

by Kim Caulfield

So, the weather is warm and your sheep are much happier now that they are shorn. Now, what happens to your wool?

The Tennessee Wool Pool is an annual event where sheep producers from across Tennessee and several other southeastern



states can gather together to market their wool. Another added benefit of the event is the chance to visit with other shepherds as the wool is processed and packed. The Tennessee Wool pool is a 100% volunteer effort processing 10,000 to 20,000 lbs of wool annually.

The process starts several months before the actual Wool Pool collection. Wool mills from across the country are contacted and asked to bid on the wool. Mills bid for the purchase of the entire Wool Pool. The winning bid goes to the highest bidder. The TSPA members are then contacted and given the current prices that will be paid per pound of wool brought to the Wool Pool.

When wool is brought to the pool, it is first unloaded and weighed. A grader inspects each bag. The grader then collects a couple of samples from each bag to evaluate the length, strength, cleanliness, and fiber diameter. Then a commercial grade is assigned. If the wool is from white faced sheep it may be graded as White Faced Clear, the top grade of wool. Fleeces from black faced sheep, such as Suffolks and Hampshires, sometimes have a few black fibers around their edges. Still they have wonderfully springy fleeces that are valued for a variety of uses. These fleeces get the grade of Black Faced Clear. Fleeces that have more hav, burrs, dirt, or other contamination are classed as Heavy or Light Burr. These will require extra processing to be used, so the mills pay a lower price. Bags with ANY colored fleece are classified as Black. In the wool industry, "Black" is a generic term. It simply means

"not white." Since it is not possible to dye a gray fleece canary yellow, it has more restricted uses. Even if a mill wants a dark color, dyeing natural colored fleeces is not as predictable as dyeing white wool. Since even a few black fibers can cause problems in a batch of white wool, many mills will not process black wool. The mills that do run colored wool often wait until they have accumulated a large amount so that they can run it all at once, before doing an extra thorough cleaning down of all their equipment. This is why the commercial price for black wool in much lower than for any grade of white wool. It is also why a single black fleece in a bag of white wool will require that the entire bag be graded as Black.

Once the wool is graded, it is packed in heavy bales. The TSPA has two hydraulic balers used to stuff and pack the wool into large wool packs and then label them according to grade and weight. The wool packs, which usually weigh close to four hundred pounds, are loaded on trucks and hauled to the mill. Wool packs are attractive to several wool mills because they are easily loaded onto trucks via forklifts and more wool can be loaded onto a truck if it is compressed rather than in floppy lightweight wool bags.

After arriving at the wool mill, the first step in processing wool is scouring. The wool must be thoroughly washed to remove all the lanolin, wax, and dirt. The wool loses a good deal of weight in scouring. Mills generally prefer to buy high yielding fleeces, so they will have as much clean wool as possible.





Processing wool at the mill.

The scoured wool is put through a picker. It is laid on a moving belt and fed past a rotating drum covered with loosely set, sharp teeth. These tease the locks open and throw the fluffed wool out the back of the machine.

The picked wool is then fed through a carder. This is a big machine with a series of drums covered in densely set, fine teeth

that resemble those of a dog brush. The drums turn very fast. If the wool is clean and strong, the teeth brush the locks apart and align the fibers. If the wool is weak, it may tear in carding, causing lumps or boils. When it comes out of the carder, the wool is a soft, fluffy, thick rope. This is called sliver in the commercial industry, although hand spinners call it roving. Following the carding, the wool is put through a machine called a pin drafter to further align the fibers.

Spinning machines in commercial mills are huge. They usually spin hundreds, sometimes even thousands, of threads at one time. They can be adjusted to control the thickness and twist of the yarn they spin. Often, two or more spun threads are twisted backwards together. This process, called plying, makes a yarn heavier, stronger, and more even.

Most commercial mills dye yarn. For producing large batches of solid colors, this is usually easiest. There are some color effects, blends of different colors, that require wool to be dyed after scouring. Colors are then blended during carding or pin drafting.

The basic steps are the same, whether

the goal is to produce fine thread to go into expensive suites, or to make soft yarns to sell to hand knitters. There are some variations in the equipment used, but the basic sequence of scouring, picking, carding, and spinning is almost universal. Even hand spinners tend to follow the same steps, just on a smaller scale. (More about hand spinning next time.)

Sometimes it helps us to know a little about how our wool is processed. It may help us to produce better quality fleeces, and earn higher prices. Besides, these days most Americans live in cities and have little idea of where food and clothing come from. When you see somebody putting on wool socks, or snuggling in a wool scarf, remember that this might be your wool. Tell them the story of how their warm garments were made and where wool comes from. They'll be impressed, and you'll be proud.

Kim Caulfield is a passionate wool lover. She is equally fascinated by hand spinning and the commercial wool industry. She runs a cottage industry wool processing mill, and she and her mother, Jane, raise a flock of around 150 Romneys, Cotswolds, and Shetlands near Cornersville, TN.