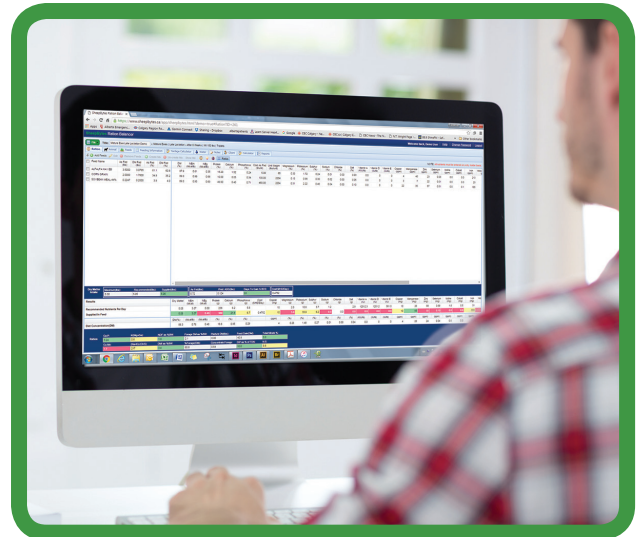


# Sheep Profits — Managing what you can measure

Dr. Susan Markus, Alberta Agriculture and Forestry

Meaningful management decisions are made on the components of a business that can be measured. Tracking feed inventories and feed cost is very important. Feed is expensive. It represents between 40% and 60% of the costs of production to produce market lambs. SheepBytes ration balancer software was developed to assist lamb producers manage flock nutrition and feed costs.



## Research, on-going review and user feedback help ensure accuracy

Recent Alberta research compared the actual dry matter intake of individual feeder ram lambs to the predicted dry matter intake from the SheepBytes computer ration balancing program. The findings show that SheepBytes over-predicts the feed intake of feeder lambs by about 15%.

The research used intact feeder ram lambs. The lambs were Rideau cross and Suffolk, Dorset and Canadian Arcott cross. The lambs were fed barley-based finishing rations over the summers of 2014 and 2015. The lambs entered the feedlots at an average of 20 kg body weight and were sent for slaughter when they reached an average live weight of 52 kg. Daily feed intake and average daily gain were monitored on every lamb.

Over an average six week period on feed and based on live weights, lamb type and weather conditions, SheepBytes predicted these lambs would consume 2.03 kg dry matter (DM) per head per day or approximately 2.4 kg as-fed per head per day. The GrowSafe computerized feed intake bunk management system was used to measure individual lamb's daily feed consumption. It was found that the lambs actually consumed an average of 1.68 kg DM/head/day or 1.98 kg as-fed/head/day.



## Economic impact

The ration estimated using SheepBytes cost \$0.88/head/day. Based on the lambs' actual dry matter intake the ration should have cost \$0.73/head/day. In this situation there was a potential for saving \$6.30/lamb over the feeding period just by fine-tuning dry matter intake. Over-estimating feed intake can be costly. An additional cost that impacts many lamb feeding operations is waste. While not part of this research, monitoring and working to reduce feed waste is critical for profitability.

## Summary


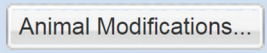
This is only one research project using feeder ram lambs from two flocks, meaning changes to the SheepBytes program may not reflect how your flock, or other flocks, perform. However, if SheepBytes users suspect feeder animal intakes are on the high side you can make your own changes. SheepBytes has a feature that enables users to modify feed components. If, based on your own feeds and flock, you are concerned about the estimations of intake you can reduce the predicted intake generated on the output screen by 10%. Use SheepBytes ration balancing program as a guideline for managing flock nutrition. Be sure to get professional advice if you have questions on flock nutrition or on rations.

## How to modify your outputs

# Sheep Bytes.ca

## Ration Balancer

When building rations for feeder lambs,

- ▶ under the *Animal* menu tab, 
- ▶ select the *Animal Modifications*. 

Change both the **Max and Pred DMI (%)** boxes (first ones on the top left) from 100 to 90. This change will reduce the maximum and predicted dry matter intake (DMI) by 10%. That will take into account the over-estimated level of dry matter (DM) suspected with feeder lambs being fed high concentrate grain based rations.

Animal Modifications	
Resulting animal requirements can be modified	
Max DMI(%):	Calcium(%):
100	100
Pred DMI(%):	Phosphorus(%):
100	100

**SheepBytes is a tool for today's lamb producers to more precisely manage flock nutrition and feed costs.**

Growing Forward 2



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