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Handling The Wool Clip

Machine Shearing.

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Handling The Wool Clip

By L. J. HORLACHER

The primary purpose of the Kentucky sheep man is to produce top market lambs; his secondary purpose is to produce wool. About one-sixth of the total income from sheep in this state is received from the sale of wool. By giving proper attention to the handling of the wool produced, the income from the flock can be increased. The purpose of this circular is twofold: first to suggest the best methods of handling the wool clip, including shearing, tying, sacking, and selling; and second, to define the market classes and grades of wool. A glossary of terms used in the wool trade is added for convenient reference.

SHEARING

Proper care of sheep and the handling of sheep and wool at shearing time does much to make wool bring the top price. Some sheep men begin shearing in April; others wait until the first of May. It is best to shear sheep after most of the cold weather has passed and there have been a few days so warm as to make them uncomfortable. This warm weather starts a flow of oil and puts the sheep and wool into excellent condition for shearing. Late-sheared fleeces are heavier than those sheared early because the fiber has grown slightly longer and more yolk has been secreted. Good shelter should be available for the sheep after they are sheared, for a sudden change in the weather may cause severe colds or death.

Never shear sheep when the wool is wet or even damp. It is a mistake to put them into the barn when the wool is damp,

because the wool will not dry and as a matter of fact the moisture content may increase. It takes wind and sunshine to dry wool. Another objection to putting the sheep into the barn and keeping them up over night is that they make the barn floor damp and dirty and as a result the wool is stained and discolored.

Some men follow the practice of shearing with hand shears; others use the shearing machine. Machine shearing is more rapid than hand shearing. The machine clips the fleece closer to the skin and gives a more uniform length of staple. The tendency of the inexperienced shearer is to start in close to the skin but gradually to work from ½ to 1 inch away from the body of the animal. He usually backs up and cuts close where he failed before, thus making what are known as second cuts. These shorter fibers detract a great deal from the value and desirability of the fleece. The shearing machine makes fewer second cuts and does not cut the skin of the sheep so badly.

Before the sheep is sheared, cut off all tags and pick or clip out all burs. The tags may be saved and sacked separately. The best way to remove burs is to clip them out with a pair of shears. The removal of burs after shearing injures the wool and gives what is known as a broken fleece. It is possible to make from 50 cents to $1.00 per fleece by taking a little time to pick out a few burs. Wool containing seed and chaff is placed in the reject grade because of the expense of removing this material and because of the poor condition in which the wool is left after being cleaned.

THE PLACE TO SHEAR

When the weather is suitable, there is no better place to shear than a good, clean bluegrass sod, because it is free from hay seed, chaff and straw. Any of these things will lessen the value of the fleece and a great deal of care should be taken to avoid them. If it is necessary to shear inside, remove all straw and litter so that there will be nothing to stick to the wool. A large canvas may be spread on the floor for the shearers to

stand on, or a board platform may be used. After each sheep is sheared, remove any trash or dirt that has accumulated.

