

# The Field Guide to Fleece

Deborah Robson  
& Carol Ekarius

100 Sheep Breeds  
and How to Use  
Their Fibers



Lincoln Longwool

Scottish Blackface

Gromark

Castlemilk Moorit

Gotland



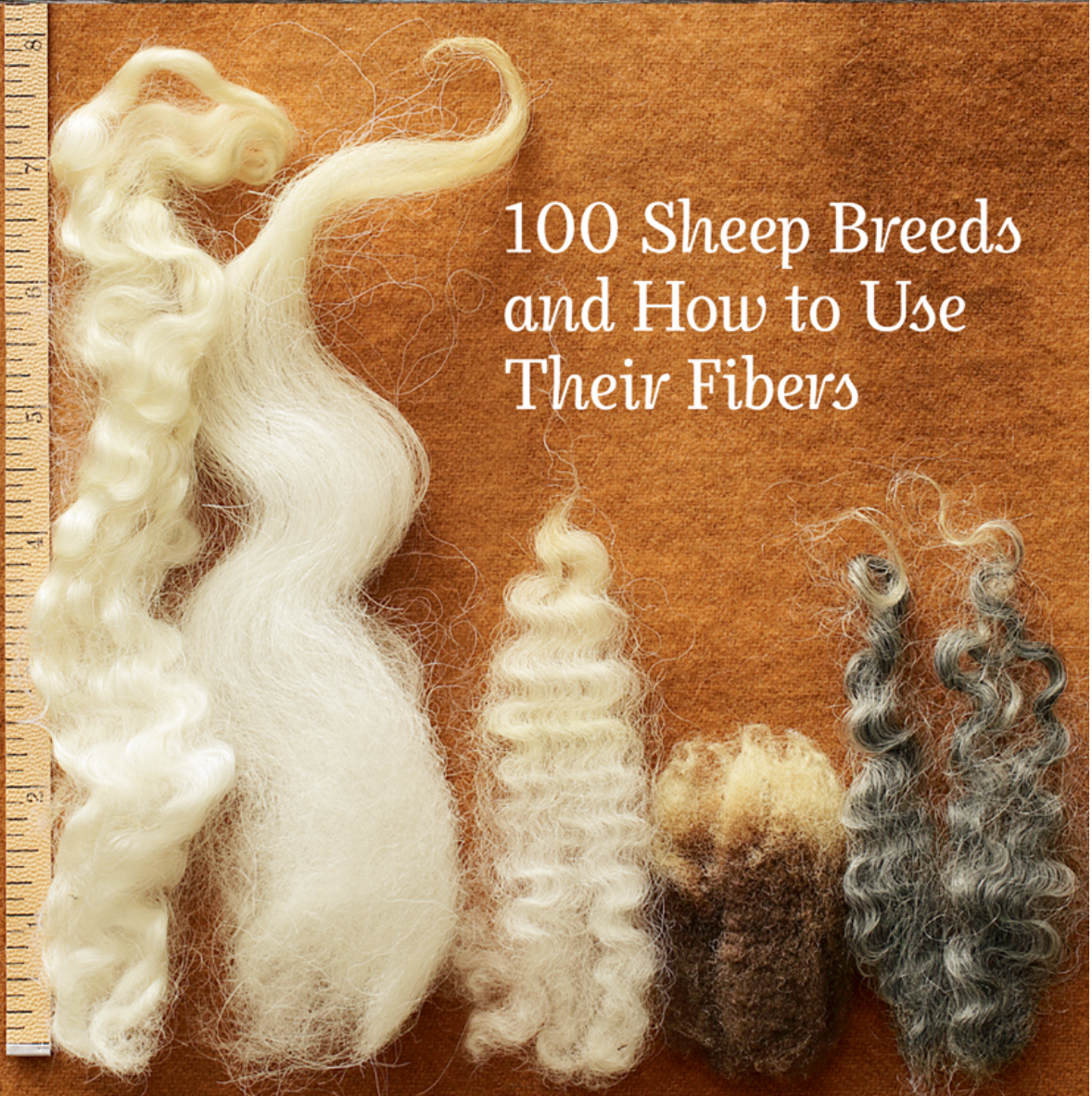




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# The Field Guide to Fleece

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How to Use Their Fibers



Deborah Robson & Carol Ekarius



Storey Publishing





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# A Love Affair with Wool

We love wool. We love sheep. That's why we wrote *The Fleece & Fiber Sourcebook*. Many readers have asked for a smaller book that they could carry with them or give to friends who are new to fiber arts. We listened!

Why are we so fond of wool? Well, first, it is all natural. It's also surprisingly diverse and exceptionally practical. It provides warmth in cold climates, while it also makes a great *cool* fabric for warm weather. Desert-living people — from Navajos to Bedouins — have long histories with sheep and wool.

## About the Breed Notes

All of the locks shown in the photographs in the pages that follow have been washed but not otherwise manipulated. Quite a few do not match the length ranges specified for a year's growth. Wool is a natural material, and you will sometimes encounter out-of-spec measurements, as we did. The shearing may have been done a little early. The shearer may have left a little wool in place because of the weather or to avoid nicking the sheep. Or the animal just may naturally grow a little less wool than the "standard."

---

**Conservation Breed.** A breed whose population may be at risk for any of a number of reasons. Breeds noted as critical in this regard have very low numbers.



**Field notes.** Use this section to track wools you've bought, shepherds you want to contact, and similar details.

Not all wools are created equal! There are more than a thousand breeds of sheep, each with its own intrinsic wool characteristics. Some grow negligible wool, while others have superlong fleeces. Some fine wools can be worn comfortably by babies, while strong wools can last for centuries in heavily used rugs. Some wools felt readily, while others won't felt at all. Some are springy, while others are dense and supple. For us, learning about these diversities of sheep and experimenting with their wools is a great adventure.

Fiber characteristics vary widely not only between breeds but also within breeds, and sometimes even throughout an individual fleece. Wool changes with an animal's age, health, and environmental circumstances. A lamb's first fleece will be its finest and softest. A sheep that was sick or subjected to other stress may grow a fleece with weak spots. The next year that same animal could grow strong and beautiful fiber. *Every* fleece has distinct, individual qualities.

Wool comes in many natural colors, but it can also be dyed. White wool is the usual choice for dyeing, while overdyeing naturally colored wools can create lovely, nuanced colors. Wools from different breeds take up dyes differently. Dyeing offers infinite possibilities!

## **Learning What a Fiber Can Tell You**

When you are learning to tell one wool from another, consider its *crimp*, *fiber length*, and *fiber diameter*, and look at the *types and mix of fibers* in the fleece.

---

**Crimp.** Crimp, which consists of the natural kinks or waves in individual fibers, forms as those fibers grow; it is permanent. Crimp can be tight and well organized, or loose and disorganized. The crimpier the wool, the more elasticity it has, so crimpier wools make great socks or other items that need to stretch and rebound. Wools with less crimp drape elegantly.



ABOVE: *High crimp* (left), *Montadale*; *low crimp* (right), *Llanwenog*

---

**Fiber length.** Our estimates of fiber lengths represent common annual growth. Many fleeces (even in our sample photos!) fall outside those ranges.



ABOVE: *Different fiber lengths (left to right): Santa Cruz, Norfolk Horn, American Karakul*

---

**Fiber diameter.** Historic grading approaches, like the Bradford Count and Blood Count, were based on the educated fingers and eyes of trained evaluators. Technology has allowed us to report fiber diameters based on micron counts. A micron is a measurement equal to one-millionth of one meter. An



interesting thing about micron counts is that two fibers can report the same micron count, yet feel different in your hand. Think of it as two pieces of paper that weigh the same, but one is slick magazine-type paper and the other a natural rice paper: you know the difference as soon as you feel them, even if they weigh the same. And trained or not, our sense of touch is still one of our best guides to fiber quality.

---

**Single-coated; double-coated.** A fleece can be single-coated (containing only wool); double-coated (containing two coats, a coarse outercoat and a fine undercoat); or composed of three types of fibers (add in kemp).



ABOVE: *Single-coated fleece (left), Hill Radnor; double-coated fleece (right), Navajo Churro*

---

**Wool; hair; kemp.** The term *wool* can apply to an entire fleece, but it also refers to a specific type of fiber within a fleece. Wool fibers are relatively fine, and have crimp and elasticity; even coarse wool fibers are much finer than hair fibers. Hair fibers

are straighter, smooth, strong, and inelastic. Kemp fibers are coarse, brittle, and almost always shorter than the other fibers. Dye “hides” in the hollow centers of kemp, a trait that is used in producing true tweeds.

So, with this brief intro, we wish you well as you explore the wonderful world of wool and sheep!







ABOVE: *A fleece that contains hair (the longest fibers), wool (most of the fibers), and kemp (short, brittle fibers), Swaledale*

## **Wool Allergies?**

Recently I overheard a woman at a fiber event saying to a friend, “Oh, I can’t wear wool. I have a wool allergy.”

I swung around and asked, “Are you allergic to your hair?”

She hesitated a second, then said that no, she wasn’t. I started to explain that wool is chemically the same as hair: The proteins and amino acids that form our hair, skin, and fingernails are the same as those in wool. I then elaborated: People may truly be allergic to the lanolin naturally found in wool (though wool can be cleaned to where lanolin is practically nonexistent); some are allergic to plant material on raw fleece; and some are allergic to

chemicals used in growing or processing wool. However, almost all people who say they are allergic to wool are not.

They do experience real discomfort! Yet the cause is stiff fiber ends that stick out from the yarn and irritate the skin. Yes, it causes redness and feels bad. This occurs mostly with fibers that have diameters greater than about 30 microns. Most fibers below 30 microns, such as those produced by Merinos, Rambouillets, or other fine-wool sheep, don't scratch. Every individual human has a different level of sensitivity, and some fine fibers are more flexible than others, but almost anyone can find wools to wear comfortably. Wool is too wonderful to miss out on because of a misconception. If you're seriously doubtful, check out wools with fiber diameters between 18 and 23 microns. I pointed the woman to a breeder who was selling Rambouillet yarn a couple of stalls down, and she promised to buy a skein and try it.

Once she discovers the right wool for her purposes, she'll be in love, too.

— Carol

# **American Miniature Cheviot**

These small sheep were originally given a name that may or may not be an appropriate reflection of their origins, and results in confusion with the Brecknock Hill Cheviots of Wales, which are about twice their size. For miniature sheep, they produce an exceptional weight of good-quality wool. Like the fiber grown by the other Cheviots, it is high-bulk and resilient. While most Cheviot wool is white, American Miniature Cheviot fleeces come in a variety of natural colors. The breed standards and some of the genetics (by way of transferred semen) are being used to develop a miniature Cheviot line in Australia. See Cheviot for dyeing and use information.



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**Origin:** North America

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**Fleece weights:** 3<sup>1</sup>/<sub>2</sub>–8 pounds (1.5–3.75 kg)

---

**Staple lengths:** 3"–7" (8–18 cm)

---

**Fiber diameters:** 25–32 microns

---

**Natural colors:** White, black, brown, and multicolored

---





Docile, hardy, cute, and raised primarily as pets, this breed also grows sizeable fleeces that yield high-bulk, resilient wool.

# Arcotts: Canadian, Outaouais, and Rideau

Because the Arcotts were intended for meat production, there are no wool specifications in the breed standards and fleeces are called “variable.” That doesn’t mean they don’t make pleasant and rewarding spinning!

All three breeds represent very mixed ancestry. The Canadian Arcott was bred primarily from Suffolk (37%), Île-de-France, Leicester, North Country Cheviot, and Romnelet. The Outaouais Arcott came mostly from Finnsheep (49%), Shropshire, and Suffolk. The Rideau Arcott was produced with Finnsheep (40%), Suffolk, East Friesian, Shropshire, and Dorset Horn. Other breeds that contributed small percentages to one or more of the Arcotts include Border Leicester, Corriedale, Dorset, East Friesian, Finnsheep, Île-de-France, Lincoln, North Country Cheviot, Romnelet, Shropshire, and Southdown.

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**Effect of dyes.** Luster, and therefore dye brilliance, varies although they all dye well.

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**Best uses.** Expect midgrade white wools from them all, with specific qualities depending on which pieces of the fiber genetics are expressed in the individual sheep. The yarns are suitable for making items like sweaters, hats, mittens, and blankets.



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**Origin:** Canada (Ontario)

---

**Fleece weights:** About 4<sup>1</sup>/<sub>2</sub>–5<sup>1</sup>/<sub>2</sub> pounds (2–2.4 kg) for 8 months' growth

---

**Staple lengths:** Estimated 2<sup>1</sup>/<sub>2</sub>"–3<sup>1</sup>/<sub>2</sub>" (6–9 cm)

---

**Fiber diameters:** Estimated mid 20s to low 30s in microns

---

**Natural colors:** White

---



Arcott is a name coined by Agriculture Canada to describe the Agricultural Research Centre of Ottawa, in Ontario, which developed three sheep breeds — the Canadian Arcott, the Outaouais Arcott, and the Rideau Arcott — between the 1960s and the 1980s. Agriculture Canada

developed a fourth breed, the DLS, at the same time at Lennoxville, Quebec.

CONSERVATION BREED

# **Badger Face Welsh Mountain**

Bred primarily for meat, this breed produces sturdy, firm-textured fleece. Locks are rectangular, with short, tapering tips and a definite crimp.





---

**Effect of dyes.** Light-colored fleece from this sheep is interesting to dye, and yields tweedy results.

---

**Best uses.** While too rough for next-to-the-skin wear, Badger Face Welsh Mountain is a good choice for tweeds and other outerwear, rugs, baskets, upholstery, and other durable items.

The “badger face” description refers to the color patterning on the face and body of the sheep. There are two types of Badger Face Welsh Mountain sheep, each the reverse of the other: *Torddu* means “black belly” and *Torwen* means “white belly” in Welsh. As wool is taken from the animals’ backs and sides rather than their bellies, *Torddu* sheep have light-colored wool; *Torwen* wool is dark colored.



CONSERVATION BREED

## **Balwen Welsh Mountain**

The coarse, short fibers of this primarily meat breed have striking coloration and produce a dark, robust, almost tough wool. Locks are blocky, with short, curly tips. Whether you flick or card it, this wool requires a delicate balance between grist and twist.



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**Effect of dyes.** Only dark gray fibers will take dye at all.

---

**Best uses.** Balwen wool is best used for outerwear, tweeds, and sturdy fabrics, and will yield relatively lightweight items that can take a lot of abuse.

---

**Origin:** Wales

---

**Fleece weights:** 2<sup>1</sup>/<sub>4</sub>–4<sup>1</sup>/<sub>2</sub> pounds (1–2 kg)

---

**Staple lengths:** 2"–3<sup>1</sup>/<sub>2</sub>" (5–9 cm)

---

**Fiber diameters:** 32–50 microns

---

**Natural colors:** Black, brown, dark gray

---





Balwen Welsh Mountain sheep almost died out in 1947, during one of the United Kingdom's coldest and snowiest winters in recent centuries. Only one ram survived, along with a small number of ewes.

# Beulah Speckled Face

Although little known outside the Welsh countryside, this breed grows fleece that is easy to prepare, with locks that open nicely, and textures ranging from medium to quite coarse.



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**Effect of dyes.** The fleece is so consistently white that dyeing it produces clean colors.



---

**Best uses.** The resulting yarn is crisp enough for good stitch definition. At the finer end, these fleeces can make a springy, multipurpose yarn suitable for everyday garments and textiles. The coarser fleeces are suitable for rugs, pillows, and other household items that need to be hard-wearing.

**Origin:** Wales

**Fleece weights:** 3–5 pounds (1.25–2.25 kg)

**Staple lengths:** 3"–5" (8–13 cm)

**Fiber diameters:** 25–36 microns

**Natural colors:** White





Beulah sheep take the longer version of their name — *Eppynt Hill and Beulah Speckled Face Sheep* — in part from a hilly area of south-central Wales. The breed's origins remain a complete mystery. It may be a truly native breed, the result of natural and human selection in a small

geographic area, as there is no mention of crossings with other breeds in any literature.

CONSERVATION BREED

## **Black Welsh Mountain**

The relatively uniform fleece of this breed is uniquely solid black, dense, and firm, with almost no kemp. Locks are easily separated, and spinning from the lock is an option.



---

**Best uses.** The resulting yarn has good loft, and is relatively soft, lightweight, and extremely durable, making it appropriate for use in many garments and household textiles, including sweaters, hats, mittens, and blankets. You can blend Black Welsh Mountain wool with similar length/diameter white wools to produce a spectrum of grays.

---

**Origin:** Wales

---

**Fleece weights:** 2<sup>1</sup>/<sub>4</sub>–5<sup>1</sup>/<sub>2</sub> pounds (1–2.25 kg)

---

**Staple lengths:** 2"–4" (5–10 cm)

---

**Fiber diameters:** 26–36 microns

---

**Natural colors:** Deep black

---





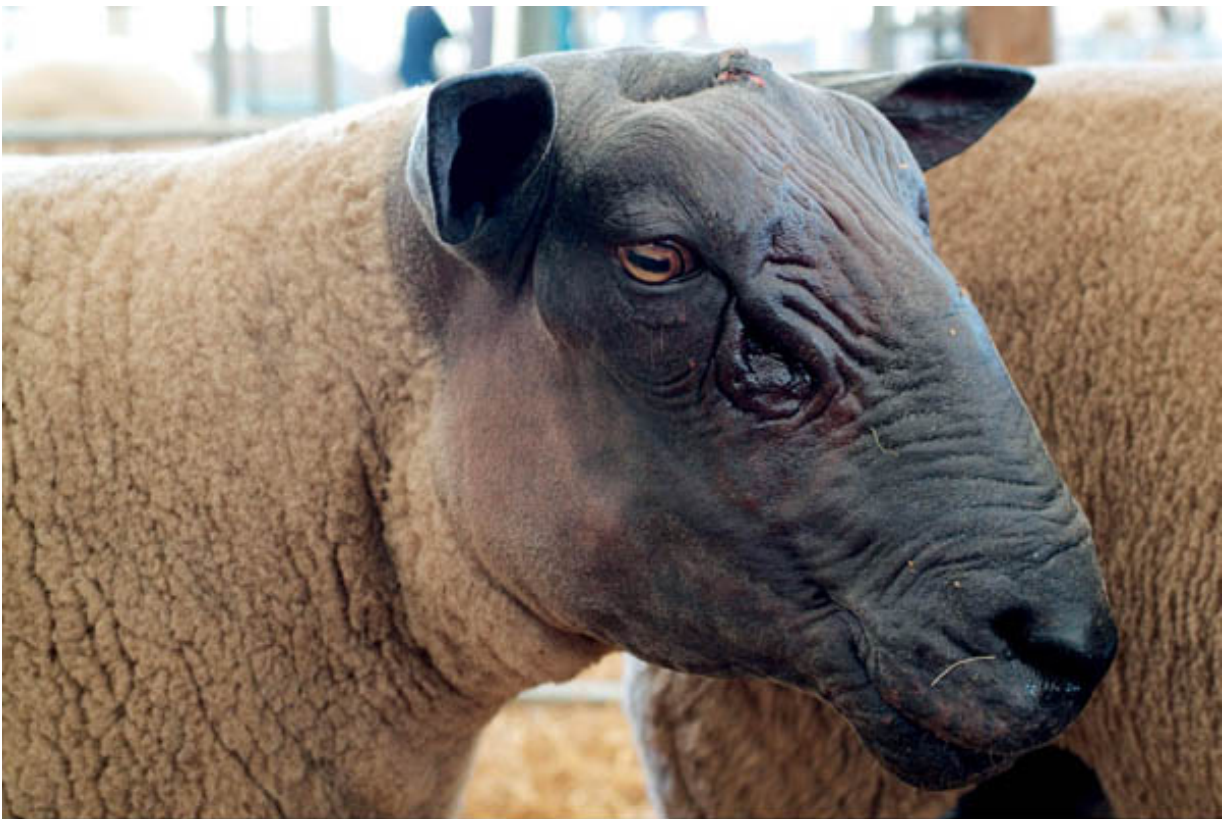
The only breed of Welsh Mountain sheep found in North America, the Black Welsh Mountain was developed strictly for the color of its fleece, which is a true black, not just a very deep brown, although the tips may become reddish from sun exposure.





# Bleu du Maine

Although not well known as a breed-specific fiber for textile work, Bleu du Maine offers easy-to-process fleece with good fiber length. Its long staples have short, pointed tips and a well-developed, wavy crimp pattern. You can flick or tease and spin from the locks, card, or comb. The wool is pleasant to spin with either woolen or worsted techniques. A woolen approach will emphasize the fiber's loft; a worsted approach will still have a light quality.



---

**Effect of dyes.** Dyeing yields clear colors with a hint of shine.

---

**Best uses.** Bleu du Maine's midrange, versatile yarns can be soft or sturdy, with nice bulk and a satisfyingly full hand. Bleu du Maine yarn is best suited for making sweaters, hats, mittens, blankets, and other homey, everyday textiles.

---

**Origin:** France

---

**Fleece weights:** 8<sup>1</sup>/<sub>2</sub>–13 pounds (3.75–6 kg)

---

**Staple lengths:** 2"–4" (5–10 cm)

---

**Fiber diameters:** 26–31 microns

---

**Natural colors:** White

---





The Millennium Bleu comes from a crossbreeding practice, intended to maximize meat production, that originated in Britain in 2000 and involves the use of a Texel or Beltex (Belgian Texel) ram and a Bleu du Maine ewe.



Millenium Bleu wool may eventually make it to market, so keep your eyes open.

# Bluefaced Leicester

Favored among fiber-lovers for its lustrous, silky, longwool fleece, Bluefaced Leicester is also one of the most predictable fleeces available in terms of grade, fiber length, and fleece weight. Often given the shorthand title BFL, it's a fairly easy-to-find, uniform fleece with no kemp or hair and a distinctly springy appearance in the locks. Locks can be slippery to prepare, so less-experienced spinners should start with commercially prepared top; loosen the top before spinning.



---

**Effect of dyes.** It takes dye colors clearly.

---

**Best uses.** Incredibly versatile, wool from the Bluefaced Leicester is fine enough to be comfortable next to the skin, yet durable and long-wearing. It blends well with other fibers, adding resilience to silk or mohair while maintaining drape and luster. Use it to make soft but hard-wearing sweaters, socks, mittens, and hats, as well as nicely draping woven fabrics for clothing and household use.

---

**Origin:** England

---

**Fleece weights:** 2<sup>1</sup>/<sub>4</sub>–4<sup>1</sup>/<sub>2</sub> pounds (1–2 kg)

---

**Staple lengths:** 3"–6" (8–15 cm)

---

**Fiber diameters:** 24–28 microns

---

**Natural colors:** Mostly white, with occasional blacks and grays

---





The Bluefaced Leicester, initially developed in the early twentieth century, was only introduced to North America in the 1970s. It belongs to the English Longwool family, a large and important group that may be descended from some of the sheep brought into England by the Romans.





# Bond

The cross of Lincoln rams on Merino ewes specially selected for fine wool resulted in Bond sheep, originally known as Commercial Corriedales and sometimes still called Bond Corriedales. Individual shearings from Bonds and Corriedales can be quite similar, but the Bond's wool is, overall, finer, with longer staples and heavier fleeces. Bonds are known for softness, good bulk, and elasticity, due to their well-defined, organized, and even crimp pattern.



---

**Effect of dyes.** Takes color well; results influenced by underlying natural tones.

---

**Best uses.** If your goal is soft, thick singles, Bond is a better choice than Merino, while Bond also makes excellent fine yarns in a lovely array of natural colors that can be used to make a variety of textiles, ranging from camisoles through sweaters and hats to blankets.

