

Project Information:

Project Title: **Wool Research and Education**

Recipient Organization Name: **Texas A&M AgriLife Research**

Recipient's Project Contact

Name: **Paul De Laune**

Phone: **(940) 552-9941**

Email: **pbdelaune@ag.tamu.edu**

Project Report

Annual Report Type: **Final Report**

Reporting Period

Start Date: April 1, 2022

End Date: Aug 31,2024

Performance Narrative:

Activities Performed - The Bill Sims Wool and Mohair Research Laboratory has historically conducted laboratory testing for wool research and individual fleece testing for sheep farmers and ranchers. During this granting period, we have launched the commercial core testing service for wool warehousemen and wool brokers and become positioned as the primary source for core testing services in the United States.

Accomplishments

***Objective 1: Regain the US commercial wool testing for commerce.***

The laboratory began providing this service in May of 2022. These reports provide estimates of quality (fiber diameter), quantity (wool base), and contaminants (vegetable matter). We follow the IWTO standardized testing that includes; blending, scoured dry yield, alcohol extract matter, total alkali-insolubles, vegetable matter dissection, acid insoluble grease, ash, and laserscan fiber diameter. We worked closely with New Zealand Wool Testing Authority, Australian Wool Testing Authority, and the International

Wool Testing Organization to provide accurate and precise results for the US wool trade that is consistent with international testing.

During this 2-year granting period, the laboratory tested over 2600 core test reports.

***Objective 2: Test wool quality to be used in the development of EBVs***

We have established a 50% discounted rate for the OFDA 2000 to provide fiber diameter estimations of side samples submitted by sheep producers who use the National Sheep Improvement Program (NSIP) to generate Estimated Breeding Values (EBVs) on their seedstock. We have provided over 2,000 individual testing to over 100 sheep producers.

***Objective 3: Expand use of NIR for yield estimation***

In the summer 2024 we have tested over 150 fleeces both with near-infrared spectroscopy and through traditional wash/dry methods to determine lab-scoured yield. Using data from these samples, calibration equations are in the process of being developed with the goal of being able to accurately predict LSY with the NIR alone. Once calibrated, we will be able to offer this efficient service to customers at a reduced cost to determine core sample yields.

***Objective 4: Evaluate raw wool color (whiteness) in individual sheep samples***

Due to a retirement & resignation of two employees who were responsible for animal fiber research, this objective was not completed.

***Objective 5: Wool lab activities in outreach and education***

The wool lab continued to serve in outreach and education at several events to including;

1. Texas A&M AgriLife Shearing and Wool Classing School
2. San Angelo Stock Show's Ewe Lamb and Angora Futurity
3. Wool Sheep and Angora Sessions at Texas Sheep and Goat Expo
4. 2024 National Rambouillet Show and Sale

The wool lab also provides no cost testing of wool fleeces used by collegiate and 4H/FFA wool judging teams. The wool lab also provides fleece testing for centralized ram testing in North Dakota and Wyoming.

Estimate the Total Percentage (%) of work Completed on the Project.....

#	Accomplishment/Activity	Relevance to Objective
	Opened and operated commercial core testing laboratory service 100% completed	Top priority of the lab and trade
	Create incentivized wool testing for improve genetic predictor of wool quality 100% completed	Ongoing effort to support education of new producers and youth
	Provided outreach and education to the public about wool quality and wool testing 100% completed	Ongoing effort to support education of new producers and youth

### Challenges and Developments

#	Challenge or Development	Corrective Action or Project Change
	Retirement/Resignation of Wool Research Staff and original Project PI	Objective 4 was not able to be completed as planned.

### Outcome and Indicator Results to Date

#	Outcome/Indicator	Quantifiable Results
	Commercial Core Testing	2,692 commercial core tests from May 2022 to August 2024
	Seedstock Wool Quality Testing	~2,000 side samples tested for fiber quality

### Upcoming Activities

#	Activities	Anticipated Completion
	Despite the grant funding period ending, data collected from this project will be used to develop a NIR test for wool yield.	2025

--	--	--

**Project Expenditures to Date**

#	Cost	Amount approved	Federal Expenditures
	Commercial Core Tests	\$20,000	\$20,000
	NSIP Breeder Tests	\$5,000	\$5,000
	Student/Technician Labor	\$3,525	\$3,525