

Fodder System for Wool Producing Small Ruminants

Final Report for FNC14-981

Project Type: Farmer/Rancher

Funds awarded in 2014: \$7,481.00

Projected End Date: 12/31/2015

Region: North Central

State: Missouri

Project Coordinator:

[Brian Willsey](#)

Rockin' W Alpaca Ranch

Project Information

Summary:

Project Goals

Our goals at the beginning of this project were to reduce overall feed costs, reduce pressure on pastures, reduce worming expenses, increase lamb production and reduce or maintain fineness of wool for the animals we produce.

We found that we could in fact achieve all of the above goals.

- Our animals maintained their fineness (micron) while on higher-protein feed.
- The higher protein feed allowed us to increase the health of underweight animals quickly as well as increased daily weight gain on lambs.
- We were able to increase our flock size while keeping the same land usage.
- We significantly reduced our feed costs.
- We reduced our cost and dependence on chemical wormers.

Introduction:

Producers raising small ruminants for wool face challenges: increases in land costs and feed costs, reductions in prices for raw wool, inconsistent weather patterns and a reduction of effective wormers. Fodder production while utilizing dry lot for the majority of the year may help to reduce overall costs and overcome these challenges.

Currently, our ranch has 6 AC available for sheep production. The typical land use for sheep is 3-5 per AC, allowing a maximum of 30 sheep. However, realistically with aggressive pasture management and rotation, the real number is closer to 18. Since we seek to increase sheep production, our goal is to utilize fodder production to allow higher numbers of sheep / AC.

- [paula](#)

Project Objectives:

2015 Performance

Increase lamb production:

2014 9 ewes produced 11 lambs

2015 11 ewes produced 20 lambs

Due to increased lamb production, we marketed live lambs and sold the majority of our 2015 lamb production.

2015 we reduced our feed cost by \$76 / head

2015 we reduced our chemical worming by 75%, saving about \$300.00

2015 we applied minimal spring seeding for pastures, saving \$1000.00

2014 micron compared to 2015 micron had no significant changes (see attached spreadsheet). We did not have a reduction in micron count for alpacas on fodder as we had hoped. However we did notice an unexpected benefit - the demeanor of our animals were calmer than 2014.

- [alpaca micron comparison](#)
- [alpaca on fodder](#)
- [2015 lambs](#)

Cooperators

- [Theresa Hoon](#)

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Research

Materials and methods:

Fodder production

2015 fodder production was based on what we learned from 2014. We put the shade cloth over the greenhouse as soon as the average daily inside temperatures approached 80 degrees to maintain growth. We pulled off of barley at the end of May, when the inside temperatures held at over 85 degrees and the germination rates dropped. We then switched over to haybeans. Unfortunately, haybeans were a challenge to source this year. We opted for a bush soybean variety that had increased foliage. However, we found that it did not perform as well as haybeans did. Our goal for next year is to aggressively source and purchase 1 ton of haybeans. We will also need to source barley again, as we are down to the last 2

tons.

Yield remained constant on the barley (500%) and haybeans (600%). The bush soybean yielded lower at 400%.

We switched back to barley Sep 7 at 5lbs per tray, then stepped up production to 6lb per tray Dec 15 and will continue thru spring 2016.

Research results and discussion:

What we've learned

Fodder production requires management and labor. One must manage what is harvested, balanced by what is added to production, and inside temperatures have a significant impact on time to harvest, which can play havoc with not only what is available on a daily basis to feed, but also how much to plant.

For an operation that is diversifying the types of livestock on their property, a fodder system may allow minimal land use for the new stock, while providing adequate feed for maximized nutrition. We have found increased twinning rates and faster growth rates in our lamb operation. We did not see any negative impact on micron due to increased protein levels in the feed. We were able to increase our flock while keeping them on the same acreage, while maintaining wool fineness. We value-add all of the wool produced on our ranch.

Our challenge is that we have no family labor to utilize, so all of the daily fodder activities are hired out. This needs to be taken into consideration when calculating ROI for a system. Our average cost per year is approximately \$1800.00 for labor to run the system - it takes about 1.5 hours / day to keep it running, 7 days / week, 52 weeks / year. If an operation chose to take the system out of production during the peak summer months, labor costs could be reduced by \$450 /year.

If an operation is considering fodder production, I would highly recommend seeing an operation in person and discussing with someone who has run a system in livestock production. They have the insight to assist in the decisions necessary to spend the least amount to achieve the desired results.

Participation Summary

Educational & Outreach Activities

PARTICIPATION SUMMARY:

Education/outreach description:

Tours available

Our plan is to continue fodder production throughout 2016. Tours of the system are welcome with advanced notice. We will continue to provide information to anyone interested, as long as we are in production.

- [maremma](#)

Information Products

- [Fodder production blog](#)

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