



# felt making



## what is it?

It's making fabric by locking together fibres (generally wool) using friction and moisture. This is the traditional 'wet' felting technique, although now there is also needle felting, which doesn't require moisture or friction. Felt is one of the world's oldest textiles (if not *the* oldest).

### Wet felting

Hot, soapy water and friction are used to mat, compress and fuse wool or other animal fibres together to make felt.

Nuno felting is a type of wet felting, where wool is felted onto a woven fabric. The wool fibres are worked through the weave, which gives the felt the stability of the woven fabric. This technique is great for upcycling old clothes.

### Needle felting

Interestingly, needle felting as a craft developed from an industrial process, rather than the other way around. The technique developed within the last 100 years, with triangular-shaped needles with notches that push and intermingle the wool fibres to create felt - no water or friction is required. Non-woven fabrics from piano felt to tennis balls are made this way.

### History

Legend has it that felting was discovered when travellers put wool in their sandals to prevent blisters, and the combination of sweat and the friction of walking created basic felt socks!

It's notoriously difficult to track the history of textiles, as they're biodegradable. Something has to happen to preserve them. That's exactly what happened to the felt found in the Pazyryk tombs, discovered in the permafrost of the Altai



*A selection of felt handbags.*

mountains in Siberia, near the Mongolian border. Water seeped in and cased everything in ice, so we can see what felt looked like around 2400 years ago. There are clothes, ornaments and rugs, and the workmanship is superb, suggesting that felt making began there a lot earlier than that. Mongolia is considered the home of felt making, although other central Asian countries like Kazakhstan or Kyrgyzstan have their own ancient traditions and techniques. Felted wool is traditionally used for yurt covers and insulation - unwashed it is dense enough, and contains enough natural oils to be virtually waterproof in Mongolia's relatively dry climate.

Felt making appears all over the world - anywhere there are sheep - but wet felting arrived late in the UK. Mary Burkett, founder of the International Feltmakers Association, discovered felting in Persia and introduced it into the UK in the late 20th century. Scandinavia has a long history of felt making, so it's not clear why the Vikings didn't introduce it into the UK. Most sheep in the UK were traditionally owned by wealthy landowners who paid locals to spin and weave it - but not to felt it, as the skill was not known in the UK.

However, a technique that was known was 'waulking' - used to soften and shrink to make a denser, more waterproof fabric, like tweed. Putting a woolly jumper into a hot wash does a similar thing. Stale urine was used - the ammonia changed the pH of the wool, which opens up the scales of the fibres, then agitation makes the scales attach to each other.

Another industrial felting technique that developed before needle felting was sometimes called 'carroting' and was used to make hats. Rabbit fur was blown onto a mould and treated with a mercury compound that often caused mercury poisoning in milliners. Mercury poisoning can often cause brain damage - hence 'mad as a hatter'. Don't try this one at home, folks.



*Upcycling an old dress using nuno felting techniques.*



### what are the benefits?

Many smallholders use sheep for conservation grazing as well as for meat and wool. Sheep are integral to lots of smallholdings and mixed farms. Wool (and therefore felt) has 2 important qualities: low flammability and good insulation against heat and cold (felt liners in boots are good in winter) - and against sound too. It's biodegradable, renewable, repairable and recyclable (a failed hat can become a tea cosy). Even better, it can be locally-sourced and organic. However, wool has fallen in value so much that it is often considered a waste product these days. Anything that can add value to British wool has to be a good thing. Felting (especially needle felting) can be very therapeutic.

### what can I do?

Felting can be used to make clothes, bags, hats, pictures, jewellery, toys, waste baskets and rugs - the equivalent of sheepskin rugs, but without having to kill a sheep. Wet felting is easy, doesn't need specialist kit and can be done with kids. Needle felting involves sharp things, so may not be so good for kids. There's good and bad felting in terms of whether it's fit for purpose. A loosely felted picture is fine, but if you're using the same piece for a handbag, it will fall apart if it's not tight felted or fulled (a cleansing and thickening process). You can attend courses to learn felting techniques or how to make specific items. Coarse wool takes longer to felt, so it's probably best to start using finer wool. Use a net / old vegetable sack / net curtain / bamboo mat placed on a towel. The washed, carded wool is placed on top of the net material. Small amounts are overlaid like roof tiles. Do it in a couple of layers - the second layer overlaid in the opposite direction to the first. Then either another piece of net is placed on top, or it's all folded so that the wool is between two pieces of netting. Warm soapy water is rubbed in a circular motion. The rubbing creates friction and the water provides moisture to cause the wool to shrink and mat to create felt. Needle felting allows you to use coarser wools that might not wet felt so easily. You can buy felting needles online - Wingham Wool Work and World of Wool (both in Yorkshire) are good sources, and there's a lot of good information on



Needle felting.

those sites too - but pretty please, don't buy from Amazon. Needles are pushed back and forth through the wool, into a pad, so that you don't stab yourself. You can learn needle felting on courses, or you can find instructional videos online. You can use a combination of wet and needle felting to mend clothes. Put some foam under the hole and put wool on the inside and outside of the material. Push a felting needle through both layers of wool to mingle the fibres, then wet felt it to solidify and condense the wool to finish the repair. Wool from different sheep breeds felts differently; often, wool from rugged breeds (e.g. Scottish Blackface or Herdwick) can be difficult to work, or produces coarse, heavy felt. Some breeds produce finer wool - like Bluefaced Leicester or Shetland. There are uses for the coarser wools - Herdwick wool is often used in rope- or rug-making. But if you're making something to be worn next to the skin, you need the finer wools to make soft felt. Merino wool is good, but most comes from Australia - not great, environmentally-speaking. Luckily, Bluefaced Leicester is good too.

### resources

- see [lowimpact.org/felt-making](http://lowimpact.org/felt-making) for more info, courses, links & books, including:
- Sabine Fouchier, *Felt*
- Gillian Harris, *Complete Feltmaking*
- Linda Lenich, *Needle Felting*
- Peter Walter, *the Felt Industry*
- [feltmakers.com](http://feltmakers.com) - International Feltmakers Association
- [woolfest.co.uk](http://woolfest.co.uk) - annual wool festival
- [feltunited.com](http://feltunited.com) - huge felt art resource

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