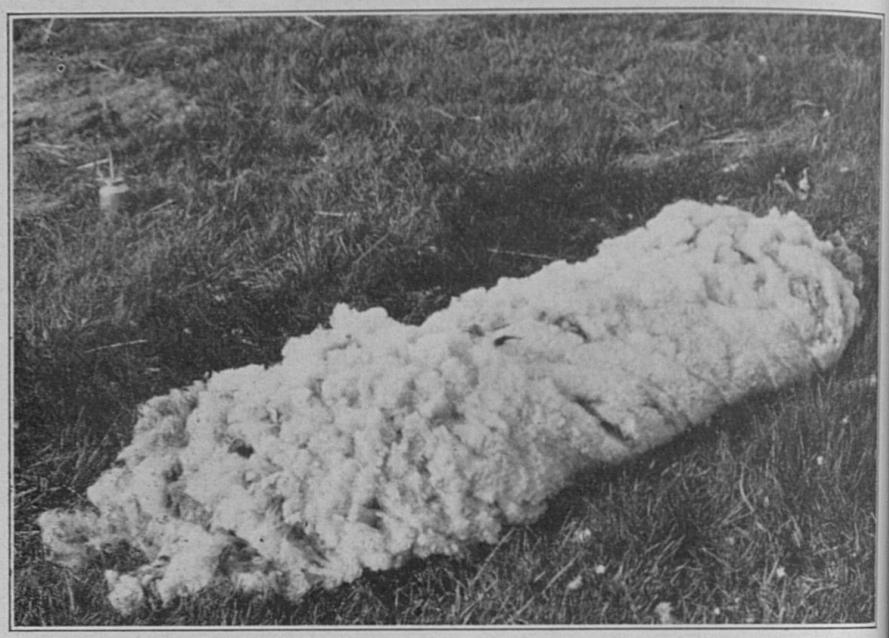
METHODS OF SHEARING

A common method of hand shearing is as follows: The animal is placed on its buttocks. The wool is first removed from the brisket downward to the fore-flank. It is then shorn from right to left clear across the belly. The wool on the entire belly thus removed hangs on the left side of the fleece. The wool is then opened up on the under side of the neck and, beginning at the ears, the neck and body are sheared by running the shears around to the ridge of the top line. The sheep is then turned over and the right side is sheared in the same way. Each line made by the shears should be at right angles to the top line.

A fleece properly spread before rolling.

For hand-powered machine shearing two men are necessary, one to furnish the power and another to use the clippers. Place the sheep in an upright position and hold it tightly between the knees. The shearer should be about one foot to the

left of the long tube and one foot in front of it. When shearing, always turn the sheep to the right. Part the wool in front of the brisket and run the clippers down twice, as far as the pit of the stomach. Put the front legs behind the arm at the shoulder and make about four swaths down the right side, between the front and hind flanks. Then shear across the belly over to the left side, on a line between the shoulder and the



A fleece with the sides turned in, ready for rolling.

flank. Keep the heel of the clipper elevated a little. Then trim out below the scrotum or udder and cut the wool off the point of the tail. Place the left hand just above the stifle and press down so as to straighten out the right hind leg and, with inward strokes, trim the inside of the leg. With outward strokes trim the inside of the left leg. Then place the right foot between the hind legs of the sheep. With the left hand placed against the sheep's under jaw, straighten the neck so that the back will be against the knee, and cut two swaths along the right side of the neck. Then turn the side of the jaw against the knee and trim the left side of the neck. Turn the sheep partly around to get it into position to have the left shoulder sheared. Make

each stroke to the center of the back, keeping the left hand on the skin above the clippers to hold it in a stretched and smooth condition. With long, smooth strokes, remove the wool from the side of the sheep. Trim the left hind leg and tail, and then

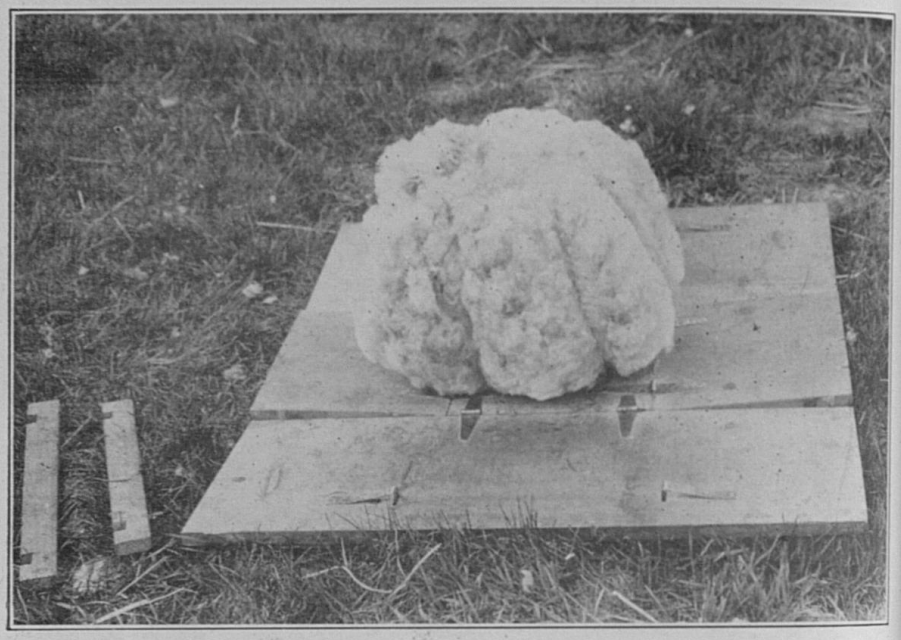
Rolling the fleece.

run three swaths half way up the back. To do this, stand astride the sheep, hold it between the knees and put the back in a rainbow shape. Run the clippers up the back and trim the head. When the left side of the neck is sheared, set the sheep up straight with its left side held tightly against the knees, and trim the right jaw. Then press the sheep's neck down against its left side. Beginning at the under side of the right side of the neck, run swaths down to the shoulder, next

working the clippers back on the top of the neck. Allow the neck to drop down against the left side and with inward strokes shear the shoulder and front leg. Then raise the head and place your left leg between the sheep's legs and hold the sheep against the body while the other side and hind leg are being sheared. At all times hold the sheep in an easy position.

