

Fine Wool Consortium

January 25th, 2019

American Sheep Industry Convention

New Orleans, Louisiana



Fine Wool Consortium

- August 2016
 - Sheep/wool producers all gathered in Dubois, ID to determine the possible framework for developing a system for adding value to the American wool clip
 - Determination progress for an increase of a premium US wool product and a willingness of the group to commit to their individual portion was the main focus of the meeting
 - The goal from this meeting was to cement the goals of the group and provide some framework and structure for the moving forward



Fine Wool Consortium

- Some of the original working members of the Fine Wool Consortium include a range of commercial and seedstock producers across the US
- These members have helped spearhead the direction of the group, but this group is not meant to be the only individuals to benefit from the tools created; others with similar vision would be welcomed to be part of the groups' discussion
- Furthermore, this project would help disseminate genetics for profitability raised by NSIP seedstock producers throughout the entire industry.

Reid Redden, TX – Sheep and Goat Specialist at Texas A&M AgriLife Extension, NSIP Chairman
Matt Benz, KS – NSIP Rambouillet liaison, long-time Rambouillet breeder
John Helle, MT – Long-time fine wool commercial breeder
Ben Lehfeldt, MT – Long-time Rambouillet breeder
Paul and John Erk, SD – Long-time Rambouillet breeders
Rick Powers, NV/SC – Owner of Rafter 7 Merino/Rambouillet
Tom Boyer, UT – NSIP Vice Chairman, Long-time Rambouillet breeder
Wade Kopren, SD – Rambouillet breeder
Beau Chapman, SD – Rambouillet breeder
John Jewell, CO – Merino breeder
Ketterling Family, WY – Rambouillet breeder

Fine Wool Consortium

Goals:

- Grow the U.S. Sheep flock by improving fine wool sheep productivity and fleece quality by:
 - Increasing utilization of NSIP
 - Facilitate distribution of genetics among group for genetic linkages
 - Support the need for technical quantitative genetic expertise and research
- To facilitate growth of the U.S. commercial sheep flock, develop a means to disseminate genetics for productivity improvement and profitability
- Continued long-term collaboration and information exchange among fine wool sheep breeders



Precise Goals

Precise Goals:

1. Develop organizational structure and statement of principle

Statement of Principle

- Group of fine wool sheep seed stock producers
 - Enrolled in and actively using NSIP
 - Dedicated towards the improvement of the profitability of the US sheep industry by using NSIP records through subjective and objective measurements
 - Production of low maintenance sheep that are adaptable to all climates and management systems.



Precise Goals

2. Develop a structure to lead to a genetically linked database as quickly as possible.

Action Item:

- Organized a breeding scheme to link rams utilizing John Helle's flock. Grant will include the procedure for enhancing genetic linkage between the members

- Rams will be sampled from all members to be raised in a common contemporary group of 2017 born lambs. We will collaborate with NSIP and MSU for technical guidance on structure.



Precise Goals

- 3. Develop a system to analyze the data to make an educated suggestion for developing a new index to progress the group.
 - Proposed another Let's Grow grant project to facilitate the development of a wool index. Ben Lehfeltdt will coordinate and submit the grant on behalf of the FWC with collaboration from other entities such as universities, USSES...

Wool Index Questions

- What does Western Range Index do well?
 - What does the existing Carcass index do well?
 - Does single trait selection along with the WRI allow for ideal selection?
-
- Could a dedicated Wool Index complement the Western Range Index?

NSIP Wool Index

- NSIP indexes do not place a sufficient amount of emphasis on wool production
- Development within group to prioritize measurables
 - Fiber diameter
 - Staple length
 - Fleece weight
 - Etc.



