

What happens to my fleece? What products can I get from it?

The following pictures show, roughly in order, the processes from raw, greasy fleece to finished products.

| | |
|--|---|
|  | <p>Raw/greasy fleece As shorn from the sheep (Gotland in this case). The fleeces should be shaken to remove second cuts, loose vegetation, etc., and then skirted to remove short, very dirty bits. Dags, cotted/matted areas or those contaminated with vegetation should be pulled off. Also, while raddle will wash out, most market sprays will not, so please either avoid them or removed areas of fleece covered in dye. The remaining fleece should be open, like a veil, or in locks, clean-looking and should only contain dirt, sweat and lanolin, with the minimum of vegetation and no pesticide.</p> |
|  | <p>Fleece sorting and grading We do this by hand on a high table with a netting top, which helps our backs and also allows dirt, short fibre and dust to fall through. We remove the bits listed above, and can sort by colour, grade and/or remove coarse fleece if required. Sorting and grading is included in our set-up charge, except for colour sorting. At this stage, we may contact you: this might be to recommend adding fleece to make up the quantity or soften the results, or to de-hair alpaca. We charge for disposal if rejected fibre is more than 15% of the incoming amount.</p> |
|  | <p>Sorted fleeces waiting for scouring Each batch from each customer is sorted separately, stored separately and processed separately. All sacks are labeled and each batch is accompanied by its own production sheet and dockets and labels. We can split batches to make different things, but charge per split if there are multiple splits as this requires quite a lot of extra work. We normally scour paler and finer fleeces first, following them with darker and coarser ones. Scouring removes dirt, sweat, grease, some short fibre and vegetation, also sometimes sand and salt from North Ronaldsay fleeces!</p> |
|  | <p>Scoured, dried fleece After scouring, we spin and then tumble dry the fleeces. This leaves them slightly clotted together but not felted. Some fleece will felt if very fine and we can air dry small batches if necessary. Dried fleece can be stored indefinitely and we always have a store of suitable breeds and colours, along with silk, nylon, flax, etc., for blending or adding to batches if required. Due to space constraints we are not able to store scoured fleece for customers.</p> |
|  | <p>Blended fleece Once it is dry, we can tease apart and blend the fleece. This is the opportunity to add other colours or fibres to a basic batch. We also add 10% by weight of a blend of around two-thirds water and one-third spinning oil (except when producing carded fleece) to enable us to control the fleece through the processing. We use a GOTS organically accredited oil for organic processing. The fleece is now basically a big pile of slightly damp, very slightly oiled fluff.</p> |

| | |
|--|---|
|  | <p>Carded fibre</p> <p>The next stage is carding, or, to be precise, scribbling (i.e. putting the fleece through the first part of the carding machine). This makes the scoured and carded fleece ready for felting or hand spinning. We can either lap it into a box or coil it into a bag in a tub or “can”. The flat version is illustrated opposite and the coiled version is shown below. The former is better for felting and the latter probably better for spinning. The fibres are smoothed out but are not aligned, so this will make a woollen spun yarn.</p> |
|  | <p>Can-coiled carded fibre</p> <p>Please request whether you would like your carded fibre lapped or can-coiled. If we are making worsted spun yarn, the fibre is removed after scribbling in the cans and taken for gilling (sometimes called pin drafting) and combing in preparation for worsted spinning. If we are doing woollen spinning the fibre carries on into the second half of the carding machine and emerges as fine slubbings (finer and much weaker than pencil rovings) ready to go to the woollen spinning machine. Carding can permit adding neps (small knots of fibre) for feature yarn and gilling can permit adding fibre such as nylon. Both carding and worsted preparation also work on precise settings to define the final thickness of the yarn to be made.</p> |
|  | <p>Tops</p> <p>After can-coiling part carded fibre, it is made into tops, by gilling (pin-drafting) and coming. Tops are ready for hand-spinning into worsted spun yarn and are also sometimes used for felting. To make our worsted yarns from tops, after re-gilling, we auto level and bi-coil to make the thinner bands of fleece ready to go into the worsted spinning frame. We can also de-hair alpaca by combing it and have found this to be most effective method. It also removes remaining hay seeds and all short fibre, so the yield is lower from the original fibre as well as being more costly.</p> |
|  | <p>Single yarn</p> <p>The spinning machines, whether woollen or worsted, make a single yarn on a tube which is slid over the spindle. Single yarns tend to kink but this can be removed by steaming or by plying into doubled or plied yarns. Single yarns are often used for weaving, particularly woollen spun yarns for blankets, throws, scarves, and tweeds, as they will brush up after weaving to make a soft, fluffy surface. Worsted spun yarns may be single or 2-ply for weaving and will make smoother, stronger and finer fabric.</p> |
|  | <p>Plied yarn</p> <p>Knitting yarns, apart from single lace-weight yarns, are usually plied to make from two- to five or more plies and the plies may be combinations of plies to make thicker yarns or to achieve greater stretch or smoothness. Generally more plies tend to make for smoother yarns as they usually start with finer single yarns. Woollen spun yarns are both spun in the singles and then plied to make as low a twist as possible to retain the softness while holding the yarn together. Worsted is more tightly spun and plied but may feel softer as the surface fibres are all aligned.</p> |

