

FLAX

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An important crop in early America was flax. We see flax, flax seed, flax yarn, flax wheels, flax combs, and flax hetchalls in wills and probate inventories. But what is flax and why did our ancestors grow it?

Flax has been cultivated for, literally, several millennia. It grows well around the Mediterranean Sea, across much of the European continent, and in North America, with many different varieties. The ancient Egyptians grew flax, as did many other cultures. The overall process is similar from one area to the next, but with variations in tools and methods. Flax is a thin plant, growing one to three feet tall. The straight stalk has a woody center core and a woody outer husk. Between these, the long flax fibers grow from the root to the flowers, held by a gummy substance.

The seeds are sown in the spring, with the conventional wisdom suggesting Good Friday as the best date (but only if winter is definitely over). Once the seeds are sown, the flax plants grow quickly. This depletes nutrients in the soil, so crop rotation is necessary. As with the growing of tobacco (see HE CALLED FOR HIS PIPE), weeding is of key importance to allow the stem to grow straight. This was usually done by women.

When the flax plants have grown to maturity, they are harvested by pulling the plant up by the roots in order to retain every inch of the valuable fiber. As they are pulled, the plants are tied in bundles (called *sheaves*, *shocks*, *stookes*, or *beets*). Then they are dried, sometimes by spreading them flat on the ground (especially if the weather is sunny), sometimes by propping them up vertically (local custom has a lot to do with how this step is done).

When the bundles are dry, the seeds are removed with a comb (called a *ripple*) that is sometimes attached to a bench, board, or post so that the bundles can be pulled through the comb, rather than the comb being pulled through the bundle (again, local customs vary). In some localities, the seeds are removed instead by crushing the hulls with wooden blocks or rollers. As with most seeds, the chaff needs to be removed from the seed (winnowing). The seeds can be used for next year's crop, to make linseed oil, or to feed animals.

The next step is to dissolve the gummy substance that holds the fibers. This is done by *retting* (in some localities called *rotting*). Retting involves soaking the plants to promote bacterial decomposition. In the past, this was most commonly done in shallow depressions with good sunlight that are close to the fields, but also near a source of running water. These are called *retting ponds*. The flax bundles are placed nearly upright in the depressions, and the water source diverted to fill the retting pond (in some areas, the ponds have a constant supply of slow-flowing water).

As the flax steeps in the warm water, bacteria begins to dissolve the gummy substance. The resulting decomposi-

tion, to put it bluntly, smells absolutely awful. The worse it smells, the better the retting/rotting process is going. Once the gum is dissolved, the inlet and outlet of the pond can be opened up so that fresh water can flow through and wash away the stinky mess. Now stop and think for a moment about how you would feel if you lived on the next farm downstream. (I'm assuming that farmers only made the mistake once of building retting ponds upstream from their own homes.) The clear water of the stream becomes polluted. It turns color, smells bad, quite likely kills fish, and isn't fit for drinking. Yet growing flax was common in early America and into the present.

The bundles are then removed from the pond (cold, smelly work) and once again dried. (Another method, called *dew retting*, is also used. The bundles are untied and spread on the ground, with dew or rain providing the moisture for the decomposition.)

When the flax is thoroughly dried, the heavy labor begins. The flax is placed on a hard floor or bench and beat with a wooden mallet, called a *beetle* or *breaker*, until the outer flax straw is broken.

The process of removing the straw is called *scrutching*. The methods vary by locality. At the simplest, a bundle is shaken or combed to get the straw out. One method involves a vertical board with a horizontal slot. A handful of flax (called a *strick*) is pulled through the slot, with one hand grasping an end of the strick and the other beating the dangling fibers with a bat or paddle (called a *swingle*) in a downward motion, causing the straw to fall away (the vertical board protects the hand holding the strick). Sometimes scrutching was a social occasion, like a corn husking or barn raising.

The fibers can then be combed by *hackling*. All the sources I consulted said this is done by pulling them through a *hackle* to remove any additional straw and to untangle the fibers. However, in all the American records I have encountered, the tool is called a *hatchel* or *hetchel*. Like the ripple described above, it is usually made of long sharp nails driven through a board. Once the hackling is complete, the flax fibers can be spun into yarn. Spinning was discussed in THE DISTAFF SIDE. The shorter or broken pieces of flax fiber are called *tow* and are used for coarser fabric. The long fibers are used to make linen yarn, which is why flax was such an important crop for our ancestors.

Hemp fiber, which until recently was grown and used extensively for heavy cloth and for rope, is processed in a similar way. The agricultural census schedules for the latter 1800s include such categories as tons of dew-rotted hemp, tons of water-rotted hemp, and pounds of flax. The processes described above have continued into modern times, although some steps have seen mechanical improvements.

The many steps in growing and cleaning flax involved most family members at one point or another in the tedious, muscle-tiring work. It can be easy for us to forget this

when we see a simple line item mentioning flax in an ancestor's inventory.

In WEAVING AND LINEN we will explore weaving and the linen cloth made from flax yarn.

To learn more about flax and linen, consult "Flax" and "Linen and Linen Manufactures" in the *Encyclopaedia*

Britannica and Patricia Baines' *Linen: Handspinning and Weaving* (London: B. T. Batsford, 1989). An Internet search should provide illustrations of some of the tools and their use.