---

**Origin:** Australia

---

**Fleece weights:** 12–16<sup>1</sup>/<sub>2</sub> pounds (5.5–7.5 kg)

---

**Staple lengths:** 4"–7" (10–18 cm)

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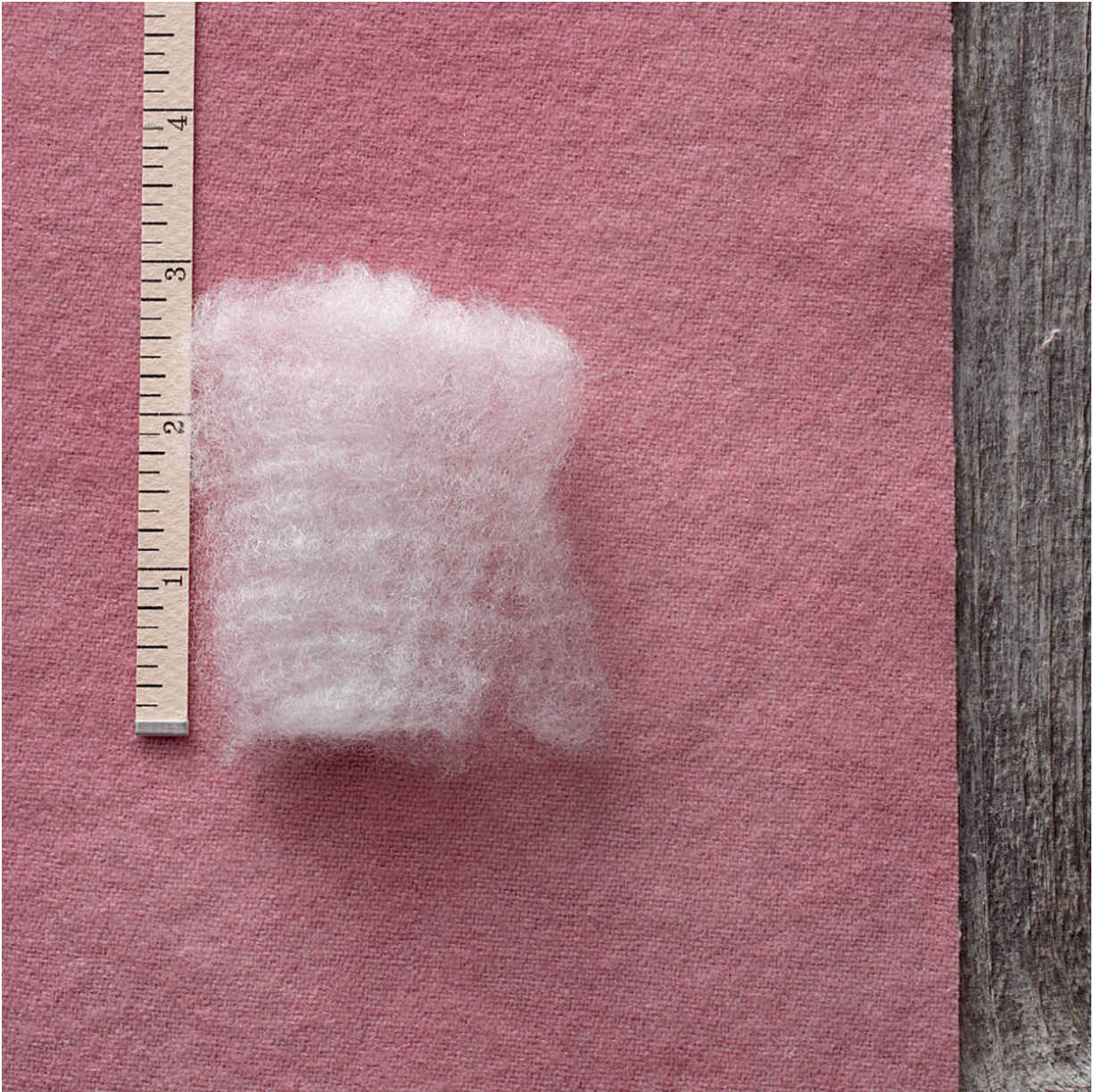
**Fiber diameters:** 22–28 microns

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**Natural colors:** White, brown, gray, black

---





Bonds, like Corriedales, were bred to perform well on the large swaths of grassland in Australia and New Zealand that are considered intermediate — neither lush nor arid.



CONSERVATION BREED

## **Border Leicester**

The sturdy, reliable fleece of the Border Leicester is known for its versatility, luster, and crisp texture, as well as the relative ease with which it can be prepared and spun. Like other longwools, Border Leicester can be spun from the lock, picked and spun, combed, or flicked. Its individually distinct locks, with their lustrous curls, can be spun for texture or for smoothness.



---

**Effect of dyes.** It takes dye clearly.

---

**Best uses.** Border Leicester's crisp hand and fiber length lend themselves to novelty yarn treatments. This wool felts reasonably well and is great for household textiles, like pillows and upholstery fabric, and durable goods, like bags. The finer fleeces make hard-wearing, comfortable everyday garments like sweaters, mittens, hats, and socks.

---

**Origin:** England (northern, near the Scottish border)

---

**Fleece weights:** 8–12 pounds (3.75–5.5 kg)

---

**Staple lengths:** 4"–10" (10–25 cm)

---

**Fiber diameters:** Variable by geographic location and breeder; 29.25–40 microns

---

**Natural colors:** White, black, gray

---





Some Border Leicester wool may feel a bit wiry, especially from the coarser end of the range, or when commercially scoured with too much enthusiasm or chemicals. Most, however, is sleek and pretty.



## CRITICAL CONSERVATION BREED

# **Boreray**

Coming as this breed does from a group of small islands quite far from the Scottish mainland, perhaps it's not surprising that it's not very well known. But the Boreray, once vital to the livelihoods of a few hardy families, remains with us both on the island it's named for and in small flocks around Britain.

Boreray fleece has indistinct, open locks with slightly pointed tips and — sometimes — the sticky base ends that are characteristic of a fleece that sheds. Boreray fleeces vary widely in fiber length and diameters from quite coarse to surprisingly fine. Begin your fiber preparation by opening the butt ends, and determine your next steps according to the profile of your individual fleece. You can spin from the lock, card, flick, or comb.



---

**Effect of dyes.** Any dye colors you use will be influenced by the wool's underlying tone.

---

**Best uses.** While most often suitable for tweeds, rugs, pillows, and other sturdy applications, an especially fine Boreray fleece could produce soft, strong garments.

---

**Origin:** Scotland (St. Kilda)

---

**Fleece weights:** 2–3½ pounds (1–1.5 kg)

---

**Staple lengths:** 2"–6" (5–15 cm)

---

**Fiber diameters:** 18–32 microns

---

**Natural colors:** White, tan, gray, brown

---



Boreray is one of a small group of islands, collectively known as St. Kilda, located west of the Scottish Hebrides. When the human residents of the islands evacuated in

1930, the flocks of Boreray sheep that were on Boreray Island and of Soay located on Soay Island were too inaccessible and wild to remove, and became the fully feral populations that still exist.



# Brecknock Hill Cheviot

Slightly finer than the fleece of other Cheviots, the dense, crisp, even fleece of the Brecknock Hill Cheviot has a bit of luster along with the Cheviot family's three-dimensional crimp. It may contain some kemp. The shorter staples will hand-card well, and there is usually enough length for flicking or combing.



---

**Effect of dyes.** This wool dyes clearly and well, although without the brilliance of the longwools.

---

**Best uses.** Brecknock Hill Cheviot yarns make great sweaters, socks, and other everyday garments, as well as household textiles such as blankets and pillows. Some of the finer fleeces may be suitable for next-to-the-skin wear.

---

**Origin:** Wales

---

**Fleece weights:** 3<sup>1</sup>/<sub>2</sub>–6 pounds (1.5–2.75 kg)

---

**Staple lengths:** 2<sup>1</sup>/<sub>2</sub>"–4" (6–10 cm)

---

**Fiber diameters:** 25–32 microns

---

**Natural colors:** Full range of natural colors

---

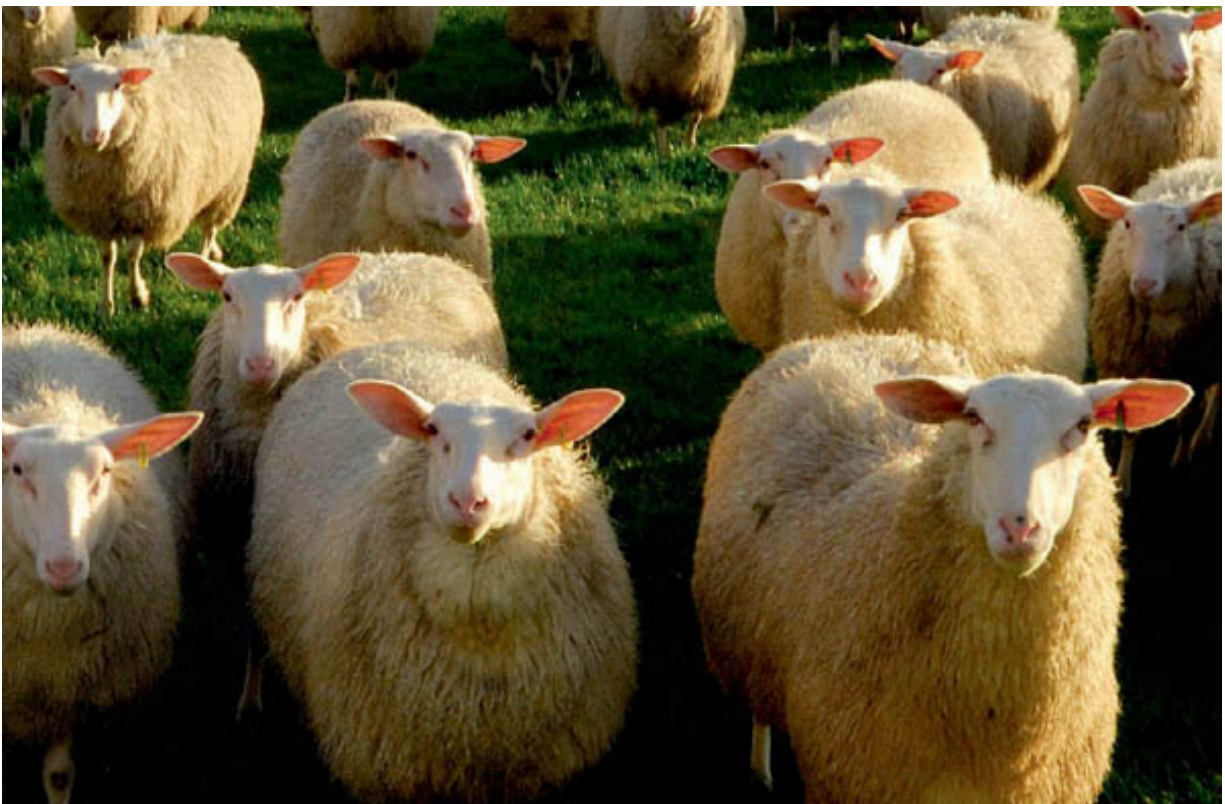




This breed was developed in the Brecon Beacons, a range of hills in south Wales, and named for Brecknockshire, one of thirteen historic Welsh counties.

# British Milk Sheep

Although bred for milk and meat, British Milk Sheep also produce fleece that is surprisingly pleasant and cooperative. Its long, fairly narrow staples have pointed tips; pronounced, open, and slightly irregular crimp; and a touch of luster. Spin the fleece from the locks, pick, or comb. If you're comfortable working long fibers on carders, you can card it. It offers opportunities to spin either fine yarns or, with longer staple lengths, relatively thick, low-twist yarns.



---

**Effect of dyes.** This fleece takes colors well and with clarity.



---

**Best uses.** While best suited to general-purpose knitted or crocheted sweaters, hats, mittens, gloves, socks, and blankets, it is also an especially nice weaving yarn, with a pleasant amount of loft and enough crispness to work well even in lace patterns.

**Origin:** England

**Fleece weights:** 9–11 pounds (4–5 kg)

**Staple lengths:** 4 1/2"–7" (11–18 cm)

**Fiber diameters:** 28–31 microns

**Natural colors:** White



Milk from sheep? Sheep's milk has a long history in many parts of the world, and has become more prevalent in North America since the late 1980s. Roquefort cheese, for example, is always made from sheep's milk, as are a number of feta cheeses.





CONSERVATION BREED

## California Red

Offering a terrific balance between durability and softness, California Red fleece has an appealing texture and may have an unusual tan color, possibly accented by red kemp fibers. The blocky staples, with their well-developed crimp, may have sticky tips; it's worth taking the time to open them up. Shorter fleeces card nicely, and longer fleeces handle well on the combs. Combing or flicking will enhance the fiber's slight luster, but may remove that interesting red kemp.





---

**Effect of dyes.** The fleece takes dye colors well, with possible warm undertones.

---

**Best uses.** Woolen-spun yarns from this breed have good body and loft for making warm, light garments. Worsted-spun yarns have great pattern definition for texture stitches, and weave up like a dream. General-purpose yarns from California Red fleece are suited to making light jackets, sweaters, hats, and gloves, as well as blankets, afghans, and other home textiles. Some softer fleeces may even be appropriate for garments that cuddle against skin.

---

**Origin:** United States (California)

---

**Fleece weights:** 5–7 pounds (2.25–3.25 kg)

---

**Staple lengths:** 3"–6" (8–15 cm)

---

**Fiber diameters:** 24–32 microns

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**Natural colors:** White or light tan with occasional darker (mostly reddish) fibers

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California Red lambs are born a dark rust or cinnamon color, and their wool lightens over the first 12 to 18 months, often retaining a beige or oatmeal cast.

# Cambridge

Development of the Cambridge breed began in 1964. Because prolificacy — the production of a lot of lambs from each ewe — and good mothering abilities have been the primary goals, Finnsheep rams, from a breed noted for large numbers of offspring, were originally mated to a mixture of sturdy, native ewes, many of them Clun Forest, all of which had produced three or more sets of triplets. Other breeds included in the mix were Llanwenog, Lleyn, and Kerry Hill, with some Suffolk and Welsh (which we take to be Welsh Mountain, given the context). By 1979 the breed was fully established, with its own society.





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**Effect of dyes.** Takes dyes well, but has a matte finish.

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**Best uses.** Sturdy, woolen-spun yarns of light to medium weight, due to short fiber lengths.

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**Origin:** England

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**Fleece weights:** 4<sup>1</sup>/<sub>2</sub>–6<sup>1</sup>/<sub>2</sub> pounds (2–3 kg)

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**Staple lengths:** Described as “short,” which probably means 2”–3” (5–8 cm) or less

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**Fiber diameters:** Described as “average quality,” which probably means high 20s to low 30s in microns

**Natural colors:** White



The mid- to late twentieth century saw a lot of emphasis on developing breeds that produce meat efficiently and also grow midgrade wools. Cambridge ewes have been most often mated to Texel rams to produce market lambs.

CRITICAL CONSERVATION BREED

## **Castlemilk Moorit**

Some spinners go into raptures over the distinctive light-brown wool of this rare breed, but nonspinners don't often have a chance to work with it, as it is hard (although not impossible) to find in ready-to-use skeins. Commercial operations generally blend Castlemilk Moorit with other fibers to make it easier to process.

Spinners find that the fleece tends to hold together as a single unit, from which the short, blocky locks can be separated. Often sun-bleached at their outer edges, the locks occasionally have slightly pointed tips. Castlemilk Moorit fleece is short enough that most will want to be carded, yet it can be spun from loosened locks. Handle it as you would a short, moderately fine wool such as Manx Loaghtan.





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**Effect of dyes.** Choose colors that will look good overdyeed on brown.

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**Best uses.** Use this breed's yarn for making midrange garments and fabrics, like outerwear sweaters, hats, and blankets.

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**Origin:** Scotland

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**Fleece weights:** 2–3 pounds (1–1.25 kg)

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**Staple lengths:** 1½"–3" (4–8 cm)

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**Fiber diameters:** 29–35 microns

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**Natural colors:** Light to medium reddish-brown



*Moorit* means reddish-brown — literally, “as red as the moors” — and is derived from the old Norse-influenced languages of the Shetland and Orkney Islands. The Castlemilk name comes from the estate in southwestern Scotland where the breed was developed in the twentieth century by Sir John (Jock) Buchanan-Jardine.

# Charollais

For a meat breed, the Charollais produces unusually fine fiber, with short staple lengths and nearly square locks. Carding is the most likely preparation method. The shearing of this breed is not fleece-oriented, so if you find that second cuts make it difficult to produce consistent rolags, try using mini combs. Because of the short fibers, singles will need to be thin and have enough twist to give them integrity. Although a woolen-style draft will preserve the wool's elasticity, it's easier to control neps with a worsted-style draft.





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**Effect of dyes.** Dyeing produces clear colors, probably without luster.

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**Best uses.** Although they don't rise to luxury level, Charollais wools make soft, general-purpose textiles.

**Origin:** France



**Fleece weights:** 4 <sup>1</sup>/<sub>2</sub>–5 <sup>1</sup>/<sub>2</sub> pounds (2–2.5 kg)

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**Staple lengths:** 1 <sup>1</sup>/<sub>2</sub>"–2 <sup>1</sup>/<sub>2</sub>" (4–6 cm)

---

**Fiber diameters:** 23–27 microns

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**Natural colors:** White

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Charollais is a fast-growing, muscular breed developed for meat from British Leicester Longwools and native ewes from a district in Burgundy.

# **Cheviot**

Durable without being harsh, Cheviot fleece is also dense, firm, and versatile. Its staples are rectangular, with slightly pointed tips, and the Cheviot family's unique, three-dimensional crimp is bold and uniform, with consistent quality from butt to tip. The ideal fleece will contain no hair, kemp, or colored fibers. The shorter staples will hand-card well, but there's usually enough length for flicking or combing, and good Cheviot is a pleasure to spin.





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**Effect of dyes.** Cheviot wool is chalky and so lacks the brilliance of the longwools, but it dyes well and clearly.

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**Best uses.** The finer fleeces, although not of luxury texture, will make pleasant sweaters, socks, and other next-to-the-skin garments, while the coarser ones will yield great everyday blankets, pillows, and outerwear.

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**Origin:** Border areas between England and Scotland

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**Fleece weights:** 5–10 pounds (2.25–4.5 kg)

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**Staple lengths:** 4"–5" (10–13 cm)

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**Fiber diameters:** 24–33 microns

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**Natural colors:** White

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Cheviots are very active sheep; because of this, many people who raise Border collies and other herding dogs use Cheviots for training them. Formerly called Border Cheviot, this breed is still sometimes referred to as the



South Country Cheviot, to distinguish it from the larger North Country Cheviot.

## CONSERVATION BREED

# Clun Forest

Clun Forest wool is a very appealing fiber, ideal for making textiles that are both comfortable and able to stand up to some abuse. The breed's dense locks and blocky staples have blunt or somewhat pointed tips and a well-developed crimp that contributes to the yarn's springy quality. Card it with hand carders or a drum carder, flick, comb, or spin from the lock, depending on the staple length and your own preferences. Clun Forest fleece is pleasant to spin, with lots of air and bounce to the yarn, and it blends well with less-elastic fibers of similar length, contributing resilience and loft.



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**Effect of dyes.** Takes color well and clearly.

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**Best uses.** Perfect for everything from a tough pair of mittens or an everyday shawl to industrial felts or wool-filled futons, Clun Forest fleeces deserve to be better known by textile enthusiasts.

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**Origin:** England

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**Fleece weights:** 4<sup>1</sup>/<sub>2</sub>–9 pounds (2–4 kg)

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**Staple lengths:** 2½"-5" (6-13 cm)

**Fiber diameters:** 25-33 microns

**Natural colors:** White



The Clun Forest breed was developed from sheep native to the open pastures and wooded hills of England's western border, with additions of Hill Radnor, Shropshire, and Kerry Hill genes.



# Colbred

The versatile, midrange wool of this fairly new breed has particularly nice loft: even a combed preparation will yield a puffy result. The Colbred's indistinct, rectangular locks have short, pointed tips and can be combed or carded, according to the fiber length and your own preferences. You can also pick and spin the locks. Yarns with lots of twist will emphasize the fiber's crisp qualities, while those with less twist will bring out its bounce and loft.



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**Effect of dyes.** The fleece takes colors well.

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**Best uses.** Colbred wool is a good multipurpose fiber for knitting, weaving, or crocheting durable clothing, blankets, bags, and other items you'd make from a standard knitting-worsted-style yarn. The finest part of the range may be suitable for garments worn next to the skin.

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**Origin:** England

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**Fleece weights:** 5<sup>1</sup>/<sub>2</sub>–8 pounds (2.5–3.75 kg)

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**Staple lengths:** 4"–6<sup>1</sup>/<sub>2</sub>" (10–17 cm)

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**Fiber diameters:** 26–32 microns

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**Natural colors:** White

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The Colbred is named for Oscar Colburn, the breeder who, starting in 1956, crossed East Friesian with Border Leicester, Dorset Horn, and Clun Forest to develop the breed for meat and dairy production.

# Columbia

The wool of the Columbia is developed primarily for sale through commercial channels, but it's a versatile fiber that handspinners can appreciate and it is becoming more readily available in breed-specific yarns. Its blocky staples may have short, recognizable tips; its fibers have a well-developed crimp that's moderately disorganized in the locks. The fleece contains significant amounts of grease and suint, so you'll want to wash it before spinning. Comb, card, flick, or spin from the lock. Choose your favorite spinning approach: woolen, worsted, or any combination will suit Columbia fleece.





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**Effect of dyes.** Columbia wools take dye colors clearly.

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**Best uses.** Lofty, somewhat crisp, without much luster, Columbia can be used to make socks, sweaters, pillows, blankets, and other everyday textiles. The finer fleeces qualify for next-to-the-skin wear.

---

**Origin:** United States



**Fleece weights :** 10–16 pounds (4.5–7.25 kg)

**Staple lengths:** 3"–6" (8–15 cm)

**Fiber diameters:** 23–31 microns

**Natural colors:** White, brown



Columbias and the closely related Panamas originated from the same combination of original breeds, with the gender contributions reversed. Columbias came from a cross of Lincoln Longwool rams and Rambouillet ewes,

while Panamas were produced by Rambouillet rams and Lincoln ewes. Panamas are hard to find, but still exist.



# Coopworth

The versatile, sturdy wool of this breed is known for its lengthy staples, well-defined crimp, and luster. Because of the length, most people will want to spin from the lock, from the fold, flick, or comb. When combing, be aware that Coopworth puffs up so much that you may find you've overloaded the combs. You'll find this fleece easy to spin.



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**Effect of dyes.** White fleeces take dye colors clearly; grays overdye with subtlety.

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**Best uses.** Similar in feel to Border Leicester, Perendale, or Romney, Coopworth is best suited to outerwear and durable household textiles, although some fleeces may make garments that work well in limited contact with the skin. Its slightly crisp hand gives definition to stitch or weave structures. It felts moderately well.

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**Origin:** New Zealand

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**Fleece weights:** 8–18 pounds (3.75–8.25 kg)

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**Staple lengths:** 5"–8" (13–20 cm)

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**Fiber diameters:** 30–39 microns

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**Natural colors:** White, gray, brown

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Some Coopworth flocks produce much coarser wool than others: the fiber's grade designations can differ depending on where the sheep are from.

# Cormo

Long-stapled and consistent, Cormo wools can be as gentle as cashmere, yet offer enough body to define stitch and weave patterns and maintain clarity in knit/purl textures. With its well-defined, regular crimp, and dense, rectangular staples, this fleece offers excellent elasticity and an appealing fluffiness. Cormo's fine-diameter fibers require a delicate touch initially, but once they're prepared for spinning, anything goes. Spin directly from the locks, flick, hand- or drum-card (using fine carding cloth), or comb. Be careful not to overwork the fiber or you'll tangle it; be sure to spin fine enough, and with enough twist, to secure and protect the fibers. Before you commit to a technique, check your finished yarn: You may think you're spinning superfine and then discover that the strands bloom a lot when plied and washed.