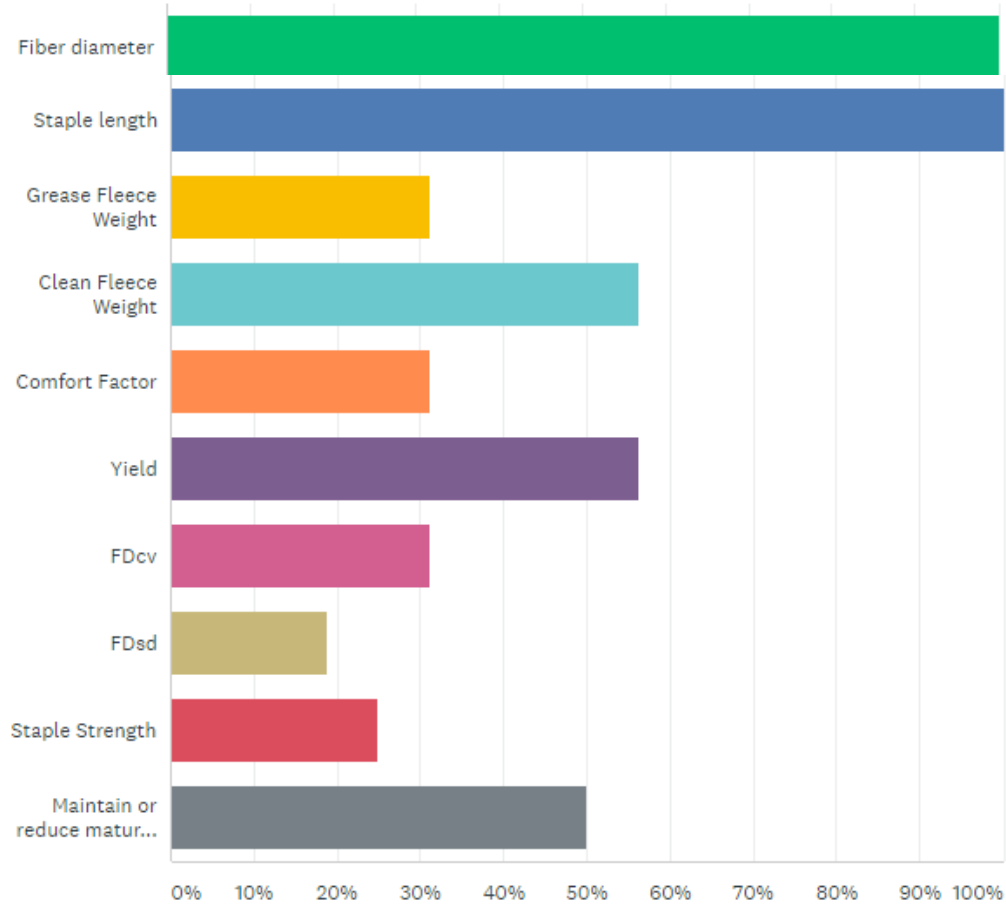
Design of an Index

1. Define the breeding objectives (traits to improve)
2. Define the traits to measure
 - Wool traits, for the most part, are the same for step 1 and step 2
 - Focus of the Fine Wool Consortium to this point
3. Determine relationships of important traits
4. Understand and define the economic importance and drivers

