



ILR-SD Llama Fleece – Annualized Weight Concerns Addressed

Annualized weight evaluates the weight of the prime fleece. Because llamas are shorn at many different ages, annualized weight of the fleece is calculated to equal one year's fiber growth. The formula for annualized weight is the actual weight of the fleece in pounds divided by number of months of growth X 12 months. Points for this annualized weight are then assigned based upon a standardized chart, which considers the annualized weight, age of the llama at the time of shearing, and fleece type.

To address concerns regarding annualized weight, the ILR-SD fleece committee has assembled a list of quotes and their references related to inclusion of weight/density in fiber judging. Please see the following:

E. Shorn Fleece Judging Criteria

The following are the judging criteria used and recorded on the ALSA Fleece Show Score Card for Huacaya fleeces:

1. Style
 - a. Fineness: 10 points
 - b. Handle: 10 points
 - c. Brightness: 10 points
2. Uniformity:
 - a. Micron: 8 points
 - b. Length : 7 points
 - c. Color: 5 points
3. Character
 - a. Staple formation/Crimp: 10 points
 - b. Density of Staple: 5 points
4. Preparation – Lack of skirting impurities
 - a. Tensile Strength & Condition: 10 points
 - b. Guard hair: 5 points
5. Density – Annualized weight: 20 points

And the Score Card for Suri fleeces:

1. Style
 - a. Fineness: 10 points
 - b. Handle: 10 points
 - c. Luster: 15 points
2. Uniformity:
 - a. Micron: 8 points
 - b. Length : 7 points
 - c. Color: 5 points

3. Character
 - a. Lock formation/Uniformity & Independence: 10 points
 - b. Density of Lock: 5 points
4. Preparation – Lack of skirting impurities
 - a. Tensile Strength & Condition: 10 points
 - b. Guard hair: 5 points

5. Density – Annualized weight: 15 points

Posted 11/17/2009, ALSA Handbook,

<http://www.nationalalpaca.com/Websites/alpaca/Images/ALSA/SectionO.pdf>

“Knowledge of wool and wool production is vitally important to producers. People who constantly increase their knowledge of wool usually encounter fewer problems in marketing their product. They are better qualified to execute breeding and management programs through which they can improve both quality and production and, thereby, raise their net income. Livestock judging students with knowledge of wool and wool judging are usually more capable sheep judges.” . . . “THE MOST IMPORTANT FACTOR IN JUDGING WOOL IS ESTIMATING POUNDS OF CLEAN WOOL” Posted 11/17/2009, *WOOL JUDGING for BEGINNERS*,

<http://www.gfwsheep.com/wool.show.html>

“WOOL, QUANTITY AND COLOR: There should be a lot of wool. The quantity of wool can best be gauged by grabbing the wool and feel how well it fills the hand. The wool can be any color.” Posted 11/17/2009, *FUNDAMENTALS IN SHEEP JUDGING*, <http://www.livestocktrail.uiuc.edu/uploads/sheepnet/papers/FUNDAMENTALS%20IN%20SHEEP%20JUDGING.pdf>

“Quantitative genetics is a scientific method based on a mathematical approach that enables animal breeders to select and breed for improvement in desired productive traits. It is commonly referred to as *objective measurement* and is widely used throughout the industry. . . . The allocation for fleece commercial value is 200 points, making the total points 500.” Posted 11/17/2009, *Quantitative Genetics*, Australian Stud Merino Breeders, <http://www.merinos.com.au/merinos.asp?pageId=75>

Evaluations of fleece production are of major importance in the selection of breeding stock specifically for merino sheep in Australia. Parameters include both weight of clean fleece and weight of grease fleece. Posted 11/17/2009, Merino Superior Sires, <http://www.merinosuperiorsires.com.au/wool.php?sort=HCFW>

“Yield is extremely variable and is influenced by factor such as the breeding of the sheep, manner of handling amount of range cover, amount of wind, rate of stocking, soil type, type and amount of feed and other factors. Since yield is affected by so many factors, there is a wide spread in the yield of wools. A variation in yield affects the grease price; wool can have low yield and still be of excellent quality. Yield usually is estimated by visual examination. For accuracy, it is necessary to scour the wool and of properly

taken sample.” Posted 11/17/2009, *Judging Wool and Mohair*, Jack L. Groff and George Ahlschwede, The Texas A & M System, p. 4,
<http://www.uky.edu/Ag/AnimalSciences/4h/JudgingWoolandMohair.pdf>

In judging Mohair, “Condition or Yield..... 10
Mohair does not have the wide variation in yield that is found in wool.”

Note: This is 10 points out of 100. Posted 11/17/2009, *Judging Wool and Mohair*, Jack L. Groff and George Ahlschwede, The Texas A & M System, p. 10,
<http://www.uky.edu/Ag/AnimalSciences/4h/JudgingWoolandMohair.pdf>

Related to judging of Angora Goat Fleece: “The fleece should be dense and cover the entire body uniformly. . . The annual growth should not be less than ten inches. The density should be such that an average-sized Angora will shear from three to five pounds.” Curt, Seth Roberts, *The fundamentals of livestock judging*, p. 63. Posted 11/17/2009,
http://books.google.com/books?id=pzYuAAAAYAAJ&pg=PA366&lpg=PA366&dq=judging+sheep+wool&source=bl&ots=2eW2yIMZ5I&sig=YNwALE79Fv64kMkcWz4I4TTtwXE&hl=en&ei=BcoCS6K_A4vOsQOp2tW4BA&sa=X&oi=book_result&ct=result&resnum=9&ved=0CCIQ6AEwCA#v=onepage&q=judging%20sheep%20wool&f=false

Of further interest might be:

Production performance, repeatability and heritability estimates for live weight, fleece weight and fiber characteristics of alpacas in New Zealand, Posted 12/1/2009,
http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6TC5-40J7B2D-2&_user=10&_rdoc=1&_fmt=&_orig=search&_sort=d&_docanchor=&_view=c&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&md5=e48c620849171c3af136885d07cc5419

McGregor, Bruce. *The effect of age, fleece weight, fibre diameter, and live weight on the relative value of Australian alpaca fleeces*. AAA National Conference, Adelaide, South Australia, 19 - 20 August 2006. Posted 12/1/2009
http://www.elitealpacabreedingsystems.com/library/effect_on_value.pdf

Ercanbrack, S.K., *Repeatabilities of Annual Fleece and Body Records of Rams*, *Journal of Animal Science*, p. 839-847. <http://jas.fass.org/cgi/reprint/27/4/839.pdf>

Safley, Mike. *Alpaca Fiber from the Textile Point of View*, Posted 11/17/2009
<http://www.ideal-alpaca.com/article/alpaca-fiber-170.htm>

Summary of 2008 Fleece Measurements, Submitted to the IAC EPD Program
July 9, 2009 posted 11/17/2009 <http://ideal-alpaca.com/images/features/2008%20EPD%20Summary%20of%20Fleece%20Measurements%20.pdf>