TYING THE FLEECE

Tie each fleece as soon as it has been removed from the sheep. Altho length and quality of fiber are the first things



A fleece tied in a wool box.

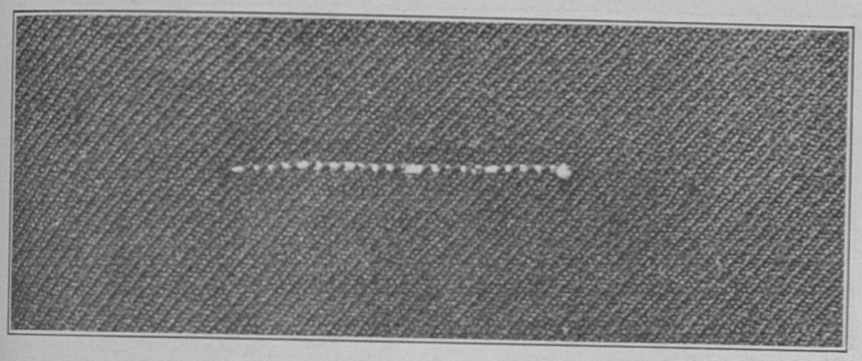
considered in determining the price of wool, the general appearance of the fleece is a big factor that is not overlooked. Before the fleece is tied, remove all tags that have not been clipped off before shearing. The grader at the warehouse can tell by the feel of a fleece whether it contains tags or stones or other foreign substances.

Roll the fleece carefully, with the clean, flesh side out, and with no loose ends protruding. To do this spread the fleece on a clean floor with the outer side upward. Fold the two sides

back so that they will meet in the center. Then roll the fleece toward the neck as compactly as can be done by hand. Tie carefully with paper twine, wrapping it around the fleece two or three times. This gives a neat, attractive package and prevents the mixing of fibers of different fleeces.

KINDS OF TWINE TO USE

One of the most common faults in handling wool is that of using the wrong kind of twine in tying fleeces. Ordinary binder twine is the worst twine that can be used, for its loose strands cling to the fleece and it is almost impossible to remove



A fiber of binder twine in colored cloth.

them. These twine fibers do not stain with dyes and as a result the piece of cloth in which they appear is practically ruined unless they are laboriously picked out by hand. A fleece that is tied with binder twine is heavily discounted and it would be better if it were not tied at all. Jute twine gives the same bad effect as binder twine. Paper twines which give satisfaction are on the market. These twines are hard and glazed and are easily dissolved by the fluids used in scouring the wool. One pound of twine should tie approximately forty fleeces. Once around the fleece each way usually is sufficient.

PACKING FOR SHIPMENT

A few precautionary measures taken in packing wool will add to its selling value. Use the standard-size woolsack. These

sacks, made of burlap, are 40 inches wide and 7½ feet long. To fill a sack it may be suspended thru a trapdoor or from a special tripod made for that purpose. Pack the wool tightly by tramping and then sew the end of the sack with twine.

It is best to pack all buck, wether, ewe, lamb, black, burry and seedy wool, tags and dead wool (wool from dead sheep) separately. Buck fleeces are usually heavy with oil and yolk and have a strong, musky odor. They are not so valuable as the fleeces from ewes, pound for pound. The reason why black fleeces should never be packed with white fleeces is evident. The black fibers adhere to the white fibers and it is next to impos-

Black fibers in white cloth, caused by mixing black and white fleeces.

sible to remove them. Thus the white fleece affected is rendered practically valueless for the making of white cloth.

After the wool has been placed in the sacks do not allow it to get wet. A heavy rain on sacked wool practically ruins it. Altho but a short time is required for the outer portions to become dry, the inner part will remain wet for a long time. This results not only in a weakening of the fibers but also in molding and staining. Wet wool is sometimes damaged to the extent of 1 or 2 cents per pound.

SELLING

One method of disposing of the wool clip is to sell to a wool dealer or to his agent. A large proportion of the wool in Kentucky is sold in this manner. The dealer usually pays one

price for all clear wool and another price for reject grades, such as burry and black wool. Thus all wool that is free from anything that might cause it to be rejected is bought at the same price regardless of any difference in value that may exist. This price is frequently that of the wool with the lowest value.