Q1

Rank your top five priorities the index should address

Answered: 16 Skipped: 0



Survey Results

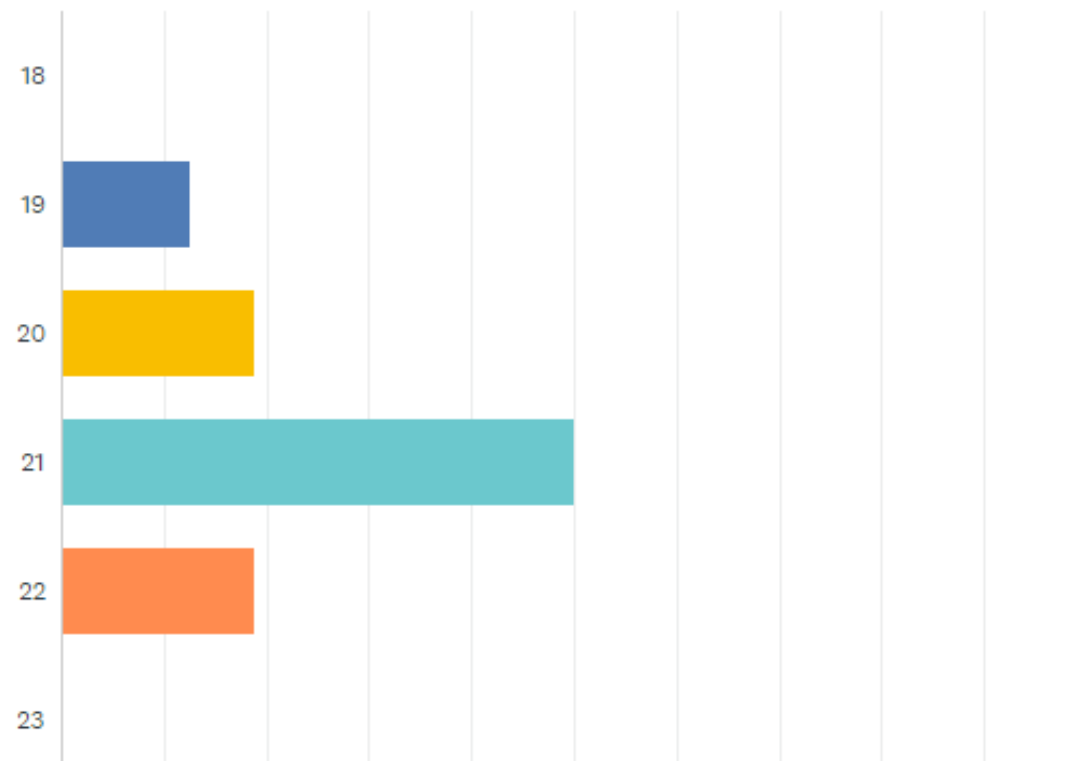


Q2



What is the desired target fiber diameter, in microns? This will be indicated in the formula by difference from 0 on the EBV.

Answered: 16 Skipped: 0

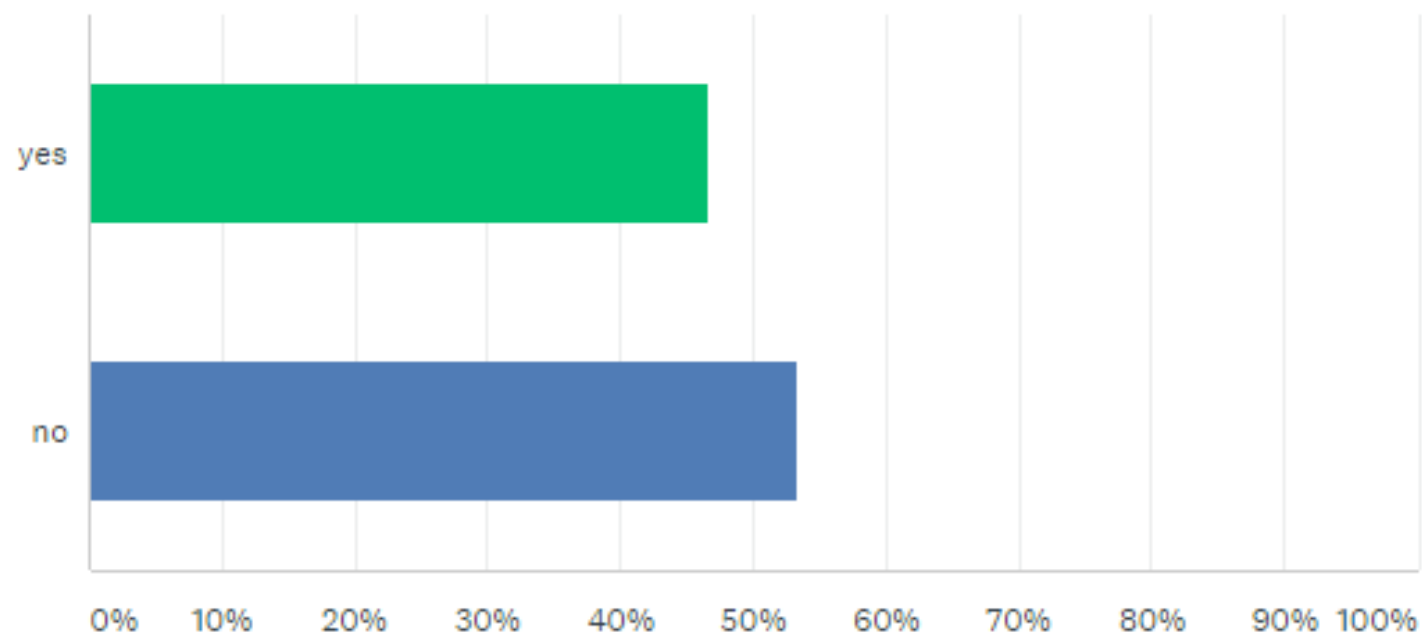


Q3



Should the index discriminate against fiber diameter that falls below the target?

