

by Barbara Parry

additional photos by John Solem

*The span of time it takes to transform a twinkle in the ram's eye to a woolly lamb bounding through the gate is about 145 days. The span of time it takes to transform a sheep's fleece into yarn has many variables and is a bit harder to predict. For me and for many sheep farmers, the yarn count down begins on the heels of shearing day, the moment we ship our boxes of skirted fleeces out the door and on their way to the fiber mill for the transformation from sheep couture to finished skeins.*



Shipping is a very stressful moment. So much depends on the outcome of fiber processing after a year of careful fiber cultivation. While the work of caring for the flock continues throughout the summer months, my work with this particular batch of fiber is done for the time being. The yarn smiths at the fiber mills are now entrusted to spin my harvest into gold. Taking a deep breath, I blow a kiss and send my wool on its way.



Wool comes in more than just 31 flavors, and when it comes to making yarn, there is no one secret recipe that fits all. The breed of the sheep, the quality of fleece, and the method of spinning all play a part in determining factor in the character of a finished skein. When it comes to selecting a spinnery, yarn farmers may travel one of two main roads: the woolen route or the path of semi-worsted. Lofty and bristling with texture, woolen yarns make warm yet light-weight sweaters, hats and scarves. The secret to warmth without bulk lies in the carded fiber preparation. Air pockets are trapped within the jumbled arrangement of fibers. When spun, the strands become cylindrical fiber cocoons. Garments knit from them are cozy, insulating and often have a soft, fuzzy halo.

Unlike their woolen counterparts, semi-worsted yarns are sleek and smooth with a bit more heft per yard. Plush and dense, with a honed surface, these yarns ideally suited for garments that will see hard wear and tear and for showing off intricate cable-intensive designs.

The type of wool and size of wool clip often dictates the chosen mode of spinning. While many yarn farmers opt for yarns of one ilk, some of us shoot for the best of both yarns. Either way the symbiotic relationship between fiber farm and fiber mill is critical to the outcome.

Waiting for my yarn to return from the mill is almost as difficult as waiting for the arrival of spring lambs. One season when fiber separation anxiety was more than I could bear, I hopped on a plane bound for Michigan, home to Stonehedge Fiber Mill, to witness the genesis of my yarn.

Located on a rural side road in the northern part of the state, Stonehedge is a quintessential small-scale mill but with a big-time output. Founded by Deborah and Chuck McDermott in 1999, the mill originally operated with equipment salvaged from large-production textile mills. Continually growing and evolving, the mill now runs on a combination of refurbished vintage equipment along with new machines custom designed to meet the needs of their operation.

After a scenic drive from the airport in Traverse City, I arrived in the dooryard of Stonehedge where I was greeted by the mill's ambassador, Rocky, a brown Shetland sheep. The mill is a sprawling complex of buildings and sheds situated on a working farm. Each spring I ship many over-sized cartons of wool to Debbie, a fellow shepherd and a master yarn crafter. As a fellow fiber producer, Debbie well understands how much is at stake both emotionally and financially for yarn farms throughout the country and how her mill fills an important role for fiber farmers.

Debbie says communication with customers is key, which is absolutely true. All good yarns begin with a conversation between the processor and the shepherd, to devise a thoughtful game plan. We had plotted our design for this year's yarn, a two-ply blend of Border Leicester and mohair, earlier in the season while we were both in the midst of lambing. Over several phone calls while I was feeding bottle lambs in my barn, we discussed the clean yield of the wool clip and how to make the most of the beauty and luster of some really lovely wool and mohair. During my visit I was able to watch our plan in action.

Wending my way through a bewildering maze of buildings and machinery was like accompanying my fiber on its journey from fleece to skein. In one shed, batches of wool suspended by nets of seine twine soaked in a hot sudsy bath to remove lanolin and barnyard grit. In the next room, washed wool was fed to the picker, which teased and opened the individual locks in preparation for carding. Fluffy mounds of picked fiber were then ferried into the carder (a custom machine designed with input from the McDermotts), which further opened and aligned the wool to produce

barrels of roving.



