Wool: The Survival Fiber

By Compatriot Howard Thomas

If one traces the development of civilization through the middle East and Europe, the parallel between those early lifestyles and the possible life of the survivalist family in the future can hardly be avoided. The early nations lived by agriculture, wood and brick architecture (if any), and by manufacture of their own clothing. Almost invariably the clothing of first choice was wool.

What made wool the first choice of fiber for early people makes it the most logical choice for a family in a long-term survival situation in the future.

1) Sheep are cheap to keep. They can live in a wide variety of climates, from the semi-desert, arid regions of Lebanon and Israel to the cold, damp areas of Scotland and Ireland. They need only grassy or shrub-like vegetation for normal summer and spring forage, and they thrive quite well on hay during the winter months. They reproduce readily in tended situations, since they have been staple farm animals for thousands of years. Finally, they produce two benefits for their owners in the forms of wool and meat.

By comparison, cotton requires large amounts of land and a great many people-hours of work to grow, gather, and process. Cotton is also inedible. The Scots and Australians have raised sheep on a strongly individual basis for centuries. The American southern cotton empire by contrast required huge amounts of slave or tenant farmer labor to maintain a reasonable income.

2) Wool is a readily processible fiber compared with other natural textile materials such as cotton, flax, or silk. It can be hand spun without a great deal of skill required, and rudimentary textile equipment for hand manufacture is easy to construct. Fine wool in open weaves is about equally as comfortable as cotton in summer wear, and almost nothing else comes close to the warmth retention properties of heavy wool fabrics for winter use.

Getting Started in the wool business

For practical purposes, the inexperienced shepherd can expect to shear the flock only once per year, although high yield, large production operations

today shear twice per year. It goes without saying that the shearing time is late spring on the once per year format and mid spring and late summer for the twice per year shearings. The animals have those coats for a purpose, and it's best not to interfere with Nature's plan if you want the sheep to stay with you.

It is an anomaly of wool that naturally short fiber is also fine fiber, and longer fibers are coarse. This means that the very long wool varieties of sheep should be raised for winter goods. (Coarse fiber yields coarse yarns, which make bulky goods.) Shorter wool fiber can also be used for heavy goods, but it's a waste of the fiber's natural capacity to yield high strength even in fine yarns. Overall, if you are going to raise only one variety, opt for the short, fine wool type. They're more useful year round.

A pair of stout (12"+ long) scissors will work for shears at first. Shearing is tricky to perform, and humane methods require that the sheep not be shorn too closely at first. Their skins can be mistaken for bunched up wool.

The best wool is on the back, shoulders, and the upper head. The worst quality is at the tail and rear legs. They call the unwashed wool state "in the grease", but trust me, it ain't grease making the stuff feel and smell that way.

This brings up the point of preparation. Wool must be washed thoroughly before it is useable. In some situations, the sheep farmers make their own soaps of potassium hydroxide and fats. Extreme caution must be taken to ensure that the soap is not too alkaline (base) in nature, since wool is a protein fiber which dissolves readily in bases. Fortunately, the fats to be used will probably be of agnusine origin, so the molecular attraction of the lipidic groups will be enhanced. (It's good to use sheep fat to make the soap, because sheep fat will wash out sheep stuff better.) NEVER use chlorine bleaches on wool; even perborate (clorox 2 type) bleaches are not good to use. When the wool has been thoroughly cleaned, it must be gently air dried before it can be processed.

Spinning wool into yarn

Processing begins by carding the wool. For home-type operations, hand cards can

be bought at many hobby shops. If these are unavailable, then wire dog brushes
can be altered to make hand cards. The important thing is that the wire must be
bent at an angle away from the brush surface. Carding takes place when the
wires from one brush are passed over wool on wires on another brush. the
wires must all be pointing in the same direction. A single pass in the
opposite direction to the point is made each time. A back and forth motion is
useless, since opposing wires would strip off the fibers. The carding operation
parallels and further cleans the fibers. The more you do it the finer the yarn
can be when you make it and the less grass, leaves, dirt, etc. you will have in
the fibers.

Carded stock can be spun. Spinning does not require a wheel, although it's nice
to have one. The wheel simply keeps the spindle moving. The real spinning is
done with the hands. Wool has a wonderful natural friction about it, and only
a little twist will hold it together. The spinner must judge how fine the
desired yard will be by pulling out the fibers and twisting simultaneously.
This takes much less practice than one might think. Most craft fairs allow the
inexperienced to try spinning firsthand, and it is a worthwhile endeavor.

Spun yarn can be wound onto a circular paddle frame resembling old sternwheeler
steamboat paddles. This frame is called a skein winder; a skein being a measure
of yarn length equal to 120 yards. The amount wound onto the frame does not by
any means need to be 120 yards long, but the longer the wool wound, the more
will be available for fabric formation.

At this point yarns may be dyed, but this is optional, since dyeing can take
place in the fabric stage or even at the garment stage.

A final word of advice about wool spinning is that the spinner needs to consider
end use. For basic survival purposes, fashion is not a consideration, so plan to
spin yarns as finely as possible for summer use. (Hold the tension higher, but
more constant than with thick yarn.) Large, fluffy, soft, bulky yarns are
wonderful for knitting heavy sweaters, scarves, and socks. These are made much
more quickly than thin yarns since less twist and pulling is required, but the
raw stock is used up more quickly for these yarns.

To be continued. Next Fabric Formation and Dyeing.