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**Effect of dyes.** The whites take dyes well, and the soft browns can be overdyed.

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**Best uses.** Nicely balanced between softness and body, Cormo wools are perfect for lace patterns, next-to-the-skin garments, and baby clothes.

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**Origin:** Australia (Tasmania)

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**Fleece weights:** 5–12 pounds (2.25–5.5 kg)

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**Staple lengths:** 3"–5" (8–13 cm)

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**Fiber diameters:** 17–23 microns

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**Natural colors:** White for the most part, but also shades of gray-browns



*Cormo* is a contraction of Corriedale and Merino; the breeds combined in the 1960s to develop a flock with increased fertility, frame size, and yield of fleece.



# Corriedale

This reliable, multipurpose wool is a pleasure to spin, knit, crochet, or weave. Its long staples and well-defined, even crimp provide loft and elasticity and make it an excellent handspinning wool. Within a single fleece, the wool tends to be consistent in length, crimp profile, and fineness. Locks are normally rectangular and dense, with flat tips. You can comb, flick, card, or spin from the locks. Cut the staples in half if you want to card fiber that is on the long side for woollen preparation. Easier to spin than many wools of similar fineness, Corriedale is also fairly easy to find in yarn form.





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**Effect of dyes.** The whites take dye well; the grays and browns can be overdyeed.

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**Best uses.** If you want to make sweaters, socks, pillows, blankets, and other household textiles, this medium-soft, resilient wool is ideally suited to the task. For felters, it's definitely a wool to experiment with.

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**Origin:** New Zealand

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**Fleece weights:** 10–20 pounds (4.5–9 kg)

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**Staple lengths:** 3"–6" (8–15 cm)

---

**Fiber diameters:** 25–35 microns

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**Natural colors:** White, gray, brown, black

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Corriedales were first imported by the USDA to the Laramie, Wyoming research station in 1914. Many sheep raised in the Falkland Islands and South America are Corriedales, and Corriedale wool is commonly shipped

from Chile through the port of Punta Arenas, and called *punta* or *PA*.



CRITICAL CONSERVATION BREED

# Cotswold

The Cotswold is known for its heavy, lustrous, wavy locks, which offer fiber lovers a variety of choices. The fleece's curls can contribute great texture or can be smoothed over; because its long fibers need little twist to hold them together, Cotswold is a good choice for novelty yarns. You can spin it from locks, pick and spin, flick, or comb.



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**Effect of dyes.** The fleece takes dye colors beautifully, and its luster enhances the results. Overdye its many natural colors to create subtly distinctive alternatives.

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**Best uses.** It can be used in lock form for dolls' wigs, and for weaving fleece rugs and other textured applications. It's also a willing felter. Use Cotswold fleece to make hard-wearing items like rugs, bags, or outer garments. Spun fine, it makes a lovely lace; it's also terrific for warps and for use in weft-faced textiles.

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**Origin:** England

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**Fleece weights:** 9–20 pounds (4–9 kg)

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**Staple lengths:** 7"–15" (18–38 cm)

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**Fiber diameters:** 33–42 microns

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**Natural colors:** White, black, grays

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Although a quintessentially English breed, you can often find Cotswolds in North America, in petting zoos and historic centers, as well as in small private flocks. Look for large sheep with shocks of curly bangs hanging over their foreheads!





## CONSERVATION BREED

# Dalesbred

“Rugged” may be the best word for this breed’s wool, often used commercially for making carpets. Expect long staples, thick at the bases, with curly, pointed tips and loose, wavy crimp. Combing will separate the longer, coarser, hairy fibers of the tips from the shorter, finer undercoat fibers, but probably not cleanly. If you’re comfortable carding long fibers, that’s an option; you can also pick the locks thoroughly and then spin from the mass, or loosen the locks and spin them one after the other. When spinning, hold the fibers lightly, as it’s difficult to get such varied fibers to feed in at the same rate.



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**Effect of dyes.** Dalesbred fleece will dye nicely, although there may be some kemp that won't show the dyed color well.

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**Best uses.** It's a natural for rugs and other textiles that need to hold up well to wear. It offers interesting textural effects, and finer fleeces can be suitable for outer garments.

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**Origin:** Northern England/Wales

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**Fleece weights:** 4 1/2-7 pounds (2-3.25 kg)

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**Staple lengths:** 5"-8" (13-20 cm)

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**Fiber diameters:** 36–40+ microns

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**Natural colors:** White

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You can recognize Dalesbred sheep by the distinctive white patches, called *smits*, on either side of their noses, and by their black-and-white legs. But don't expect to see them unless you're wandering around in the Yorkshire Dales: Ninety-five percent of all Dalesbreds live on those cold, wet hillsides.



CONSERVATION BREED

## **Dartmoor Greyface**

While never soft, adult Dartmoor fleeces offer shine, length, and strength in abundance, making them a good choice for sturdy fabrics. You can use the compact, curly locks unspun for pile or a fleece rug, or for added texture when woven into a base fabric. Depending on their length, strength, and cohesion, you can pick, flick, or use combs with coarse teeth. If you're combing, tease the locks apart before mounting them on the combs, don't overload, and take very long strokes. Use a light touch with Dartmoor — it's so strong that it can actually cut your fingers if you tug too hard! It spins into highly textured, durable yarns, and low-twist yarns are possible because of the fibers' length.



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**Effect of dyes.** Dartmoor's luster gives dye colors shine and depth.

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**Best uses.** This is great wool for making hard-wearing tweeds, blankets, rugs, and carpets.

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**Origin:** England

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**Fleece weights:** 13–20 pounds (6–9 kg) or more

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**Staple lengths:** 6"–12" (15–30 cm)

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**Fiber diameters:** 36–40+ microns

**Natural colors:** White





*Greyface* refers to the grayish-black, mottled coloring around this sheep's snout. The Dartmoor Greyface is a slightly newer breed than the Dartmoor Whiteface, and shows more influence from infusions of other breeds, possibly including Leicester, Cheviot, Southdown, and Lincoln, although for the most part it avoided the major "improvement" push of the nineteenth century.

## CONSERVATION BREED

# **Dartmoor Whiteface**

See the Dartmoor Greyface for a description of the wool characteristics of this breed, a hardy type that has inhabited the moors of Devon since before human records were kept. It likely originated from infusions of old-style Leicester sheep into native Welsh Mountain types that had been sturdy enough to handle the environment. The Dartmoor Whiteface is the only longwool breed with horns (in the rams).





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**Origin:** England

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**Fleece weights:** 10–16 pounds (4.5–7.25 kg)

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**Staple lengths:** 6"–12" (15–30 cm)

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**Fiber diameters:** 36–40+ microns

**Natural colors:** White



While Dartmoor Whiteface and Greyface have almost identical fleece profiles, the Whiteface is the older of the two breeds. Both breeds are endangered, and wools can be difficult to locate but are worth seeking out by the textile adventurer.



## CONSERVATION BREED

# Debouillet

Debouillet sheep, part of the Merino family, produce fine, soft wool with plenty of elasticity and resilience. Expect dense, blunt locks, often weathered at the tips, with tight crimp and a heavy protective grease layer. Remove the grease using hot water, but don't agitate — Merino-family wools love to felt! Also be sure not to let the washing solution cool so the grease gets redeposited on the fiber; if this happens, it can be extremely difficult to remove. Spin clean wool from the lock, comb, or card. To prevent neps, use fine-toothed combs, carders, or carding cloth. It's easiest to spin Debouillet into fine yarn, but you can achieve thicker yarn by plying.



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**Effect of dyes.** Dyeing will produce clear colors.

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**Best uses.** This is a great fiber for making lightweight, soft, delicate fabrics that wear reasonably well. It felts easily.

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**Origin:** United States (New Mexico)

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**Fleece weights:** 9–18 pounds (4–8.25 kg)

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**Staple lengths:** 3"–5" (8–13 cm)

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**Fiber diameters:** 18–24 microns

**Natural colors:** White





Debouillet wool can be hard to find, as flocks are concentrated mainly in the southwestern United States.

# Delaine Merino

Also known as the Type C Merino, Delaine Merino wool is fine, soft, and highly crimped. With dense, blunt, heavily greased locks that are often weathered or dirt-caked at the tips, raw Delaine requires careful cleaning with hot water. Don't agitate, though — like all Merinos, this fleece is eager to felt! The breed's characteristic crimp contributes elasticity, but can make the wool challenging to handle. You can spin from the lock, comb, or card using fine-toothed combs, carders, or fine-fiber carding cloth. Delaine Merino wool lends itself to being spun fine, so if you want a thicker yarn, ply together a number of thin strands.



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**Effect of dyes.** White fleeces dye well, yielding clear colors.

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**Best uses.** Delaine wool, with its softness and resilience, is a classic fiber for shawls, camisoles, and baby garments. It felts easily.

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**Origin:** United States (Pennsylvania)

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**Fleece weights:** 9–14 pounds (4–6.25 kg)

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**Staple lengths:** 2½"–4" (6–10 cm)

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**Fiber diameters:** 17–22 microns

**Natural colors:** White



Like other Merinos, Delaines have long, productive lives of a decade or more.



# Derbyshire Gritstone

Offering the finest, most feltable wool in the Blackfaced Mountain family, Derbyshire Gritstone is a breed whose fleeces have won top honors in Britain. The wool is consistent and dense, with enough crimp to yield yarns with good loft and resilience. The blocky staples have very short, pointed tips; locks tend to disengage from the fleece in long strips, and may contain some black fibers or kemp. You'll need to loosen up the locks before picking or combing. Carding will work well on shorter fleeces. This is an easy wool to draft and spin, and offers possibilities for nice yarns in a wide range of weights.





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**Effect of dyes.** The wool's subtle luster produces clear dye colors with more light reflection than other Blackfaced Mountain breeds.

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**Best uses.** Derbyshire Gritstone is a workhorse wool, a versatile choice for projects that call for midrange wools, like sweaters, blankets, and weft-faced or balanced weave structures. It felts decently.

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**Origin:** England

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**Fleece weights:** 5–6½ pounds (2.25–3 kg)

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**Staple lengths:** 4"–8" (10–20 cm)

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**Fiber diameters:** 27–31 microns

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**Natural colors:** White

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The Blackfaced Mountain breeds may also be referred to as blackfaced hill, blackfaced heath, blackfaced moor, or just blackface sheep. This can be confusing because Scottish Blackface sheep are also referred to as Blackface sheep.





CONSERVATION BREED

# **Devon and Cornwall Longwool**

The massive fleeces of Devon and Cornwall sheep give new meaning to the word substantial. Long, sleek, and strong, this fiber will reward knitters, weavers, and other artisans with its heft, drape, and presence. Locks are long and wavy, with curly, pointed tips. Use simply as locks, spin from the lock, pick and spin, or use sturdy combs with widely-spaced teeth. Be careful not to overload the combs, and take very long strokes. The fibers are slippery, and may be easier to control if lightly sprayed with water to reduce static.



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**Effect of dyes.** The high-luster fleece takes dye colors clearly and brightly.

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**Best uses.** The adult wool, classed as a carpet type, is strong and shiny enough to make great rugs, bags, and other sturdy textiles, and perhaps even tapestries. It makes an excellent heavy warp for weaving. It is suitable for felting. Devon and Cornwall lambswool is quite fine, and can be used for next-to-the-skin projects.

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**Origin:** England

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**Fleece weights:** 13–26 pounds (6-11.75 kg)

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**Staple lengths:** 8"–12" (20–30 cm)

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**Fiber diameters:** 36–40+ microns

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**Natural colors:** White

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Devon and Cornwall sheep are raised as dual-purpose animals, producing both meat and fiber.

CONSERVATION BREED

## **Devon Closewool**

Devon Closewools have medium-length wool that is crisp and lofty, with lots of body. The dense, blocky, relatively indistinct staples tend to separate from the mass in clumps; the crimp is well developed and mostly disorganized. The fleece is easy to process on coarse combs; shorter fiber lengths can be carded. You can also pick and spin directly from the lock for textured results. Devon Closewool is easy and fast to spin.





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**Effect of dyes.** There may be some kemp, which will affect the wool's appearance when dyed, but otherwise the wool's touch of luster enhances bright colors.

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**Best uses.** The strength of this fiber makes it a good choice for outerwear, blankets, bags, and the like, although some finer fleeces may be suitable for sweaters, hats, and mittens.

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**Origin:** England

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**Fleece weights:** 5–13 pounds (2.25–6 kg)

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**Staple lengths:** 3"–4 1/2" (8–11 cm)

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**Fiber diameters:** 28–35 microns

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**Natural colors:** White

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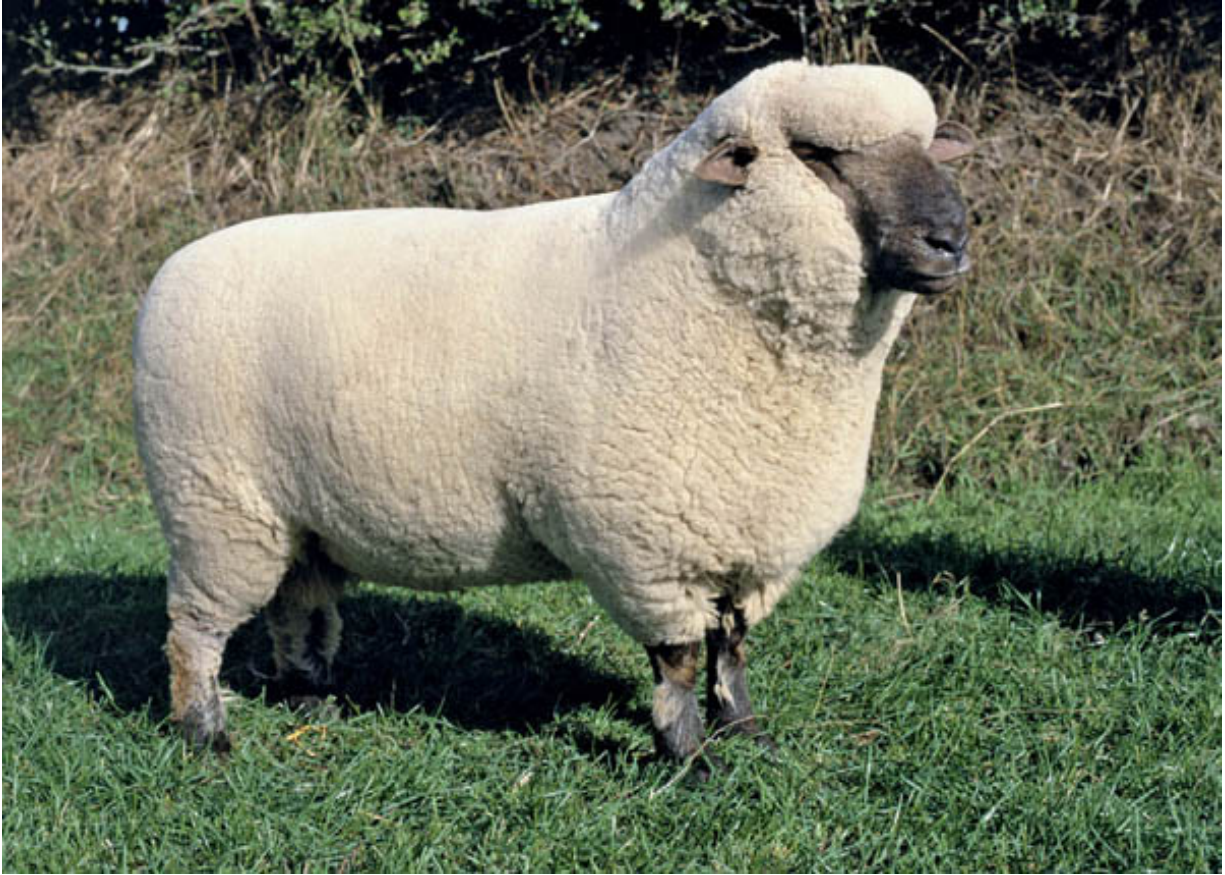
Raised primarily as a meat breed, Devon Closewools are often crossed with Bluefaced Leicesters to produce Closewool Mules.



## CONSERVATION BREED

# **Dorset Down**

The wonderful, durable wool of the Dorset Down is not as well known to handspinners as it ought to be, and the fact that there are three distinct breeds named Dorset can be confusing (Dorset Down, Dorset Horn, and Dorset Poll or Polled Dorset). The Dorset Down has a nice, versatile fleece that is dense and resilient, with blocky, rectangular staples that hold together and may be hard to distinguish from each other. You can card shorter fleeces and flick or comb longer ones. Maintain loft and springiness by keeping your drafting on the light side and the twist at moderate levels.



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**Effect of dyes.** Neither luminous nor dull, this wool takes dye well.

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**Best uses.** Dorset Down is great for making long-wearing socks, mittens, hats, and everyday sweaters, and its finer fleeces are soft enough to wear against the skin. It does not easily felt.

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**Origin:** England

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**Fleece weights:** 4<sup>1</sup>/<sub>2</sub>–6<sup>1</sup>/<sub>2</sub> pounds (2–3 kg)

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**Staple lengths:** 2"-4 1/2" (5-11 cm)

**Fiber diameters:** 25-29 microns

**Natural colors:** White





Sheep in the Down family (Dorset Down, Hampshire Down, Oxford Down, Shropshire, Southdown, and Suffolk) all have colored faces, ranging from tannish brown to dark brown, or charcoal to true black, and their wools don't felt readily.

## CONSERVATION BREED

# **Dorset Horn**

The somewhat crisp, versatile wool of this breed has good body as fleece or yarn. With an organized, regular, and relatively fine crimp pattern in both fiber and lock, Dorset Horn is amenable to a variety of preparation methods. You can card it or comb it, depending on the length of its dense locks. It can be spun from the staple. The crimp can vary, and a longer fleece with a more open crimp pattern will be easier to spin than a shorter-stapled fleece with tighter crimp.



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**Effect of dyes.** It takes dye clearly and well.

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**Best uses.** Whether spun using the woolen method, for airiness, or the worsted method, for compactness, you'll find Dorset Horn appropriate for making everyday garments, blankets, and the like. It is reluctant to felt.

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**Origin:** England

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**Fleece weights:** 4<sup>1</sup>/<sub>2</sub>–9 pounds (2–4 kg)

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**Staple lengths:** 2<sup>1</sup>/<sub>2</sub>"–5" (6–13 cm)

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**Fiber diameters:** 26–33 microns

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**Natural colors:** White

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Dorset Horn is the only traditional British breed that can mate and produce lambs throughout the year, not just in winter and spring.

# Dorset Poll (Polled Dorset)

The wool of this breed is versatile and somewhat crisp, with good body. An organized, regular, and relatively fine crimp pattern in both fiber and lock makes Dorset Poll amenable to a variety of preparation methods. Depending on the length of its dense locks, you can card it or comb it. It can be spun from the staple; remove any sticky, dry tips if necessary. Crimp varies, and a fleece with a more open crimp pattern will be slightly easier to spin than one with tighter crimp.





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**Effect of dyes.** It takes dye clearly and well.

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**Best uses.** Whether you spin using the woolen method, for airiness, or the worsted method, for compactness, you'll discover that Dorset Poll yarn is well suited to making everyday garments, blankets, and the like. It is reluctant to felt.

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**Origin:** Australia and United States (North Carolina),  
separate strains

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**Fleece weights:** 4 1/2–9 pounds (2–4 kg)

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**Staple lengths:** 2 1/2"–5" (6–13 cm)

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**Fiber diameters:** 26–33 microns

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**Natural colors:** White

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Dorset Polls are now far more common than their siblings, the Dorset Horns, or the similarly named but only distantly related Dorset Downs.

# East Friesian

One of the most outstanding dairy breeds of sheep, the East Friesian has surprisingly nice fleece, in a range of fiber grades. Expect blocky, dense locks with a well-developed but somewhat disorganized crimp pattern. Let your particular batch of wool determine how you prepare it: shorter staple lengths can be carded by hand or by drum carder, while longer fibers may want to be combed or spun from the fold. Spin worsted for a smooth yarn; for extra bounce, but perhaps more scratchiness, spin woolen style. Either way, the resulting yarn will probably be both crisp and light, with good body.





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**Effect of dyes.** The low-luster white fleeces take dyes well.

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**Best uses.** While some East Friesian fleeces may be fine enough to use for sweaters, hats, and other everyday clothing, most are better suited for making heavy-duty blankets, rugs, bags, and pillows.

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**Origin:** Germany

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**Fleece weights:** 9–13 pounds (4–6 kg)

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**Staple lengths:** 3"-6" (8-15 cm)

**Fiber diameters:** 26-37 microns

**Natural colors:** White, black

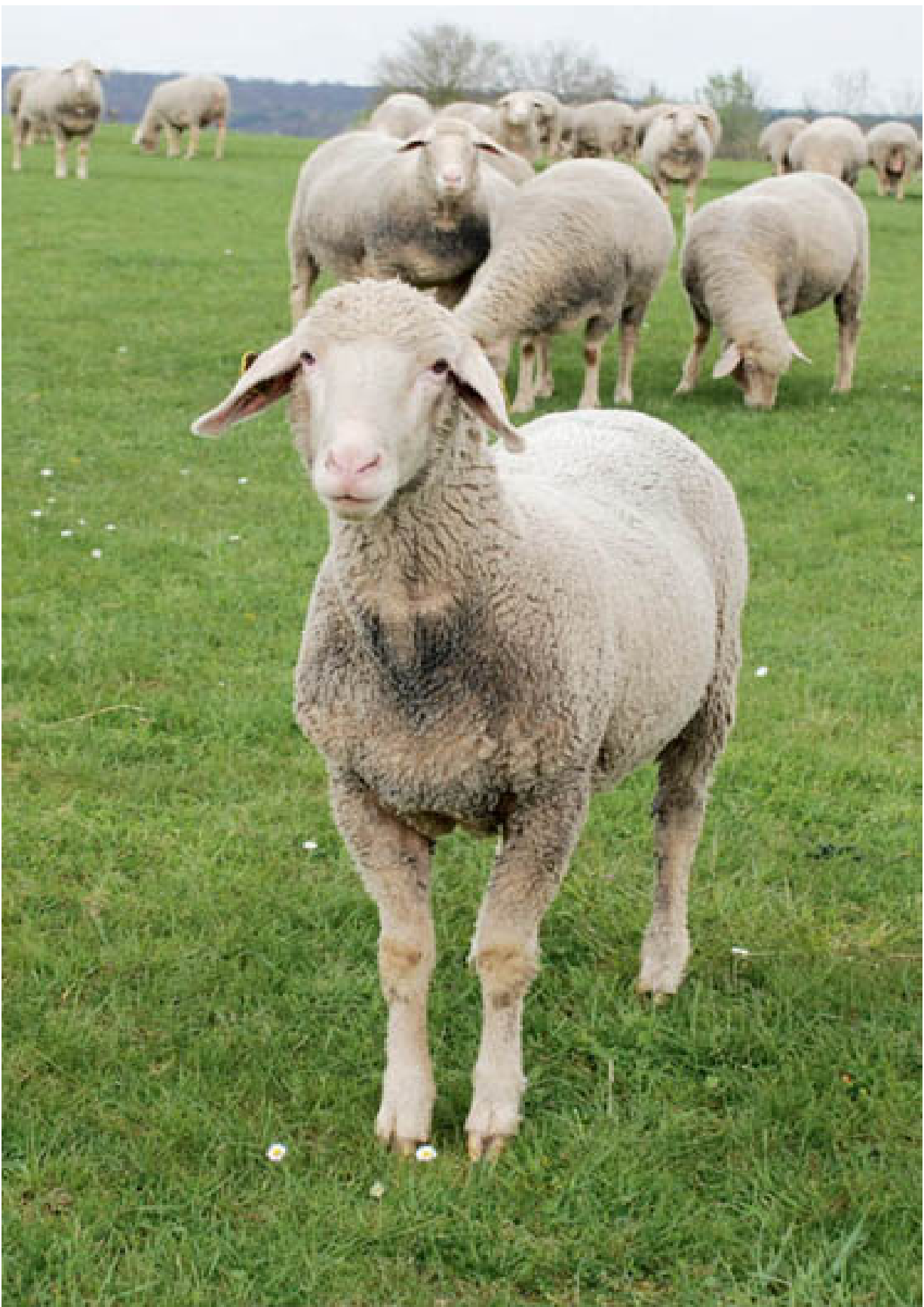


The East Friesian is known as the “Holstein of the sheep world” because, like Holstein cows, it produces generous amounts of milk.



