

Lily's Batting 101

Enough about batting to bore you to tears.

Some useful batting terms:

Scrim: An extremely thin fabric used to hold fibers in a batting in place

Resin: A binder or glue that holds batting fibers together, some wash away, some are there forever, long after the rest of the quilt is gone.

Needlepunched: A batting made by punching needles down through a pile of fiber and sort of felting them together. Some needlepunched battings use scrim or resin, others just use needlepunching. All needlepunched battings have a right and a wrong side: the right side has dimples, where the needles went in, the wrong side has little nubs, where the needles came out. Quilting with the wrong side up will make your thread break more, your tension poorer, and in general, give you a headache.

Drape: The way a batting lays inside a quilt once quilted. Drape often differs depending on whether the stitching is dense or farther apart. A more drapery quilt is softer and hangs more limply, a less drapery quilt is stiffer and has more body.

Loft: The thickness of a batting, but also how puffy it is after quilting—some batting may be thick, but when quilted, it squishes them down, others may “loft up” when quilted.

Stitch-definition: How well your quilting stitches show in a given batting.

Bearding: When some of the batting fibers come up through the stitching holes as you quilt, leaving little “beards”.

Migration: The movement of some fibers gradually out of the quilt through the fabric. This is most prevalent with animal fibers that are very fine and with other super-fine fibers. Washing usually exacerbates migration.

Some fibers that are commonly used in batting and some tidbits about them :

Cotton: Cotton batting is extremely common. It is often used in blended batting with other fibers. Cotton is very water and fertilizer intensive, and is typically in the middle of the price-range of battings and is considered one of the less environmentally friendly battings. Cotton will shrink when washed and dried which gives the “heirloom” look that many people desire in their quilts. Pure cotton often doesn't needle well, which can make it difficult for hand-quilting (though very low loft cottons work wonderfully) and make some threads more finicky in machine quilting. Cotton is also a “grabby” fiber, which means it holds stitches well, but can also hold onto thread a little too much, causing breakage. Most cotton battings are needlepunched, which means they have a right and wrong side, just like fabric. Cotton batting can be expected to become more and more expensive in the next 6-12 months due to crop destruction, increased consumption and hoarding in China, and the situation in the Middle East, where a great deal of cotton is grown. Cotton is a cooler fiber and breathes well. It's great for summer quilts, less so for winter quilts, unless you live in a much warmer climate than Montana. Cotton has a little stiffer drape, but it will soften every time it's washed. Cotton has subtle stitch definition and doesn't “puff” around stitches, or really squish down where stitched. Cotton does sometimes beard, but this is usually less problematic with high quality cotton.

Polyester: Polyester got a bad rep in the 70's when it was first developed and hadn't yet been refined. Polyester is a plastic, that's it. It's one of the most common fibers in our modern lives because it is durable, washable, dryable, and wrinkle and stain resistant. Polyester is sometimes called “microfiber”, but acrylic, a different, and stiffer type of plastic, commonly used in bargain yarns, can also be called microfiber. In general, a microfiber version of either will be softer and nicer to work with than it's less micro counterpart. Polyester is used in blended battings, but also in its pure form in high loft battings, stuffing for pillows and plush toys, and in Dream Green, made from recycled plastic bottles. Polyester is ideal for gifts that may be going to someone who will not heed your washing and drying instructions because it is almost impossible to

hurt without burning it. Polyester battings range from very disgusting and coarse to work, but extremely cheap, to very nice, soft, and beautiful and still very reasonably priced. Polyester is warm, but doesn't breathe as well as some natural fibers. High quality polyester also needles very well so it is great for hand quilting and often easier to quilt with with specialty threads, like metallics. Polyester typically has drape roughly equivalent to cotton, but will stiffen slightly with denser stitching. Cheaper polyesters will beard, but polyester almost never migrates.