Pooling wool is practiced by many sheep men. Pools may be county, state, or national in scope. For successful pooling, it is necessary for the county or state to be organized on a reasonably large scale. Many county pools have been successful in Kentucky. About 600,000 of the 4,500,000 pounds of wool produced in Kentucky are handled each year by the Kentucky Wool Growers Association, which is a part of the National Wool Marketing Corporation. The wool is graded by an expert and each member's wool is sold strictly on its merits. Pooling has the advantage of securing for the grower all that the wool is worth with only the necessary selling charges being deducted. All wool pools must be strongly financed. Confidence in the organization is essential to success.

CLASSES AND GRADES OF WOOL

Proper classing and grading of wool requires much skill. There are two general characteristics of wool which determine the market class and grade to which the wool belongs. These are length of fiber and fineness of fiber. There are two classes of wool: (a) combing or staple wool, and (b) clothing wool. Length of fiber is the important factor in determining class. To be classed as combing or staple wool the fibers must be strong and at least 2½ inches in length. Clothing wools are those that are shorter than 2½ inches. Sometimes a third class, known as French or baby combing, is made. This is an intermediate class and includes the shorter combing wools and the longer clothing wools. On the market combing wools are worth from 2 to 7 cents a pound more than clothing wools. About 80 percent of Kentucky wools are classed as combing wools.

Each class is divided into grades. The characteristic that determines grade is fineness of fiber. The grades are as follows:

Combing Wools	Clothing Wools
Fine or 80s, 70s, and 64s	Fine or 80s, etc.
Half-blood or 60s and 58s	Half-blood
Three-eighths blood or 56s	Three-eighths blood
Quarter-blood or 50s and 48s	Quarter-blood
Low quarter-blood or 46s	
Common or 44s	
Braid or 40s and 36s	

The terms, "fine," "half-blood," etc., originally referred to the percent of Merino blood in the sheep which produced the wool. Wool from a purebred Merino sheep was known as fine wool, while that from a sheep that was half Merino and half common sheep was known as half-blood. Common wool was produced by a sheep of nondescript breeding, and braid was produced by a sheep of the long wool breeds. While these grade terms are still retained they do not carry the former meaning. They simply indicate the relative fineness or diameter of the fibers and bear no relationship to the amount of Merino blood present in the sheep producing the wool. The purebred Southdown, for instance, may produce wool that grades as half-blood, yet this breed has been kept pure from outside blood for more than 150 years.

The numerical grades, 80s, 70s, etc., are based on the spinning count. The term, 56s, means that the wool may be spun fine enough so that one pound of yarn may contain 56 hanks of yarn of 560 yards each. About 70 percent of Kentucky wools grade as 56s, 50s, and 48s, tho all grades are produced.

REJECT GRADES

One of the most common reasons for price discount in wool is the presence of burs. Burs not only increase the shrinkage of the fleece, but also make it necessary for the manufacturer to go to additional expense and labor to remove them. Frequently the chemical used in removing burs injures the wool fibers and weakens them. Black wool is worth less than white

wool because its use is limited to making dark or gray cloth. Kempy wool contains many hair-like fibers that have poor spinning and dyeing qualities. Tender wool is weak and the fibers break easily. Wet wool sometimes molds which stains and weakens the fibers. Cotting or matting of the fibers sometimes occurs because of illness or other unusual conditions. Some dips, such as lime-sulfur and caustic soda dips, are harmful to wool. Most of the dips in common use, however, are not harmful. Dead wool, which is wool pulled from dead sheep, lacks life and elasticity, and is therefore worth less per pound than wool sheared from live sheep.

BRANDING PAINT

Many kinds of paint used in branding do not scour out readily and for this reason lower the value of the fleece. A branding paint which some range producers have found to be satisfactory may be made as follows:

¼ pound lampblack
¼ pound flour
½ pint pine tar
¼ pint turpentine
3 pints linseed oil

This amount of branding fluid is sufficient for 350 sheep. The brand is permanent, but the scouring fluid removes it completely.

