

## **Montana Wool Laboratory**

For the past couple of years the Montana Wool Lab has been using the most state of the art technology available in the world of wool fiber diameter measurement, the Optical Fiber Diameter Analyzer 2000 (OFDA2000), to determine its usefulness in the field. During shearing this new technology has given us the ability to identify the fiber diameter of each individual fleece. Producers can use the OFDA2000 to help sort off the coarse end, determine what line the majority of the wool clip will be and in return offer more uniform shearing lines which lead to increased selling potential and work towards a positive reputation for American Wool.

### **How realistic is testing on site?**

In April, the Wool Lab was again fortunate to have the opportunity to take the equipment into the field and test Rambouillet fleeces for fiber diameter in order to set shearing lines. After speaking with the producer about his production goals, shearing lines were predetermined to make a fine line < 19.0 microns, and a coarser line > 19.1 microns. The OFDA2000 was set up at shearing, near the skirting tables. Each fleece was picked up from the shearing floor, skirted and then placed on a table whereby, numerous samples were taken from each fleece and tested on the OFDA2000. As each fleece was tested it was put into appropriate bins for each line, and then baled accordingly. Two wool technicians were able to keep up with the 6 shearers for an average of 1,000 sheep shorn a day.

Another on site option to producers is to use the OFDA2000 to sort sheep prior to shearing. This can be done by running random samples from each animal's wool and then ear tag or permanently mark the animal according to its fiber diameter. Animals can then be sorted off according to their designated fiber ID and fleeces can be easily placed into the appropriate shearing lines.

This type of cooperation between the Wool Lab and producers has allowed for a tighter wool clip and an opportunity for producers to know what range their wool is falling in and where improvements can be made.

### **What other options are available?**

The Montana Wool Lab is available to producers residing in Montana. It is located on the Montana State University Campus in Bozeman. The lab offers testing services for wool fiber diameter using OFDA100 in lab equipment as well as the previously mentioned OFDA2000 portable unit. As a part of the extension service, the lab offers training and education to help improve the quality of your wool clip. Informational yield evaluation of wool lots is available to producers to get a feel for where they need to improve or maintain their production goals. Certified core tests can be obtain from Yocom-McColl Testing Laboratories in Denver.

## **Beyond the basics...**

The Montana Wool Laboratory's purpose is to support MSU sheep extension, research and teaching efforts. In addition, research projects associated with objective measurement of wool are conducted. The Wool Lab works in cooperation with the Montana Wool Growers Association, the American Sheep Industry and the American Wool Council as well as collaborating with many scientists throughout the west concerning wool aspects of their research activities. Cooperative work is currently being conducted with the University of Nevada, The US Sheep Station at Dubois, Idaho and the University of Minnesota.

The Montana Wool Lab is actively involved in the MSU Ram Test. The state ram test is open to all producers within the state and compares breed against breed for animal gains and fleece quality.

The lab participates with Yocom-McColl Testing Laboratories in Denver, to core sample wool pool lots from around the state. The Wool Pool Consolidation effort combines like wool with like wool to increase quality and quantity while allowing the buyer to know what is being purchased and the producer to get a fair price.

The Wool Lab is an important part of the 4-H, FFA and Ag in the classroom programs. Wool judging classes are developed and sent out to extension personnel, agricultural programs for use in judging teams and teaching. Throughout the year the wool lab conducts tours and classes on wool selection and quality, the use of wool, end products and shearing improvement techniques.

At the university level, the Wool Lab is involved in the teaching of sheep related courses. Lectures and labs offer hands on experience in both a classroom environment and field training.

If you are interested in any opportunities available please feel free to call me at (406) 994-2100.