Bamboo or Tencel: While not all Tencel is bamboo, all bamboo in batting is essentially Tencel. Tencel is a plant byproduct of making Rayon that is very soft, supple, and can mimic some of the qualities of cotton. Bamboo is a very nice, environmentally friendly alternative to cotton because it grows quickly, with little fertilizer and no irrigation and it limits erosion. Bamboo has superior drape. It is a breathable, natural fiber of medium warmth, and is most often used in blends to enhance its natural qualities and often to reduce the cost of silk batting while maintaining the features of silk. Bamboo is often referred to as "anti-microbial" but there is no scientific basis for this. Bamboo does resist rotting more than cotton simply because it grows in a tropical climate and cotton prefers arid climates. Like cotton, bamboo will shrink slightly, for that heirloom effect and have subtle stitch definition. Bamboo is less grabby than cotton so it is easier to use with specialty threads in machine quilting. Bamboo also tends not to beard as much as cotton does. Bamboo will likely become more prevalent as cotton prices continue to rise. Bamboo is still a specialty, luxury fiber, so most of the bamboo batting on the market that I'm familiar with is very nice, high quality batting.

Wool: Sheep's wool is the most common type of wool batting on the market, but there are smaller companies that use alpaca as an alternative for people who are sensitive to wool. Wool is considered the Mecca of stitch definition and drape. Most of the national award winning quilts in the machine quilting category are quilted with wool batting. Washable wools have made life even better for the wool quilter, but it is very important to note that although these battings are WASHABLE and sometimes even labeled as DRYABLE, they mean NO HEAT. Wool's main downside is that it does have some fiber migration (but no bearding). It is also more expensive than artificial or plant based fibers, but only by a factor of \$10-\$15 for a large queen sized quilt, and maybe \$20-\$25 in a large king sized quilt. In the overall cost of your quilt, this is a very minor amount. Wool is superb for hand or machine quilting. It is warm in the winter and cool in the summer. It comes in a range of lofts, but is always very lightweight, even for higher lofts. Wool can be densely or loosely stitched, depending on the look you want. Alpaca batts tend to have more migration and lower loft, but are significantly warmer. Alpaca is almost always blended with other fibers (most commonly sheep's wool, but occasionally cotton) to make it more affordable.

Silk: Silk is made from unraveling the cocoons of silk worms that feed on mulberry bushes. Silk is the most expensive fiber, but makes lovely batting, that like wool is warm in the winter and cool in the summer. It has a very supple drape and nice stitch definition despite low loft. Silk is also commonly used for show quilts because it shows off the stitching very well. Silk will shrink slightly, so it is often used for heirloom quilting. Silk will not beard and tends not to migrate as much as wool. It is very breathable and very durable, likely outlasting the fabric of the rest of the quilt. Silk is particularly nice if you want a low loft, but drapery and light, alternative to wool. 100% silk batts are available but they are expensive, so silk is often blended with other fibers. Bamboo and cotton are common blends, but wool is also blended with silk, and in most cases, the silk's features dominate.

Corn Fibers: This is often touted as an environmentally friendly alternative to cotton, but in most cases, they use the corn itself, rather than its byproducts (the husks and plants), and corn is extremely fertilizer and water intensive. Corn fiber is meant to mimic the qualities of cotton or bamboo, but in my experience, does not live up to either, and has the added downside of smelling fantastic to insects and other vermin, which I would rather not have eating my quilt. I'll say no more than that I would avoid corn based battings.

Soy Fibers: Soy battings, like corn, are touted as an environmentally friendly alternative to cotton. That being said, they are almost exclusively blended with cotton. Soy fibers are made both like Tencel, from the plant body of soy bean plants, and from the byproducts of making soymilk and tofu, so in that sense they are more environmentally friendly than the corn battings. This also means that they smell less like food to creatures of sorts than corn. Soy tencel makes a very soft handed batting, but hasn't been around long enough for me to speak to its other qualities very much. I have some quilts lined up to use these batts in and I will report back once I have a better feel for how they quilt. I imagine they will be very similar to cotton and bamboo as they are created and processed in a similar fashion.