# **Est à Laine Merino**

Found mostly in Europe, the wool of this Merino strain is generally described as “very fine,” which makes it a good choice for lightweight, soft, delicate fabrics. You’ll find that the dense, blunt locks of most Merino fleeces are protected by a heavy layer of grease; removing it as you prepare for spinning will require a continuous supply of very hot water, a good scouring agent, and no agitation at all, as Merinos love to felt. Once clean, you can spin Est à Laine Merino from the lock, comb, or card. Because of its fineness, the wool tends to form neps, so use fine-toothed combs, cotton carders, or special fine-fiber carding cloth on a drum carder. Spin fine. To make thick yarn, spin several thin, nicely twisted strands and then ply them together.



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**Effect of dyes.** Takes color well, with a matte finish.

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**Best uses.** Est à Laine fleeces raised with a focus on wool quality will range from 15 to 30 microns and are wonderful for shawls, camisoles, and baby clothes. If the sheep are raised for meat/wool balance or with a meat focus, the fibers will be larger in diameter and sturdy enough for general-wear clothing, like hats, mittens, and sweaters. The wool felts easily.

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**Origin:** France

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**Fleece weights:** 10–14½ pounds (4.5–6.25 kg)

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**Staple lengths:** up to 4" (10 cm)

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**Fiber diameters:** Estimated 15–30 microns

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**Natural colors:** White

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This breed's name includes the words for "wool" and "east," reflecting its development in northeastern France, on the border with Germany.



CONSERVATION BREED

## **Exmoor Horn**

Crisp, crunchy, springy — this is a wool with plenty of body and an independent character, perfect for hearty outerwear. Exmoor's blocky staples have slightly pointed tips and a relatively large number of semiorganized crimps per inch; there may be some kemp. You can card shorter fibers, comb longer ones, or spin from the lock — it's an easy wool to spin. If the fibers feel wiry, you may want to use a worsted method to keep the yarns smooth for use in clothing.



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**Effect of dyes.** This wool takes dye colors well and clearly.

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**Best uses.** The body and resilience of Exmoor yarn give it a cushiony feel and allow it to show fabric textures nicely. Stitch or weave structures will be clearly defined unless the fabric is fulled or felted. Exmoor is a good choice for well-fulled, weather-resistant coats, jackets, hats, and other rugged items.

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**Origin:** England

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**Fleece weights:** 4<sup>1</sup>/<sub>2</sub>–6<sup>1</sup>/<sub>2</sub> pounds (2–3 kg)

---

**Staple lengths:** 3"–5" (8–13 cm)

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**Fiber diameters:** 26–38 microns

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**Natural colors:** White

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The ancestors of these hardy sheep have been on Exmoor, in southwest England, for so long that no one knows when they arrived. Most Exmoor Horns live within a small area focused on Exmoor National Park. In addition to being

sturdy and economically useful animals, they fit well into conservation management plans.

# Faroese

Sheep have been important for thousands of years to the people of the Faroe Islands, a cluster located halfway between Iceland and Norway. Fleeces are fairly evenly divided in color between white, black, and gray, although browns (dark, light, and reddish) appear now and then, as do some multicolored patterns. The outer coat is long; the inner coat is a good deal shorter, finer, and softer. To show off the best qualities of each type of fiber, the coats can be separated and processed individually, which is fairly easy to do, but they can also be spun together.

The mixed fibers will produce yarns that are both sturdy and lofty. To get a soft result suitable for most types of sweaters and other garments, you'll need to use just the undercoat, either carded or combed. Because of the length, keeping the fibers parallel is the most likely spinning method.





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**Effect of dyes.** Influenced by underlying color and nice but not brilliant luster.

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**Best uses.** The outercoat can be made into a strong yarn for cording, a dog leash, or another use that requires durability.

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**Origin:** Faroe Islands

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**Fleece weights:** 2<sup>1</sup>/<sub>4</sub> pounds (1 kg) or more

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**Staple lengths:** 3" (8 cm) (undercoat); 12"–16" (30–40 cm) (outercoat)

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**Fiber diameters:** 12–80 microns (undercoat/outercoat)

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**Natural colors:** White, black, gray, and a range of browns, including reddish tones

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Faroese are Northern European Short-Tailed sheep, and the population is closely related to the old-style Spaelsaus, Icelandics, and Shetlands, but with more dramatic differences in length between the undercoat and outercoat.

# Finnsheep

The versatile wool of this breed offers a nice combination of softness and durability, with a pleasant resilience that comes from its moderate crimp. There's not a lot of grease in it, so it's easy to clean and prepare. Just be sure to watch the water temperature and avoid agitating, or the wool will felt. Expect an open fleece, from which you can easily separate locks with slightly pointed tips. Shorter locks can be carded, but most Finn wool has perfect staple lengths for combing; keep the fibers parallel to accentuate the luster. Whether you fluff out the locks and spin directly from them, or spin longer fleeces from the fold, Finn is easy to work with.



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**Effect of dyes.** It takes dyes well.

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**Best uses.** Sturdy enough to wear well, yet often fine enough to be worn next to the skin, Finn wool is a great choice for sweaters, blankets, textured knit/purl patterns, and woven laces. It felts easily.

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**Origin:** Finland

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**Fleece weights:** 4–8 pounds (1.75–3.75 kg)

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**Staple lengths:** 3"–6" (8–15 cm)



**Fiber diameters:** 22–33 microns

**Natural colors:** White, black, gray, and occasionally brown



The Finn is one of the most prolific sheep in the world, with litters of as many as nine lambs born at a time.

## CONSERVATION BREED

# Galway

Galway fleece produces matte-surfaced yarns with reliably crisp, pleasant, firm character. Although it's referred to as an Irish longwool and its heritage includes infusions of Leicester Longwool, the Galway's wool does not have the English longwools' luster or strongly organized crimp. The locks have a longish profile, wavy crimp, and pointed, slightly curled tips. Galway is a natural for combing, but you can also spin from loosened locks, or card if the fiber length suits your inclinations. The fleece drafts easily to either thick or thin singles, and the amount of twist can vary from relatively low to fairly high. The individual strands of simple yarns will retain their identities; more textured novelty yarns will have enough body to resist being crushed.





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**Effect of dyes.** Dyeing produces clear colors.

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**Best uses.** If you want to make knitted, crocheted, or woven items with superior stitch definition, this lesser-known wool is a lovely choice.

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**Origin:** Ireland

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**Fleece weights:** 5<sup>1</sup>/<sub>2</sub>–8 pounds (2.5–3.75 kg)

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**Staple lengths:** 4<sup>1</sup>/<sub>2</sub>"–7<sup>1</sup>/<sub>2</sub>" (11–19 cm)

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**Fiber diameters:** 26–32 microns

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**Natural colors:** White



The Galway is the only remaining distinctively Irish sheep breed.



# Gotland

Long, lustrous, with a well-developed crimp, Gotland fleece is suitable for use in any technique. The locks are dense and astonishingly wavy, like shiny springs; the staples feel soft and silky. The fibers' relative fineness can make them slick and flyaway, especially in dry climates. Open the locks slightly and spin directly; or flick the locks and spin; or comb; card if fiber length allows. Gotland is easier to spin into fine yarns than into bulky ones, and when you add twist, the fluffy fibers nestle down together to create a yarn that feels heavier and has better draping qualities than you might expect. You can spin smooth or heavily-textured yarns, and the unspun locks can be used to decorate other textiles.



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**Effect of dyes.** It takes dye well over the base tones of gray.

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**Best uses.** For surprisingly soft and comfortable garments, and for other textiles with wonderful drape, shine, and texture, Gotland is a rewarding fiber. It felts easily.

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**Origin:** Sweden

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**Fleece weights:** 5<sup>1</sup>/<sub>2</sub>–11 pounds (2.5–5 kg)

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**Staple lengths:** 3"–7" (8–18 cm)

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**Fiber diameters:** 27–35+ microns; lambs as fine as 18 microns

**Natural colors:** Light gray to near black





The name *Gotland*, which refers to a Swedish breed developed in the early twentieth century, is sometimes confused with the ancient Goth, Gute, or Gutefår breed, its ancestor.

# Gromark

Beginning in the late 1960s, two separate efforts to develop breeds by crossing Border Leicester rams on Corriedale ewes began, one in Australia and one in New Zealand. The goal was to maximize income from a combination of meat and wool, focusing on large, medium-grade fleeces as the fiber's contribution to the equation. Both breeds are suited to environments with a significant amount of rainfall, and the animals are sturdy, with good resistance to problems like footrot and flystrike.

By the late 1970s, the Gromark was established in Australia and the Borderdale in New Zealand, each displaying the qualities of the originating breeds in about equal proportions. The breeds are still grown commercially, which is the strong emphasis of their existence, although the status of the Gromark is under evaluation by the Rare Breeds Trust of Australia.

Gromark locks are long, with well-defined, wavy crimp and pointed tips. Flick and spin from the lock, or from Viking combs. Experienced carders can probably handle full-length locks, but you can also cut the locks in half to card. Gromark yarns, whether spun commercially or by hand, are fairly lofty and bouncy, even when spun worsted.

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**Effect of dyes.** The wool should take dye colors clearly.

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**Best uses.** Gromark is a versatile midrange wool, good for making sweaters, mittens, blankets, and everyday textiles. It

felts reasonably well.

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**Origin:** Australia

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**Fleece weights:** 9–11 pounds (4–5 kg)

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**Staple lengths:** 4 1/2"–6" (11–15 cm)

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**Fiber diameters:** 28–34 microns

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**Natural colors:** White

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Gromark fleeces are a touch smaller than those grown by Borderdales, another breed produced from the same original crossing of Border Leicesters and Corriedales. Gromarks have, in general, longer staples and finer, more consistent fiber diameters.





CRITICAL CONSERVATION BREED

## **Gulf Coast Native**

These sheep, more tolerant of hot weather than most wool-growers, are a source of nice fleeces that sometimes fall within next-to-the-skin comfort levels. The locks have open, wavy, and/or finely crimped fibers and are low in grease, making the fleece easy to wash. Short fleeces can be carded; medium to longer ones will be happy with combing. Use any preparation and spinning techniques you want to explore.





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**Effect of dyes.** Influenced by underlying color. Whites can be creamy or clear.

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**Best uses.** Gulf Coast Native fleeces, although variable in quality, are generally a pleasure to work with and yield yarn that is crisp enough to show stitch or weave textures clearly. If you want to try felting, this is a fiber to look for.

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**Origin:** United States (southeastern)

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**Fleece weights:** 4–6 pounds (1.75–2.75 kg)

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**Staple lengths:** 2 1/2"–4" (6–10 cm)

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**Fiber diameters:** 26–32 microns

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**Natural colors:** Mostly white, with some blacks and browns

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Gulf Coast Natives breed and lamb year-round, producing small but hardy offspring. The breed has outstanding resistance to many internal parasites and diseases that plague other sheep in the region. A subgroup of the population is being evaluated to determine whether it is

sufficiently distinct to be considered a separate breed, the Florida Cracker.



## CONSERVATION BREED

# **Gute or Gutefår**

While Gute sheep are sometimes called Gotlands, the Gute is an ancient horned breed, an ancestor of the more modern and hornless Gotland. Originally, their home location on the Swedish island of Gotland protected them from the “improvement” breeding efforts of the nineteenth and twentieth centuries. By the early twentieth century, selection on the island began to produce the Gotland and by the middle of the twentieth century, fewer than two dozen of the old-style Gute or Goth sheep remained. Conservation breeding has significantly increased the old breed’s numbers, although it is still not common.



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**Effect of dyes.** Mixed fibers take dye differently. Some nice overdyeing options.

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**Best uses.** A Gute fleece consists of layers of both fine wool and coarse hair, along with both black and white kemp. Because the two layers are about the same length, they are often spun together, but it is also possible (with some difficulty) to separate the fiber types and use them for a variety of purposes, from garments to rugs. Gute wool is also very useful for felting.

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**Origin:** Sweden

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**Fleece weights:** 4<sup>1</sup>/<sub>2</sub>–5<sup>1</sup>/<sub>2</sub> pounds (2–2.5 kg)

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**Staple lengths:** None available

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**Fiber diameters:** 17–40 microns (undercoat/outercoat)

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**Natural colors:** Mostly gray; some blacks, tan-marked whites, and browns

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The hardy and long-lived Gute also goes by the name Gotland Outdoors Sheep, reflecting its ability to survive year-round without human-provided shelter.



# Hampshire Down

Like others in the Down family, Hampshire sheep grow strong, springy wool with great elasticity. Their dense, resilient, medium-grade fleeces have blocky, rectangular staples that hold together and may be hard to distinguish from each other. Flick or comb longer fleeces; card shorter ones. To maintain loft and spring, prepare and spin woolen-style while keeping the drafting light and the twist moderate.



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**Effect of dyes.** Neither lustrous nor exceptionally matte, Hampshire wools take dye nicely.

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**Best uses.** Yarns spun from these fleeces — even the finer, softer ones — work well for making durable socks, mittens, hats, and everyday sweaters. As Hampshire wool doesn't felt particularly well, you may be able to machine wash anything you make from it.

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**Origin:** England

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**Fleece weights:** 4 1/2–10 pounds (2–4.5 kg)

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**Staple lengths:** 2"–4" (5–10 cm)

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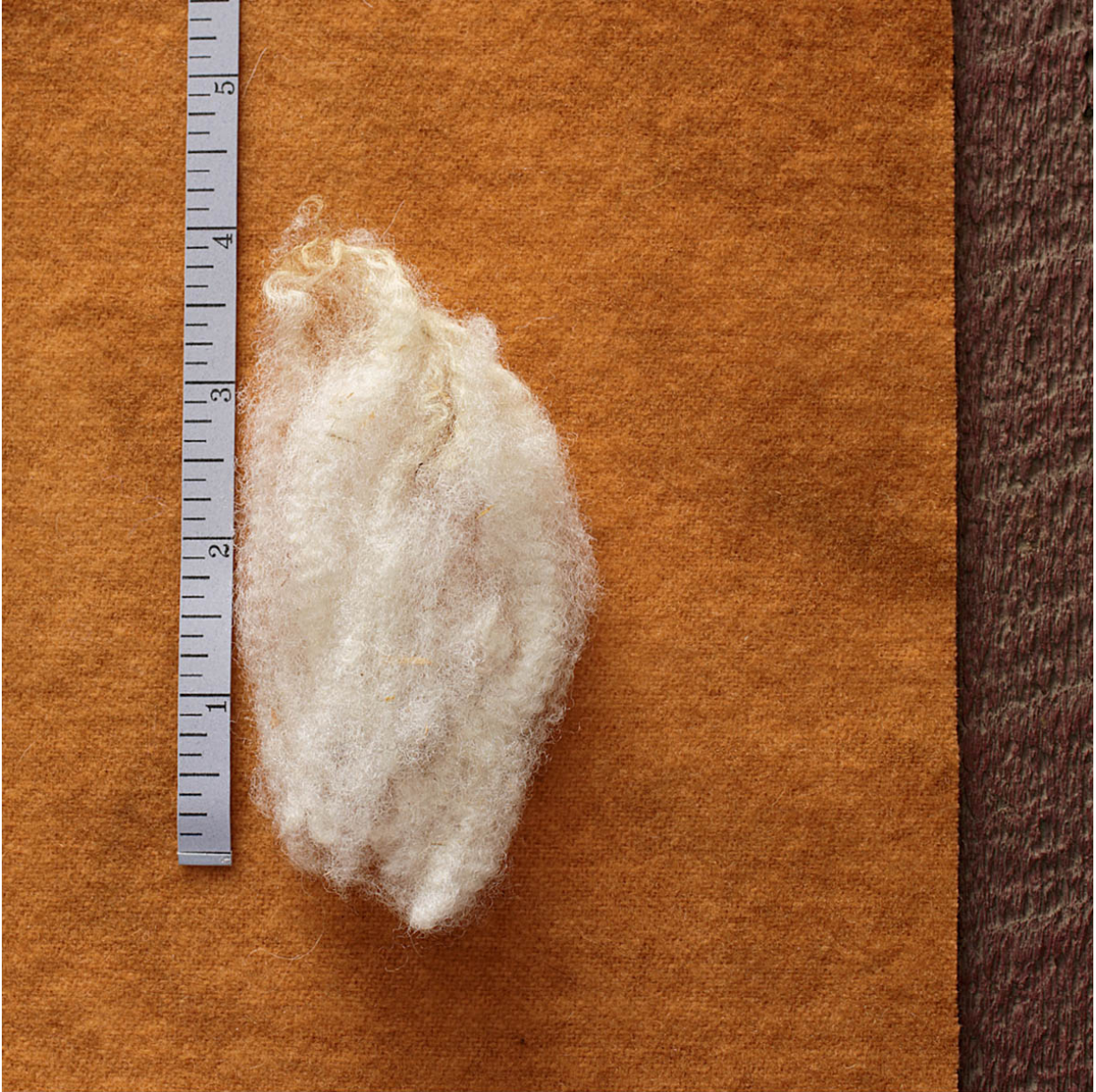
**Fiber diameters:** 24–33 microns

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**Natural colors:** White, although there are a few black sheep

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Found around the world, Hampshires are one of the most populous sheep breeds, although most of their wool is sold for commercial processing and it can be difficult to find breed-specific fleeces or yarns.

## CONSERVATION BREED

# Hebridean

Deep color and sturdy texture are the hallmarks of the fleece of this Northern European Short-Tailed breed. Probably related to the primitive sheep brought to the Hebrides by the Vikings a millennium or so ago, Hebridean sheep grow fleece that is exceptionally variable in texture, and dense, able to withstand weather and wear. The lustrous triangular locks may contain hair or kemp; the tips may be sun-bleached or may turn gray as the animal ages. The preparation and spinning techniques you use will depend on the fiber length, and whether you want to separate fibers of different quality or spin them together. While individual fleece characteristics may vary, expect spinning Hebridean to be a bit of a challenge — albeit a rewarding one.



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**Best uses.** Use Hebridean wool when you want a luscious, dark color and a lot of durability. It's great for everyday outerwear, blankets, sturdy mats, and the like, and spun fine, it's woven commercially into lovely tweed fabrics.

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**Origin:** Scotland (Hebrides)

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**Fleece weights:** 3<sup>1</sup>/<sub>2</sub>–5<sup>1</sup>/<sub>2</sub> pounds (1.5–2.5 kg)

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**Staple lengths:** 2"–8" (5–20 cm)

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**Fiber diameters:** 29–38+ microns

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**Natural colors:** Black, or very dark brown



Today's Hebrideans are frequently multihorned and always have exceptionally dark wool.

## CONSERVATION BREED

# **Herdwick**

A single fleece from this breed offers fiber lovers an unusual mix of natural colors and textures, and one of the most significant challenges in terms of processing. Amazing and wonderful things can be made from Herdwick! Locks are clumpy, dense, and composed of undercoat, hair, heterotypic hair, and kemp. Some parts of the fleece will contain more coarse fibers than others. Open out the locks to facilitate drafting, and experiment. Combing may help separate some of the fiber types; carding may work on shorter staple lengths, but use your coarsest carding cloth and a light touch. Instead of fighting the natural texture of the fiber mix, consider it a positive contribution to your finished yarn.





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**Effect of dyes.** Expect tweedy dye results because of the underlying natural colors.

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**Best uses.** Herdwick lends itself to use in rugs, durable woven fabrics, or components for baskets and sculpture. If you can separate out the coarsest fibers, the undercoat will make nice sweaters, blankets, or hats.

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**Origin:** England (northwestern)

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**Fleece weights:** 3–4 1/2 pounds (1.25–2 kg)

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**Staple lengths:** 3"–10" (8–25 cm)

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**Fiber diameters:** Variable within fleece; an average would likely be 36+ microns

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**Natural colors:** Gray

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The name Herdwick is thought to be derived from the old Norse *herdvyck*, or “sheep pasture.” Lambs are born nearly black; as they grow, they quickly lighten to the breed’s characteristic gray or gray-brown bodies, with those charming white faces.





## CONSERVATION BREED

# Hill Radnor

Although the fleece of this breed evolved to protect the animal from the elements, it is dense but not rough. Occasional kemp and colored fibers give it the potential to produce tweedy yarns. The indistinct, mostly rectangular staples have short, pointed tips and an overall medium crimp that is generally disorganized. Depending on fiber length, you can pick and spin from the locks, comb, or card. The crimp patterns make it relatively easy to draft. Hill Radnor yarns are crisp, with nice body, making them a good choice if you want to maintain the texture of a fabric construction or keep distinct areas of color from blurring.



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**Effect of dyes.** Dyeing produces clear colors with a matte finish.

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**Best uses.** Some Hill Radnor fleeces will be good for skin-cuddling garments, like sweaters and hats, while others will be coarser and better suited to outerwear.

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**Origin:** Wales

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**Fleece weights:** 4<sup>1</sup>/<sub>2</sub>–5<sup>1</sup>/<sub>2</sub> pounds (2–2.5 kg)

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**Staple lengths:** 2"–6" (5–15 cm)



**Fiber diameters:** 27–33 microns

**Natural colors:** White



Early in its history the Hill Radnor was often referred to as the Radnor Tanface. The breed has been recognized in central Wales for many centuries, but little was written about it in early agricultural texts. Perhaps everyone in the isolated, rural area where the breed lived took it for granted!

## CRITICAL CONSERVATION BREED

# Hog Island

Hog Island sheep once inhabited a small barrier island off the coast of Virginia, and their fleeces reflect the harsh conditions there: they are unusually high in lanolin. But the wool of this little-known breed can be enjoyable and satisfying to work with, and will yield air-trapping, slightly crisp yarns. Locks are somewhat rectangular and dense, with disorganized crimp. Because of Hog Island's crimp pattern and generally short fiber lengths, mill-processing may result in neps. When processing by hand, you can card or comb, depending on the length of the fibers. To maintain the yarn's integrity, keep singles reasonably fine so that the fibers are well caught in the twist.





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**Effect of dyes.** If you dye this wool, be aware that its matte surface and natural pigment may result in muted colors.

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**Best uses.** Use Hog Island yarns for sturdy garments such as sweaters, socks, and blankets. Some may have next-to-the-skin qualities, if a specific fleece is fine enough.

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**Origin:** United States (Virginia)

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**Fleece weights:** 2–8 pounds (1–3.75 kg)

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**Staple lengths:** 1½"-2½" (4-6 cm) or more

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**Fiber diameters:** Insufficient data, but the samples we tested averaged from 22-32 microns

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**Natural colors:** White, black

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Sheep on Hog Island, for which they are named, became feral in 1933 when the island was evacuated; in 1974, they were moved to new homes at several appropriate historic sites, including Mount Vernon.



