Glossary of Wool Terms

Fact Sheet No. 1.400  Livestock Series | Management

by S.B. LeValley*

**Apparel wool:** Wool suitable for manufacture into apparel fabrics.

**Bellies:** Short and often times defective wool on the belly of sheep.

**Black wool:** Fleeces from sheep containing gray, brown or black wool.

**Braid:** Long, course, lustrous wool.

**Break length:** Wool that is abnormally weaker in one spot along the fiber

**Breech or Britch:** Coarse hair fibers on lower hind leg.

**Carbonizing:** Removal of burs from wool by immersion in dilute sulfuric acid.

**Carpet:** Wool too heavy and coarse to be made into apparel; suitable for carpets and rugs.

**Clothing:** The shorter length wools within a grade.

**Color:** In wool trade, this refers to the actual color of the wool; a bright white to a cream is most desirable.

**Core-testing:** The coring of bales or bags of wool for determination of grade, yield and clean content.

**Crimp:** The natural waviness of the wool fiber; it varies with the diameter of the fiber.

**Crossbreed:** A sheep or the wool from a sheep resulting from the breeding of two difference breeds.

**Felting:** The matting together of wool fibers.

**Fleece:** The wool from a single sheep in the shorn grease state.

**Fleece wool:** Usually all fleeces grown in the states east of the Mississippi and Missouri rivers.

**French combing:** Wool of medium staple length, suitable for combing.

**Grade:** The classification system used to describe grease wools. The grades are; Fine – 64s, 70s, 80s; half-blood – 60s, 62s; three-eights-blood – 56s, 58s; quarter-blood – 50s, 54s; low-quarter-blood – 46s, 48s.

**Grading:** The classification of fleeces according to grade and length.

**Grease wool:** Wool as it is shorn from the sheep, before any processing.

**Handle:** A term referring to the actual feel of wool.

**Hank:** A 560-yard (512 meter) unit of wool yarn would on a reel.

**Kemp:** Brittle, chalky white, weak fiber found as an impurity in the fleece.

**Lanolin:** Wool grease; this substance, sometimes called “yolk” is a secretion from the sebaceous glands of the sheep skin.

**Lock:** A small, approximately fingersized bit of wool that tends to stay together when shorn from the sheep.

**Noils:** The short and sometimes defective wool fibers removed in the combing process.

**Pelt:** The skin of the sheep with wool still attached to the skin.

**Pulled wool:** Wool removed from the skins of slaughter sheep.

**Range wool:** Wool grown on large ranches, distinct from wool grown on small farms; usually termed territory wool.

**Raw wool:** Grease wool in a natural state before scouring.

**Scouring:** The actual separation of dirt, grease and foreign matter from grease wool; this is usually done in a lukewarm, mildly alkaline solution followed by a rinse.

**Second cuts:** Short tufts of wool cut at least twice by the shearing.

**Shearing:** The removal of wool from the animal by use of power clippers or blade shears.

**Shrinkage:** The weight raw wool loses when scoured, expressed as a percentage of the original weight.

**Sorting:** The separation of the whole fleece into parts, as well as removing the off-sorts.

**Soundness:** Freedom of the fiber from breaks and tenderness; relates to strength.

**Staple:** Refers to the length of a lock of shorn wool; in the wool trade “staple” refers to the longer length wools within a grade.

**Tender:** Wool that is weak throughout the entire length of the fiber.

**Top:** A continuous strand of partially manufactured wool, which has been scoured, carded and combed an intermediate stage in the process of worsted yarn.

**Vegetable matter:** Any material of plant origin found in the fleece, such as burrs, stickers, chaff and seed heads.

**Woolen:** A system of processing that utilizes the shorter length wools within a grade.

**Worsted:** A system of processing that utilizes the longer length wools within a grade.

**Yield:** The amount of clean wool that is derived from grease wool in the scouring process; yield is expressed as a percentage.

---

Alpaca Fiber Terms

**Annualized weight:** The clean fiber weight from an alpaca adjusted to reflect the length of time between shearings to a 12 month period.

**Apron:** Coarse fiber forming an overcoat around the chest of the alpaca.

**Architecture:** General structure and lay of fibers within the locks, which go together to make up the fleece as a whole.

