

Chapter One



Your Daily Dose of Fiber

Fiber ain't just for breakfast!

To make felt—any kind of felt—you need some sort of yarn or fluffy stuff or fabric. The first pieces of felt ever made centuries ago were likely crafted from loose bits of sheep wool. Today, as the pages of this book will show, you can create felt from loose fiber (such as sheep's wool), yarn, old sweaters, and more. But first, you need to have an idea what kind of felting you are going to do, so you know what kind and form of fiber you need.

Felt Happens

No matter whether you're wet felting, needle felting, or fulling from an already created fabric, felt happens when friction is applied to a felt-able fiber. In most cases, soapy water significantly helps things along. Heat doesn't hurt, either. Water, soap, and heat all help to loosen up the fibers and help them to stick together. So, let's look at the different types of felting covered in this book, and why they work.

Wet Felting

Wet felting is achieved by carefully overlapping wool fiber in several perpendicular layers, then applying a bit of hot, soapy water and gently rubbing until the fibers interlock. Wet felting can be done flat or three-dimensionally on a solid form such as a bottle or jar. You can also create some neat effects by wet felting artfully arranged

wool onto a porous fabric, such as silk chiffon or cheesecloth. Not to let anything constrain you, you can felt balls or ropes in your hands or felt around a piece of plastic to create pouches and bags. In all these cases, raw fiber is layered; then wet; then rubbed, pressed, or rolled until a cohesive, smooth, solid fabric forms. I cover wet felting in the following chapter. See some examples of wet felted scarves in chapter 7.

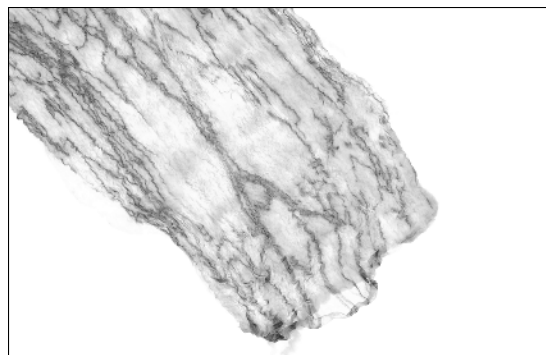
Needle Felting, or Dry Felting

The only form of waterless felting uses barbed needles to repeatedly puncture the wool fiber, in essence, attaching the fibers as if sewing without thread. Needle felting is a quick and clean (if slightly dangerous) way to appliqué onto wool fabric, perhaps an already felted bag? You can needle felt either fiber or yarn. Yarn works great for outlines or detail work, but unspun fiber is ideal for larger sections of color. In addition to applying detail to another object, needle felting works for three-dimensional objects. You'll read about needle felting in chapter 3. Check out the needle-felted flowers in chapter 8.

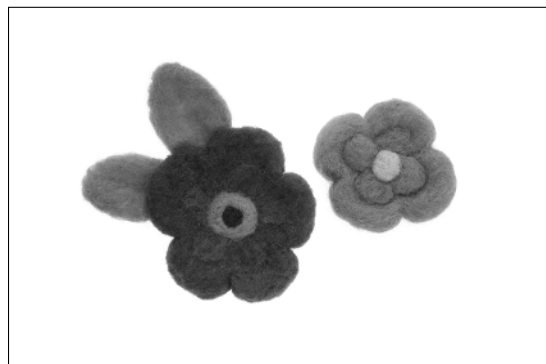
Fulling (a.k.a. Felting a Fabric)

Most knitters and crocheters have seen this type of felting in their local yarn stores or favorite magazines. Yarn is knit or crocheted extremely loosely and shaped with the usual increases or decreases to create an object. Any individual pieces are sewn together loosely with the same yarn as the object. The whole thing is then thrown into the washing machine on a hot wash cycle with a little bit of detergent. After 5 minutes (or 50), the object has shrunk significantly, and individual stitches are no longer easy to spot. The fabric may get exceptionally bubbly or fuzzy, depending on the yarn used, and the type of washer.