# Icelandic

This Northern European Short-Tailed breed, known for its double-coated fleeces, offers fiber lovers both strength and softness. The sturdy outercoat, called tog, forms loosely curled, triangular locks with pointed tips. The fine undercoat, called thel, is bulky, with shorter, softer fibers and some true crimp. The two coats can be spun together or separately. Because the bases of the staples may clump together, open them out carefully. Try spinning from the lock, drum-carding, or using Viking-style combs. If you want to spin both coats together, work from the lock or combine the fibers by carding, being careful to draft the differing fibers evenly. To maximize strength and softness, separate the coats and spin the long fibers worsted and the short ones woolen.



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**Effect of dyes.** These wools dye well.

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**Best uses.** The undercoat is a good choice for knitting and crocheting, while the outercoat lends itself to weaving, needlepoint, and other stitchery. But be sure to experiment — these fibers are versatile!

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**Origin:** Iceland

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**Fleece weights:** 4–7 pounds (1.75–3.25 kg)

---

**Staple lengths:** 2"–18" (5–46 cm) (undercoat/outercoat)



**Fiber diameters:** 19–31 microns (undercoat/outercoat)

**Natural colors:** A full range of natural colors





Developed in almost total isolation, the Icelandic breed is one of the world's purest livestock populations. All of the Icelandic sheep in North America derive from two importations by Stefania Sveinbjarnardottir-Dignum and Ray Dignum, of Ontario.

# Île-de-France

While this breed has mostly forgotten its Rambouillet ancestors, some Merino traits still linger in its fleece: a readiness to felt, for example, and an allover cuddliness at the finer end of its range. Locks are nicely defined, less blocky than Rambouillet, and easy to separate, with slightly pointed tips and regular crimp organized in both fibers and staples. You can card, flick, or comb, depending on staple length. Carded wool will have nice loft and insulating qualities; combed wool offers a good amount of spring. Less demanding than Merino or Rambouillet, thanks to the addition of Dishley Leicester genes, Île-de-France is a good wool to experiment with.



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**Effect of dyes.** It dyes clearly, without yellow undertones.

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**Best uses.** Yarn characteristics include a soft hand, good stitch or weave definition, and great bounce. Use it to make general purpose sweaters or next-to-the-skin garments that offer increasing durability as the fiber diameter increases. It felts easily.

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**Origin:** France

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**Fleece weights:** 6 1/2–13 pounds (3–6 kg)

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**Staple lengths:** 2 3/4"–3 1/2" (7–9 cm)

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**Fiber diameters:** 23–30 microns

**Natural colors:** White



As a result of plummeting wool prices in the early 1800s, French shepherds crossed Dishley Leicesters with French Rambouillet Merinos, hoping to improve meat production. The resulting Île-de-France was one of the first breeds for which performance testing was required before animals could be registered with the breed society.

CONSERVATION BREED (AMERICAN  
JACOB)

## **Jacob**

Jacobs have one of the widest ranges of acceptable fiber qualities of any kind of sheep. Their distinctive multicolored fleeces often have a springy quality; kemp, if present, may give the wool a tweedy effect. Locks are generally jumbled, with moderate crimp and some luster. The different colors in a single fleece are likely to have different lengths and texture patterns. Fit your preparation methods to the fibers you find: shorter fibers will need to be carded; longer fibers take nicely to combing if you match the comb type to the fibers' fineness. Separate the colors; spin the fleece as it comes; or blend colors to make a variety of shades.





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**Effect of dyes.** Dyeing seems unnecessary, but may yield intriguing results.

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**Best uses.** Try small projects first, and ease into larger ones when you're ready. Buy sufficient fiber for your whole project at the start, as textures and colors can vary widely among fleeces.

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**Origin:** England

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**Fleece weights:** 3–6 pounds (1.25–2.75 kg)

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**Staple lengths:** 3"–7" (8–18 cm)

**Fiber diameters:** 25–35 microns

**Natural colors:** White, black, brown-black, gray, brown





The English landed gentry, fascinated by the Jacobs' multicolored coats and picturesque horns, used to keep them as ornamental animals. Over time those in Great Britain have undergone breeding shifts to make them more productive as meat animals, so today they are significantly larger than their American counterparts, which are considered closer to the original genetics and are classified as rare.



CONSERVATION BREED

## **Karakul, American**

The double-coated Karakul is known for its open, lustrous, relatively grease-free fleeces, which offer intriguing color variations and are fairly easy to spin into fine or thick yarns. The locks have wide bases, gently tapering to the tips, and separate out without undue difficulty. In preparation, you'll want to decide whether to emphasize the fleece's texture variations, or to even out the variations by blending. Use peasant combs or flick; card on regular or coarse carding cloth, with hand or drum carders. If you do comb, be careful not to inadvertently separate the coats when you are pulling the fiber off. You can draft to maximize texture, or go for smoothness instead.



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**Effect of dyes.** The fleece accepts dye well, but take underlying natural shades into account.

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**Best uses.** Strong, durable, stable, and eager to felt, Karakul yarns are wonderful to experiment with. Whether you knit, crochet, braid, or weave, your bags, pillows, rugs, or boots will endure hard wear. Karakul is exceptional as the weft in weft-faced textiles, and also makes a good warp yarn.

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**Origin:** United States (developed from sheep imported from Central Asia)

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**Fleece weights:** 5–10 pounds (2.25–4.5 kg)

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**Staple lengths:** 6"–12" (15–30 cm)

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**Fiber diameters:** 25–36 microns (undercoat/outercoat)

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**Natural colors:** Blacks, grays, browns, whites

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The central Asian Karakul, from which the American Karakul was developed, is native to one of the cradles of domestication of livestock. It is considered one of the oldest sheep breeds in the world. American Karakuls include genetics from a wide variety of other breeds.

## CONSERVATION BREED

# Kerry Hill

The exceptionally white fleece of this breed makes a lofty yarn that's suitable for use at many weights and in multiple techniques. Locks are dense but not especially distinct, with slightly pointed tips; they separate out easily. Card the shorter fleeces, and comb or flick the longer ones; you can open out any staple length and spin from the lock. Worsted-style processing will yield a yarn with subtle shine, good loft, and reliable insulating qualities. Woolen-style preparation and spinning will produce a matte yarn with even greater air-trapping capacity.



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**Effect of dyes.** This wool dyes clearly.

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**Best uses.** Kerry Hill offers handspINNERS and other fiber lovers wool that is a pleasure to work with, soft and durable enough to be practical for a wide range of everyday garments, from sweaters, socks, and hats to blankets and pillows.

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**Origin:** Wales

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**Fleece weights:** 5–6½ pounds (2.25–3 kg)

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**Staple lengths:** 2½"–5" (6–13 cm)

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**Fiber diameters:** 26–29 microns

**Natural colors:** White



Kerry Hill sheep have striking faces, especially for growers of white wool! They have black ears, eye patches, and noses. Formerly listed as endangered by the Rare Breeds Survival Trust, the Kerry Hill is a breed that has benefited from attention to genetic conservation activity.



CONSERVATION BREED

## **Leicester Longwool**

The long, dense, lustrous fleeces of this rare English longwool breed yield yarns that are classy and versatile. The beautiful, distinct locks have well-defined crimp, from their pointed tips to their flat bases. Although the fibers are usually too long for comfortable carding, the wool can be spun from the lock, picked, flicked, or combed. You can spin it any way you like — fine and smooth, fine and textured, heavy and textured, heavy and smooth — and you'll be impressed by the yarn's body and crisp hand.





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**Effect of dyes.** It has an affinity for dyes.

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**Best uses.** While it is considered an extremely sturdy wool, Leicester Longwool when spun into a smooth yarn can feel sleek enough for a knitted or woven shawl. Its crisp hand can highlight texture or lace patterns in knitting; its robust character makes it suitable for art textiles and novelty yarns; and its exceptional durability means it makes fantastic rugs.

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**Origin:** England

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**Fleece weights:** 5–18 pounds (2.25–8.25 kg)

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**Staple lengths:** 5"–14" (13–36 cm)

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**Fiber diameters:** 32–46 microns

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**Natural colors:** White, black, gray

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Although they're among the world's largest sheep, Leicester Longwools grow very slowly, so industrial farmers with an eye on meat production don't find them profitable. The breed is kept alive in North America by the

conservation efforts of several dozen breeders in the United States and Canada.



CONSERVATION BREED

## **Lincoln Longwool**

These big, rare, English longwool sheep grow “big wool”: heavy fleeces with lots of long, shiny fiber that can be spun into sturdy smooth or textured yarns. The firm, heavy locks have pointed, often spiraling, tips and broad, well-defined crimp. You can spin directly from the locks, pick, flick, or comb — Viking combs work well. Keep your hands far apart when drafting.



---

**Effect of dyes.** The luster of this fleece enhances dye colors.

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**Best uses.** Use the locks directly to make dolls' wigs or weave them into fleece rugs. Look to Lincoln Longwool for hard-wearing, sturdy, gorgeous fabrics. Use lambswool for finer textiles; the adult fiber should be used for more rugged items, such as upholstery, rugs, long-wearing bags, and shiny tapestries. You'll have to work to get this fleece to felt.

---

**Origin:** England

---

**Fleece weights:** 11–16 pounds (5–7.25 kg)

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**Staple lengths:** 7"–15" (18–38 cm)

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**Fiber diameters:** 33.5–45 microns

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**Natural colors:** White, gray, black

---







Handspinners have been responsible for the continued existence and breeding of colored Lincolns, which are registered separately from the white sheep. As with all of the classic, robust longwools, we need to encourage breeders to maintain the Lincoln's unique qualities and not select for wools that push its fleeces into the realms of the finer longwools, like Bluefaced Leicester, Teeswater, and Wensleydale.

# Llanwenog

Sleek, shiny, and fun to spin, Llanwenog has begun to earn acclaim among handspinnners, and fiber artists will find it delightful to use in any technique. Expect locks with splendid luster, wavy crimp, and distinct pointed tips. Shorter fibers can be carded, but comb whenever possible to retain the fibers' natural luster and sleekness. Spin from opened locks; use woolen or worsted techniques — any way you choose to spin, you'll find Llanwenog smooth, a little slick, and pleasant in the hand.



---

**Effect of dyes.** The wool's clear white color and its luster help make dye colors gleam.

---

**Best uses.** The glistening, supple, and soft yarn produces good stitch definition in knitting and crochet, as well as clear, crisp woven patterns. Consider using the unspun locks to make pile fabrics in applications that would get little wear.

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**Origin:** Wales

---

**Fleece weights:** 4 1/2–6 pounds (2–2.75 kg)

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**Staple lengths:** 2"–4 1/2" (5–11 cm)

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**Fiber diameters:** 25–28+ microns

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**Natural colors:** White

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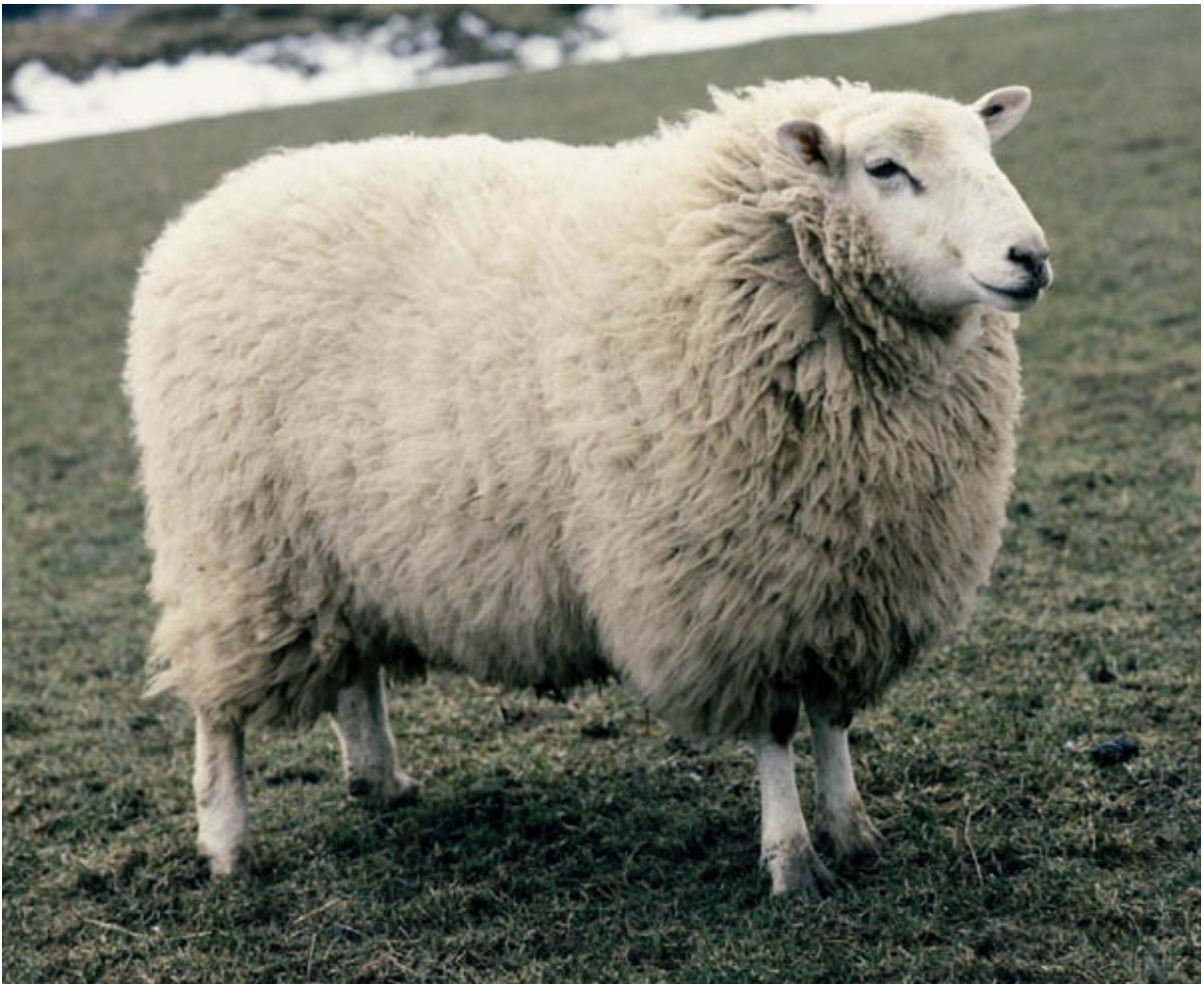
Llanwenogs hail from the lowlands and hills of the western coastal counties of Wales, a less rugged area than the higher, mountainous eastern part of the country. The breed came into existence when the now-extinct local sheep, the Llanllwni, were crossed with Shropshires.





# Lleyn

The fleece of this meat breed is versatile, sturdy, and white. The pointed locks, with their wavy, organized crimp, are kemp-free and easily separated. Flicking or combing works well if the fibers are long enough; worsted-style spinning will keep the yarn smooth and minimize hairiness. The coarsest fibers may be quite hairy, producing yarns with interesting texture.





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**Effect of dyes.** The fleece has a muted luster, and it takes dyes and shows colors well.

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**Best uses.** With body enough to hold good stitch or weave definition, plus nice bounce and good insulating properties, Lleyn yarns can be used to make a range of items, from everyday warm garments to tweedlike fabrics and sturdy household textiles.

---

**Origin:** Wales

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**Fleece weights:** 4<sup>1</sup>/<sub>2</sub>-6<sup>1</sup>/<sub>2</sub> pounds (2-3 kg)

---

**Staple lengths:** 3"-5" (8-13 cm)

---

**Fiber diameters:** 26-31+ microns

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**Natural colors:** White

---



Prince Charles keeps a flock of 450 Lleyn ewes near his Highgrove Estate in Gloucestershire, England. Like the Galway, the Lleyn may trace its ancestry to the now-extinct Roscommon breed.



## CONSERVATION BREED

# Lonk

These stout sheep grow sturdy, high-quality fleece that tends to feel robust rather than harsh. Expect blocky staples with tiny, pointed tips, well-developed yet relatively disorganized crimp, and occasional kemp. The fleece is amenable to any preparation technique: longer staples will want to be flicked or combed; more moderate lengths can be carded. Combing will tame the prickle factor by minimizing protruding fiber ends. Lonk is an easy fiber to spin.





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**Effect of dyes.** Its matte finish allows it to take dye colors clearly, with a soft effect.

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**Best uses.** Outerwear, bags, pillows, upholstery, rugs, and tapestries are all good uses for Lonk's durable yarn.

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**Origin:** England

---

**Fleece weights:** 5–6½ pounds (2.25–3 kg)

---

**Staple lengths:** 4"–6" (10–15 cm)

---

**Fiber diameters:** 28–36 microns

---

**Natural colors:** White

---



Many British livestock breeds are named for their county, city, or district of origin. *Lonk* may be a shortened form of *Lancashire*, the English county where the breed has been most concentrated for centuries. Lonks resemble

Derbyshire Gritstones, although their fleece generally feels sturdier.



CONSERVATION BREED

## **Manx Loaghtan**

The appealing fleece of this rare Northern European Short-Tailed breed is an unusual, warm brown color. Although individual fleeces can vary significantly — some are hairy and others, woolly — the wool overall tends to be soft, with enough grease to protect it. Locks are close-textured; the crimp is bold, uniform, and of consistent quality throughout. You can pick and card, or, if the fibers are long enough, comb. Woolen-style preparation will maximize the fiber's natural bounce; worsted-style preparation yields a very durable yarn.



---

**Effect of dyes.** The natural brown can be overdyed to produce a subtle range of colors.

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**Best uses.** Traditionally, Manx Loaghtan is woven into tartans and fabrics for tailored suits and vests. It's a great wool for making knitted or crocheted sweaters and socks, or relatively lightweight fabrics. Create a test swatch before making garments that will rub against bare skin.

---

**Origin:** Isle of Man

---

**Fleece weights:** 3–5½ pounds (1.25–2.5 kg)

---

**Staple lengths:** 2½"–5" (6–13 cm)

---

**Fiber diameters:** 27–33 microns

---

**Natural colors:** Brown

---



The Manx Loaghtan, the Isle of Man's own distinctive breed, was brought back from near-extinction in the 1970s. Prized for its lean, flavorful meat, the Manx is also appreciated for its grazing habits, which help create a



favorable environment for the endangered Red-Billed  
Chough.

# Merino

Although Merino is one of the most recognizable names in fleece, there are dozens of identified Merino breeds around the world, and the softness levels of Merino wools vary noticeably, from ultrafine to relatively sturdy. Merinos grow large quantities of dense, fine wool; the locks are blunt, often weathered, with regular crimp. The fibers' heavy coat of grease must be washed out in very hot water with a reliable cleansing agent — and no agitation, as Merino felts easily. You can spin from the lock, comb, or card. The wool's fineness means it forms neps easily. You may want to use fine-toothed combs, cotton carders, or fine-fiber carding cloth. To produce thick yarn, spin several thin, nicely twisted strands and ply them together.



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**Effect of dyes.** The white wools take colors well.

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**Best uses.** Merino is wonderful for lightweight, soft, delicate fabrics and garments, including baby clothes. It felts easily.

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**Origin:** Spain

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**Fleece weights:** 6<sup>1</sup>/<sub>2</sub>–40 pounds (3–18 kg)

---

**Staple lengths:** 2"–5" (5–13 cm)

---

**Fiber diameters:** 11.5–26 microns

---

**Natural colors:** Whites for the most part; some blacks and browns

---





In the twelfth century, Spanish royalty began importing rams from the Beni-Merines, members of a Berber tribe in what is now Morocco. The Spanish crossed the rams with their own ewes; the result was a fine-wool sheep like no other. It changed the world of wool profoundly.





# Montadale

This breed is mostly grown in large flocks for the meat and the long-stapled, relatively soft wool, so before you prepare the fleece by hand, the tips may need careful cleaning. Once cleaned, however, the Montadale's uniform, nicely-crimped locks are nice to card, comb, or spin directly with any technique you prefer. The result is a lofty wool with a crisp quality that shows textures clearly.





---

**Effect of dyes.** It dyes well, and, although it's not known for its luster, it has an appealing light-catching quality because of the clarity of its white color.

---

**Best uses.** Montadale yarns are well-suited to making everyday garments and household textiles, whether knitted, woven, or crocheted. The yarns may be more luxurious than you would expect from a meat breed!

---

**Origin:** United States

---

**Fleece weights:** 7–12 pounds (3.25–5.5 kg)

---

**Staple lengths:** 3"–5" (8–13 cm)

---

**Fiber diameters:** 25–34 microns

---

**Natural colors:** White, black

---



The rare fleeces of black Montadales, useless to large-scale commercial production, are a delight for handspinners and small-scale artisans.



CONSERVATION BREED

## Navajo Churro

The three types of fiber — outercoat, undercoat, and kemp — in the fleece of this breed make generalizations difficult, but overall this is a wool that feels soft and fine, while displaying amazing durability. So low in grease that washing is optional, Navajo Churro fleeces feature open locks that are easy to separate, with wide bases tapering to narrow tips. You can spin from the picked lock, card in the traditional Navajo way, or comb. Use any spinning techniques or tools that you find comfortable.





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**Effect of dyes.** White Navajo Churro fleeces take dyes well, and the natural colors can be overdye.

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**Best uses.** Navajo Churro is an ideal fiber for making weft-faced rugs and tapestries that look and feel soft, but wear astonishingly well. The finer fleeces may be used in garments; some would even make excellent, soft camisoles and other next-to-skin wear, but most will be better suited to making cardigans, hats, or mittens. This wool does felt.

---

**Origin:** United States (southwestern)

---

**Fleece weights:** 4–8 pounds (1.75–3.75 kg)

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**Staple lengths:** 3"–14" (8–36 cm) (undercoat/outercoat)

---

**Fiber diameters:** 10–35+ microns (undercoat/outercoat)

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**Natural colors:** A full array of whites, browns and tans, grays, and black

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The Navajo Churro is the oldest sheep breed in North America. It has been nearly wiped out on several occasions, but has been saved through the diligent efforts of people who understand its unique cultural, historical, and environmental value.



CONSERVATION BREED

## Norfolk Horn

This hardy, feisty, dark-faced breed is not well-known, which is a pity, because its fleece offers a nice balance of softness and durability. The Norfolk Horn does well on poor grazing, and its origins likely date to Saxon times or earlier. The breed's wool has blocky staples with a touch of luster, square tips, and fine, well-developed, disorganized crimp. You can card, comb, or pick the locks apart and spin them directly. It is easy and versatile to spin, and produces lofty yarns.



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**Effect of dyes.** The wool takes dyes cleanly.

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**Best uses.** Use Norfolk Horn yarn to make sweaters, hats, mittens, socks, blankets, and similar comforting textiles.

