

Precision Flock Management

Enhancing Ewe Productivity



Ewe productivity is a key factor in flock profitability. Improving the number of marketable lambs per ewe is an effective way to improve flock profits. Knowing the “root cause” of low ewe productivity enables flock managers to make decisions on improving flock performance and profitability targets.

Precision Flock Management

Precision Flock Management (PFM) is a systematic management approach for getting the most from your flock.

The cost of production survey by the LTP project identified six critical management areas that significantly affect flock profitability.

- Ewe productivity – the number of marketable lambs weaned per ewe exposed.
- Feed costs – total value of feed consumed by the flock per lamb marketed.
- Labour – number of human hours per lamb marketed.
- Total operation costs – per lamb marketed.
- Income – revenue generated by the sheep enterprise.
- Investment – dollars invested per lamb marketed.



THagedorn, AARD

Best Practices Goal:

Increase the number of marketable lambs per ewe

Improving Lamb Survival

Increasing the number of lambs born and reducing neonatal and pre-weaning death loss are keys to improving flock productivity.

There are well researched reasons lambs die at birth. What you do as a flock manager has an impact. Key factors in neonatal lamb death loss include:

- **Weak at birth:** low birth weight (less than 8 lbs/3.5 kg); abortion disease in ewes; ewe nutrition; large litter size; weather.
- **Starvation:** chilled lambs unable to nurse; lack of colostrum or milk due to poor ewe nutrition during pregnancy; inadequate lactation rations; poor selection for milking ability, udder or teat conformation; poor records on lamb weaning weights; health issues like mastitis, OPP; lambs separated from mother, other lambs stealing milk.
- **Disease:** poor ewe nutrition; poor ewe health management (vaccination, parasite control); dirty environment, crowding, stress; exposure to other sick animals; improper diagnosis, treatment or poor response to treatment.
- **Poor mothering:** low body condition score; poor nutrition; weak maternal genetics; health issues; interference during lambing (human, dog, other sheep).
- **Inadequate facilities:** ewes and lambs separated; accidents, crushing, crowding, trampling.
- **Unknown cause:** talk to your vet about lamb deaths and where to improve flock nutrition and health management focusing on improving lamb survival.

Profitable Flock Performance

Flock managers who are looking to improve the sustainable profitability of their lamb business need to address two key factors:

- Producing enough marketable lambs.
- Managing the cost of producing marketable lambs.

New management tools have been developed to assist producers improve flock performance. RFID tag technology systems and applications such as the Flock Snapshot financial analysis application and SheepBytes ration balancer system make flock management decisions easier and faster.

Using new flock data management software assists in collecting accurate information. Its strength is that it also provides rapid analysis and reports useful in selecting the ewes that pay the bills. Paper lambing records do work, however with larger flocks, paper records are difficult to use and make data analysis difficult to impossible. With good software flock managers can track exactly how many lambs are born, how many survive to weaning, are profitable at sale and which of your ewes are top performing and which need to be culled.

Analyzing production records allows you to clearly identify the number of lambs you have to market and helps focus on the reasons for not having enough marketable lambs. Being able to analyze your financial records allows you to determine the exact cost of producing those lambs.

Know what flock management terms mean

Calendar year: January 1 to December 31.

Production year: pre-breeding one year to pre-breeding the next.

Ewes exposed: total number of female sheep put to the ram in any breeding period and expected to lamb in five months in that calendar year.

Total ewes lambing: All the ewes that gave birth, regardless of whether the lambs lived, were aborted, stillborn or died at birth.

Total lambs born: Every lamb born, regardless of whether it lived, died, or was stillborn.

Lambing percentage: Total lambs born divided by ewes exposed X 100.

Ewes not lambed: Every ewe that did not lamb during the calendar year.

Pregnancy rate: Total ewes lambing divided by ewes exposed X 100.

Lambs died: Every lamb that was born and died in the calendar year.

Lamb mortality: Lambs that died divided by total lambs born X 100.

Marketable lambs: Lambs alive and available for sale, for breeding, slaughter and/or retained as breeding stock.

Ewe productivity: Marketable lambs divided by ewes exposed X 100.



Setting Improvement Targets

Every successful business adapts to changing conditions and 'learns' as it grows. By constantly setting incremental improvement goals you will be able to increase your production and profitability.

- Improve record keeping so you know exactly which ewes produce lambs that survive to market and generate flock income.
- Purchase and use a good flock management software program that works automatically with your RFID tag reader. Choose software that will generate timely reports to aid management decisions.

- RFID tags are now sold routinely in Alberta. Use them to tag every ewe, lamb and ram. Consider purchasing a compatible RFID tag reader for simpler, accurate tag reading and data recording.
- Set next year's target to reduce this year's lamb deaths by 5% or 10%. Attainable goals will keep you growing.
- Not all ewes do a good job of raising lambs for market. Good flock data management software can identify the bottom ewes in your flock. Get rid of the 'bottom performers' quickly to improve flock performance.



- **Target reduced death loss for more lambs to market.**
- **Target reduced open ewes for reduced feed costs.**
- **Target identifying 'top-performing' ewes.**
- **Target select from the best, ship the rest.**

Getting It Going

Have a plan, keep it simple, have deadlines, write it down. Here is an example.

SHEEPSIDE FARMS - LAMB DEATH REDUCTION PLAN		
What are you going to do?	How are you going to do it?	When to do?
Improve flock records	Record and post key dates (rams in / rams out; first lamb due, etc.)	2012
	Uniquely identify every animal; record individual performance	2012
	Find and learn how to use flock management software	2012
	Weigh lambs and record all lamb and ewe ear tags at weaning	2013
Improve flock nutrition	Sample and test feeds; use SheepBytes to balance rations	September 2013
	Monitor rations by body condition scoring or weighing regularly	Monthly
	Improve feeders, feed storage and delivery systems	Summer 2013
Improve flock health	Put vet flock health protocols (vaccinations, parasites) in calendar	December 2012
Improve lamb survival	Shear ewes before lambing	Nov 2013
	Sort and feed ewes according to age, monitor body condition	Monthly
	Build ten more lambing jugs	Fall 2012
	Hire extra labour for lambing season	Jan 2013
Improve ewe genetics	Identify top performing ewes on basis of their lamb production	2014
	Cull poor performing ewes; select replacements from top performers	Fall 2013

Planning for Success

Your plan has to fit your management style and the goals you have for your business. Identify specific tasks that need to be done. Develop a consistent or standard way of handling tasks that repeat. Again the key to making an action plan that works is to keep it simple, make it specific, have definite deadlines, write it down and keep it handy. Update it often as you implement the steps.

- List and prioritize all the actions you need to consider to tackle reducing lamb death losses.
- Select a few actions you can tackle right away and create a timeline for the rest.
- Post your action plan where it is easy to refer to and to update regularly.



Improving ewe productivity needs to become part of your ongoing management practices. Finding systems to make it easier is worth the time and effort you put into planning. A few changes can improve your bottom line dramatically and provide you with the information you need to make easier and better decisions about your business. Markets, whether the price is high or low, look for consistent quality. By fine-tuning your ewe productivity you will improve your overall flock performance, the value of your flock as well as the quality and consistency of the product you produce.

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For more information on Ewe Productivity:
www.ablamb.ca (producer management resources)
www.agriculture.alberta.ca (information/livestock/sheep&goats)

Your partners in building better lambs

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