

PENDLETON®



issue no.3  
*Joy of Winter  
& Wool*

WOVEN





Photo by Jeff Chang, @theapartmentphoto

# Embrace the season — No matter the weather.

The story of wool connects generations with warmth and craftsmanship. Pendleton Brand Ambassadors tell that story with photography.

COVER PHOTO: Kathleen Peachey, @kathleenpeachey



◀ This icon indicates a link for more information can be found in our digital publication.  
Visit [PENDLETON-USA.COM/MAG](https://pendleton-usa.com/mag) for the interactive version.



Photo by Parker Feierbach, @bach.photo

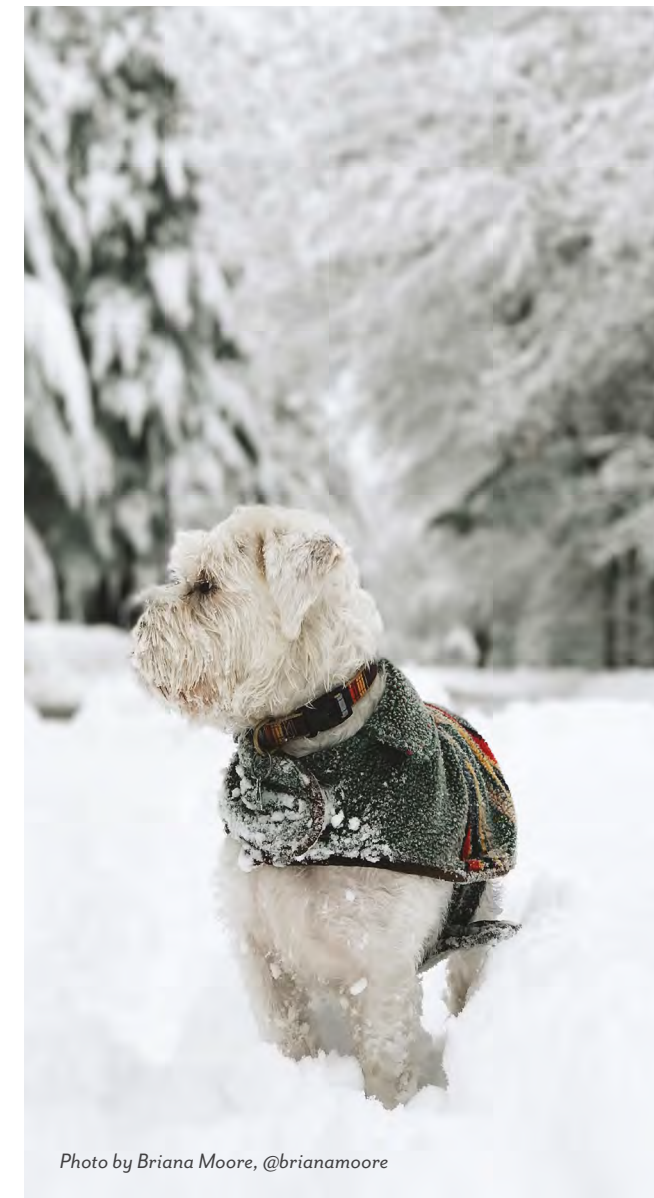


Photo by Briana Moore, @brianamoore



Warranted to be  
Quality craftsmanship  
enriching lives and  
connecting generations.

Photo by Brandon Burk, @brandonburkphotography



# WOOL

## NATURE'S FIRST TECHNICAL FABRIC



Wool has been humankind's first line of defense against the elements for millennia. Early humans plucked the naturally-shed fleece of prehistoric sheep from brambles and bushes long before those animals were ever domesticated. That wool was used to make shoes, saddles, tents, caps, blankets, and more.

### Unique fiber structure

Wool is made of keratin, the natural protein that forms fur, hooves, fingernails, and horns. But wool's unique structure is what creates an advantage in cold climates that synthetics can't match. Wool has a spongy inner core that can absorb water vapor, such as perspiration and humidity. That core is surrounded by an outer layer of overlapping scales. These scales act like shingles on a roof to shed rain while allowing the vapor to pass through to be absorbed by the core. This gives wool the unique ability to keep you warm and dry when it is cold and wet.

