

SDSU Extension “Let’s Grow” Grant # 1 Final Report

Project Title: SD Post Weaning Lamb Performance Program

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Summary of Activities:

Twelve cooperating sheep producers who have been active participants in the successful sheepSD program and/or the “Growing South Dakota Sheep Producers” learning group will place 20-60 head of their home raised feeder lambs into the “Post Weaning Lamb Performance Program”. Participants retained ownership of their lambs through the entire activity until they were delivered for slaughter and sold to the cooperating packer: Mountain States Lamb Cooperative in Greeley, Co.

The program activities dovetailed into the objectives set by ASI’s Lamb Industry Roadmap – Productivity Improvement Committee by establishing an individual producer’s flock baseline for post weaning lamb performance in the feedlot phase and the resulting carcass qualities post-harvest. However, an integral component of the activity was to include the “Electronic Instrument Grading” technology and the subsequent Value Based Pricing (VBP) was unavailable at the time of slaughter. Therefore, we utilized personnel from Colorado State University’s Animal Science Dept. to conduct Carcass Data Collection (Carcass data files as well as feedlot performance are included in this submission). Disappointedly some of the carcass data was unusable. However, the settlement sheets provided by Mountain States Lamb Cooperative provided some qualitative and quantitative data for the producer to identify how their lamb’s genetics performed in a specific feeding program representative of the lamb feeding industry. Additionally, producers used this information to assess and evaluate how their management and genetic selection decisions impacted the feedlot performance and carcass merit.

This project, “SD Post Weaning Lamb Performance Program” targeted 3 primary areas: 1. Lamb growth performance and efficiency 2. Genetic merit and 3. Producer education. The participating sheep producers provided leadership and assisted in hosting educational programming events in their local communities, regions and state. These programs presented the performance results of lambs data submitted, an economic assessment, and examination of the benefits of genetic selection tools, such as EBV’s, to enhance flock profitability.

The completion of this project has set the stages for the Let’s Grow Grant “phase 2” proposal. Producers identified the flock management and productivity areas that contributed to improved post-weaning feedlot performance and superior carcass characteristics. By adding management skills and the use of genetic selection technology (NSIP-EBVs) participants are working toward achieving their flock goals. Some producers are keying on higher levels of productivity through improved management and/or others are using EBVs to select sires.

Objectives:

1. Employ management practices during weaning, transport and finishing period to reduce stress and “shrink loss”.
 - a. An understanding of “shrink” was conducted in this activity. Producers weighed lambs as a group “at home” or their closest scale facility. Lambs, as a group, were weighed again upon arrival at the cooperating feedlot. A shrink for their lambs was determined. Results for each group are as follows:

Group 1 – Average Shrink – 4.75 lbs	High – 5 lbs	Low	4.5 lbs
Group 2 – Average Shrink – 2.47 lbs	High – 5.75 lbs	Low	1.0 lb

b. As part of the educational programming a presentation and discussion of managing “shrink” was included.

2. Understand the effects of lamb feeding practices on feed cost of gain and carcass merit.

a. Lamb feedlot performance, carcass value vs. expense was as follows:

Group 1 Lamb – 100 hd Fed 83 Days – Avg Daily Gain .76 lbs

Feed \$.66/hd/day Yardage \$.04/hd/day

\$.70/hd/day x 83 days = \$58.10

* Cost/lb of Gain - \$58.1/63lbs total gain/lamb avg = \$.92/lb –cost of gain

\$224/Carcass average net price

- \$58.10 feeding expenses
- \$12.50/hd transportation
- \$1.83 interest

= \$151.57/hd net price received.

b. **Group 2 Lambs** – 200 hd Fed 97 Days – Avg Daily Gain .54 lbs/hd/day – FOOT SCALD.

Feed \$.66/hd/day Yardage \$.04/hd/day

\$.70/hd/day x 97 days = \$67.90/hd feeding expenses-

* Cost/lb of Gain - \$67.90/52.70lbs = **\$1.29/lb – cost of gain**

\$210/Carcass average net price

- \$67.90 feeding expenses
- \$12.50/hd transportation
- \$ 2.14 interest

= \$127.46/hd net price received.