**Belly:** Abdomen; contains the digestive tract; also, fiber from the abdomen of the alpaca (usually coarse).

---

*Colorado State University Extension sheep and wool specialist, animal sciences. 10/2004

©Colorado State University Extension. 1/00. Revised 10/04.

www.ext.colostate.edu
Blanket: Back and side of a fleece from the base of the neck to the base of the tail and sides from backbone to belly including the haunches.

Break: A weakening of fibers in the staple, allowing them to break under strain.

Brightness: A term used to describe the property by which fiber reflects light.

Character: Relates to definition and evenness of crimp found in huacayas. The crimp should be even and well defined from tip to butt.

Coarse: Fiber of large diameter.

Cotted: Fleece which is matted together; causes processing problems.

Crinkle: WAViness/crimp in the individual fiber; usually the coarser the fiber, the less crinkle.

Crimp: Pronounced corrugations in the entire fiber staple; occurs uniformly in the fibers of the staple in the same plain.

Felting: An irreversible tangling of fibers together.

Handle: Degree of softness of a fleece; generally indicates fineness.

Luster: The sheen, gloss or shine of the fiber; often considered a characteristic of huacaya fleece.

Medullated: True hair fibers which contain a hollow core or medulla; often called guard hair, but alpaca also contains varying degrees of medullated or part-medullated fiber which is not undesirable.

Micron: A measure of fineness used in the fiber production industries. One micron is one millionth of a meter; when fiber is tested for fineness it is expressed in microns and usually is accompanied with “Standard deviation and co-efficient of variation” of micron.

Noils: Short fibers removed during the combing process.

Open fleece: A type of fleece which does not hang together as a unit; usually a lighter weight fleece prone to debris.

Pickle: The quality in fleece that causes itchiness when pressed against human skin.

Prime fiber: Best fiber the alpaca produces; usually found in the blanket, but can include neck and upper thigh.

Second cuts: Small pieces of short fleece remaining in the fiber, caused by shearing the same area twice.

Skirting: The process of removing lower grade fiber, debris, dung and vegetable matter from a fleece in preparation for processing or showing.

Sound fiber: Fiber able to resist breaking either during processing or by pulling with the hands (see “tensile strength”).

Staple: Single lock of fiber.

Staple length: The average length of fiber in a fleece measured from the skin to the tips of the individual fibers.

Style: Relates to the wave and/or twist (architecture) found in suri fleece. This wave or twist is an indication that the fleece is not of a straight hair type. Wave and twist help give some natural elasticity to the fleece.

Tender: Fiber which has a distinct weakness or break in it; usually the result of health or stress.

Tensile strength: Ability of fiber to resist breaking either during processing or by pulling with the hands.

Top knot: The fiber on an alpaca’s head between its ears; also called “wool cap” or sometimes bonnet.

Trueness to breed: Possessing the most desirable characteristics of the breed, i.e., correct fiber type. A huacaya exhibiting little or no crimp (plain) and little density or a suri with straight plain fiber with chalkiness and no luster would be said to be “not true to breed”.

Uniformity: The degree of consistency in a fleece from one area to another in fineness, staple length, character, color and density.

Wool blind: The fiber covering on the face is so pronounced in the adult huacaya that the eye cannot be seen.

Wool cap: The fiber on an alpaca’s head between its ears; also called “top knot” and sometimes “bonnet.”

Yield: The amount of clean fiber sheared from a particular alpaca; also a processing term relating to the percentage of clean fiber after washing out the natural grease and dirt and removing vegetable matter.

Batt or Batting: Sheets or rolls of carded wool or other fiber; or, mixtures thereof which is used for woolen spinning or for stuffing, padding, quilting, and felting.

Belly fiber: Fiber harvested from the belly, usually of a coarser quality.

Blanket: The back and side of a fleece from the base of the neck to the base of the tail and the sides from the back bone to the belly including the haunches.

Break: A weakening of fibers in the staple which will break under strain.

Brightness: The property by which fiber reflects light.

Britch fiber: Fiber off the lower thigh of the rear leg of the llama.

Brittle: Long tapering dry tips usually caused by weathering.