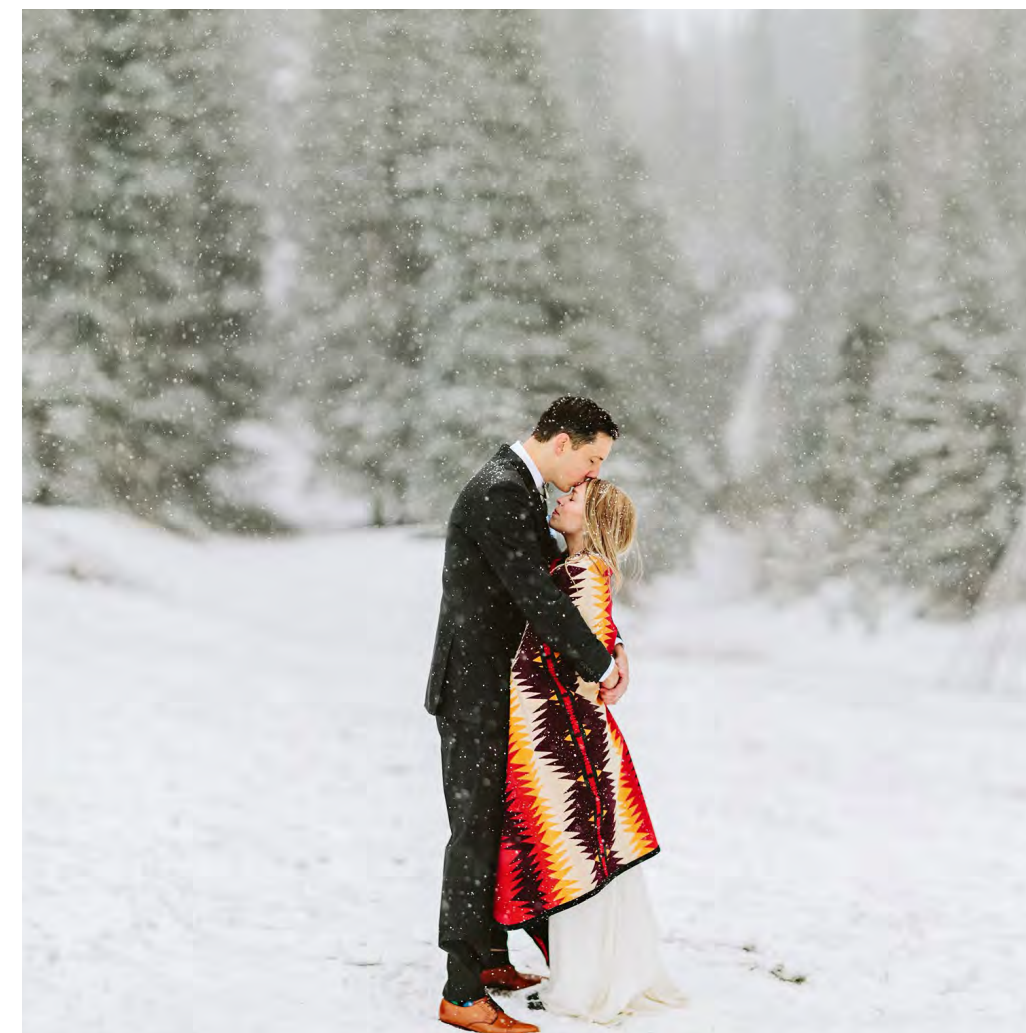
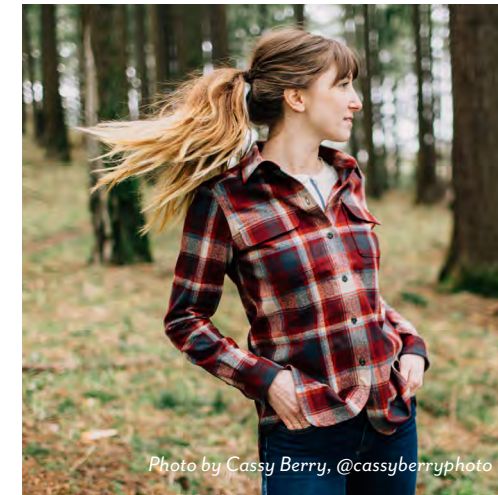
### Resilience

Wool is also incredibly resilient. A wool fiber can be bent and straightened 20,000 times before it breaks, compared to 3,200 for cotton and only 75 for rayon. This is why wool garments and blankets can last for years, and can be passed down to the next generation.

