

U.S. Wool Prices Hit Record High

by Julie Stepanek Shiflett, PhD

U.S. wool prices hit record highs in April. Wool prices in fleece states representing midwestern and eastern wools--were 35 percent higher year-on-year and 41 percent higher from two years ago. The industry hasn't seen prices this high since mid-2011. Market fundamentals of tight global supplies and strong demand suggest that wool prices will remain strong in the foreseeable future. A producer's knowledge of the average fiber diameter of his or her flock can be the most important factor in securing high returns from wool.

U.S. prices reflect Australian wool market trends. During the week of May 7, the AWEX (Australian Wool Exchange) EMI (Eastern Market Indicator) hit a record high of 1891 ac/clean kg, 23 percent higher year-on-year. This all-time high is equivalent to 1410 U.S. cents per kg, \$6.40 per lb. clean, or \$3.20 per lb. greasy assuming a clean yield of 50 percent.

A first step toward maximizing wool returns is objectively defining the quality of wool. A second step is on-farm wool preparation. Being able to describe the quality of wool with internationally-shared objective descriptors can improve the bargaining position of any grower. Wool sales can be a significant portion of any sheep growers' business with sales accounting for 10 to 50 percent of a sheep's annual revenue (ASI, 2015:1152).

A systematic, objective measurement of wool quality is unbiased, irrefutable and clearly communicates to any buyer wool's characteristics. Objective measurement of wool's fiber diameter is one such way to add an unbiased characterization to growers' wool, and maximize returns. According to Wool Innovation, Ltd.: "Fibre diameter is responsible for 70-80 percent of the greasy wool price over the long term," (Australian Wool Innovation Ltd., no date).

Defining Micron

The U.S. system of standardizing wool quality characteristics has evolved over time to better communicate wool's value to domestic and international buyers, and processors. The average fiber diameter of wool refers to wool thickness and is the most important fiber property determining wool's



end use and value (American Sheep Industry Association, 2015:1113).

The first wool grading system in the U.S. was the "American Blood System." When native coarse-wool sheep were crossed with fine-wool imported Merinos, the percentage of Merino in the cross defined the amount of fine wool.

The "American Blood System" was broad and replaced by the more precise English Worsted Yarn Count System (Spinning Count System). In this standard, grades referred to the number of hanks (each 560 yards) of yarn that could be spun from 1 lb. of wool top. The count system split wool into 14 grades, ranging from 80s (finer wool) to 36s (coarser wool). Historically, it was possible to produce 64 hanks of yarn from grade 64s wool, but increased wool processing productivity has rendered this parallel outdated (American Sheep Industry Association, 2015:1113).

Many U.S. wool growers today still use the grading system, and, in fact, the U.S. Department of Agriculture (USDA) still reports grades, but wool grades and standards have since evolved into the internationally-accepted micron system. The micron system splits all wool into categories defined by the scientifically-measured average fiber diameter

called a micrometer, or micron, for short. A micron is equal to 1/25,400 of an inch.

There are no strict standards to what defines fine, medium and coarse wool, but the lower the micron number, the finer the wool. Wool microns range from 17 (finest) to 40 (coarsest). In general, and with some overlap, fine wools produce a micron of 17 to 24, medium wools range from 30 to 21 micron, and coarse wool produces a micron reading of 36 and higher.

USDA Wool Prices

In general, wools out of Oregon, Washington, and some Californian wools are called fleece states wool by USDA and are used to proxy midwestern and eastern wools. These wools are typically a little heavier, and a little shorter relative to other western wools, called territory states wools. In Kentucky and neighboring states, wool ranges widely in micron, but perhaps most wool produces 25 to 30 microns.

The USDA, Agricultural Marketing Service (AMS) does not report wool prices out of eastern and midwestern U.S. due to confidentially concerns. As the U.S. wool industry contracts, and wool warehouses consolidate, it is challenging for AMS to

protect the identity of those entities reporting wool prices. As a consequence, fewer wool prices are reported by AMS to wool growers, exacerbating marketing risk for some.

The “National Wool Review” reported weekly by AMS can be accessed online at https://www.ams.usda.gov/mnreports/gl_ls850.txt.

Inverse Relationship between Micron and Price

There is an inverse relationship between micron and price. The finer the wool, the lower the micron reading and the higher the price. On average, one lower micron reading (moving from 26 to 25 micron, for example) brought a 6 percent price premium from 2015-2017 in the fleece states. In general, the price premium increases even more per micron for the finer 18 and 19 micron wools.

In April, the micron-price spread was more pronounced in the fleece states. For example, 22 micron averaged \$5.70 per lb. clean, a 9 percent price premium to 23 micron which averaged \$5.21 per lb. clean. Twenty-five micron saw \$4.26 per lb. clean, an 11 percent price premium to 26 micron averaging \$3.85 per lb. clean.

Sheep Breeds by Micron

Selecting sheep genetics is the most important factor in determining wool fiber diameter, and thus returns. The finer the wool, the higher price premium.

Sheep breeds can be classified by micron into three general categories of fine-wool, medium-wool, and coarse-wool breeds. The type of wool produced defines its end use and thus its value. Knitwear and underwear use the finest wools (about 19-21 microns) while men’s and women’s outerwear can use fine to medium-micron wools (up to about 26 micron). Sock manufacturing can use 21-26 microns.

According to the American Sheep Industry Association, fine-wool breeds include Merino and Rambouillet. In general, the heat and humidity of the Midwest and East may not be suited to fine-wool production, so the largest fine-wool flocks are typically found in the West. However, there are some fine-wool flocks east of the Mississippi. These flocks might be geared specifically to the niche, hand weaving

industry, and not marketed to the national and international commercial markets.

In Kentucky and neighboring states, many sheep producers run medium-wool breeds including Polypay, Shropshire, Dorset, and Hampshire. Micron production of wool can range from 25 to 33 micron. Many medium-wool breeds were originally cross bred for meat production, but profiting from wool doesn’t mean sacrificing meat production goals.

Border Leicester, Lincoln, and Romney are examples of coarse-wool breeds. Micron production can be 34 micron and coarser.

Testing Micron

Almost all wool sold on a greasy and clean basis in the U.S. today is subject to some level of objective measurement as it passes through marketing channels (ASI, 2015:1117). For less than \$10 per head, wool growers can send wool samples to the Yocom-McColl Testing Laboratory to receive a fiber diameter analysis.

Knowing wool micron can help set breeding and selection goals and monitor progress. The Yocom-McColl laboratory website states: “When utilized properly, objective fiber testing can be a powerful marketing and genetic selection tool. Objective measurement is an assessment made without the influence of personal feelings or prejudice,” (Yocom-McColl Testing Laboratory, No date).

Knowing Micron Facilitates Marketing
Defining the average micron of a flock can give a grower an advantage in marketing. There is a market for every wool clip, but efficient marketing is paramount to achieving top dollar. “Presale objective measurements are beneficial to both producers and buyers in assuring that wool is appropriately priced,” (ASI, 2015: 1117). The Yocom lab website added: “The determination of average fiber diameter (micron) helps identify the best end use for fiber and is information that wool mills require before making purchasing decisions.”

The midwestern and eastern wool marketing system in the U.S. is challenged to combine like wools from different growers in order to build significant volume to attract buyers. Many wool pools and warehouses incur a significant expense sorting wools into

uniform bales. If a wool producer can defend the quality of his or her wool, its value can be recognized in a marketing chain that rewards high-quality wools.

In the end, the Yocom-McColl lab summarized wool testing: “Information is power in the marketing world.”

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