Technically, this process isn't called felting at all . . . it's called *fulling*. Before you accuse this book of being totally full of it, or think that all those great felted bag patterns have it wrong, relax. I'll let you off the hook. The common crafter vocabulary is pretty set in calling this process *felting*. After all, the end result isn't that different looking than what you get from a half hour of wet felting a piece of fabric. It's just the process that differs.



Wet felting; see Scarf for the Subzero Urban Dweller on page 129.



Needle felting; see Spring Is Sprung! on page 141.

For crafty guys and gals, it's probably most common to full a knitted or crocheted accessory. But, it's also easy to full woven fabrics or store-bought knit garments. Just make sure the fiber content is 100 percent non-superwash wool, or a blend of wool, mohair, angora, cashmere, and so on. You'll get more specifics on how to full in chapter 4.

Animal, Vegetable, or Mineral: Which Felts?



Fulling; see Rainbow Bridge Baby Blanket on page 164.

Any yarn or fiber addict knows that yarn comes in three main categories: man-made (acrylic, nylon, metallic), plant-based (cotton, linen, and hemp), and animal-produced. Although you can get some neat effects by incorporating synthetic or vegetable fibers in your felting projects, overall, you'll need fiber from an animal to successfully produce felt of any kind.

Traditionally, felt is made from the shorn wool of a sheep. But you can make felt from nearly any protein-based fiber that hasn't been treated with a chemical to make it shrink-resistant. Whether you choose fiber from a sheep, alpaca, rabbit, llama, cat, dog, or your own head (think dreadlocks), any fiber that originated from an animal should eventually felt—technically.

Every one of these fibers is covered with tiny overlapping scales. Just like the bits on a pinecone, these scales are attached only at one end, with the other end free. During the felting process, these scales will first swell with water to open outward, and then, as friction is applied, the scales will interlock, creating a dense fabric and appearing to shrink.

However, the fiber from each breed of animal has different properties. Expert felters and spinners of yarn will mention terms such as *crimp*—the waviness of the fiber—and *staple length*—the length of the average piece of fiber. But, as a novice felter, you don't need to be too concerned with the type-A technicalities. Knowing the different properties of the main types of feltable fiber will help your projects be as successful as possible.

Wool

Wool is the most common of the protein fibers. In many places, the words *wool* and *yarn* are actually used interchangeably. Wool is the final product of sheep fleece, shorn from the adult sheep, typically once a year. Hundreds of breeds of sheep can be found around the world, with each breed possessing different staple lengths, crimp, and colors of fleece.

In terms of felt-ability, the wool from some breeds of sheep felt more quickly and are easier to use than others, whether you are wet felting or using yarn to full a knitted or crocheted object. Merino is one of the most universally popular breeds of sheep. Exceptionally soft, merino is also extremely fast to felt. Some fiber artists joke that merino felts when you look at

it cross-eyed. Luckily, merino is one of the most common types of raw fiber seen in your local supply store. It's also reasonably priced in undyed form. Fine merino yarn is also plentiful in most yarn stores. Just make sure that the yarn isn't labeled "Superwash." The care instructions, if any, should specify hand washing in cool water. Other good breeds for felting include Gotland, Blue Faced Leicester, and Rambouillet.

Mohair

Mohair is actually goat hair. Kid mohair is typically the softest, shorn from goats younger than 18 months. Adult mohair can vary from fine and lustrous to coarse and hairy. In yarn, you'll often see blends of wool and mohair. This allows the yarn to combine the halo and shine of the mohair with the density and elasticity of wool. Mohair/wool blended yarn is fantastic for felting. Some of the projects in this book use Brown Sheep Lamb's Pride yarn, an 85 percent wool / 15 percent mohair blend widely available in yarn shops and online. It creates a furry and dense felt compared to a straight wool and has a lovely shine. Needle felters can take advantage of pure mohair yarn for adding texture to any design. For wet felting, it's unusual to use straight mohair fiber, but it is possible. If this is of interest, experiment! You never know what will happen!