Wool does its work naturally and renewably.

### @ATRIBOUTWEST

Photographer Mikal Wright & stylist Brandy Anderson work together, setting their shots in the staggering beauty of landscapes throughout the west, including Oregon's Willowa Mountains.



<https://blog.pendleton-usa.com/2015/01/29/properties-of-wool-how-wool-saved-my-life/>



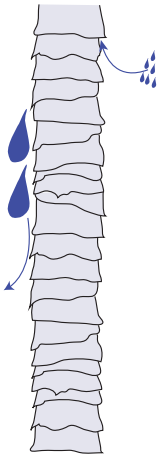
<div> <div></div> <div></div> </div> <h1>BENEFITS of WOOL</h1> <p>Wool is the first choice for fine tailored garments because of its superior ability to be shaped to the vision of the designer, and retain that shape year after year.</p>		
<div> <div></div> <div></div> </div>	<b>SUSTAINABLE &amp; RENEWABLE</b>	<p>In a time of sustainability and environmental consciousness, this biodegradable renewable resource remains longer-lasting and better looking than synthetic fabrics.</p>
<div> <div></div> <div></div> </div>	<b>RESILIENT &amp; WRINKLE-RESISTANT</b>	<p>The unique characteristics of the individual wool fibers give fabrics the ability to hold a shape, resist wrinkles and withstand wear. This makes wool great for travel. Wool can be stretched or twisted and its cells return to their original position.</p>
<div> <div></div> <div></div> </div>	<b>NATURALLY COMFORTABLE</b>	<p>Wool fibers spring back to shape keeping their open, porous nature. Wool provides the most warmth with the least weight. The air trapped inside (about 80% of wool fabric volume) makes wool an excellent insulator. Wool is nature's original outdoor "performance" fiber.</p>
<div> <div></div> <div></div> </div>	<b>FLAME RETARDANT</b>	<p>Unless it is in direct contact with flame, wool will extinguish itself. The denser the weave and the greater the fabric weight, the less likely it is to char because of its smaller oxygen content. Fire departments recommend the use of wool blankets, rugs or coats to put out flames.</p>
<div> <div></div> <div></div> </div>	<b>LUSTROUS &amp; FADE RESISTANT</b>	<p>Wool has a permanent natural luster it never loses, even after years of hard wear. It absorbs dyes until it is completely saturated so colors stay brilliant. No other fiber can be spun or woven into such a variety of weights, textures, finishes and colors.</p>
<div> <div></div> <div></div> </div>	<b>WATER &amp; STAIN REPELLENT</b>	<p>Wool repels light water, like a rain shower, because of the membrane on the outer scales. In very wet conditions, wool can absorb up to 30% of its own weight without feeling damp. And because of insulation ability, wool "breathes," allowing the body's natural moisture to pass through.</p>
<div> <div></div> <div></div> </div>	<b>SURPRISINGLY VARIED</b>	<p>Pendleton sources wool from more than 30 different breeds of sheep, so that we can match the qualities of the fiber to the finished fabrics. By controlling the entire manufacturing process, we can create the best fabric for each use.</p>

# THE SCIENCE OF WOOL



## WHAT IS WOOL?

Wool is fine hair obtained from the coat of sheep and other animals. It's made of keratin, the same protein in hair, fur, claws, nails, hooves, horns and skin. Wool's incredibly complex physical structure gives it some key characteristics that make it nature's most versatile fiber. An inner layer draws in and releases water, and an outer layer of overlapping scales repels water and traps air for insulation. This amazing dual nature of absorbing and repelling is retained throughout wool's fleece-to-fashion processing into textiles.



## WOOL BASICS

**WOOL CATEGORIES:** There are basically two categories of wool; apparel wool and carpet wool. Apparel wool has many different types. Carpet wool has to be durable, stiff, and mat-resistant.

**WOOLEN YARN:** Spun from shorter fibers of one to three inches, thicker and loosely twisted. Fabric woven from woolen yarns has a softer hand, like a Umatilla wool shirt.

