



## An HJS Studio Pattern: Spinning Great Sock Yarn



It's funny how you can stumble across something that works totally by accident. That's what happened for me and learning how to spin yarn for socks that wears well. My very first pair of handspun socks are still in use, and only needed their first repair—reinforcing a slightly worn area—four years after I made them. Although I don't wear these socks daily, they are worn when doing chores on particularly cold days, so they suffer more stress than being worn in street shoes.

I've since spun yarn for about a dozen pairs of handknit socks. Two pairs taught me what my first pair didn't—that 100% wool doesn't make a long-lasting pair of socks, even though they were made of medium-type, strong Shetland wool. Another pair taught me that even really well designed sock yarn can be eaten alive by unlined, unpadded rubber barn boots. Another pair taught me that socks must be carefully stored off season, and don't trade a good pair of socks for the ones that were bug eaten after you gave them to your sister. Another way to put it is to be sure the recipient appreciates what goes into sock yarn, and knows how to store them so they don't become munchies for bugs.

Here's my experience of spinning sock yarn that works well. Although there are no guarantees, there's a lot of trial and error summarized here for you, so you don't have to learn from your own mistakes.



Elsewhere on my site is a generic sock pattern that will allow you to knit a sock that fits whatever foot you're knitting for, using whatever type yarn you desire, while another page has information on how to make knee socks that stay up wearing after wearing.

### **Sock Requirements**

Here's what I require of socks I make:

- ❖ Comfort! I have wide feet, making it difficult to find shoes that fit well, so my socks are made from fingering weight yarn to minimize the fitting problem.
- ❖ Warmth! Wool is so wonderfully warm, and handspun more so than commercial wool sock yarns.



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- ❖ Durability! I don't want to make a pair of socks that gets holes every other time they're worn. Darning socks is kind of satisfying, but I don't want to have to do it daily like women of yore.
- ❖ Beauty! Why bother putting the time into making socks if they're not going to be attractive?
- ❖ Elasticity! Who likes a sock that stretches out the first time it's worn and then bunches up every time after that? Good elasticity makes the sock snap back and fit better each wearing.
- ❖ Easy care! OK, so I can't machine wash and dry these socks. But they're very easy to handwash, and dry in a matter of hours.

If my handspun, handknit socks don't meet these requirements, they're not worth the time to make. I want something I can cherish for decades, even pass down to my kids (but only if they appreciate them! :)

## Fibers

Wool is the best primary fiber for socks. Most wools are quite elastic if not over processed. Wool is very warm and cushy, and it's easy to find and spin.

There are lots of different types of wool. I avoid using Merino and similar fine wools, as they don't stand up to abrasion very well. Some people like to make socks designed to be felted, and fine wools are good for felting, but my one experience of felted Bond x Corriedale slipper-socks suggests fine wools, even felted, get holes in them very quickly, and are about impossible to repair, besides!

The wool used needs some definite crimp. It doesn't need to be a lot, but it needs to look more like crimp than wave. Crimp is a large part of what gives wool its elasticity.

Border Leicester, and some of its crosses, are my first choice for sock wool. My second choice would be Romney. Both breeds vary tremendously in their wool characteristics. What I look for is:

- ❖ Staple length of around 5-7 inches / 13-18 cm in length (unstretched). I wouldn't use wool less than 3 inches / 7 cm in length (unless, perhaps, it's a down breed) because it would probably be too fine to resist abrasion well. And I would be hesitant about wool longer than 8 inches / 20 cm because it's likely to be harder to prepare and spin, and be wavy rather than crimpy so less elastic than I want.
- ❖ 5-10 crimps per inch / 2.5 cm. More usually means a fine wool. Fewer often means a somewhat harsh wool, and less elasticity.
- ❖ Somewhat soft or silky handle. My feet aren't particularly sensitive to harsh wools, but my legs are. I need a fiber soft enough to be comfortable on my legs.

Some folks recommend down breeds for socks. I haven't used them, but would imagine their combination of strength and bounce would be ideal. I would still be inclined to blend in some mohair, to be on the safe side.

The next most important fiber is mohair. I blend about 10-15% mohair by weight into the wool for sock yarn. You can use kid, yearling, or adult—I like yearling best as it's less expensive than kid, but still very soft and adds a lovely halo.



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Why mohair? It effectively takes the place that nylon has in commercial sock yarns. Mohair adds strength and resistance to abrasion, the prime enemy of socks. You don't need a lot; 15% by weight is plenty. Percentage by weight, in my usage, means you weigh a given amount of wool, use a calculator to figure out what 15% of that weight is, then weigh that much mohair. Blend all together very thoroughly.

The only other fiber I've used in socks has been angora. I added about 10% angora by weight to a sock fiber blend that was previously 85% Romney and 15% yearling mohair. I was making knee socks for winter chores, so wanted the extra warmth; plus the angora softened the somewhat harsh feel of that particular Romney wool.

Other fibers can be added. Alpaca and llama add warmth. Silk adds sheen and softness. Just about anything can be added in small amounts, so long as at least about 70% of the fiber is wool, and a minimum of about 15% is mohair.

Of course, make sure the fiber you use is in good condition. Don't choose the fleece with a break in the middle of each lock. Also, if using machine-carded fiber, make sure the fibers weren't broken in processing. Pull fibers out of the roving or batt and look at their length. Are they all about the same length, or are parts much shorter? Hold it up to the light. Is the fiber even carded, or can you see little knots (called neps) of tangled fiber? Either can be a sign of broken fibers, and may not make a long-lasting sock yarn.