The fiber traveled onward to the next building where the pin-drafter groomed multiple strands of roving through a series of 80 combs, further straightening and aligning the fibers. Pin-drafting, the last step before spinning, gives semi-worsted yarns its smooth and polished finish. It also ensures consistent grist, the diameter of the finished yarn.

“The machine will spin whatever it is given,” Debbie explained. The more even the pin-drafted sliver, the more uniform the spinning.

Barrels of pin-drafted sliver next performed an aerial acrobatic. An overhead creel transferred the sliver from barrels on the floor up and over the aisle beside the spinning frame, delivering the strands to the spinning frame. Here the yarn at last began to take shape.



The ribbon of roving descended to a pair of rollers which form the drafting zone. Here the roving is attenuated to determine the yarn's final gauge. By adjusting gears, Debbie set the amount of fiber receiving twist, and also adjusted the spindle speed which regulating the amount of twist the fiber receives. As the machine purred, bobbins filled with freshly spun singles. When later transferred to the pleyer, pairs of singles were married to form a delectable 2-ply yarn. Leaving the mill, I snatched a couple of crisp, freshly-wound skeins to fondle on my flight home.

Luckily for me, visiting my yarn-in-progress doesn't always require a plane ticket and a day's travel. I can be at the doorstep of the Green Mountain Spinnery, a woolen style mill located in southern Vermont, in about the time it takes for me to finish sipping the latte I've grabbed along the way.



On the heels of shearing day each spring, I arrive at the mill with my precious harvest. I am met by David Ritchie, general manager and one of the original founders. In the wool shed we open, inspect and weigh each box. David's careful assessment of the fiber is important. Noting the fineness, slipperiness and length of staple we discuss how these fibers will best behave on the mill's vintage equipment and best translate into a finished yarn. David's understanding of yarn architecture and fiber intuition comes from more than 25 years of operating a woolen mill. Now in the hands of the mill's team of yarn craftsman, my fiber begins its metamorphosis.

The key to woolen yarn lies in the carding preparation. Unlike semi-worsted processing where fibers drafted on the spinning frame determine the final grist of yarn, in a woolen mill the carding operation is primarily responsible for controlling the yarn's finished diameter. Occupying the entire west end of the building, the mill's behemoth Davis & Furber woolen card, circa 1916 is run by "grist-meister" Laurie Gilbert. The line begins with a feedbox, a jumbled hopper full of washed fibers which are then conveyed through a series of cylinders lined with stainless steel teeth.





The series of cylinders, called workers and strippers, fans the fibers to create the web, a gossamer curtain of wool spanning the width of the carder. A series of aprons separates and condenses this sheet into ribbons, which are further attenuated into strands wound onto spools of pencil roving at the north end of the line. Laurie periodically samples and weighs the roving ensuring consistent grist.



The five foot wide spools full of pencil roving are transferred to the mill's vintage Whitin spinning frame, circa 1948. Here Patty Blomgren, the queen of twist, takes over. Fragile spaghetti strands are threaded through a pair of rollers and then through the spinning ring. By making adjustments to the gearbox, Patty determines the draft and the twist the yarn will receive - just the right amount. These crucial details determine the handle and feel of the yarn. The air rings with the sound of the action - yarn whirring at lightning speed as it is wound onto wooden bobbins. After steaming to set the twist, the bobbins are then transferred to the skein winder where Gail Haines meters out the final yardage, the perfect distillation of a year's work.



Whether woolen or semi-worsted, spinning mills fill an important niche in the farm yarn chain. Small farms that do not produce enough wool to meet minimum requirements at larger textile mills have an affordable way to produce a unique value added product that carries the imprint of a specific flock. Unlike working with homogenized commercial yarns, knitters have the chance to sample and savor different flavors of yarn, and to gain an understanding and appreciation of the craftsmanship behind the yarn.

*Barbara Parry is a fiber educator, event organizer & artist, the talent behind [Foxfire Fiber and Designs at Springdelle Farm](#), and is the author of the recently published [Teach Yourself Visually Hand-Dyeing](#) from Wylie Press. Read about her ongoing adventures as a Yarn Farmer in these installments:*

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