| | |
|--|--|
|  | <p>Oiled yarn Newly spun yarn after plying, whether then finished in skeins/hanks or on cones, will still have the spinning oil on it so will be flat and dull-looking and may feel quite hard. In this state it is useful for machine knitting or weaving as there is a minimum of fluffiness from fibres sticking out. The yarn may be steamed to reduce the propensity to kink, and this will also remove most of the spinning oil. To prepare for machine knitting the yarn can also be waxed as it is wound onto cones.</p> |
|  | <p>Washed yarn This is exactly the same yarn as in the picture above, but after washing out the spinning oil, which makes it paler, softer and also “bursts” it, enabling the individual fibres to remember their form and become fluffy, elastic and resilient. The yarn is now ready to be packaged in its final format or dyed. Woollen spun yarns will continue to soften and felt slightly over time whereas worsted spun yarn is remains closer to the state when it was first made, gradually wearing thinner and sometimes harder. Hand knitting or crochet will also soften all yarns.</p> |
|  | <p>100g skeins/hanks of washed yarn If the yarn is to be dyed it is left in large un-weighed skeins, but we can also make weighed skeins at 50g, 100g, 200g or for a set length or weight as required by the customer. Each hank is tied in 4 places, once to tie off the two ends and three more times to hold the threads in place. Skeins are relatively easy to knit from if you can keep them around a chair-back or your neck but most people find that hand-winding into balls makes life easier. Twisted skeins take as much work to make as balls as we twist them all by hand.</p> |
|  | <p>Cones of dyed yarn A cone is the most dense package for finished yarn, so makes the least bulk for storage or transport. You can also knit or crochet direct from a cone, which avoids making joins in the yarn, but at 300g to 1kg in weight they are less transportable than balls. We dye our yarns in hanks/skeins but wind them back onto cone for storage or before winding into balls. Cones generally weigh about 25-30g and we include the weight of the cone in the total package as no-one ever sends them back, unless specifically requested for Weights and Measures purposes to weigh just the yarn.</p> |
|  | <p>Balls of yarn without ball-bands Our ball winder will make 25g, 50g, 100g or larger balls and can also customize the winding design! The balls may be left long or flattened into dough-nut shapes. They are then packaged into grip-seal polythene bags, normally 10 or 12 to a bag. Some customers will have a mix of hanks, cones and balls as their finished order. It is relatively easy to make ball-bands with details of your own farm or flock but please remember that if you are selling these you will need to comply with Trade Descriptions, Weights and Measures and possibly GOTS organic requirements.</p> |
|  | <p>Balls of yarn with ball-bands The somewhat easier approach is to send us your logo and we can prepare bands including the required information together with your own farm/flock name, breed of sheep and contact information. We also customize our ball-bands for yarn shops. Balls with ball-bands are relatively labour intensive but are also, along with twisted skeins, the form in which most people are used to purchasing their yarns. Each band will state the yarn type, composition, how to wash, whether natural fleece colour or dyed, spinning mill, animal type and contact information.</p> |

Unit B, Pipers Court, Pennygillam Industrial Estate,
LAUNCESTON, Cornwall. PL15 7PJ
Telephone: 01566 777635
Email: enquiries@thenaturalfibre.co.uk
Website: www.thenaturalfibre.co.uk



Yarns of different specifications/gauges

Please see our other information sheets about the aspects of yarns: both the thickness and the length are important considerations, along with the number of plies. Yarns can be designed using particular types of fibre or blends to perform in specific ways: to be bulky, fine, soft, highly insulating, lacy, drapey, shiny, hard, strong, smooth, fluffy, stretchy, high definition and crisp. It is possible, although we do not have the equipment (yet?) to make boucle or roving yarns. We can add coloured neps, ply different shades to make marls or blend to heathered shades.



Woollen stuffing

We try not to waste anything! Our reject wool fibre can go for felt making, while alpaca goes for duvets. Waste created between batches or falling out of the processes can go for carpet underlay, felt or mixed blend basic weaving yarns. Noils – the short bits combed out of worsted preparation – can go back into woollen spun yarns, as can neps. Card waste and chopped up spinning waste can be shredded to make loose fluff suitable for stuffing. This is not to a British Standard, and is thus quite cheap. It is also compressed for storage and posting so will need fluffing up before use.