Answered: 15 Skipped: 1

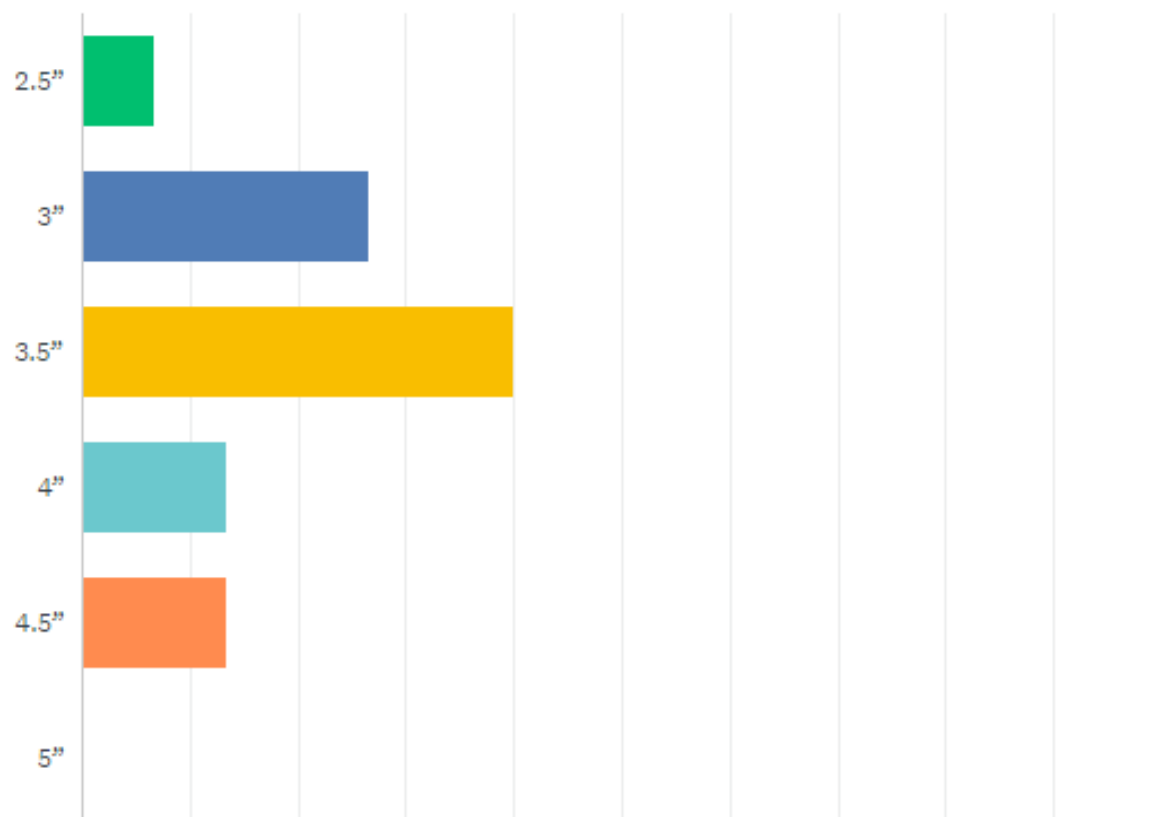


Q4



What is the desired target staple length? This will be indicated in the formula by difference from 0 on the EBV.

