

# *Knotty Lady* YARN S

## GET TO KNOW LINEN!

For the second part in our get to know your fiber series, we are all about linen. Not only is it a great non-wool option, it is also a great option for all year around projects. Linen is perfect for any summer time clothing you wish to make since it is known for its drape and breath-ability. And, it has a bonus feature of being eco-friendly. Linen has and continues to withstand the test of time with fabrics dating back to 8,000 BC. Linen is also 30% stronger than cotton and softens with wear and time, while keeping its shape. A naturally hypoallergenic, anti-static, breathable, and low elasticity fiber, it makes for a great option for any garment. Another benefit to linen is it will absorb 20% of its weight before feeling damp. This makes it a desirable option for bed sheets, summer wear and layering.



### What makes linen?

Linen is made from the flax plant, the same plant that produces flax seed and oil. Flax seeds are rich in dietary fiber and omega-3 fatty acids. Flax seeds are great in smoothies, on salads, as a garnish, and in many other dishes. Flax Oil, or Linseed Oil, not only has major health benefits but can be used for a variety of other things such as a paint binder to make oil paints more fluid and glossy; a glazing putty used to seal windows, wood finishing for such things as firearms, sport bats, pool cues, surfboards, and even guitars and mandolins. Linseed Oil is also a major ingredient in the invention and production of linoleum.

There are two distinct types of flax plants; the linseed and flax variety. The linseed variety is grown and harvested to yield more oil and seeds. The flax variety is the variation that we are more interested in. This version of the plant grows taller and more slender which makes for better fibers to produce linen. This plant is not a fan of the extreme heat and much prefers cool and damp climates. Some of the best flax is grown in the Nile River Valley in Egypt and is harvested in early spring. For the best yield of fine fibers it is best to harvest before the seeds germinate. When harvesting, it is common and better to pull the plant up by the roots so that the stalk stays intact and doesn't dry out the fibers inside.

### Now for processing!

How do you turn the raw plant into workable yarn? First you have to let the plant dry in open air then remove the seeds by beating the stalks and shaking the seeds free. Flax is considered a bast fiber meaning the fibers are collected from the phloem (inner bark of the plant). Bast fibers are typically stronger and more durable. Another bast fiber we will be talking about later is hemp. The next step is called "retting" or rotting which separates the bast fibers from the plants vasculature. In more scientific terms, this process separates the xylem and the phloem. During this process, the stalk is exposed to moisture that causes the phloem cells to burst open allowing micro organisms to

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further break down the plant. In less scientific terms, retting uses microorganisms to start breaking down, or decomposing, the plant to separate the linen fibers from the remainder of the plant.

## Retting!

Retting is simply a wet and stinky process! There are various types of retting that determine how your fibers will turn out.

**Water retting** is the most popular choice since it produces the highest quality fibers. This is done by weighting down the bundles in a stagnant or very slow moving pond/bog/stream. The more stagnant the water equals the more abundant the bacteria. The temperature of the water will also determine if this process will take days or weeks. Using this method in a stream will take more time but the result will be cleaner and less smelly.

**Dew retting** is another preferred method in areas where there is a heavy nightly dew and warm day temperatures. This requires the stalks to be spread out to have the combination of air, sun, and dew to cause fermentation. This exposure gives linen that natural color and typically takes 2-3 weeks and yields a poorer quality.

**Tank Retting** is typically done in large cement vats. The stalks are first soaked for 4-8 hours to remove dirt and impurities. After a quick water change the stalks are then soaked for 4-6 days.

**Chemical retting** is a more time friendly process however it is more harmful to the fiber and environment. It is not a preferred method.

Once the stalks are done retting it is then called "straw". It is then mechanically or air dried which takes anywhere from a few weeks to months to dry and cure. After the straw is cured it is time to remove the woody stalk from the fibers in a process called scutching.

## Scutching!

Scutching is done by passing the straw through either rollers or a flaxbreak that crushes the wood-like stems into smaller pieces. The next part is labor intensive. It involves hanging the fibers vertically against a wooden board and taking a wooden knife and scraping down the fibers which releases any remaining woody bits. Next, the fibers are heckled! No not making fun of or harassing the fibers verbally, but combed through a bed of nails that splits, polishes and removes short fibers, called tow. Long fibers are also called line and can reach up to 3 feet long.



