

Teacher Information Card (1 of 2)

The Process of Growing Flax and Producing Linen

This card is based on descriptions of the traditional methods. Many of the processes described below were eventually industrialised and carried out by farm machinery, and then in mills for spinning and weaving and in bleach works, but the stages remained the same.

See the Hincks engravings, available at:

www.irishlinenmills.com/Production/18c_production/18century.htm

Growing – the **flax seeds** are sown in April and harvested in late July/August. Land has to be well prepared for sowing, so it is usually grown after another crop, e.g. potatoes, has broken up the soil and allowed weeds to be dealt with. The flax plant blooms with a beautiful, vivid **blue flower**. These wither and go to seed when the flax is ready for harvesting. Flax is also known as **lint**.

Pulling – the mature plant is not cut down because the fibre used in the cloth making goes right down into the roots. It is pulled up and gathered into bundles or **beets** and the **seeds** are combed out. Twelve beets stacked together make a **stook**.

Retting (soaking in water – ‘rotting’) – the bundles are retted for up to 14 days in a **lint dam** to rot the hard woody material in the stalks that later has to be stripped out.

Drying – the flax is laid out and dried in the open air; in Ireland this often had to be done using a hot kiln – a type of big oven. The dried beets then go through the following processes.

Breaking – the beets are beaten with a wooden mallet to break up the woody parts. A bundle of broken flax was known as a **strick**.

Scutching – this involves knocking off the woody parts with a long wooden blade. Breaking and scutching produce a great deal of fine dust, known as **pouce**, which the workers inhaled and which caused breathing problems and hoarseness.

Hackling/Combing – the scutched fibres are passed through a big metal comb to untangle them and remove any remaining pieces of woody stem.

Hackle – this is the name for a large comb with metal teeth used for untangling the flax. After hackling, the neat lengths or bundles of flax are ready for spinning.

Spinning – this was traditionally done by women at spinning wheels in cottages. The fibres of dried and combed flax are spun together into long lengths of yarn.

See www.youtube.com/watch?v=8Qw6pVgw9UU

This short film demonstrates the process and explains the uses of the three essentials – distaff, treadle and water. The lint hangs on the distaff. The wheel turns the bobbin on which the spun yarn collects.

See also W H Crawford’s description of the traditional process, illustrated with **Hincks plate number 6** viewed here: www.irishlinenmills.com/Production/18c_production/18century.htm

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Boiling – the spun flax is boiled and dried again. Then it is ready for weaving.

Weaving – the yarn is woven on a loom. The **warp** threads hang from bobbins at the back of the loom and are stretched to the cloth beam at the front. The horizontal threads are called the weft. See

Hincks plate number 7 viewed here:

www.irishlinenmills.com/Production/18c_production/18century.htm

The linen produced at this stage is **brown linen**.

Bleaching – the brown linen has to be bleached white, traditionally on a **bleach green** where it is repeatedly soaked in water. See image on **Hincks plate number 10** of linen on a bleach green.

www.irishlinenmills.com/Production/18c_production/18century.htm

This happened only from March to October. Because of the need for water, bleach greens were usually on the banks of rivers.

Marketing – once bleached, the linen cloth can be sold to be made up into clothes and other goods, such as tablecloths, sheets, pillowcases or napkins. It can be woven finely for marketing as ‘fine linen’, or in a heavier, coarser, more durable weight. Linen clothes are very cool to wear in hot weather. Linen wrinkles easily, but some garments now are made with a mix of linen and man-made fibres to reduce wrinkling. Or the characteristic crumpled look can be used as a positive – one of the features that identifies linen as genuine, and a natural product.