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**Origin:** England

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**Fleece weights:** 3–4½ pounds (1.25–2 kg)

---

**Staple lengths:** 3"–4" (8–10 cm)

---

**Fiber diameters:** 26–29 microns

---

**Natural colors:** White

---





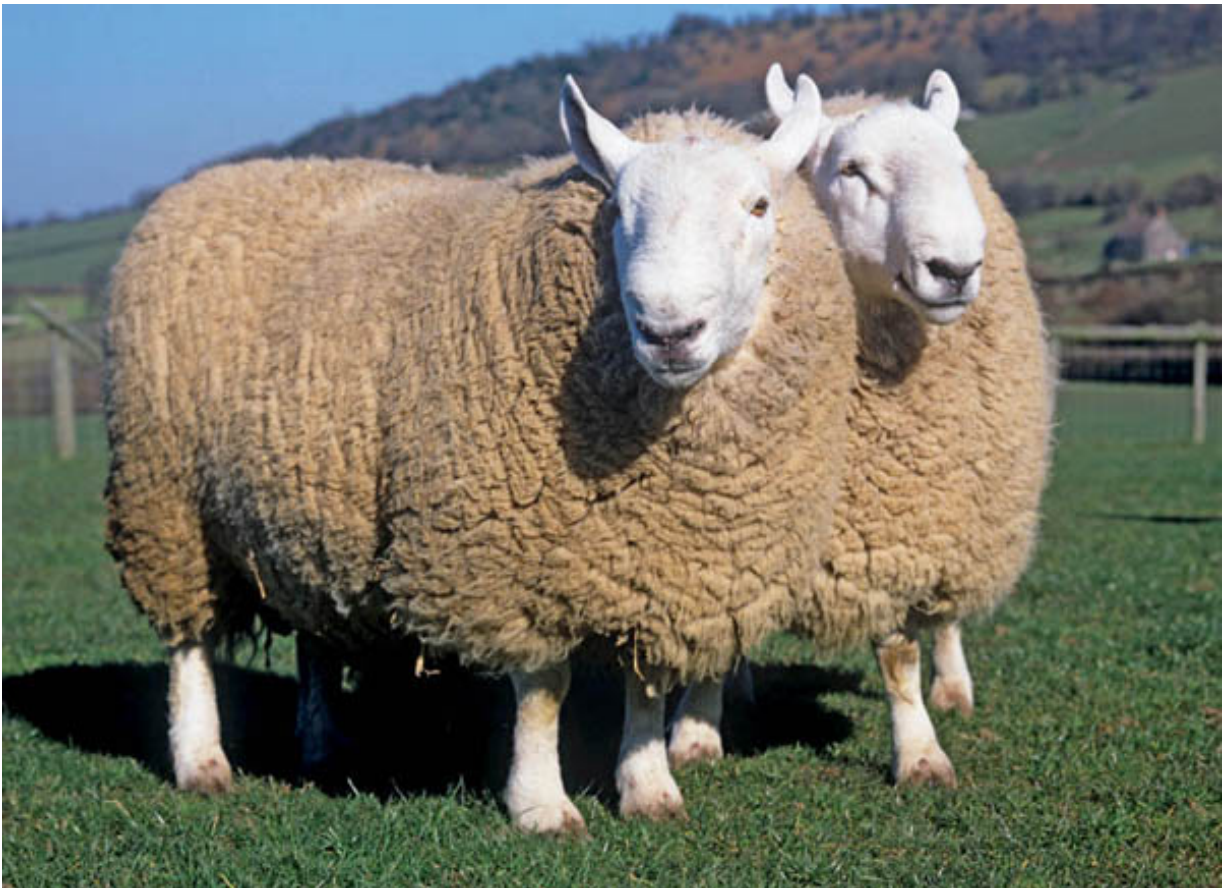
Norfolk Horn lambs are born with mottled fleeces, although the adults are white. The breed became functionally extinct in the 1970s, when the last purebred ram died, followed shortly by the last purebred ewe. Before their demise, one of the Norfolk Horn's derivative



breeds, the Suffolk, was used in an effort to salvage as much of the original genetics as possible. The resulting sheep were initially called New Norfolk Horns, but after a decade or so the “new” part of the name was dropped.

# North Country Cheviot

This hardy, long-lived breed — the largest of the Cheviots — produces high-bulk, resilient, good-quality wool. The locks are rectangular, with slightly pointed tips and the bold, uniform three-dimensional crimp that is characteristic of the Cheviot family. Ideal fleeces contain no hair, kemp, or colored fibers. There's usually enough length for flicking or combing, and shorter staples will hand-card well. Good Cheviot is a pleasure to spin, being versatile and easy to work with, and yields a bouncy yarn.



---

**Effect of dyes.** Although chalky, as all Cheviots are, the wool dyes well and clearly; just don't expect the brilliance of the longwools.

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**Best uses.** While not a luxury fiber, North Country Cheviot yarn will make great sweaters, socks, and other everyday garments, as well as blankets, pillows, and the like.

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**Origin:** Scotland (northern)

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**Fleece weights:** 5–10 pounds (2.25–4.5 kg)

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**Staple lengths:** 3<sup>1</sup>/<sub>2</sub>"–6" (9–15 cm)

---

**Fiber diameters:** 27–33 microns

---

**Natural colors:** White

---





Sir John Sinclair, known for coining the word *statistics*, started developing the North Country Cheviot breed in 1791, crossing Border Cheviots (also previously known as South Country Cheviots and now just called Cheviots) with Leicester Longwools and Border Leicesters.



## CONSERVATION BREED

# North Ronaldsay

This tenacious Northern European Short-Tailed breed, which predates the Iron Age, rewards patient spinners with color, texture, and fiber-handling adventures. These fleeces can contain a mix of fiber types: The undercoat, with its even crimp, is generally fine enough to be used next to the skin, while the guard hairs, which protect the animal from the weather, are significantly coarser. Like most double-coated fleeces, the North Ronaldsay's locks are triangular, with wide bases. Because these are seaweed-eating sheep who live in the intertidal area of North Ronaldsay island in Orkney, off the northern coast of mainland Scotland, some of their fleece weight, in the form of sand and salt, will readily wash away. The fiber tends to mat at the bases of the locks, so it can be difficult to just card unless you first pick the stuck bits open. Combing removes the guard hairs; carding preserves them, as well as the texture and possible scratchiness they contribute.





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**Effect of dyes.** Overdyes work well on lighter natural colors.

---

**Best uses.** North Ronaldsay yarns with guard hairs in them are best for making durable textiles; without the guard hairs, the yarns are suitable for fine textiles. The wool felts easily.

---

**Origin:** Scotland (Orkney)

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**Fleece weights:** 2–2½ pounds (1–1.25 kg)

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**Staple lengths:** 2"–6" (5–15 cm)

---



**Fiber diameters:** 23–28 microns (undercoat)

**Natural colors:** White, grays, browns, beiges, black



North Ronaldsay sheep occupy an unusual niche in the landscape, surviving as they do on the rocky outer edges of a tiny island — with a human population of about 60 — north of the Scottish mainland. A small wool-processing mill on the island provides some income for residents and many intriguing products, including, at various times, fleeces, yarns, sheets of felt, wool stuffing, and finished goods.



# Ouessant

The tiny, hardy Ouessant, one of the Northern European Short-Tailed breeds, packs a lot of fleece onto its small frame. Its fleeces may be nearly single-coated, double-, or even triple-coated, perhaps containing coarse fibers and some kemp. You may want to trim the gummy, matted butts of the shorn locks, sacrificing some length for easier workability. Staples are triangular, with wide bases of finer undercoat narrowing to coarse pointed tips. You can separate the coats, then comb or flick; or you can spin the mixed fiber types together. Card, if the fibers are not too long. Guard hairs will spin best worsted style; the undercoat, if separated out, can be spun either worsted or woolen style.



---

**Effect of dyes.** Light-colored fleeces can be dyed.

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**Best uses.** The softest Ouessant yarns make good socks, mittens, and other garments; outercoat yarns have pronounced texture and some scratchiness, and work well as warp yarns or for adding strength to knitted or crocheted items. This wool does felt.

**Origin:** France

---

**Fleece weights:** 2<sup>1</sup>/<sub>4</sub>–4 pounds (1–1.75 kg)

---

**Staple lengths:** 3"–4" (8–10 cm)

---

**Fiber diameters:** 24–35 microns (undercoat/outercoat)

---

**Natural colors:** Black; also sometimes brown, white,  
gray

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The Ouessant, also called the Ushant, is one of the smallest sheep in the world, with rams measuring only about 20 inches (51 cm) at the shoulder.



CONSERVATION BREED

## **Oxford Down**

These large, gentle giants, one of the core Down breeds and native to one of the most fertile agricultural areas in the United Kingdom, grow dense, resilient, medium-grade fleeces. The blocky, rectangular staples hold together and may be hard to distinguish from one another. You can card shorter fleeces, but longer ones should be flicked or combed. To preserve the fleece's characteristic loft and springiness, keep your drafting light and twist moderate.



---

**Effect of dyes.** Oxford wools take dye nicely, although the colors will be a bit soft because of the matte surfaces of the fibers.

---

**Best uses.** If you make socks, mittens, hats, or casual sweaters from the finer Oxford yarns, you'll find them soft but durable. Because the wool doesn't felt particularly well, you may be able to machine wash these garments, too.

---

**Origin:** England

---

**Fleece weights:** 6<sup>1</sup>/<sub>2</sub>–12 pounds (3–5.5 kg)

---

**Staple lengths:** 3"–5" (8–13 cm)

---

**Fiber diameters:** 25–37 microns

---

**Natural colors:** White

---





Oxfords weigh in at up to 325 pounds (147 kg) for a mature ram and 200 pounds (91 kg) for a mature ewe. That's the reason Oxfords are rare: they are bigger than many shepherds want to manage! In the British Isles, only the Lincoln Longwool is larger.





# Pelssau

This Norwegian breed, also called the Norwegian Fur sheep, was developed in the twentieth century by crossing Swedish Gotlands with blue-gray individuals of the Norwegian Spaelsau. The fiber is sometimes found marketed under the spelling Pellsau, but Pelssau means “pelt sheep,” a category of animal that includes breeds known for high-quality sheepskins. The outercoat, or hair, should predominate in the fleece and gives it the characteristic feel and behavior. Each fleece should be basically a single color, with subtle gradations and a lot of luster.





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**Effect of dyes.** Nice luster gives colors a spark. Overdyeing the grays produces subtle effects.

---

**Best uses.** Pelssau is one of the wools well-known for making good felt, along with several of the other Northern European Short-Tailed breeds found in the Scandinavian countries. It can also be made into yarns that are good for durable bags, rugs, and outerwear.

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**Origin:** Norway

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**Fleece weights:** Not available

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**Staple lengths:** Up to 6" (15 cm) (outercoat)

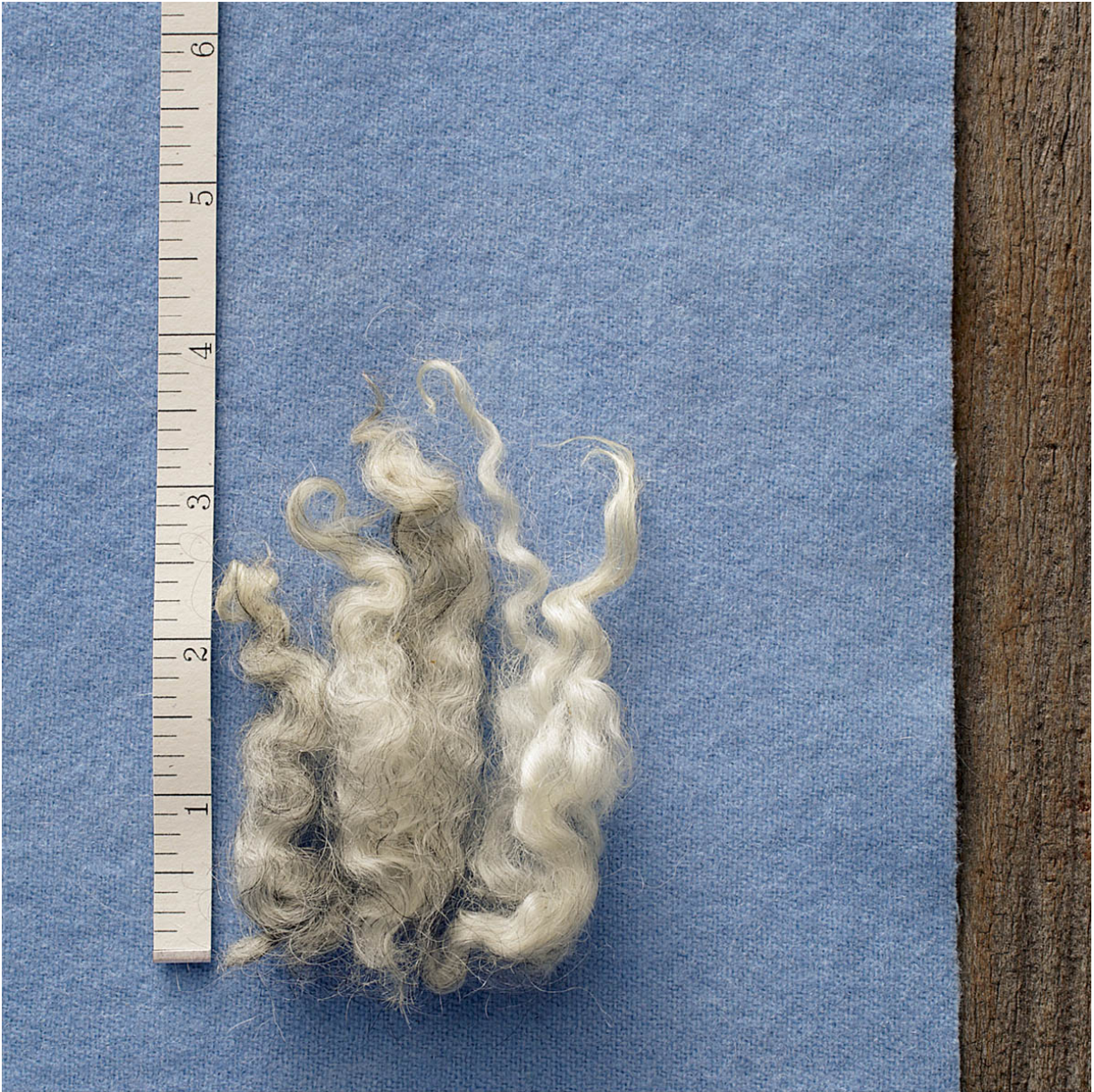
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**Fiber diameters:** 45–50 microns (outercoat)

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**Natural colors:** Grays to near blacks, and a few whites

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Developed in the 1960s, the Pelssau is known for the lustrous, subtly shaded grays of its predominant outercoat.



# Perendale

Bouncy, high-bulk Perendale wool is still hard to find as fleece or yarn in North America, although the breed was first imported into the United States in 1977. The lofty quality of the wool, which translates into warmth without weight, makes it worth looking for. Expect long, kemp-free locks that generally show clear, even crimp. Spin from the lock, flick, or comb. If the staples are shorter, carding is an option. Easy and pleasant to spin, Perendale fibers tend to capture air and bounce, so even full worsted spinning will give you a lofty finished yarn.



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**Effect of dyes.** The wool takes colors beautifully, although without the shiny clarity of other longwools.



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**Best uses.** Both finer and coarser ranges of wool exist within this breed: some sheep produce wools for general knitting yarns, while others grow fleeces best suited for harder-wearing textiles like rugs, bags, and upholstery. The yarn's crisp quality yields nicely-defined texture patterns in knitted or woven textiles.

---

**Origin:** New Zealand

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**Fleece weights:** 7<sup>1</sup>/<sub>2</sub>–11 pounds (3.5–5 kg)

---

**Staple lengths:** 4"–6" (10–15 cm)

---

**Fiber diameters:** 28–37 microns

---

**Natural colors:** White, plus a range of grays

---



In the 1950s Geoffrey Peren, of Massey University in New Zealand, crossed Cheviot rams on Romney ewes to produce the Perendale, a dual-purpose meat and fiber breed.

## CONSERVATION BREED

# Polwarth

The even, soft-feeling fleeces of this breed are a delight to work with, whether you encounter them as raw wool, ready-to-spin fiber, or prepared yarn. The dense, rectangular staples are generous in length, with flat or very slightly pointed tips and well-defined crimp. Polwarth is very fine, so removing grease and preventing it from being redeposited on the wool requires consistently hot water and a good cleansing solution — the same procedures that are needed for Merinos, Rambouillets, and Romeldales. Spin from the lock, flick, or comb, shorter fiber lengths can be carded. Fit your spinning method to your desired end result: for softness, use less twist; for durability, use more twist. While too fine to be a good “beginner” wool, Polwarth can be easier to work with than Merino or Rambouillet.





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**Effect of dyes.** The clear whites take dyes well; other natural colors produce subtle results when overdye.

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**Best uses.** Soft enough even for baby garments, Polwarth is elastic, resilient, and lofty, and it drapes well.

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**Origin:** Australia

---

**Fleece weights:** 9–13 pounds (4–6 kg)

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**Staple lengths:** 3"–7" (8–18 cm)

---

**Fiber diameters:** 21–26 microns

---

**Natural colors:** White, grays, browns, tans, black

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Polwarths are named for the county in southwestern Australia where the breed — a cross of Merino rams with Merino/Lincoln ewes — was developed. In South America, these sheep are known as Ideals, and they are one of the breeds grown in the Falkland Islands.





# Polypay

Offering a nice combination of softness and body, the fleece of this breed is fine enough to require a light and somewhat experienced hand, especially in carding. The locks, with their slightly tapered tips, are easy to separate. The crimp is well developed and readily evident, although it may be partially disorganized. You can spin from the lock, comb, flick, or card. Combing is the best way to insure consistent, nep-free preparation. Keep the handling very light when you spin, to avoid the fibers' alternately clumping or thinning out.



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**Effect of dyes.** Polypay's bright or very slightly creamy white wool takes dye colors cleanly.

---

**Best uses.** Supple, durable, and soft, with remarkable wearing comfort, Polypay yarns are good for color patterning, and offer enough body to show texture well. They're great for making blankets, sweaters, hats, or mittens.

---

**Origin:** United States (Idaho)

---

**Fleece weights:** 7–11 pounds (3.25–5 kg)

---

**Staple lengths:** 3"–5" (8–13 cm)

---

**Fiber diameters:** 22–29 microns

---

**Natural colors:** White

---





A breed comprising 25 percent each of Targhee, Dorset, Rambouillet, and Finnsheep genetics, the Polypay — whose name is intended to suggest “many ways to provide return on investment” — produces both excellent wool and good meat.



## CONSERVATION BREED

# Portland

“All-purpose” succinctly describes the wool of this small, very old breed, which has long inhabited the Isle of Portland, off the southern coast of England. Because of its isolation, it escaped much of the eighteenth- and nineteenth-century “improvement” efforts. Some Portland fleeces will be good for use next to the skin, and all will be good for making worsted-weight yarns, the versatile standby of many knitters. Although the locks can be variable — sometimes wavy, sometimes disorganized, with distinct but irregular crimp and occasional red kemp in the britch area — they’re easy to tease open and comb, and pleasant to spin.





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**Effect of dyes.** The wool's warm white tones nicely enhance dye colors.

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**Best uses.** Use Portland's versatile yarns to make sweaters, socks, caps, blankets, and other everyday textiles.

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**Origin:** England

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**Fleece weights:** 4<sup>1</sup>/<sub>2</sub>–6<sup>1</sup>/<sub>2</sub> pounds (2–3 kg)

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**Staple lengths:** 2<sup>1</sup>/<sub>2</sub>"–4" (6–10 cm)

---

**Fiber diameters:** 26–31 microns

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**Natural colors:** Creamy white



Although almost extinct in the 1970s, Portlands now can boast over 1,500 breeding animals in more than 100 flocks. The lambs are born with reddish-brown wool, but it whitens quickly — while their faces and legs retain a tannish color.



# Rambouillet

In terms of fleece qualities, think of Rambouillet as a Merino cousin with a bit more bounce. A great wool to blend with luxury fibers, Rambouillet contributes elasticity without compromising softness. The square, dense, flat-tipped staples have a well-defined crimp that's somewhat less organized than a Merino's. The tips often collect dirt. Rambouillet's high grease content means the wool must be carefully cleaned using consistently hot water (don't let the water cool off and redeposit the dissolved grease on the fiber); its willingness to felt means you must limit agitation. Spin from flicked locks, comb, or card with fine-toothed carders or carding cloth.



---

**Effect of dyes.** While Rambouillet has a more matte surface than Merino, it takes colors clearly and well.

---

**Best uses.** With superior softness and good insulating properties, Rambouillet is superb for next-to-the-skin fabrics, baby garments, and other special items. It felts easily.

---

**Origin:** France

---

**Fleece weights:** 8–18 pounds (3.75–8.25 kg)

---

**Staple lengths:** 2"–4" (5–10 cm)

---

**Fiber diameters:** 18–24 microns

---

**Natural colors:** White

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Valued in America's western ranges for their hardiness and ability to thrive on sparse native grasslands, Rambouillets bunch up tightly to sleep, which gives them a higher degree of protection from predators than breeds that spread out when resting.





# Romanov

This wool calls for creativity in preparation, spinning, and use. Unlike most double-coated breeds, in which the outercoat is significantly longer than the undercoat, the Romanov's two coats are of similar length. This complicates the job of separating the coarse fibers from the fine ones, although the right set of combs might help you accomplish the task. It's probably best to simply spin the coats together.



---

**Effect of dyes.** Dyeing over the wool's natural dark gray color might produce some interesting results.

---

**Best uses.** Traditionally, Romanov fleeces have been valued more as sheepskins than as sources of wool for spinning or textile construction, but the fiber should be fun to experiment with if you are lucky enough to come across some.

---

**Origin:** Russia

---

**Fleece weights:** 6–13 pounds (2.75–6 kg)

---

**Staple lengths:** 4"–5" (10–13 cm)

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**Fiber diameters:** 16–22 microns (undercoat); 40–150 microns (outercoat)

---

**Natural colors:** Black, fading toward gray with age

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Named for the last imperial family of Russia, the Romanov breed originated in the Volga valley, near Moscow, more than 200 years ago. Like Finnsheep, they are known for lambing in litters.

## CRITICAL CONSERVATION BREED

# **Romeldale and CVM**

The Romeldale and CVM were, for a while, considered two separate breeds. Now the CVM (which stands for California Variegated Mutant) is being managed as a specific colored-wool strain of Romeldales. Whatever their classification, these sheep offer handspinners and other fiber aficionados consistently soft wool in a multitude of solid and variegated natural colors. Each fiber of the dense locks is nicely crimped from base to tip; you'll find no kemp or hair. Depending on the staple length, you can spin locks without preparation, flick, comb, or card. Because of the fibers' lively quality, even combed preparations will have plenty of loft and elasticity. Romeldale and CVM fleeces provide a good introduction to fine wools for spinners who may be tentative about working with fine fibers: they're rewarding and comfortable to spin.





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**Effect of dyes.** The whites dye well, and the other colors can be overdye, with nuanced results.

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**Best uses.** With fiber diameters nearly equivalent to the upper ends of the Merino and Rambouillet ranges, Romeldale and CVM yarns are suitable for next-to-the-skin clothing, blankets, and other cuddly items. The wool felts well.

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**Origin:** United States (California)

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**Fleece weights:** 6–15 pounds (2.75–6.75 kg)

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**Staple lengths:** 3"-6" (8-15 cm)

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**Fiber diameters:** 21-25 microns

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**Natural colors:** White, reddish, brown, gray, black,  
variegated

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Romeldales, a cross of Romney with Rambouillet, were first developed in California starting in 1915. When two badger-faced colored lambs appeared in a Romeldale flock in the 1960s, a California shepherd began to breed

for color and fleece quality and called the resulting animals CVMs, or California Variegated Mutants.



## CONSERVATION BREED

# Romney

The wool of this large, calm, friendly English longwool is versatile and lustrous, with fiber diameters ranging from moderately coarse to fairly fine. Romney fleeces are large and dense, with distinct, hanging locks that exhibit bold, uniform, well-defined crimp that is consistent from butt to tip. You can card, flick, comb, or spin from clean locks; the low grease content means you can even spin a freshly shorn fleece in the grease. Explore diverse preparation methods for handspinning — Romney fibers are amenable to almost anything.



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**Effect of dyes.** Romney wool takes dye well and clearly.

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**Best uses.** The coarser Romneys make great outerwear, rugs, mats, and other durable items; finer fleeces work well for sweaters, shawls, and even some garments worn next to the skin. While the finer Romney fleeces may not felt well, the coarser ones generally will.