Flaxbreak on the left

Scutching board on the right

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## Results!

If you decide to try this on your own you can easily tell if you have retted the stalks properly. If small amounts of bark remain on your fiber, this can be spun together with the tow fibers to create a lower quality linen. Even though it is called "low quality linen", it is still perfect to spin to create a stronger heavier yarn that can be used for upholstery, tarps, tents, burlap and sewing leather. When spinning linen, it is easier to use a distaff to help keep these long fibers organized. Click here to be directed to a video on how flax was processed in the time of George Washington! Want a more industrial look at processing the flax plant????click here!

## Blocking!

Where there are many blocking methods, it is sometimes hard to pick the right one for your project. Check your label to see which method(s) are definitely out. Linen...well it decided to run by the beat of its own drum! Linen goes against a lot of the norms we knitters/crocheters are use to. This can cause a little hesitation when deciding to work with it. Doing research to find the best blocking method for linen, I came across several unique methods. Now, even though they worked for those individuals, doesn't mean it will work for every project. I read of people wet blocking after several hot and cold baths to soften the fiber, washing a sweater like any other delicate piece in the washer and dryer, and even ironing the curling edge of their piece. Scary right? When linen is machine friendly, we recommend washing in cool water and laying flat to dry, or in the dryer using a short no-heat dry cycle. If you wish to try the machine blocking method, we would strongly advise trying it with a swatch first. Before you block anything, check your tag for its exact content and any special features the yarn may have. Also note that some yarn dyes may not be completely set and may run in the blocking process....don't panic!

### Method 1: Wet Blocking

Wet blocking is the easiest and safest way to block any type of linen piece.

- ◆ Immerse your project completely in cool water. You can use Eucalan (or any other wool wash) to help clean and soften your piece.
- ◆ Gently roll your wet project up in a dry towel and squeeze out any excess water  
**DO NOT wring out your project by twisting. This will destroy your masterpiece!**
- ◆ Lay out flat and shape your project (Pinning where needed).
- ◆ Any flat surface will work as long as you don't need that area for a day or two.
- ◆ Let dry completely
- ◆ Air dry/fluff in dryer with NO HEAT to help soften (Optional)

There are crafters out there that have done the "whap" method during this blocking method. And, if you are brave enough to try it. While your project is still wet simply "whap" the piece against the tub or sink. This will not only help start softening the piece, it will add length. Remember Linen is stronger when wet!

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## Method 2: Steam Blocking

This is a perfect method for any lace-like patterns, or if you want to stretch out your piece a little bit. It also works great if you only have a small amount of blocking to do.

**CAUTION THIS METHOD USES A HOT IRON/STEAMER!**

**DO NOT TOUCH STEAMER OR IRON TO PROJECT!**

**LET YOUR PROJECT COOL BEFORE TOUCHING**

- ◆ Pin project to blocking mats. Use pins that are rust proof and designed to withstand heat (normal colored plastic headed sewing pins will melt)
- ◆ Warm Iron or handheld Steamer
- ◆ Hold iron/steamer about 1 inch away from project or at the tops of your pins
- ◆ Move iron/steamer over project until damp
- ◆ Leave alone to dry completely before removing pins

## Method 3: Dry Blocking

This method works for projects that need little to no blocking, but enough to help fix a projects shape or a curled edge. This would be the best way to lightly block granny squares before sewing together. Would also be good for dish/wash cloths, a bag, flowers, smaller blankets and scarves.

- ◆ Pin project down on blocking mats to desired shape
- ◆ Using a spray bottle gently mist your project until lightly damp
- ◆ Let dry completely before removing pins.

From seeds to yarn, linen is a very eco-friendly and economical process in its entirety. There are people all over the world that include flax into their gardens, not only for the nutritious seeds, but to process at home and make into yarn. Linens greatest feature simply has to be that it gets stronger and softer over time. It is a long process, but a very satisfying one for sure. With time, patience and experience, you can make your own linen yarn and continue to help it withstand the test of time!

Some of our favorite linen yarn examples is Berroco Indio which is a 100% Linen yarn (picture on the left). On the right we have Daisy by Knit One Crochet Too which is a linen, silk and hemp blend!