If you're considering having a custom sock yarn roving made at a mill, first check what types of blends their equipment and staff can handle. Then, to make sure the entire batch is well blended, so you have the right proportion of wool to mohair throughout, have the roving carded twice. I have found this makes the fiber much more easy to spin as well as more consistent in texture. It's really worth the extra money—my sock class students always comment on the quality of the sock roving I provide.

Important update in 2008: I no longer recommend using machine-processed roving! I've made a couple pairs of socks from specially-designed sock roving I had made from good wools and mohair. Although beautiful and easy to spin, the socks I've made from these rovings have not held up in wear for very long at all. The performance of the yarn has been strikingly poor compared to yarn from handprocessed fibers. As yet I have no experience spinning sock yarn from commercial top, so can't comment on that.

## **Fiber Prep and Spinning Techniques**

You can spin good sock yarn using various preparation and spinning techniques.

### **Combing**

The fiber can be handcombed (or you can use a commercially combed blend) if the fibers you're blending are all quite close to the same length. This is really important, for as you draw off your top from the combs, the longer fibers will tend to come first. Whether those longer fibers are wool or mohair doesn't matter—your yarn won't have the right mix of fibers for elasticity and abrasion resistance throughout the spun yarn.



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An issue with commercially combed fibers in my experience is that they seem to have the crimp, and therefore elasticity, somehow processed out. I don't know how this happens, but definitely most commercially combed top doesn't regain its bounce even after washing. If this is the route you want to go, buy a little and spin, then wash it first. Check to see how much elasticity is in the fiber afterward. Superwash top seems to have a similar problem, in my limited experience of it. Remember to choose something other than fine wool top, if you want to use commercially combed fibers for your socks.

## Carding

The fiber can be handcarded, drumcarded, or machine carded (though I no longer recommend machine carded fibers for socks). Although the finished yarn may be a little more prone to pilling and wear-and-tear than when combed fiber is used, those of my socks have been drumcarded have given very good results.

True worsted spinning methods will give a dense yarn that will stand up to wearing quite well. Long draw spinning will loftier and cushier. I like long draw, because it's very fast and easy for me. Ultimately, the choice may be determined by what preparation method you chose, and what pattern, if any, you want in the finished socks. If the sock is to be in a lace pattern, fair isle, or any type of textured stitch that you want to show well, worsted spinning will be a good choice. My socks are usually just stockinette stitch and ribbing. The interest lies in the colors, so I can card layered batts and spin them long draw with successful results.

Either way, make sure the fiber is well prepared. Yes, I'm harping on this point! Fiber with lumps will make yarn with bumps. Bumps may be OK for the leg of your sock, but in the foot they're bad news. Bumps abrade faster, causing worn spots. They can also rub against the foot, causing discomfort, even blisters. Think smooth when spinning the yarn for your sock feet.

It all boils down to this: Imagine the socks you want, then plan the fibers, colors, textures, fiber prep, and spinning method to best complement those socks. If you wish, break the sock into regions, and spin a different yarn for each! Extra durable yarn for heel and toe, for example, or smooth for lace patterning in the leg, fluffier for the foot. It's all possible for the handspinner.

## Twist and Ply

I have found that spinners almost universally believe sock yarns need a lot of twist to be durable. That's not my experience. I spin to a twist angle of about 15 degrees routinely, project after project. It works as well in plied sock yarns as it does in weaving singles. The bonuses are that your yarn will feel softer, it won't take nearly as long to spin and ply a balanced yarn, and the socks won't take as much fiber. I've seen twist angles as high as 30 degrees used in sock yarns. I find such yarns to be very wiry and uncomfortable to knit and wear. Give a lower twist angle a chance, and see what you think.

An area in which I spend more time than many spinners is in spinning a three-ply yarn rather than a two-ply. I have no direct comparison to offer, as I've never made two-ply yarn for socks. However, the more plies, the more durable the yarn will be. It will look less stringy at lower twist angles as well. If making yarns from layered batts, there will be fewer harsh con-



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trasts (barberpoling or candystripping) between the colors since there are three (or more) colors interacting in any given area.

I've not yet spun a four-ply yarn for socks or anything other than small samples. It certainly makes a really nice, full, rounded yarn. I would say it's worth the effort for someone who really enjoys spinning, but it's not necessary for good sock yarn.

Some people believe the only yarn that will wear very well in socks is a cabled yarn. Certainly a cabled yarn, using as it does at least four well-twisted singles, and being plied twice over, is a very durable yarn. Maybe it would even stand the test of being worn inside rubber barn boots! (I'll have to check that out someday :) It's not necessary, though, for good sock yarn in normal shoes or padded boots.

All this tends to debunk myths rather than give clear guidelines. Basically, to create durable, long lasting socks:

- ❖ Choose your fiber wisely—no weak fibers, no fibers that are too fine to resist abrasion, and make sure they have good crimp for elasticity
- ❖ Prepare them carefully so as not to weaken them, and to make sure they are equally well blended from beginning to end
- ❖ Spin a smooth yarn with moderate twist, around 15 degrees
- ❖ Use three plies
- ❖ When knitting, aim for a dense fabric, probably using much smaller needles than you normally would with that size yarn
- ❖ Store the finished socks where bugs can't dine on them, and don't wear inside unpadded boots, especially if your feet are inclined to slide around inside
- ❖ Darn your socks at the first sign of thinness, using yarn leftover from the socks and stored for the purpose—it's a lot easier to darn a thin spot than to darn holes

If you follow these guidelines, you'll be amazed at how much nicer your handspun socks are than socks made from commercial sock yarn. They'll be more beautiful and personal, of course. They will fit better, and remain elastic. They'll be warmer because they're all natural fibers. And they will be very nearly as durable as socks of commercial sock yarn. I rarely wear any socks other than my handspun ones in the winter.



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