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**Origin:** England

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**Fleece weights:** 8–12 pounds (3.75–5.5 kg)

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**Staple lengths:** 4"–8" (10–20 cm)

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**Fiber diameters:** 29–37 microns

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**Natural colors:** White, black, gray, silver, brown

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The Romney is named for Romney Marsh, a huge area of salt marsh in southeast England made habitable by an ancient system of drainage ditches and seawalls. Romneys are bred to grow high-quality fleeces even in very damp conditions.





# Rouge de l'Ouest

The “red of the west,” now bred mainly for meat, grows short-stapled fleeces that are fine yet crisp. The breed’s locks are dense and rectangular, with a lot of crimp. As these sheep are shorn for practical reasons rather than for spinners’ purposes, second cuts may cause neps — already a risk when you’re working with fibers this short and slender. Carding is the most reasonable preparation method, but don’t expect perfection. A pair of mini combs will help you clear out the second cuts, if you’ve got enough fiber length to get the wool onto the combs. Plan on spinning fine, with enough twist to hold the short fibers together and enhance the yarn’s durability.



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**Effect of dyes.** The wool will dye clearly, with a matte finish.

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**Best uses.** Rouge de l'Ouest wool is suitable for next-to-the-skin garments, but expect a crisp feel rather than a soft one.

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**Origin:** France

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**Fleece weights:** 3<sup>1</sup>/<sub>2</sub>–6<sup>1</sup>/<sub>2</sub> pounds (1.5–3 kg)

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**Staple lengths:** 1<sup>1</sup>/<sub>2</sub>"–2" (4–5 cm)

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**Fiber diameters:** 23–26 microns

**Natural colors:** White



Called the British Rouge in Britain, the Rouge de l'Ouest was developed in the Loire province of western France when English Longwools — particularly Wensleydales and Bluefaced Leicesters — were bred to the native landrace sheep. The original goal was a dairy breed.



CONSERVATION BREED

## **Rough Felt**

This hardy, docile Blackfaced Mountain breed grows weather-resistant fleeces that mix wool, hair, and kemp in varying proportions — and rough is the operative word. The outercoat resembles horsehair; the undercoat is woollier, but has more kemp. The long, triangular locks are thicker at the woolly bases and narrower at the hairy tips. You can spin from the whole locks, teasing them out to separate the fibers, but their length and wiriness make spinning a challenge. Separate hairy fibers from woolly ones by holding the base ends and pulling the hair loose.





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**Effect of dyes.** The varied fiber textures each take dye differently; the kemp won't display the dyed colors and will produce a tweedy look and feel.

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**Best uses.** Use Rough Fell fiber, unspun, to create accents in weaving or basketry, or spin it into ropelike yarn and knit or crochet rugs and heavy fabrics. Whatever you make will be durable and resilient. Felting is not a strong point.

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**Origin:** England (northwest)

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**Fleece weights:** 4 1/2–8 pounds (2–3.75 kg)

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**Staple lengths:** 6"–12" (15–30 cm)

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**Fiber diameters:** 36–40+ microns

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**Natural colors:** White

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Cumbria, the Rough Fell's home, receives 60 to 100 inches (153 to 254 cm) of rain each year, and is blanketed by heavy snowfalls in winter. Only sturdy sheep survive. Although there are quite a few Rough Fell sheep, most of them live in a small geographic area.



## CONSERVATION BREED

# Rya

This double-coated landrace sheep was developed at the beginning of the twentieth century from both Swedish and Norwegian native breeds, including the Spaelsau. Wool has been one of the focal points of breeding, with the goal of producing long, shiny, and wavy wool. The hair coat, which makes up about half the fleece, has a well-defined, broad crimp.



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**Effect of dyes.** Colors influenced by the underlying natural tones, and given some depth by the subtle luster.

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**Best uses.** Weavers may know of a traditional textile called the rya rug, made with a knotted-pile structure, of which this wool is emblematic. It does make an excellent material for rugs, as well as wall hangings and sturdy outer garments, whether woven, knitted, crocheted, felted, or constructed with any other technique.

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**Origin:** Sweden

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**Fleece weights:** Not available

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**Staple lengths:** 6"–12" (15–30 cm)

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**Fiber diameters:** Average 24 microns (undercoat), 52 microns (outercoat)

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**Natural colors:** White; also some black, gray, and brown

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The Rya's long, wavy, shiny wool, combined with its clean legs, make it look like it's wearing trousers.



## CONSERVATION BREED

# Ryeland

These relatively small sheep grow exceptionally fine, soft, and fluffy fleeces, and are said to have once had wool that rivaled the Spanish Merinos in fineness. Breeding for improved meat production has resulted in coarser fiber. Contemporary Ryelands in the British Isles and Australia still have finer, lighter fleeces than Ryelands in New Zealand. All Ryelands' dense, blocky staples may have very short, pointed tips; the abundant crimp is fine but disorganized. Carding makes the most of the fiber's lightness, loft, and elasticity; fleeces with longer staples can be combed effectively. You can also spin directly from clean picked or teased locks. The quintessential candidate for woolen spinning, which emphasizes the wool's loft and lightness, Ryeland can also be processed worsted-style to produce a smoother, more compact, durable yarn.



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**Effect of dyes.** These wools dye nicely, with a matte finish.

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**Best uses.** Offering an abundance of lightweight warmth, Ryeland yarn is great for making sweaters, blankets, hats, and other cozy garments. Their reluctance to felt means Ryeland garments can often be machine washed (always test a swatch first, though!).

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**Origin:** England

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**Fleece weights:** Variable by geographic location, 4<sup>1/2</sup>–9 pounds (2–4 kg)

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**Staple lengths:** 2"–5" (5–13 cm)

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**Fiber diameters:** 25–32 microns

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**Natural colors:** White; some colored

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One of Britain's oldest sheep breeds, the Ryeland was originally known for Merino-like softness: Queen Elizabeth I was given some Ryeland stockings, and they spoiled her for stockings made of any other wool.

## CRITICAL CONSERVATION BREED

# **Santa Cruz**

One of the softest and most pleasant wools we've ever encountered comes from this extremely rare breed, fewer than 150 of which still survive in the United States. Yet a good fleece can be difficult to find. Keeping the sheep themselves alive, and the breed genetically viable, is the shepherds' primary concern. If you ever have the opportunity to work with this unusual fiber, you may have to deal with short staples, dirt, and second cuts. Yet the yarn that you can produce from it, with a good dose of patience, will be unlike anything else you've experienced because of the amazing elasticity for which it has the potential. You'll find finely-crimped, disorganized staples. Wash the fleece as you would any fine wool. If staple lengths are on the short side, card; if they're on the long side, comb. Experiment with spinning techniques to tease out that extraordinary elasticity. Counterintuitively, our best samples ended up being spun worsted from very short fibers.





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**Effect of dyes.** Santa Cruz fleece has a matte surface that takes dyes clearly but without a lot of shine.

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**Best uses.** Firmly in the realm of next-to-the-skin softness, Santa Cruz would make wonderfully comfortable camisoles, sweaters, and other cuddly garments, and it is a ready felter.

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**Origin:** United States (California)

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**Fleece weights:** Insufficient data; there are very few sheep —estimate 2–4 pounds (1–1.75 kg)

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**Staple lengths:** Should be 2"–4" (5–10 cm); most of what we've seen lately has been 1"–2" (3–5 cm)

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**Fiber diameters:** Estimated 18–26 microns

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**Natural colors:** White, brown, near-black

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The entire 100 square miles (259 sq km) of Santa Cruz Island, off the California coast, was a ranch in the 1890s. At that time there were fifty thousand head of these sheep on the island. A few were removed from the island to

protect the genetic resource; the breed is now critically endangered and shepherds are needed to maintain flocks.



# Scottish Blackface

The source of 50 percent of the wool harvest in Scotland, the Scottish Blackface is also very important, economically speaking, across England, Scotland, Wales, Ireland, and Northern Ireland. Its long, strong fleece, while not soft, is known for outstanding durability and resilience. Expect hairy, pointed staples, with occasional kemp and an undercoat of fine wool. You can spin from the lock, or comb with wide-toothed, Viking-style combs. Use a light touch in preparation and spinning. As this wool can be prone to static, it may benefit from misting as you spin.



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**Effect of dyes.** Known for their clear white quality, these fibers take and display dyes well.

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**Best uses.** Scottish Blackface yarns are very stable: they can feel more like linen than wool. Use them for knitting, weaving, or crocheting projects that require crispness, body, and exceptional strength.

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**Origin:** Scotland

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**Fleece weights:** 3–6½ pounds (1.25–3 kg)

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**Staple lengths:** 6"–14" (15–36 cm)

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**Fiber diameters:** 28–40+ microns

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**Natural colors:** White

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The Scottish Blackface accounts for about 30 percent of all sheep across the entire British Isles. Recognized strains include the Lanark, the Northumberland, the Perth, and the Newton Stewart. The wools' lengths and fineness vary between the strains. Of the group, Northumberland is the softest and Newton Stewart is the most rain-resistant.

## CONSERVATION BREED

# Shetland

With many fleece grades and an exceptionally wide natural color range, wool from the Shetland breed can satisfy any taste and any need. Different strains of the breed produce strongly differentiated fleeces. When you have seen one fleece labeled Shetland, you have only started to learn about the breed. The locks of their dense fleeces are essentially triangular: wider at the base and somewhat pointed. The finer fibers are nicely crimped; those with longer, coarser fibers may be wavy to nearly straight. You can spin from the lock; card short, fine fleeces; and comb or flick longer fine, medium, or mixed fleeces. The fiber types may be easy to separate, or you may need to spin them together, but spinning should be relatively smooth and easy.



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**Effect of dyes.** White Shetland wools are often dyed, and the breed's natural colors can be overdye.

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**Best uses.** Combining light weight with unusual durability for the degree of fineness, Shetland yarns can be used for anything from a delicate shawl to sturdy rope. The fine to medium fleeces make exceptional sweaters. Most Shetland fleeces will felt.

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**Origin:** Scotland (Shetland)

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**Fleece weights:** 2–5 pounds (1–2.25 kg)

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**Staple lengths:** Varies by type, 2"–10" (5–25 cm)

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**Fiber diameters:** 20–30 microns generally (widely variable, depending on strain)

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**Natural colors:** As wide an array as any breed: whites, creams, tans, browns, all shades of gray, and black

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**Double-coated**

**Single-coated**

It can be difficult to tell whether the “Shetland” wool you buy is from a) a purebred Shetland sheep (from the islands, North America, or elsewhere); or b) a sheep of another breed that makes its home on the Shetland Islands in the North Atlantic. Shetland wool warrants, and rewards, extensive study.



## CONSERVATION BREED

# Shropshire

Because the sheep are bred primarily for meat, wool from breeds in the Down family, like the Shropshire, is rarely listed by name in the United States. So this breed's springy, strong, elastic wool can be difficult to find, even though in 1930 Shropshires were the most common breed in North America. Fiber artisans who search for fleeces or yarn will be rewarded, however: dense, resilient Shropshire fleeces are nice to work with, and can be handled in a variety of ways. The blocky, rectangular staples hold together and may be hard to distinguish from one another. It's best to card shorter fleeces, but longer ones can be flicked or combed. Spinning with moderate twist will help maintain the wool's loft and elasticity.



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**Effect of dyes.** These wools dye well.

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**Best uses.** The finer fleeces produce durable yarn that's soft enough to be worn next to the skin; coarser grades are excellent for hats, mittens, socks, and casual sweaters. Shropshire fleeces aren't ready felters.

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**Origin:** England

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**Fleece weights:** 4 1/2–14 pounds (2–6.25 kg)

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**Staple lengths:** 2 1/2"–4" (6–10 cm)

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**Fiber diameters:** 24.5–33 microns

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**Natural colors:** White, for the most part





Shropshire ewes commonly have twins and triplets, and they are long lived, often producing lambs into their teens.

## CRITICAL CONSERVATION BREED

# Soay

The wool of these small, rare sheep can be challenging to locate and also to use, but the search and the subsequent explorations will provide a worthwhile adventure. The Soay's locks tend to be indistinct and a little blocky, sometimes with pointed tips. Fleeces may be distinctly double coated, or may be nearly single coated; they may be woolly or hairy, or include scatterings of very coarse fibers. Try spinning from the locks after gently opening them. Because of the fiber length, carding is also an option; mini-combs can work well to remove persistent skin flakes at the locks' bases, if you encounter this problem. You'll probably need to spin Soay wool fairly fine, and keep your mind open to creative approaches.



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**Effect of dyes.** The wool will take dye, but its natural colors are more often used.

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**Best uses.** The way you use Soay yarns may be dictated by the mix of fibers you obtain, but anything from underwear (from the carefully separated fine undercoat) to tweedy fabric is possible. Bring your patience and see what you can make of it.

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**Origin:** Scotland (St. Kilda)

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**Fleece weights:**  $\frac{3}{4}$ –2 pounds (350g–1 kg)

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**Staple lengths:** 1 $\frac{1}{2}$ "–4" (4–10 cm)

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**Fiber diameters:** 9–48+ microns (undercoat/outercoat)

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**Natural colors:** Brown, predominantly; also tan, near-black, a few white

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The word Soay is derived from Norse words for “sheep” and “island.” Soay closely resemble some of the earliest domesticated sheep of Neolithic times. What a living treasure!



## CONSERVATION BREED

# Southdown

The docile, affectionate Southdown is the breed from which all other Down breeds were developed. Like other Down sheep, Southdowns produce versatile, resilient, medium-handling wools. Their dense fleeces have blocky, rectangular staples that tend to hold together. The shorter fleeces can be carded; with longer ones, you may choose to flick or comb. To maintain the wool's natural loft and springiness as you spin, keep your drafting light and the twist levels moderate.



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**Effect of dyes.** Southdown takes well to dye: the results won't be lustrous, but the colors won't be flat, either.

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**Best uses.** These yarns are great for socks, mittens, hats, and everyday sweaters. The finer Southdown fleeces offer both next-to-the-skin softness and good durability. Southdown isn't overeager to felt, so whatever you make may be machine washable (test a swatch).

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**Origin:** England

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**Fleece weights:** 4–8 pounds (1.75–3.75 kg)

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**Staple lengths:** 1½"–4" (4–10 cm)

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**Fiber diameters:** 23–31 microns

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**Natural colors:** White

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Some historians believe that the first sheep to arrive in the Jamestown Colony in Virginia, in 1609, were the short-wooled, colored-faced breed known as Southdown. It's possible that some of those sheep formed part of the ancestry of the Hog Island breed.



## **Spaelsau (New)**

Three breeds tuck in under the name of Spaelsau or Spelsau, and distinguishing between them can be confusing, in large part because of the way they are named. Spael means “short-tail” and sau means “sheep,” and all three are short tailed. One is covered here; the other two are in the next entry. Beginning around 1950, the Norwegian Spaelsau, focusing on meat production and size, was developed from the Old Spaelsau by incorporating Cheviot, Icelandic, and Faroese genetics. Often just called Spaelsau, these well-established and successful sheep have been bred for uniformly colored wool and to eliminate the older breed’s horns. The undercoat of this Spaelsau can be quite fine, while the outercoat is a good deal coarser and over twice as long.





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**Effect of dyes.** The Spælsaus have varying amounts of luster, which affect the resulting shades, but they take dyes well.

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**Best uses.** All three breeds have in common double-coated fleeces that felt well, and their wool can also, of course, be spun into yarn that is good for fine-art weavings, tapestries, fleece or pile rugs, and sturdy sweaters, socks, hats, and other garments where durability is more important than softness.

**Origin:** Norway

**Fleece weights:** 4<sup>1</sup>/<sub>2</sub>–6<sup>1</sup>/<sub>2</sub> pounds (2–3 kg)

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**Staple lengths:** 2"–2<sup>3</sup>/<sub>4</sub>" (undercoat); 5"–7" (outercoat)

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**Fiber diameters:** 19–22+ microns (undercoat); 37–40+ microns (outercoat)

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**Natural colors:** Predominantly white, with occasional colored fleeces

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The Spælsaus provide some of the classic felting wools. The coats can be separated or used together — either as yarn or as felt.



## CONSERVATION BREEDS

# **Spaelsau (Old)**

Another name associated with the three Norwegian Spaelsaus, or short-tailed sheep (see the previous entry), is Gammelnorsk spaelsau, which means “old Norwegian short-tail.” “Old” and “Norwegian” describes two of these breeds: one is a coastal type and one developed inland, based on the coastal sheep, and later gave rise to the new Spaelsau.

The coastal sheep, the oldest type, has been around for at least 3,000 years. They are called Old Norse, Old Norwegian, Norwegian Feral Sheep, and Gammelnorsk sau. Since 1994 and the development of a successful marketing program that promotes the breed’s meat, they have also been called Villsau, which means “wild sheep,” a reference to their ability to survive without intensive husbandry. Inland flocks consisted of Old Spaelsau, also known as Norwegian Old Spael, Gammelnorsk spaelsau, and Gammeltypisk spaelsau.



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**Best uses.** The dual coats in the older-style inland Spaelsau are often (but not always) about the same length and then can be spun together into a sturdy yarn, or they can be separated, with the smooth, lustrous outercoat spun into durable yarn for rugs and weather-resistant garments and the undercoat made into softer textiles. Spaelsau wools, well known for felting, have also been used since the Renaissance for weaving tapestries.

**Origin:** Norway

**Fleece weights:** 2<sup>1</sup>/<sub>2</sub>–3<sup>1</sup>/<sub>2</sub> pounds (1.25–1.5 kg)

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**Staple lengths:** 4"–13<sup>1</sup>/<sub>2</sub>" (10–35 cm)

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**Fiber diameters:** Not available

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**Natural colors:** White, black, gray, brown

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**Old  
Spaelsau  
(inland)**

**Old Norse  
(coastal)**

Spaelsau wool was used to make sails for early ships — all, of course, with spindle-spun yarn. More than 200 fleeces would go into a single sail, which would last between 30 and 50 years.



# Stansborough Grey

Here's a modern breed developed with wool — not meat or milk — in mind: the Stansborough Grey came into being when Gotland sheep, a breed that originated in Sweden, were imported to New Zealand from Denmark, specifically for the production of high-quality textiles. The lustrous fiber is shorn every five to seven months to produce moderate staple lengths, which process well in machine worsted-spinning. Handspinners can spin it woolen or worsted, although the latter will best highlight its wonderful shine and draping qualities.





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**Effect of dyes.** The wool's natural grays are beautiful in their own right, and overdyeing will produce subtle, glistening hues.

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**Best uses.** Sleek, durable, and relatively soft, Stansborough Grey yarns are ideal for making garments that are lightweight, drape well, and possess a subtle, near-magical gleam.

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**Origin:** New Zealand

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**Fleece weights:** 5 pounds (2.25 kg) (per shearing)

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**Staple lengths:** 3"–4" (8–10 cm) (per shearing)

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**Fiber diameters:** 22 (lamb)–29 (ewe) microns

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**Natural colors:** Light, mid, and dark gray

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Stansborough Grey has been called upon to provide costumes for a number of films, including, among others, *The Lord of the Rings* trilogy; *The Lion, the Witch, and the Wardrobe*; *Prince Caspian*; *The Water Horse*; *Avatar*; and the BBC's *Kidnapped*.





# Suffolk

Although the fleeces of the Suffolk, like those of other Down family breeds, are generally sold into an anonymous pool for commercial processing, they can be rewarding to spin individually when you can find a nice one. Dense and resilient, with blocky, rectangular staples that hold together and can be hard to distinguish, Suffolk fleeces yield a pleasant, versatile, medium-handling wool. Card shorter fleeces, and flick or comb longer ones. Keep the drafting light and the twist moderate to preserve the wool's characteristic loft and spring.

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**Effect of dyes.** While they lack luminosity, these wools dye well.



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**Best uses.** Suffolk doesn't felt readily, which means you may be able to machine wash whatever you make from it (always test a swatch). On the finer end of their spectrum, Suffolk yarns can be used to make soft, durable items that may rest comfortably close to the skin. Otherwise, use Suffolk to make great socks, mittens, hats, and everyday sweaters.

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**Origin:** England

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**Fleece weights:** 4–8 pounds (1.75–3.75 kg)

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**Staple lengths:** 2"–3½" (5–9 cm)

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**Fiber diameters:** 25–33 microns

**Natural colors:** White





Suffolks are now the most common breed in North America, thanks to their superior conversion of feed into meat. Their wool is often seen as negligible, although it's wonderful stuff.

# Swaledale

Sturdy, rough Swaledale fleeces are well suited to the harsh weather of northern England, where this Blackfaced Mountain breed originated: they have an outer layer of rain- and snow-shedding hair and an inner layer of insulating wool. The locks have wide bases and tapered tips; they may include some kemp or dark guard hairs. You can spin from teased locks, card, or prepare on Viking combs. During combing, the fibers will want to pull off the final comb in sequence: longest, medium, then kemp; you can recombine the lengths before spinning. Carding will keep them mixed throughout processing. During spinning, a light grip works best to keep the fiber types from separating. Use the shortest fiber lengths as your guide to the amount of twist to use.



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**Effect of dyes.** Varied fibers make Swaledale interesting to dye.

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**Best uses.** Consider Swaledale yarns for rugs, jackets, bags or baskets that need to stand up to weather, wear, or both.

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**Origin:** England (northern)

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**Fleece weights:** 3<sup>1</sup>/<sub>2</sub>–6<sup>1</sup>/<sub>2</sub> pounds (1.5–3 kg)

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**Staple lengths:** 4"–8" (10–20 cm)

---



**Fiber diameters:** 36–40+ microns

**Natural colors:** White, off-white, gray



Sheep husbandry has been practiced in the English Lake District, the Swaledale's home turf, since Roman times. These sheep are one of the breeds that become so attached to their own grazing grounds that they remain where they are born without the need for fencing.

# Targhee

The Targhee was bred to thrive in range and farm environments of the western United States. Its fleece is soft and fine, but also lively and supple, making it a good choice when you want a touch of luxury in a dependable everyday garment. The breed's dense, uniform, matte locks are blocky, with occasional slightly pointed tips and a whole lot of crimp. Depending on length, the fleece can be combed or carded. You can also spin from the lock, flicked or not, although the fiber's fineness can make these approaches challenging. Use fine carding cloth on hand carders or a drum carder, and handle gently to avoid producing neps. A light touch in spinning will keep the fibers flowing smoothly.





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**Effect of dyes.** Targhee takes dye colors well.

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**Best uses.** Lofty, elastic Targhee yarns are wonderful for making soft, cozy, resilient textiles that feel indulgent, yet wear well. The wool will felt.

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**Origin:** United States (western)

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**Fleece weights:** 10–22 pounds (4.5–10 kg)

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**Staple lengths:** 3"–5" (8–13 cm)

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**Fiber diameters:** 21–28 microns

**Natural colors:** White



The all-around, meat-and-fleece Targhee resulted from breeding Rambouillet rams to Corriedale and Lincoln/Rambouillet ewes. The end result for wool aficionados is delightfully fine and versatile fiber.



CONSERVATION BREED (BRITISH)

## **Teeswater**

Offering both length and luster, Teeswater fleeces are also finer than those of most English longwools. The long, wavy, smooth-surfaced locks, free of all kemp and dark fibers, hang individually and don't clump together. Spin directly from the locks, or use them unspun to make a fleece rug. You can open the locks by flicking, or comb using long strokes because of the length and strength of the fibers. To draft very long fibers effectively, keep your hands far apart.



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**Effect of dyes.** Teeswater's luster makes it a great candidate for dyeing, so expect brilliant results.

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**Best uses.** A wonderful weaving yarn, Teeswater is exceptionally durable without being stiff or scratchy. Knitted or crocheted items will drape well, look sleek and shiny, and have terrific stitch definition. Lay the wool, unspun, directly

into woven, crocheted, or other ground fabrics. It is a reluctant felting wool.