Cashmere, Angora, and Alpaca

Exotic fibers, including cashmere, angora, and alpaca, can be excellent substitutions for the more rough and hard-working wool.

Cashmere, from central Asian goats, is extremely soft and lightweight. It's also exceptionally pricey and fairly delicate. You wouldn't necessarily choose cashmere for a felted floor mat, for example.

Angora is the downy coat of Angora rabbits, and is soft and silky. Pure angora fiber and yarn sheds quite a bit and may blow away in the breeze before you get a chance to begin felting. However, blends of angora and wool felt into a soft and downy fabric that's far lighter in weight than a straight wool garment would be. Check out the Cropped Cardigan pattern in chapter 7 to see how angora can be improved by felting!

In the past few years, alpaca has gotten to be nearly as widely available as wool. Without adding much expense, alpaca can provide some of the drape and loft of cashmere. Try felting with a pure alpaca yarn or fiber . . . you'll get a soft and slinky fabric that pure wool could never provide. One word of warning; wet alpaca is extremely stinky. Think "wet dog" but 10 times worse.

How to Buy Wool for Felting

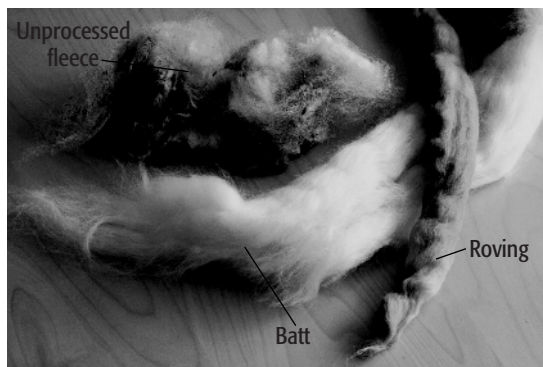
Nearly all of the wet felting projects in this book use wool of some type. So, although the following information can also be applied to alpaca, cashmere, mohair, and other animal fibers, we'll try to keep things simple by just talking about wool.

Aside from yarn, which we'll cover later in the chapter, the fleece of a sheep can be purchased in many different forms; unprocessed fleece, batts, and combed roving.

Although it's unusual for a novice felter to go out and purchase a freshly sheared sheep fleece, it is possible to take the wool all the way from barnyard to runway. Unprocessed fleece hasn't even been cleaned. Giving it a good soak, wash, and deep cleaning is the first step to obtaining usable wool.

Next, the fleece will be combed or carded to make the fibers align in the same direction. Although you can do these things at home with a small amount of equipment, a decent amount of time, and a large willingness to get down and dirty, most hobby felters simply purchase wool that's already been cleaned and carded, and sometimes even dyed.

In the shop, look for bags labeled *top*, *sliver*, or *roving*. All these words generally mean that the fiber has been cleaned and combed so all pieces are facing the same direction. Wool that's been carded will look smooth to the eye and can usually be lifted out of the bag in one long rope-like piece. In contrast, you can also sometimes find wool *batts*. Batts are thin layers of carded wool that have been stacked atop each other. In the bag, a wool batt will look a lot like the acrylic poly-fil stuffing you can buy at your local craft store.



What Is This Stuff?

If you're extremely lucky, at some point a well-meaning friend or relative will gift you with unwanted yarn. Sometimes you'll be blessed with a very helpful label that details the fiber content of the yarn, the care instructions, the length, and the weight. Other times, you'll have to suss it out for yourself. The *melt test* has long been a quick and dirty method for narrowing down the options. Before trying this at home, you'll want to make sure you have a fireproof container, such as a large stock pot, and a set of metal tongs to hold the yarn, as well as a lighter or matches. While doing this, make sure to hold everything over the stock pot, so any stray ashes are contained. Take a lighter or match to the end of a piece of yarn and let it burn for a second before blowing it out. Is the odor chemical? Does the end of the yarn now contain a hard "bead?" If so, you have a synthetic yarn. If a fine ash forms and you smell burning paper, you're likely looking at cotton, linen or another cellulose fiber. If a crushable ash forms and you smell burning hair, you're blessed with a protein fiber of some kind.