BREED AND GRADE

It is impossible to assign wool to a definite grade solely upon the breeding of the sheep, for there is a great deal of variation among sheep in any breed and also much variation in the wool produced on different parts of one sheep. The following list shows in a general way how fleeces from different breeds would be likely to grade:

Breed	Grade of Wool Produced
American and Delaine Merino	Fine combing and clothing.
Rambouillet	Fine combing and clothing and a small amount of half-blood.
Southdown	Half and three-eighths blood clothing and combing.
Shropshire	Mostly three-eighths combing or clothing. Some quarter-blood.
Hampshire	Three-eighths and quarter-blood combing or clothing.
Dorset Horn	Three-eighths and quarter-blood combing or clothing.
Ryeland	Three-eighths combing.
Suffolk	Three-eighths combing or clothing.
Corriedale	Three-eighths combing.
Cheviot	Three-eighths and quarter-blood combing.
Tunis	Quarter and low quarter-blood combing.
Romney, Lincoln, Leicester, Cotswold	Mostly braid. Some low quarter-blood combing.
Cross-bred: Medium wool on Merino	Half and three-eighths combing or clothing.

SHRINKAGE OF KENTUCKY WOOL.

The average shrinkages of Kentucky wools during the process of scouring are approximately as follows:

Grade	Shrinkage (Percent)
Fine combing	58 to 62
Fine clothing	60 to 64
Half-blood combing	50 to 53
Half-blood clothing	52 to 55
Three-eighths combing	38 to 43
Three-eighths clothing	40 to 44
Quarter-blood combing	37 to 42
Quarter-blood clothing	38 to 43
Low quarter-blood	36 to 40
Common and braid	36 to 40

This means that if 100 lbs. of three-eighths combing wool shrinks 40 percent during the process of removing the grease, dirt and other foreign substances, there will be 60 pounds of clean or scoured wool left.

TERMS USED IN THE WOOL TRADE

Black wool. Any wool that is not white.

Britch wool. Wool from the lower thighs of the sheep; usually the coarsest on the body.

Carpet wool. Low, coarse wool used in the manufacture of carpets. There is very little produced in the United States.

Condition. Refers to the degree of oil in grease wool. It largely regulates the price. In scoured wool it is used to indicate the degree of moisture.

Cotted fleece. One in which the fibers are matted or tangled. The cause may be ill health of the sheep or the absence of proper amount of yolk or grease in the wool.

Cow tail. A very coarse fleece, more like hair than wool.

Crimp. The natural waviness of wool fiber. Uniformity of crimp indicates superior wool.

Crossbred wools. In the United States the term generally refers to wool from a longwool and finewool cross.

Fall wool. Wool sheared in the fall, where shearing is practiced twice a year, as in Texas and California. The fall wool is usually dirtier than the spring clip. It represents four to six months' growth.

Fleece wool. An American trade term used to designate wool grown in the farm states or in that part of the United States that lies east of meridian 102 and north and east of the Edwards Plateau Region of Texas.

Fribs. Short, dirty locks of small size. Dungy bits of wool.

Frowsy wool. A lifeless-appearing wool with the fibers lying more or less topsy-turvy. The opposite of lofty wool.

Grease wool. Wool as it comes from the sheep, with the grease still in it.

Kemp. Not a dead hair but an abnormal fiber made up entirely of horny material, such as is on the outside of ordinary wool fiber. It will not dye so well as the ordinary fiber and does not possess spinning qualities.

Line fleeces. Those midway between two grades or classes, as to quality or length.

Lofty wool. Open wool, full of "life". Springs back into normal position after being crushed in the hand.

Luster wool. That from Lincoln, Leicester and Cotswold sheep. It is known as luster because the coarse fibers reflect the light.

Modock. Wool from range sheep that have been fed and sheared in the farm states. The wool has qualities of both regions.

Neolaine. Artificial wool.

Pulled wool. Wool taken from the skin of a slaughtered sheep's pelt by slipping, sweating or the use of depilatory.

Quality. The diameter of the wool fiber. It largely determines the spinning quality.

Run-out fleece. One that is not uniform but much coarser on the "britch" than elsewhere. It may be kempy.

Shearlings. Short wool pulled from skins of sheep sheared before slaughtering. Also English term for yearling sheep.

Shoddy. Wool that has been manufactured, torn apart and made ready to use again.

Sniafil. Artificial wool.

Spring wool. Six to eight months' growth; sheared in the spring, where sheep are shorn twice a year.

Stained wool. That which is discolored by urine, dung, etc.

Staple. (a) A lock or bunch of wool as it exists in the fleece. (b) Combing wool.

Stubble shearing. Shearing some distance from the skin, leaving a "stubble".

Suint. Excretions from sweat glands, deposited on the wool.

Tags. Large dungy locks.

Territory wool. Wool grown in the states west of the Missouri River.

Washed wool. That from which the grease has been removed by washing the sheep before shearing.

Yolk. The fatty grease deposited upon the wool fibers from the oil glands.