Answered: 15 Skipped: 1

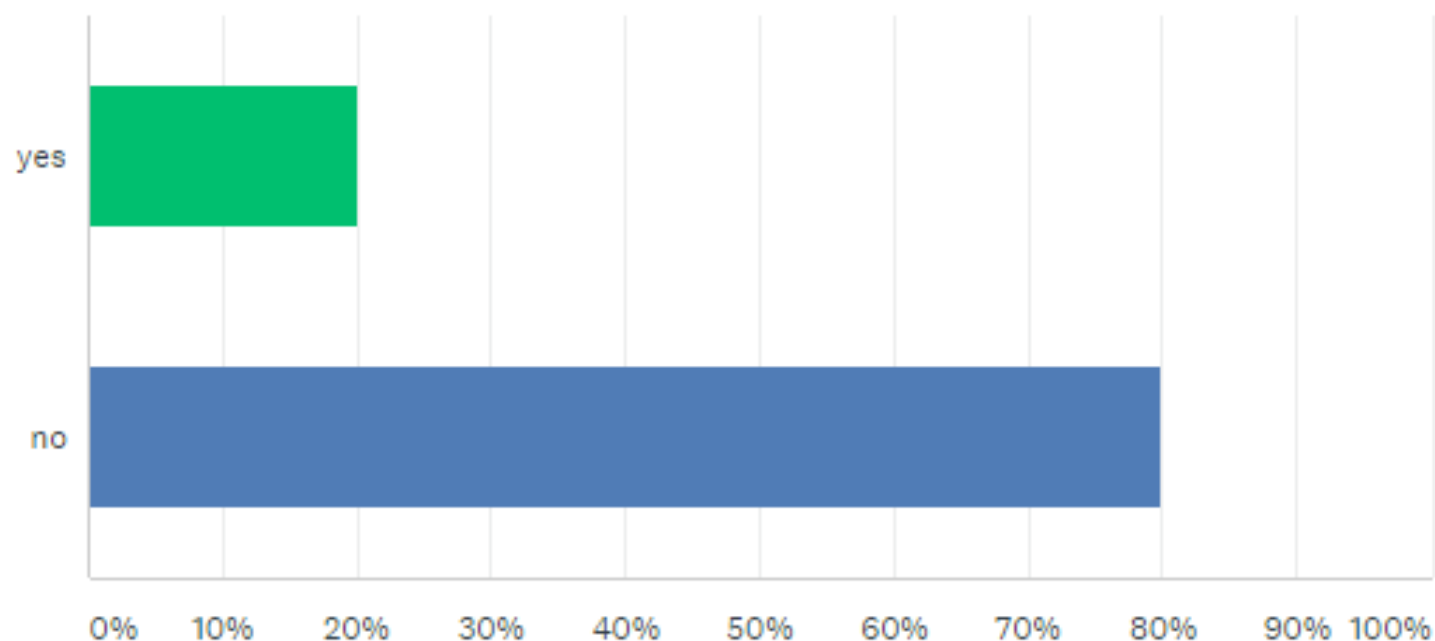


Q5



Should the index discriminate if the staple length is above the target?

Answered: 15 Skipped: 1



Kansas State University Graduate Student

- Dr. Alison Crane
 - Sheep Extension Specialist
- Tamra Kott
 - Background
 - Texas A&M University
 - Animal Science major
 - Sheep Experience
 - Introduction



Timeline of Project

June 15, 2019- Tamra Kott to arrive at KSU- Manhattan

- Month of June will be dedicated to Tamra's orientation and completion of training and paperwork.
- Tamra- enter NSIP data from KSU sheep and goats; Assist with Fall breeding program
- Fine wool consortium advisory group
- Coordination with United States Sheep Experiment Station - Dubouis, ID



Success of Wool Index Project

- **Dependent upon:**

1. Strong genetics expertise availability
2. Small advisory group available to Dr. Alison Crane and Tamra
 - Fine Wool Consortium Representative
 - Technical expertise for index development
 - NSIP and Sheep Genetics coordination expert
 - USSES coordination and historical data set
 - Sheep geneticist to help with economic parameters
3. Budget

Wool Index Development Milestones

- January 2020 ASI Convention update
 - Fine Wool Consortium
 - Let's Grow
- January 2021 index implementation timeline
 - Sheep Genetics
 - Producer demonstrations
- Development of wool index usage demonstration on webinar series



Lot: 8033 Rambouillet

350 Yearling Ewes Base Wt 130
Slide: 50¢ under 130

Delivery Location:

Breed Type: Ranch raised Rambouillet Yearling Ewes

Breed of Ewe:

Breed of Ram:

Frame: Medium Large

Horns:

Flesh: Medium

Castrated:

Est Wt Var: Fairly Even (10-15% +/-)

Delivery Date: 09/01 to 09/30

Precon Program:

Implants: ALL NATURAL

Vaccinations:

Feeding Program: Pasture

Wt. Conditions: Overnight stand, load on Buyers Truck haul 20 mi, weighed on the Truck straight.

Comments: Have been raising replacement sheep for 5 generations. Reputation MT sheep ranch. 350 ewes sorted from 450 hd. Ewes are herded and with guard dogs. 20 micron wool.

Rep:

ALL NATURAL



Marketing tool for both Seedstock and Commercial Producers

Example symbols which may be used to recognize animals selected using EBVs:



Thank you to our collaborators

- Let's Grow
- Dr. Dave Notter
- Dr. Tom Murphy
- Dr. Ron Lewis
- Rusty Burgett
- Dr. Alison Crane
- Dr. Reid Redden