Of course, many yarns are actually blends of one or more of these types. When using the melt test, the results will reflect the majority of the fiber. So, before knitting and attempting to felt a large project, you really should try knitting a small square out of the yarn to see how it felt. Of course, you should be doing this swatching anyway.

For needle felting projects, the type of wool doesn't much matter. But, for wet felting, you might find it easier to start from wool roving. Since the fibers in roving are clearly defined and aligned, it will make it that much easier to effectively set up your layers for felting.

All about Yarn

For projects that need to be knit or crocheted prior to fulling, you'll need some sort of yarn. As previously mentioned, this yarn needs to be shrinkable. So, cotton, linen, superwash wool, and anything with nylon or acrylic or rayon or silk can instantly be ruled out for most projects. Since most fulled projects are destined to be shrunk into a relatively smooth fabric, highly textured yarns can be overkill. . . the texture won't show in the end, anyway.

Yarn typically can be found everywhere from your local grocery store to high-end yarn boutiques. In general, it's tough, almost impossible, to find natural, shrinkable wool in large chain stores. For whatever reason, they tend to focus more on synthetic, easy-case yarns. Two exceptions to this rule are Patons Classic Merino Wool and Lion Brand Lion Wool. Either of these yarns can be found in many larger craft chain stores in Canada, the UK, and the USA, respectively. Look also at your local farmer's market for fresh-from-the-sheep wool yarns, often at inexpensive prices. For more tips on yarn shopping, check out chapter 11's section on "Stash Enhancing Fun."

Choosing the Perfect Fulling Yarn

Yarn selection has the most impact on the finished piece. Want a wild and furry piece of felt? Look for yarn with some mohair content. Want something smoother and more refined? Pure merino is the way to go. In your search for the perfect felting yarn for any given project, the possibilities may seem overwhelming. Here are a few of my favorite tips for choosing yarn.

Read the Ball Band

In many cases, your first clue that a pure wool yarn will felt are words on the ball band such as "Pure Virgin Wool," or "Organic Merino," or even instructions indicating that you should only hand wash in cool water. Fiber content indicating pure wool, or mixtures of wool and mohair, alpaca, cashmere, or angora will quite possibly full nicely. You'll still want to swatch for any yarn that doesn't come with a personal recommendation or wasn't specifically listed in a pattern. Some hand-dyed yarns or luxury yarns may direct you to hand wash only to preserve the color or texture of the yarn. These yarns have already been chemically treated to be shrink-resistant.

In no case should you buy a yarn labeled "Superwash." These yarns will not full, no matter how much time you spend on them. Also, until you're confidently experimenting with different fiber blends, avoid any yarn with a synthetic or plant-based content. The portions of the yarn containing the nylon, cotton, hemp, linen, or polyamide will not full, and the animal-based fibers may full only slightly. This can create a cool fabric, or it can just look like a mess. Read on for more tips on blends.

Some Favorite Felting Yarns

Although you've learned the short list of rules surrounding suitable fulling yarns, sometimes it helps to have a personal recommendation. The following is an incomplete list of some of my favorite, personally tested felting yarns. Any yarns on this list should full eventually. Just keep going! Have I left anything out? Absolutely! These are just yarns I can personally vouch for.