**WORSTED YARN:** Spun from longer fibers of three to six inches, smooth, clean and free of fuzz. Fabric woven from worsted yarns has exceptional drape and a smooth, crisp hand, like a Sir Pendleton shirt.

**CRIMP:** The natural waviness that gives wool its elasticity, flexibility, resilience and loft. Loft is very important to wool's insulating properties.

**STAPLE LENGTH:** A wool staple is a naturally formed cluster of wool fibers, and different staple lengths are used in different yarns. The longest staple wools are used for worsted wools. Short staple fibers have plenty of uses too, especially as felt.

**MICRON:** The diameter of a wool fiber is measured in microns and each micron is a millionth of a meter. The finest wools have a low micron count from 15-23, and the coarse wools measure up to 35 microns. Wools above that range are not generally used for garments, but are perfect for carpets because of their resistance to wear.

**LAMBSWOOL:** Soft wool from a lamb's first shearing, with smooth, resilient fibers that make it the highest quality sheep's wool.

**MERINO:** Wool from the Merino sheep, a breed that produces an extremely small diameter fiber with closely spaced scales. This makes it shed moisture and dirt easily, feel as soft as cashmere, and can be spun into very thin, fine yarns. The refined fiber is very white and can be dyed to clear and bright color.

**FLEECE:** The wool shorn from one sheep is called a fleece.



# WOOL CULTURE+ HISTORY



*Vintage photo from the Pendleton archives*

## WOOL THROUGH THE AGES

Wool, sometimes called “the fiber of civilization,” has been an integral part of human life and culture since its properties were discovered. Sheep were first domesticated for their meat about 12,000 years ago in southwest Asia. They shed fleece naturally each year, and sometime between 10,000 BC and 8,000 BC, ancient people began to harvest wool by plucking it from bushes and using it for warmth and shelter. In 5,000 BC, people began to spin wool. Ancient sheep were red, brown, grey and black, but the preference for dyeable fleece made white sheep the standard. The quest for specific fleece characteristics has resulted in more than 1,000 breeds of sheep in the modern world.

## WOOL SHAPES THE EUROPEAN WORLD

- England’s first great industry was wool. In the Middle Ages, it was the nation’s largest export resource, with every European country relying on England for wool.
- Between the 12th and 16th centuries, Spain built a merino wool monopoly. It was a capital offense to export merino sheep from Spain until 1786. Spain’s wool industry was broken by the Napoleonic wars (1803-1815).
- The Medici family of Florence, Italy, built their wealth on the wool trade in the 15th and 16th centuries. Their wealth allowed them the financial ease to offer patronage to artists like Dante, da Vinci and Michelangelo.
- The American Revolution was in part ignited by a stiff tariff imposed to restrict American wool trade to England.
- The first sheep arrived in Australia in 1788 on an English ship full of convicts. Today, Australia’s economy is based on wool and sheep.



*Photo by Grace Adams, @grace\_adams*

*“To care about weaving...is to be in touch with a long human tradition. We people have woven, first baskets and then cloth, for at least ten thousand years.”*

*– Phylis Morrison, science educator*



*Photo by Justin Montagano, @justinmonty*





Photo by Kathleen Peachey, @kathleenpeachey

## LAYER UP TO STAY WARM AND DRY

Some climates bring more winter rain than winter snow. Layering with wool can make all the difference. Wool socks add cushiony, water-resistant warmth under rain boots. A wool shirt under a waterproof jacket adds an easy layer of breathable warmth.



Photo by Kristen Frasca, @kristenfrasca



Photo by Briana Moore, @brianamoore

## HOW WOOL HAS SHAPED OUR LANGUAGE

Common phrases in the English language are actually based on the wool trade!