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**Origin:** England

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**Fleece weights:** 7½–18 pounds (3.5–8.25 kg)

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**Staple lengths:** 12"–15" (30–38 cm) first clip; 6" (15 cm) for subsequent (twice-yearly) clips

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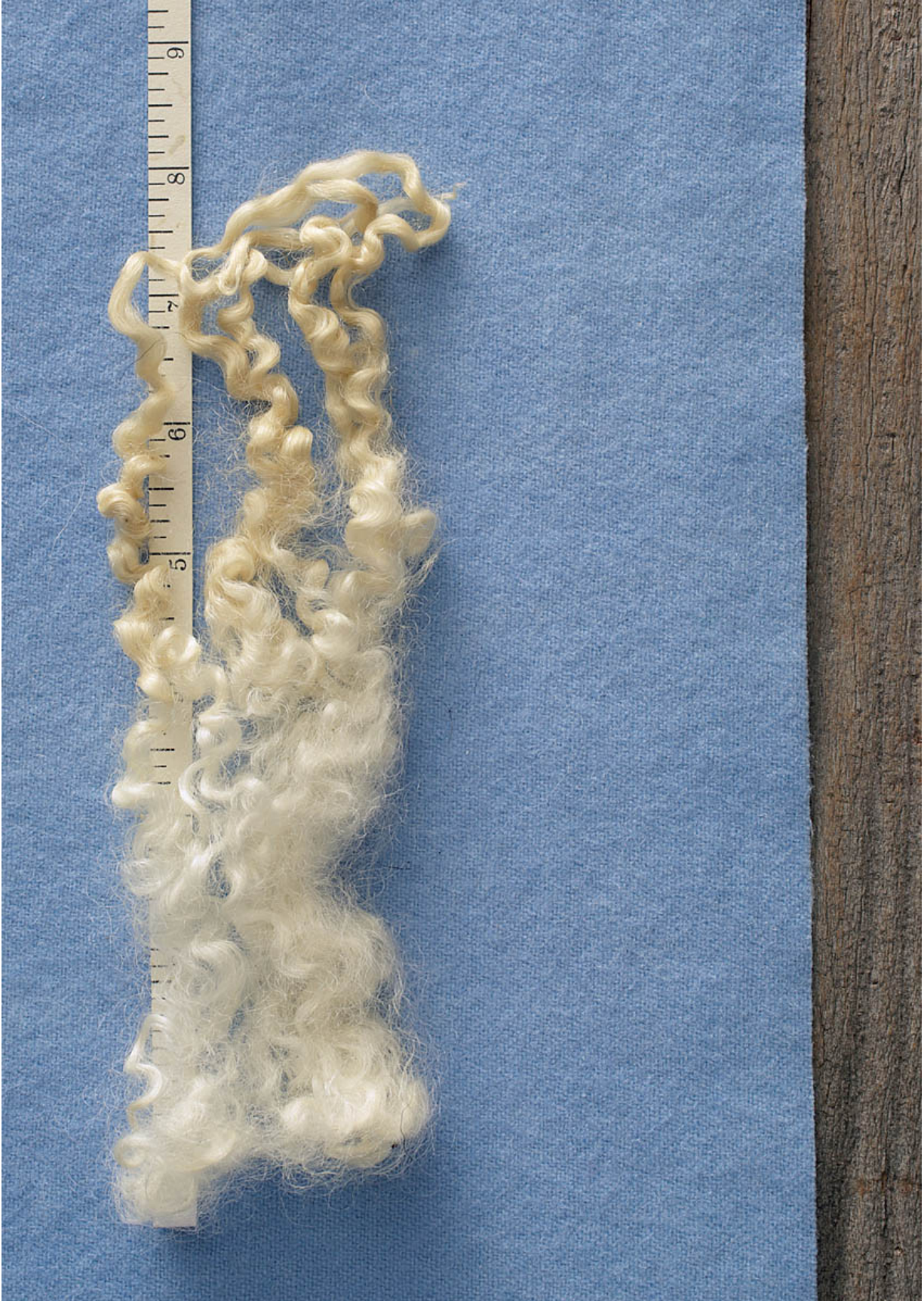
**Fiber diameters:** 30–36 microns

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**Natural colors:** White

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The Teeswater breed is named for the River Tees, which meanders 85 miles (137 km) from the Pennines to the North Sea. Teeswater sheep are being produced in North America through upgrading, and the fleeces of American Teeswaters may have the characteristics of the foundation breed mixed with those of the British Teeswater sire.

# Texel

Texels are bred to produce high-quality meat; that's their role, and their wool is considered a secondary crop. Still, those nice white Texel fleeces are versatile and yield yarns with better-than-average insulating qualities. The locks are springy and somewhat crisp-feeling; both fiber and locks exhibit partially organized crimp. If you get a fleece from a meat-focused flock, you may need to pay special attention to cleaning the wool: combing will help remove vegetable matter. Shorter-stapled fleeces can be carded, and longer ones can be combed. You'll find Texel relatively easy to spin, but remember that even worsted-style yarns will have a lofty quality.





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**Effect of dyes.** The fleece takes dye colors clearly, but the low luster means they won't glisten.

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**Best uses.** Flexible in a variety of techniques, high-bulk Texel yarn is a good choice for cozy, sturdy blankets, stockinette-knit sweaters, or cushiony mats and pillows.

---

**Origin:** The Netherlands

---

**Fleece weights:** 7–12 pounds (3.25–5.5 kg)

---

**Staple lengths:** 3"-6" (8-15 cm)

**Fiber diameters:** 26-36 microns

**Natural colors:** White



The modern Texel was developed in the mid-1800s by crossing native sheep of the island of Texel, off the coast of the Netherlands, with Lincoln and Leicester Longwools. The Blue Texel, with steel-gray to nearly black fleeces and badger-patterned faces, is recognized as a separate breed in the Netherlands.



CONSERVATION BREED

## Tunis, American

As versatile and friendly as the breed itself, American Tunis fleece aims to please. It's warm in color, dense, and uniform throughout, with a noticeable crimp in the fibers. The locks are relatively open and a bit blocky, with occasional pointed tips; they're easy to tease open, so flicking is an appealing preparation method. Shorter staple lengths can be carded, and longer ones can be combed or spun from the fold.



---

**Effect of dyes.** This wool's bit of luster adds brilliance to dye colors, while the natural tone may warm them.

---

**Best uses.** You can use American Tunis fleece for any fiber technique you like: it has enough crispness to hold spaces in openwork, and enough body for good stitch or weave definition. Whatever your clothing or household need, American Tunis will be happy to oblige.

---

**Origin:** United States

---

**Fleece weights:** 6–15 pounds (2.75–6.75 kg)

---

**Staple lengths:** 3"–6" (8–15 cm)

---

**Fiber diameters:** 24–31 microns

---

**Natural colors:** Creamy white

---





The American Tunis was developed from Tunisian Barbary sheep, a breed that dates back to biblical times, although it's come a long way from its origins and is a separate breed. The entire population was almost destroyed during the Civil War.





## CONSERVATION BREED

# Warhill

Warhill sheep were developed in the 1930s in Wyoming, at the Warren Livestock Company, through the efforts of rancher Fred Warren, son of a state senator, and John Hill, dean of the School of Agriculture at the University of Wyoming in Cheyenne and one of the first people to statistically analyze wool properties. The goal in developing the breed was larger fleeces of finer wool, suitable for range conditions, which was accomplished with great success by using mostly Rambouillet, Panama, Columbia, and Targhee blood.

Warhill is only likely to be available as fleece, not yarn, although maybe that will change. Like many range sheep, the fleeces collect vegetable matter and dirt, but clean up beautifully and, in this case, spin into soft yarns reminiscent of their Targhee and Rambouillet ancestors; see those breeds for dye and use information.



---

**Origin:** United States (Wyoming)

---

**Fleece weights:** 11<sup>1</sup>/<sub>2</sub>–12 pounds (5.25–5.5 kg)

---

**Staple lengths:** estimated 3"–5" (8–13 cm)

---

**Fiber diameters:** Estimated 22–26 microns

---

**Natural colors:** White

---





Development of the Warhill breed increased the Warren Livestock Company's fleece quantity by about 60 percent and its market value for the ranchers by more than that, because of the increase in fineness.



CONSERVATION BREED

## Welsh Hill Speckled Face

Affectionately nicknamed “Speckles” among breeders, the Welsh Hill Speckled Face is known for its extreme hardiness and the sturdy, stable character of its wool. Expect dense locks with pointed tips; there’s a wavy, semiorganized crimp in both fiber and lock. It’s easy to process and spin. Depending on the fiber length, you can flick, pick and spin from the lock, card, or comb. Appropriately prepared, the fleece drafts smoothly for either thick or thin yarns.



---

**Effect of dyes.** Dyeing produces clear colors, and the fiber's hint of luster may add some brilliance to the results.

---

**Best uses.** This pleasant, versatile, midrange wool can be soft enough for sturdy sweaters, hats, and other skin-touching clothing, or may be used to make outerwear, rugs, pillows, and the like.

---

**Origin:** Wales

---

**Fleece weights:** 3<sup>1</sup>/<sub>2</sub>–4<sup>1</sup>/<sub>2</sub> pounds (1.5–2 kg)

---

**Staple lengths:** 3"–4" (8–10 cm)

---

**Fiber diameters:** 26.5–33 microns

---

**Natural colors:** White

---





The extremely hardy Welsh Hill Speckled Face breed was developed in the mid-twentieth century by crossing Kerry Hill rams with Welsh Mountain ewes.

## CONSERVATION BREEDS

# Welsh Mountain and South Wales Mountain

Sturdy sheep, sturdy yarn — that's what you can expect of these breeds. The main difference between them is the amount of kemp in their fleeces. Welsh Mountain contains slender kemp, which adds durability without much accompanying harshness. Expect far more abundant kemp in South Wales Mountain fleeces, and factor in scratchiness when planning uses for this wool. Both breeds exhibit blocky staples with short, tapering tips and a nice, if irregular, crimp in the finer fibers. The fiber mix makes combing or carding a challenge; consider teasing apart the low-grease locks and spinning them directly. Use a light touch when spinning, and expect the kemp to resist twist.





---

**Effect of dyes.** Kemp won't show dyed colors well, but other fibers in the mix will yield interesting shade and texture contrasts.

---

**Best uses.** Sturdy sweaters, mittens, hats, blankets, tapestries, rugs — pay attention to the fiber mix, and you can make any of these with selected fleeces of these breeds.

**Origin:** Wales



**Fleece weights:** 2<sup>1</sup>/<sub>2</sub>–4<sup>1</sup>/<sub>2</sub> pounds (1.25–2 kg)

---

**Staple lengths:** 2"–4" (5–10 cm) or more

---

**Fiber diameters:** 25–40 microns

---

**Natural colors:** White

---



Welsh Mountain sheep from southern Wales are a bit larger than those grown in the central and northern Welsh mountains.



CONSERVATION BREED (BRITISH)

## **Wensleydale**

Lustrous Wensleydale fleeces are finer than the fleeces of most other English longwools. Their distinct, curly, kemp-free ringlets are wavy, with a smooth, supple surface. The long locks can be spun into smooth or textured yarns, or you can use them unspun to make a fleece rug. Flick or comb using very long strokes. When drafting, be sure to keep your hands far enough apart that you're not inadvertently holding both ends of the same fibers.



---

**Effect of dyes.** Wensleydale is very amenable to dyes, and its wonderful luster produces clear, bright colors.

---

**Best uses.** Exceptional for weaving, Wensleydale yarns are well suited to tapestry, upholstery, and fine worsted-spun wool yardage. These yarns bring clear stitch definition and good drape to knitting, crochet, and other construction methods. You can also spin Wensleydale into a dynamically textured yarn that becomes a statement in itself. Wensleydale is an unwilling felter.

---

**Origin:** England

---

**Fleece weights:** 7–20 pounds (3.25–9 kg)

---

**Staple lengths:** 7"–12" (18–30 cm)

---

**Fiber diameters:** 30–36 microns

---

**Natural colors:** White, gray, black

---





Wensleydales are closely related to Teeswaters. Statistically they have nearly identical wools, although handspINNERS may be able to detect subtle differences. Wensleydale sheep, like Teeswaters, are being bred in North America through upgrading, and the fleeces of



American Wensleydales may resemble those of the foundation breed, which will be another longwool.

## CONSERVATION BREED

# Whitefaced Woodland

If you're able to find fleece or yarn from this rare breed, you'll have to judge its uses according to what you feel: Whitefaced Woodland wools lack consistency, and may be described as anything from "hairy medium" to "off the scale for coarseness." We've also seen some that could be called plain old medium (without the "hairy" designation). The locks are somewhat open, with crimp patterns that vary. It's an old breed; consistency in fleeces is a more modern breeding goal. The preparation and spinning techniques you choose will depend on where in the fiber range your specific fleece falls.



---

**Effect of dyes.** Apart from some kemplike fibers at the coarsest end of the range, this wool will dye nicely.

---

**Best uses.** Depending on the softness of your fleece, you can use Whitefaced Woodland yarns to produce anything from sturdy everyday socks, gloves, mittens, blankets, and sweaters to tough outerwear, rugs, and other textiles that can withstand serious abuse. This wool will felt.



---

**Origin:** England

---

**Fleece weights:** 4<sup>1</sup>/<sub>2</sub>– 6<sup>1</sup>/<sub>2</sub> pounds (2–3 kg)

---

**Staple lengths:** 3"–8" (8–20 cm)

---

**Fiber diameters:** 28–38+ microns

---

**Natural colors:** White

---



Whitefaced Woodlands, once known as Penistone sheep, have always been primarily meat producers. The breed nearly became extinct in the late twentieth century, but recognition of its value and suitability for particular

environments have improved its situation, although it's still considered endangered.



# Zwartbles

The dense fleece of this milk-and-meat breed is springy and intensely black, apart from occasional sun-bleaching at the tips. The locks are blocky and moderately long, with well-developed, slightly jumbled crimp in both fiber and lock. The relatively open lock formation and medium fiber diameter mean you can choose your favorite preparation technique with confidence; apart from a little extra bounce, this wool is easy to handle.



---

**Effect of dyes.** Given its dark color, it doesn't make much sense to dye it.

---

**Best uses.** A great workaday wool for spinning and knitting, Zwartbles' crisp hand will emphasize stitch and weave structures, and its springiness will offer resilience to fabrics. Use it to make durable hats, mittens, gloves, and cardigans, as well as household textiles that are both strong and satisfying to handle.

---

**Origin:** The Netherlands

---

**Fleece weights:** 6 1/2-10 pounds (3-4.5 kg)

---

**Staple lengths:** 4"-5" (10-13 cm)

---

**Fiber diameters:** 25-37 microns

---

**Natural colors:** Black

---





The Zwartbles is the result of a cross of the Netherlands' two main native sheep breeds: the hornless, short-tailed Friesian and the horned and hairy-fleeced Drenthe.



## In case you're curious. . . .

Although we have endeavored to make this guide contain most of the breeds that produce wools that a primarily English-speaking community of fiber folk is likely to encounter, you'll inevitably come across fleeces or mentions that we haven't included. This list will give you tips about some additional items.

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**Borderdale.** This breed was developed in New Zealand from the same cross that in Australia resulted in the Gromark (Border Leicester X Corriedale). See Gromark.

---

**Bowmont.** When the Macaulay Land Use Research Institute in Scotland set out to breed a sheep that could thrive in the British Isles and yet consistently grow wools considered fine on the world market, it began with 75% very fine Australian Merino and 25% white Shetland. The gene pool is being supplemented through artificial insemination with fine Saxon Merinos from Australia. Fleeces and yarn can be found from time to time, although most of the 14- to 20-micron wool is used commercially.

---

**Falkland Islands.** This term refers to the place where the wool has been grown, not to a specific breed of sheep. This generally fine, white wool is of high quality. Many sheep in the Falklands are Polwarth, Merino, Corriedale, Romney, or combinations thereof. Staple lengths are generally 3 to 4 inches (8–10 cm) and micron counts range from 18 to 33.

---

**Masham.** Mashams (pronounced MASS-ums) result from a traditional crossbreeding practice. Teeswater or Wensleydale rams are bred to Dalesbred, Swaledale, or Rough Fell ewes. Although the resulting fleeces vary in their specific characteristics, they tend to be long and lustrous, with wavy crimp.

---

**Mule.** A mule is a crossbred ewe who is part of a production system intended to produce meat. Bluefaced Leicester rams are bred to Blackfaced Mountain, Cheviot, Welsh Mountain, or Clun Forest ewes to produce the resulting mules. (This type of mule is fertile, unlike most equine mules.)

---

**"Norwegian wool."** Also called C1, this excellent felting wool comes from a blend of white-wooled Norwegian breeds, including Dala, Cheviot, Steigar, and Rygya. These breeds are often both bred and marketed together as Norwegian White Sheep. An average micron count is in the low 30s.

---

**Panama.** The Panama resulted from the use of Rambouillet rams and Lincoln ewes, a configuration opposite that which contributed to the development of the Columbia at about the same time.

---

**Romnelet.** A breed developed in Canada beginning in 1935 with Romney Marsh rams and Rambouillet ewes, with small introductions of Targhee and Romeldale before the breed definition was completed.

# Glossary

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**Badger-faced.** Color pattern on the body of an animal that is primarily light-colored, with dark markings on the face, underbelly, legs, and chest, and under the tail. In the reverse badger-faced pattern, a dark-colored animal has light markings in the same locations.

---

**Batt.** A form of fiber preparation in which the fibers are arranged with relatively even density and somewhat helter-skelter directions. Batts can be prepared on a drum carder or hand carders.

---

**Bulky.** Wool that is described as bulky feels full in the hand, incorporating a lot of air for its mass. The word is also used to describe a specific size of yarn that may or may not have a bulky feel.

---

**Carding.** Carding is a means of separating locks and clumps of fiber into thin, even layers prior to spinning, with a maximum amount of air between fibers. Traditionally, carded fibers are spun woolen style (see Woolen) to produce yarns that emphasize the fibers' softness and warmth.

---

**Chalky.** Wool that is chalky has a chalklike white surface, without luster.

---

**Combing.** Combing prepares fibers for spinning by making sure that all the fibers are evenly separated, parallel, and, ideally, of similar lengths. Traditionally, combed fibers are



spun worsted style (see Worsted) to produce yarns that emphasize the fibers' durability and smoothness. Hand combing of fibers can be carried out with a variety of different tools, of different weights, and with different numbers of rows of teeth. Combs are most often used in pairs.

---

**Crimp.** Refers to the natural kinks, waves, or bends in individual fibers. Crimp in natural fibers occurs as part of the growth process. Sometimes the waves are small and close together, and sometimes they're larger and more spread out. Sometimes they are very organized and sometimes they occur quite randomly. Although fine fibers have more crimps per inch than coarse fibers, there is no direct correlation between crimp and fiber diameter.

---

**Draft.** During the spinning process, the combed or carded fibers are drawn out, drafted, or attenuated. They slip past each other, forming a long, slender mass of fiber. When twist enters this mass, the fibers are held together in the form of yarn.

---

**Elasticity.** The ability of a fiber or yarn or fabric to stretch and then, when released, return to its original shape and length.

---

**Felt.** A textile in which fibers have joined together so they can't be pulled apart. This usually happens through the application of heat, moisture, agitation, and a bit of soap, and it can be intentional or unintentional. Felting is permanent. Some fibers felt readily; while wools are one of the best-known felting fibers, not all wools will felt. See also Full.

---

**Fleece.** The coat of wool from a wool-bearing animal, generally obtained by shearing.

---

**Flick.** Flicking is a method of opening out locks so the fibers don't stick together but they remain in the same relative positions in which they grew; it opens the lock without obliterating its identity. Flicking can be carried out in several ways, using a tool called a flicker that looks like a small hand card.

---

**Full.** To full a fabric is to wash it under conditions resembling those used to produce felt but to stop the process when the fabric feels more like a unified whole but has not undergone the full transformation to felt.

---

**Grease.** A combination of lanolin (see Lanolin) and suint (see Suint) in animal fiber. When the fleece is washed, a certain percentage of its weight (in the form of grease) is cleaned away.

---

**Guard hairs.** Coarse, water-repellent fibers found in some sheep breeds. They overlay and protect an animal's soft undercoat.

---

**Kemp.** A coarse, hollow fiber found in the fleeces of some sheep breeds. Kemp is brittle, scratchy, has less elasticity than other fibers, and doesn't take dye the same way (the dye molecules end up inside the fiber, their color obscured by the fiber's opacity).

---

**Lanolin.** An oily or waxy substance that sheep exude from sebaceous glands in their skin. Yes, it's the same stuff that shows up in cosmetics!

---

**Locks.** Natural divisions in a sheep's fleece, composed of small clumps of fiber that hold together. Some breeds' fleeces have well-defined locks and others do not. (See Staple.) *Spinning from the locks* means spinning without an intervening step of carding or combing, although it's common to use the fingers to separate the fibers so they will draft more freely (see Draft).

---

**Luster.** The shininess of a fiber. Some fibers are lustrous (reflect light), some are not, and some are in the middle (semilustrous).

---

**Molt.** See Shed.

---

**Nep or noil.** A tangled knot of short, broken, or disarranged fibers.

---

**Overdye.** Dye one color over another, whether the first is a natural color or one produced by previous dyeing.

---

**Pick or tease.** Picking or teasing fiber means plucking the locks apart to fluff them up and separate any stuck spots.

---

**Pointed tips.** The tips of locks have different and frequently characteristic configurations. Some are pointed; some are blunt or blocky.



---

**Rolag.** A rolag is a form of fiber prepared for spinning with the use of hand carders, then rolled into a sausagelike form.

---

**Ro.** To pluck wool from a sheep after the fiber has loosened and is naturally shedding. Wool can be collected by roing only from sheep that seasonally molt or shed their fleeces.

---

**Shed.** Just as some dogs shed a lot, and others nary a bit, some breeds of sheep naturally shed or molt their fiber. Shedding is a characteristic of breeds closer to the ancient types of sheep.

---

**Skirt.** Skirting means removing undesirable portions of a fleece, including the short and dirty bits, as well as anything that is felted or matted.

---

**Staple.** Most often refers to the length of the individual fibers; the word is sometimes used in the same sense as lock.

---

**Strong wool.** A wool that has a relatively coarse fiber diameter and is comparatively durable. Strength in wools is a relative, not absolute, concept.

---

**Suint.** Salt that is given off in an animal's sweat. It mixes with lanolin to make grease, which coats and protects fibers.

---

**Teased lock.** A lock that has been lightly worked with the fingers to open the fibers.

---

**Twist.** Twist holds fibers together and turns a loose mass into yarn. Twisting can be done with the fingers, or with any of a number of types of spindles or spinning wheels.

---

**Upgrading.** The process of attempting to replicate a breed by using semen from a purebred ram on ewes of one or more closely related breeds, called the foundation breed or breeds.

---

**Woolen.** In the context of Western European–based yarn construction, woolen refers to methods of preparation and spinning that produce yarns that incorporate a lot of air, are lightweight, and have high insulation qualities. Woolen spinning begins with carded fiber and proceeds with drafting techniques that keep as much air as possible in the yarn.

---

**Worsted.** In Western European–based traditions, worsted yarns are prepared and spun to enhance the sleekness and draping qualities of the fibers. Combing is the fiber-preparation method that precedes worsted-style spinning techniques to produce these yarns. The term worsted can also refer to a particular weight of yarn, regardless of how it has been made.

---

**Yield.** The yield of a fleece is the amount of clean wool left after the vegetable matter, grease, and other contaminants have been washed out or mechanically removed.

## **Note on Yarn Types**

As is usual with everything in fiber, there are a nearly infinite number of styles of preparation and spinning. Woolen and worsted are the two reference points, but

yarns may be anywhere on the continuum between, and defined by, these two alternatives.



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