Burry fiber: Fiber contaminated with burrs (seeds, etc.).

Carpet fiber: Coarse hairy fiber.

Classing: Grouping of fleeces according to type and quality.

Character: The characteristics of fiber lock or fleece determined by qualitative evaluation of crimp, staple length and configuration, handle or softness, and luster. It indicates good breeding and growth.

Consistency: Uniformity throughout a fleece of fineness, staple length, character (crimp, staple configuration, hand) and density.

Coarse: Fiber of large diameter and low count.

Cotted: Fiber naturally felted on the animal.

Count: Refers to Bradford Count, a method of indirectly assessing fiber diameter.

Coverage: The distribution of continuously growing fiber over the llama’s body, neck, legs and head.

Crimp: The waviness found along the length of the individual fibers throughout the blanket. The waviness in crimp occurs uniformly in the fibers of the lock in the same plane.

Crutchings: Fiber from the britch and inner thighs.

Curl: Waviness found along the length of individual fibers throughout the blanket that lies randomly in different planes and gives the fleece a curled looking appearance.

Dags: Lumps of dung.

Debris: Material that can be found contaminating a fleece.
Density: Number of fibers per square unit measurement of the llama's body.

Elasticity: The ability of a fiber to recover its original size and shape after extension.

Felting: The irreversible tangling of fibers together.

Fleece weight: The yield or weight of the spinable fiber from shearing. To be relevant, the age of the llama, the particular shearing (i.e., first or subsequent) should be identified and the length of time the fleece was on the animal.

Fiber fineness: Refers to the fineness of the individual fiber and is measured in microns.

General tenderness: Fibers break in random locations along the fibers. Indicates generally weakened fleece.

Guard hair: The somewhat thicker, straighter and longer fibers found in the fleece.

Handle or hand: The tactile quality of the fleece to the hand.

Lock: A naturally occurring tuft of fiber within the fleece.

Luster: The sheen, gloss or shine of the fleece and fiber.

Matting: The inextricable meshing of fibers in the fleece.

Micron: A unit of measurement equal to one thousandth of a millimeter.

Mushy: Fiber lacking in character. Reece wool with weathered and worm tips which cause irregularity of fiber length in processing.

Noils: Tangles that occur as a result of short fiber contamination.

Open fleece: A type of fleece (as Shetland sheep or camelids) which does not hang together as a unit and tends to have lower grease content, as opposed to a closed coat (for example, Merinos and most fine woolled breeds of sheep) where the wool surface does not open and is characterized by high grease content.

Prime fiber: The best quality fiber that a particular llama has to offer. This may include some neck fiber.

Second cuts: Short pieces caused by poor shearings.

Seedy fiber: Fiber containing seeds.

Skirting: Fiber of lower grade removed from fleece.

Silkiness: Smoothness and slipperiness of fiber.

Softness: The tactile quality of the fleece.

Sorting: Breaking of a fleece up into qualities.

Sound: Fiber without breaks or tenderness.

Staple: Single lock of fiber.

Staple length: The average length of fiber within the fleece when measured from its point of origin at the animal's skin to the tips of the individual fiber.

Stress break: Occurs at one point across the fibers in the locks.

Sun bleaching: The changing of color of the tips of locks when exposed excessively to the sun. This can also be the cause of damage by drying out the tips of locks and causing tenderness at the tips.

Tippy: A form of lock which indicates the fibers within the lock are not all close to the same length. The more “tippy” the lock the greater the disparity in the fiber length. Since fiber growth rate in the blanket is roughly inversely proportional to the diameter of the fiber, a lock with a wide variety of fiber lengths will also have a wide variety of fiber diameters, that is to say, an inconsistent lock.

Tenderness fiber: Weakness in the fiber. It may be general, which results in breaks at random places in the fibers in the lock under tension, or it may be stress tenderness, where all the fibers break in the same place along their length, indicating something happened at one point in the growth of the fleece to produce a break at that point.

Uniformity: Refers to the degree of consistency from one area to another within the fleece of fineness, staple length, character (crimp, staple configuration, hand) and density.

Yield: The amount of clean fiber obtained from a particular llama.