- **DYED IN THE WOOL** means genuine and permanent. In wool manufacturing, it refers to wool dyed as fleece.
- To **FLEECE** someone means to swindle them, referring to the shearing of valuable fleece.
- To **PULL THE WOOL OVER SOMEONE'S EYES** is to fool them.
- **SHODDY** meant re-used wool in Civil War times, and signifies inferior workmanship.
- A **SPINSTER** was an unmarried woman who earned her keep by spinning wool.
- Watch out for a **WOLF IN SHEEP'S CLOTHING**. This is a predatory person disguised with gentleness.
- The **BELLWETHER** is the lead sheep in a flock. This has come to mean the person or trend that leads a profession or industry.
- There are several stories about why a sleepless person tries **COUNTING SHEEP** to fall asleep. One is that medieval British shepherds had to count off their flocks before they could go to bed at night. The other is that early shepherds in the Middle East were so anxious about their valuable flocks that they counted each sheep in order to relax.



Photo by Kathleen Peachey, @kathleenpeachey





Photo by Grace Adams, @grace\_adams

# ANYONE for SNUGGLES?

*“Honestly, I’m living my fantasy. It’s being with my family, preferably on a snowy afternoon with a fire going, cuddled up in blankets, playing a game.”*

– Meredith Vieira, journalist



Photo by Bri Heiligenthal or @burtsbrisplease



Photo by Tamara Jaswal, @tinyhouseholisticliving



Photo by Cassy Berry, @cassyberryphoto



Photo by Marissa Rocke, @geronimo\_mo



Photo by Bri Heiligenthal or @burtsbrisplease

## WE ALL NEED SOME **HYGGE** AT HOME

Winter is the season of hygge, the Danish concept of coziness. **HYGGE** (pronounced hoo-guh) derives from a Norwegian term, hugga, and is related to the English word, hug. Could any concept be more cozy?

Though the word hygge has no official English translation, it embodies that sense of warmth and coziness you feel when you’re safe inside on a cold day, when warmth enfolds you like a hug against the winter weather outside.

The Scots have a similar concept, **CÒSAGACH** (pronounced koza-go) that means much the same thing; to prepare for the coming cold by making the home warm and safe.

The ingredients for both hygge and còsagach are a list of everyone’s favorite things: warm wool blankets and throws, comfortable slippers, good books, warm hearths, the soft fur of four-legged friends, and delicious hot drinks to warm you from the inside out.



<http://pendletonwhisky.com/our-story/>

Pendleton Woolen Mills presents Pendleton® Let 'er Buck® Whisky, now in Midnight



### MIDNIGHT GALLOP

- 1 oz. Pendleton® Midnight
- 1 oz. Amaro
- 4 oz. Hot Cider

Add ingredients to a hot toddy mug or teacup. Garnish with a cinnamon stick and ground nutmeg.

### PENDLETON TODDY

- 2 oz. Pendleton® Whisky
- 1 tsp. honey
- 4 oz. hot water

Add ingredients directly to a hot toddy mug and stir briefly. Garnish with cloved orange peel.







## WOOL — THE ANSWER TO YOUR SLEEP WOES?

*“I purchased a Glacier Park blanket in November, 2015. I have always had trouble staying warm while sleeping. Prior to owning a Pendleton blanket, I literally slept with two down comforters. Now I only sleep with this wool blanket. I have been totally blown away with how warm and comfortable it is. I cannot thank you folks enough, your blanket has resolved my sleeping issues.”*  
 –Brennan, happy customer

# COUNTING SHEEP

## UNDER THE COVERS WITH THE SCIENCE OF SLEEP

Scientists have studied the temperature fluctuations of sleepers, and recommend a room temperature of 60 to 67 degrees Fahrenheit for optimum sleep. But that’s the room. What about under the covers, where the temperature can fluctuate by as much as 25 degrees?

### KEEP IT NATURAL

The human body is engineered to keep itself at the correct temperature while asleep, so it’s important to choose bedding that supports the body’s natural processes. Always choose natural fibers: cotton mattress covers, 100% cotton sheets, duvets with down or wool fill and wool blankets. These natural materials insulate without too much heat buildup, thanks to airflow and humidity control.

### BREATHABILITY

Balanced airflow is a key part of a sleep strategy. Natural-fiber bedding allows for movement of air, allowing the body to shed excess heat that builds up after entering a sleep cycle. High thread-count sheets are silky to the touch, but if woven too tightly, can block airflow. A down or down/wool duvet is an excellent source of insulation without weight. And a breathable wool blanket will help maintain the body’s natural temperature without overly increasing it.