This list is probably not exhaustive as there are all sorts of new battings cropping up all the time, but these are the lion's

share of the batting market. If you find an interesting batting that you know nothing about, I strongly suggest making a little sandwich with some of your fabric and quilting it with the thread you intend to quilt with, and then laundering it the way you intend to launder it. A Sharpie can be used to label it so you can refer to what batt it was in the future, but then if it's a mushy disaster that decomposes in your washing machine or turns out to be well disguised cat hair, you didn't kill your quilt by using it.

A few tips on picking a batting:

First, ask yourself what you want from your batting. Do you want it to be warm? Do you want it to be lightweight or heavy? Do you want a supple or stiff drape? Will the quilt be washed and dried frequently, like baby quilts or the quilts of Great Dane owners? Do you want good stitch definition or are you just starting to custom quilt and might like a little less definition to hide those mistakes? Do you want high or low loft? Are you hand or machine quilting? What thread are you going to use? How densely will you quilt? How much are you willing to spend?

I recommend really thinking about these questions, or at least the ones that matter to you (some people say, "Drape, what the heck is drape?"--some factors may not matter at all to you). Then, if you can't figure out which one is right for you, you at least can tell me what you want from your batting and I can help you choose. Batting is often like thread; a quilter finishes a top and says, "Eh, whatever, it doesn't matter," and for some quilts that may be true, but if you've spent any amount of time on a quilt, I recommend taking the five minutes to really think about what you want your finished quilt to look like, and choosing a batting accordingly. Cheaper is definitely not always better, but sometimes that is just what you need.

A few random batting facts:

They call batting "wadding" in Australia. I took a class with a couple Australian ladies and it took us a little bit to figure out what this new fangled thing was, then we realized we were actually discussing the same product.

The little brown nubbins in unbleached cotton will stain over time, that's why you shouldn't use unbleached cotton in light colored quilts.

Antique quilts often had just an old wool blanket inside instead of batting.

The reason for "quilting" was from a time before scrim, resin, and needlepunching, when it was just loose chunks of whatever fluff you could lay your hands on, the stitching was designed to keep it relatively evenly distributed even with laundering (if you think an agitator is hard on a quilt, imagine a washboard or some rocks in the river). This was particularly true in old garments before the advent of bed quilts, people quilted coats, pants, and armor for warmth and protection.

Most natural fibers, including cotton, silk, soy, wool, bamboo, and corn, if left unattended for long periods of time, will attract critters either to eat them or to make nests out of them, to avoid this, if you have to store quilts, make sure they are very dry (for dryable fibers, a little stay in the dryer on low heat can't hurt), put them in a cotton pillowcase, and then in a sealed container of some kind. The cedar chest was the old standby, but not only are these currently hard to come by, they do not seal, and for many critters, cedar is a very inviting smell. There is no place that is truly safe from insect activity, but you can certainly minimize it by keeping them in tubs under your beds, or in your guest bedrooms, rather than in your garage, shed, or storage unit. People are the best deterrents for serious pest invasions. But it's good to be aware that all your hardwork can become a snack for some creepy bug if you store it improperly. Do not store quilts with paper or in cardboard for any length of time as both of these have acid in them that will eventually leech into the fabric and damage it.

Some people don't like using polyester in baby quilts because in a fire it can melt and get on their skin. While this is true, modern polyesters have such a high melting temperature that the baby is most likely cooked or has perished from smoke inhalation by the time the polyester melts. Cotton was the old standby, but bear in mind that cotton is extremely flammable, so one little cinder can light up the whole quilt instead of just the outer layers (which will burn off quickly). I believe that the best solution to the baby batting conundrum is plenty of smoke alarms and a good plan of action in case of a fire. Be wary of flame retardant battings, new evidence suggests that the chemical used in flame retarders causes sterility in women.