water of the same temperature. Set the skein in the water and press down gently again. Remove the skein, drain the water, and repeat the rinse. Squeeze the skein (don't wring it) to remove excess water, and then let the skein dry on a towel or rack.[1]

Felting happens when you agitate or rub wet wool, whether fleece, yarn, or fabric. It's wonderful to make felt on purpose, but to avoid accidental felting when you're washing any wool product, be careful to handle it as little and as gently as possible.

If the yarn looks wrinkly or kinky after you wash it, you can smooth it out by **steaming** it, as you steam wrinkles out of a garment. Use a travel steamer or steam iron, or pass the skein over the spout of a steaming teakettle; five to ten seconds of steaming is enough to smooth most yarns.

Admire your skein. It's some of the best yarn in the world!

[1] The same process works for washing raw wool. Wash in batches that fit your sink or basin, and gently lift the wool mass as you would a skein.

This brochure is available for the general advancement of the spinning community. If you would like additional copies please contact Interweave Press at (970) 669-7672. Text by Rita Buchanan and Deborah Robson. Illustrations by Susan Strawn Bailey.

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