### STAY DRY

Humidity is another factor in sleep comfort. Newer synthetic fibers can be engineered to wick away moisture, but do not naturally release it the way wool does. If night sweats are a constant problem for a sleeper, a sheet and a wool blanket might be the best choice. As the most absorbent fiber in nature, wool gathers and disperses the perspiration from a sleeping body, avoiding that muggy feeling in the warm months and that clammy feeling in winter.

### LAYER UP

And just as clothing layers are best in the cold months, dressing the bed in layers helps a sleeper customize comfort according to overnight temperature fluctuation. A cool room and natural fiber bedding create the best conditions for a good night’s sleep.



*You spend eight hours a night in your bed.  
 Let wool bedding help you make  
 the most of those hours.*





# KNOW YOUR *FLANNEL*



**#CLOSETGOALS**

*These photos show the flannel collections of some dyed-in-the-wool Pendleton fans, featuring Board Shirts in every plaid under the California sun.*



## WHAT EXACTLY IS FLANNEL?

The technical definition of flannel is a cotton or wool fabric that's been milled on one side to raise a nap. Milling is a process that brushes up fibers; nap is the soft-to-the-touch texture of those fibers. But to many, flannels are shirts, specifically plaid Pendleton wool shirts.





# PLAID



Photo by Will Nielsen, @willtheredhead

## THE SEASON'S FAVORITE PATTERN

Plaids are composed of horizontal and vertical stripes that intersect one another at 90 degree angles, creating grid-like patterns. There are many different types of plaids: windowpanes, glen plaids, tartans and more. Technically, checks like tattersalls, buffalo checks, graph checks and gingham are also plaids. Plaids can have many variations of band width, repeat and color, and can be small or large, balanced or unbalanced. This versatility makes plaid a popular choice for home décor and clothing.

Pendleton's distinctive wool plaids are created in-house by a team of fabric designers who sometimes delve into the archives for inspiration. A Pendleton specialty is the ombre plaid, which weaves closely related shades of the same color to create a subtle dimensional effect.



OMBRE  
PLAID



STANDARD  
PLAID



Photo by Michell Strizhius, @michellstrizhius



Photo by Michell Strizhius & Ben Pham, @phamisalive & @michellstrizhius



Photo by Grace Adams, @grace\_adams



Photo by Kathleen Peachey, @kathleenpeachey



Photo by Cassy Berry, @cassyberryphoto

## GENERATIONS OF PLAID

Plaid is the pattern of memories. Pendleton plaids seem to hold a special place in family lore. Each day, the Pendleton mail room receives letters and photos that share the histories of special blankets and items of clothing. Wool's natural durability means that a treasured garment can last for several lifetimes. Pendleton wool is woven to last, made to be shared with generations to come.

<https://blog.pendleton-usa.com/2017/11/15/a-pendleton-coat-travels-the-world/>





# TARTAN or PLAID



Photo by Tyler Sharp or @tylersharpphoto

*“All tartans are plaids, but not all plaids are tartans.”*

– Scott Meacham Wood, Interior Designer

Tartans are a special set of patterns originating in Scotland. Like plaids, tartans are composed of horizontal and vertical stripes at 90 degree angles. But a tartan shows the wearer’s clan associations, and must be woven with a very specific sequence of colored threads.

## A BANNED PATTERN

In the 1700s, tartans were the everyday dress of the Highland clans, and served as a marker of a person’s family and political allegiances. As rebellion brewed in Scotland, the Dress Act of 1746 banned the wearing of “Highland Dress,” including tartans and kilts. The law was repealed in 1782. Within two years, Highland aristocrats set up a society to promote the wearing of ancient highland dress. Tartans became the official national attire of Scotland. The attempt to suppress tartans only made them more important to Scottish society. Today, tartan patterns are proudly worn around the world.

## TARTANS, DRESS AND HUNTING

Different versions of a clan tartan serve for different occasions. Dress tartans are the fancy dress versions, and often incorporate white into the pattern. Hunting tartans use more woodland hues. Ancient or muted tartans use the older, softer colors from the times when wool was dyed with vegetable dyes by local weavers. All official versions of a clan tartan are registered with the Scottish Register of Tartans.