Alafoss Lopi and Lett Lopi
Blue Sky Alpaca Bulky
Blue Sky Alpaca Sport
Brown Sheep Lamb's Pride Worsted
Brown Sheep Lamb's Pride Bulky
Cascade 220
Cascade Pastaza
Colinette Point 5
Elann Peruvian Collection Highland Wool
Lion Brand Lion Wool
Lorna's Laces Fisherman

Lorna's Laces Bullfrogs & Butterflies
Malabrigo
Manos del Uruguay
Noro Kureyon
Noro Shinano
Patons Classic Merino Worsted
Rowan Big Wool
Rowan Felted Tweed
Schaefer Miss Priss
Schaefer Esperanza

Substitute Smartly

Although it's not always possible to obtain the yarn the pattern recommends, taking a closer look at the yarn can help make a more informed choice. Specifically, check out fiber content, thickness, and ply. The pattern should mention the fiber content of the original yarn, along with the length and physical weight of the ball or skein. For thickness, or weight of the yarn, you're looking for the typical gauge in knitted stocking stitch for a non-fulled project. Some patterns, including the ones in this book, provide this information. For others, ask at your local yarn shop or look the yarn up on YarnDex (www.yarnDex.com), an online index of yarn information. Finally, ply matters! A loosely spun single-ply yarn may felt in a more wild or lumpy way than a smooth 4-ply. Again, YarnDex is a good resource for this kind of information.

Hanks, Balls, and Skeins, Oh My!

In cartoons, yarn always comes in perfect huge balls for kitten-chasing delight. In reality, yarn can be purchased in many forms.

Many yarn brands are sold in little cake or donut-shaped balls in 50g or 100g sizes. These balls, when the labels are removed, can easily be crocheted or knit directly from the center of



the ball with no prep work required. As you work, the ball will empty from the center out. These are often called *center-pull balls*.

Pull-skeins are similar to balls but shaped more like a log—long rather than round. As with center-pull balls, you can knit or crochet directly from the center of the pull-skein. Patons Classic Merino and Lion Brand Lion Wool are packaged as pull-skeins. Although you can find these beasts up to one-pounder sizes, it's rare to find a commercial feltable wool packaged that large. Noro Kureyon, for example, is packaged in a 50g pull-skein.

For both balls and pull-skeins, although the yarn is supposed to pull neatly from the center, you'll occasionally run into some tangles, especially near the beginning of the ball. Have patience—these are seldom actual knots. Using your fingers to gently jostle and loosen the fibers will help straighten out the yarn. Occasionally, the outside end is tucked into the center of the ball. Before digging around inside, make sure to pull out this outer tail.

Not to be confused with pull-skeins, the general terms *hank* and *skein* refer to the same packaging; a twisty-looking long object, not unlike a twisted pastry or roll. It's not uncommon, especially when buying pure wools from yarn shops or farm-fresh yarn from independent mills, to get yarn in skeins. With skeins, the producer has wound the yarn into a large ring, approximately 4 ft. in circumference, and tied it at several points. The skein is then folded in half, or twisted and wound into itself, and secured with a label. To use a skein of yarn, you'll need to first untwist it into a large ring, then wind a ball. There are special instruments for this task—swifts to hold the ring of yarn and ball winders with cranks to make a ball of yarn; however, draping the ring over your knees and using your hands to make a ball works just fine, too.

A Tangled Mess: How to Wind a Ball of Yarn

It happens to everyone at the beginning. That lovely length of yarn that came all twisted in a nice perfect hank becomes quickly tangled while beginning to work. Avoid this newbie trap by winding the yarn into a ball before you begin!

To wind a perfect ball of yarn from a skein, do the following:

1. Remove the label. Untwist the skein until you have a ring of yarn. The yarn may be tied at one or two places. If so, carefully untie these knots without disturbing the yarn ring.
2. Ideally, get a friend or willing relative to help at this point. He or she should hold the ring open with two hands. If you're on your own, put the ring over the back of an armless chair, or around two chairs if the skein is quite large. (If really desperate, use your knees.)
3. Find one end of the yarn and begin to wind around three of your fingers. After winding a few yards, you can pull this off your fingers and wind in the opposite direction, cinching the small ring you've made in the middle. Then just keep winding at different angles every few yards to create a solid ball. Don't wind the ball tightly, or you'll stretch out your yarn, which can wreak havoc on the size and elasticity of your crocheting. You're going for a ball with a comfortable squoosh, not a baseball.