3. Interpret carcass data and calculate economic return based on carcass merit.

a. See above calculations using an average of all lamb settlement sheets. Each producer was kept anonymous.

b. **Group 1** Carcass Grading Results:

Group 1 comprised of 97 head

Yield	%	Weight Categories	%
1	0%	55lbs & down	1%
2	7%	55-65lbs	13%
3	44%	65-75lbs	44%
4	45%	75-85lbs	35%
5	4%	85lbs & up	7%
No Roll	0		0

c. **Group 2** Carcass Grading Results:

Group 2 – comprised of 197 head

Yield	%	Weight Categories	%
1	5%	55lbs & down	5%
2	45%	55-65lbs	25%
3	41%	65-75lbs	49%
4	6%	75-85lbs	15%
5	0%	85lbs & up	3%
No Roll	2%		

4. Utilize present and future technology (ie. electronic grading) to integrate a grid system that establishes a carcass pricing scale.
 - a. This objective was an important part toward achieving our goals. Disappointedly it was not available.
5. Utilize NSIP-EBVs and performance records to select breeding animals for flock genetic improvement.
 - a. Programming and education provided at area ram sales, namely the Newell Ram Sale and the Montana Ram Sale. EBV data was made available to participants to aide in selection of Rams
6. Use risk management tools and opportunities to provide consistency and profitable returns, ie...cooperative feeding & selling pools, Lamb-Livestock Risk Protection, and commodity contracts.
 - a. Brad Anderson, lamb procurer for Mountain States Lamb Cooperative presented at 2 SDPWLP programs in April 2016. He explained how marketing through a lamb cooperative worked.
 - b. Sadly, the LRP-Lamb is unavailable at this time due to lack of market reporting information.
7. Possess a clear understanding and commitment to providing a product that consumer's desire.
 - a. Participating producers have participated in American Lamb Board promotions, National Lamb Feeders Leadership School, SDSU hosted lamb fabrication activities.
8. Utilize the leadership from the participants involved to develop learning communities and mentor relationships in South Dakota.
 - a. Participants are in discussion of forming a "producer group" to consider the option of feeding and delivering lambs directly to MSR or Superior.
 - b. At this point, a very good feeder lamb market has lessened interest in retaining ownership to finish and slaughter.
9. Ultimately, become active in industry leadership and promote consumption of quality American Lamb.
 - a. Three of the program participants are newly elected directors of the SD Sheep Growers Association and a providing leadership and energy to the membership's activities.

The support of the SD Post Weaning Lamb Performance Program has educated and encouraged sheep producers to the development of lambs that are not only economically viable, but considers quality aspects needed to increase consumer demand. These efforts support the Sheep Industry Roadmap Productivity Committee focus on use of NSIP-EBVs, development of producer marketing groups and establishing highly valued educational programs that can be implemented nationwide.

Evaluation

1. **How do you propose to evaluate the effectiveness of the program?**
 - a. The number of producers willing to actively participate in the program.
We were able to solicit 12 younger/newer producers to participate in this educational program.
 - b. The quality and value of the data collected.
The feedlot performance data was valuable in group 1 lambs, group 2 lambs experience foot scald which provided reality to feeding issues, but interfered with an accurate reflection of those lambs potential.
 - c. The percent of producers who set production and performance goals based on education and data.
100% of the participating producers had "take away" points in management and genetic selection that each are using to improve their flock's productivity.
 - d. The percent of producers who utilize performance and NSIP-EBV information to select breeding stock.
Participants were educated on the use and application of EBV's, but not all had the opportunity to utilize EBV's at Ram Sales to purchase improved genetics.

- e. Development of cooperative feeding and marketing groups.
Considered by some of the participants for future use if feeder lamb prices drop below a certain price, but at this time the majority of these producers continue to end their involvement in the sheep industry pipeline at the feeder lamb level
- f. The percent of producers who adopt or strengthen management practices identified to increase producer profitability and lamb quality. 100% of the participants have indicated implementation of new management practices and improved performance and attainment of some flock productivity goals.
- g. The percent of producers who become actively involved industry leadership and promotion.
Of the 12 participants in the program, 9 of them are actively participating with sheep industry leadership activities either on the state or national level.

At this time, we have completed “Phase 1” of the SD Post Weaning Lamb Performance Program.

We are remitting back to the Let’s Grow Committee any of the unused funds during this granting period. Fortunately, a number of the expenses budgeted were supported by the industry stakeholders themselves.

A Big THANK YOU goes out to the following entities and people for enabling such a positive education experience.

Grant Sponsor – American Sheep Industry Association’s “Let’s Grow thru Change” Committee

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Brad Anderson – Lamb Procurer – Mountain States Lamb Cooperative

Karissa Maneotis – Carcass Data Collection – Colorado State University