Photo by Shondina Lee, @shondinalee



Photo by Andrew Mori & Robin Harkins  
@amoriphotography & @dr\_robinharkins\_dc



Photo by Cassy Berry, @cassyberryphoto



<https://blog.pendleton-usa.com/2017/04/06/national-tartan-day-its-here/>



## WOOL FUN FACTS

FRONT COVER



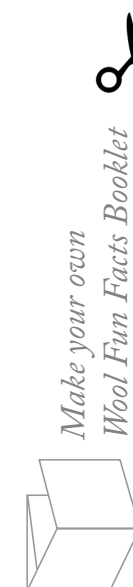
BACK COVER

Boiled wool is not actually boiled. It is felted with a process that combines heat, moisture and pressure.



Virgin wool is new wool that has not been recycled or reclaimed.

PG 2



Make your own  
Wool Fun Facts Booklet



There is nearly a mile of yarn in each Sir Pendleton shirt.

PG 4





## WOOL CARE Q & A

### *What's the best way to clean wool clothing?*

- Treat small stains by rinsing with cold water or seltzer and blotting dry with a clean cloth.
- If the garment is labeled “hand wash,” use specially formulated mild soap and wash by hand.
- After hand washing, gently roll the garment in a towel, and let dry on a flat surface away from direct heat or sunlight.
- To freshen a wrinkled wool garment, hang it in a steamy bathroom.
- Wool is naturally odor-releasing and anti-microbial. Dry cleaning once a season should be more than enough to keep wool garments fresh.

### *Can a wool blanket be washed?*

No. Washing combines heat, detergents and agitation, which will shrink the blanket and ruin it. Pendleton wool blankets should only be dry-cleaned. The exception is the washable Pendleton Eco-Wise Wool® bedding line. These blankets and throws have been specially treated to be machine washable.

### *Are wool shirts washable?*

Pendleton is developing more and more washable wool shirt fabrics that use a special process to seal the scales of wool fiber so they will not mat during the wash and dry cycle. These shirts are clearly labeled as washable, and once washed, should not be dry cleaned.

Also, if you would rather dry clean a washable wool shirt, it should not be washed after. Dry cleaning removes the washable finish, and the shirt will shrink. You should choose one method and stick with it for the life of the garment.

## WOOL'S ENEMIES

**BLEACH AND DETERGENT** – Treat wool gently to keep it beautiful. A little bleach causes wool fiber to stiffen and discolor permanently. A lot of bleach will dissolve wool fiber. The alkalis in soaps and detergents remove wool's luster, strength and softness.

**HIGH HEAT AND SHRINKAGE** – Exposure to high, direct heat will damage wool fabric, as will a trip through the dryer. Follow cleaning directions carefully to avoid shrinkage.

**MOTHS** – These pests can be prevented in a few ways, but mothballs and cedar chests are not as helpful as commonly believed. The best prevention against moth damage is to use wool blankets and wear wool clothes. When not in use, periodically take wool garments and blankets out, shake or brush, and re-fold or hang. Keep closets and storage areas swept, making sure to inspect for dead moths and larva casings. Sunlight is another helpful tool against moths—sun blankets now and then to kill any missed eggs.

*“Never throw anything good away —  
real wool, pure silk. Put it away and  
wait for it to come back.”*

*– Helen Gurley Brown, Editor in Chief of Cosmopolitan Magazine*



Photo by Mikal Wright and Brandy Anderson, @atribewest & @brandyxanderson

*Want  
Another  
Pendleton*

Five merino  
sheep can  
produce  
enough wool  
yarn to encircle  
planet Earth.



Pg 1



Wool is naturally antimicrobial.  
It refreshes itself when allowed to  
hang for 24 hours between wearings.

Pg 3

The American  
Revolution was  
ignited in part by a  
British restriction  
on the American  
wool trade.



Pg 5



A Pendleton loom produces  
160 blankets or 500 yards of  
fabric in 24 hours.

Pg 6





Photo by Kate Rolston, @kate\_rolston

 This icon indicates a link for more information can be found in our digital publication.  
Visit **[PENDLETON-USA.COM/MAG](https://pendleton-usa.com/mag)** for the interactive version.

For media requests contact [PendletonPR@penmills.com](mailto:PendletonPR@penmills.com)  
Stockists learn more at [pwmwhsl.com](https://pwmwhsl.com)