Not every skein is perfect; you may have to stop from time to time to untangle the yarn before winding. It's also possible to buy a *swift*, a wood or metal contraption that holds the skein open and allows it to rotate for easier winding. Mechanical ball winders create perfect center-pull balls. These kinds of set ups can run \$120 or so but can dramatically reduce the time you spend getting ready to knit or crochet. Most yarn shops or fiber supply catalogs feature at least one swift and ball winder combination. If you don't readily see one, just ask!

An important fact to note; different regions and stores label or refer to yarn differently. Whether it comes in a round ball, a log, or a twisted oblong, it's all just yarn.

Where Do I Find This Stuff, Anyway?

If you're already a knitter or a crocheter, you've probably gotten the knack for seeking out yarn in local (and not-so-local) yarn shops. But raw wool for wet felting and needle felting can be a trickier beast to track. Chapter 11 covers more hints and resources for finding the goods, but here are a few pieces of advice.

Your best bet is to look for a spinning and weaving supply store. Stores that sell primarily to hard-core fiber artists are likely to have the best selection of not only roving, both dyed and un-dyed, but felting needles, hand carders, and a variety of dyes. In the telephone directory pages, look for "Wool-retail," or even under "Art Supplies." If that doesn't work, call around a

few of the local yarn shops. If the yarn shop doesn't sell roving or other felting supplies, most will know where their customers go to purchase these sorts of supplies. Art schools or colleges usually have a supply shop on campus, some of which are open to the public. Since many art programs have a fiber art component, these kinds of stores can carry basic supplies at reasonable prices.

Even more fun, take a road trip to your closest wool mill. Seeking one of these out can be a bit tougher. The Internet is a perfect resource as many felters before you have visited these meccas of fiber. Doing a search may pull up someone's blog that reviews one of her favorite shops. Visiting a wool mill or sheep farm sometimes lets you see a bunch of cute (and not-so-cute) sheep, alpacas, or llamas as well, which is always a bonus.

Yarns for felting are much easier to find. Look under "Yarn-retail," or sometimes "Wool-retail" in your telephone directory pages, or do a Web search for yarn shops in your town. When in a bind, some large craft stores carry one or two lines of shrinkable wool.

Finally, every supply required in this book can be purchased from many eCommerce shops online. What you lack in the tactile experience and instant gratification of shopping for fiber you can often make up for in convenience, selection, or price.

More shopping hints and tips can be found in chapter 11.

Getting Your Hands Wet

And now, it's time to start felting! The next three chapters cover the basics of wet felting, needle felting, and fulling. There's no particular advantage to reading them through in order. I do recommend reading a chapter through before attempting a project using that particular technique, unless you've had some prior experience.

Each chapter first covers the equipment you need to complete the sample projects. Then it teaches the basic principles through a series of quick-and-easy samples. These teeny, tiny projects are great for experimenting before you invest the time and cashola necessary for the fabulous projects in part two. Any more advanced techniques are then introduced, along with some troubleshooting Q&A and ideas for experimentation.

Once you feel comfortable with a technique, launch into some of the great projects in part two! Organized by type of project, these chapters give you a range of great items to challenge, inspire, and make your own through suggested variations.

Finally, part three covers back-up information. Are you a beginning knitter? Have you never crocheted? You'll find hints and tricks along with basic instructional info. Looking to expand your fiber stash? Chapter 11 covers shopping in detail. If you're a history buff, you'll love chapter 10's intro to the cultural history of felt. Any additional resources can be found in the appendix.

Hurry up—get felting!