Increasing Lamb Survival


by Mike Neary
Extension Sheep Specialist
Purdue University

Most sources on lamb mortality report that the average death loss of lambs nationally is somewhere in the range of 20 to 25% of the number of lambs born. Furthermore, the majority of lamb mortality occurs within seven days of birth. This is a tremendous amount of reproductive wastage on an individual farm basis and for the sheep industry in its entirety.

Under most circumstances, it would be impractical to have a production goal of zero mortality. However, by proper management of the flock at key times of the production cycle, the amount of young lamb mortality can be reduced. A realistic goal of 10% lamb mortality is attainable by most producers.

Before Breeding

Yes, lamb mortality can be reduced before fertilization even occurs. Proper reproductive and health management of ewes and rams can prevent lamb mortality and lambing season problems.

Screening of the ewe flock should occur before breeding. Ewes with bad udders and any other physical limitations (bad eyes, feet, mouths, etc.) should be culled before breeding. Records of past years’ performance can be used to predict future performance. Ewes that were poor mothers, had low milk production, had lambing difficulties or created a problem in previous lambings would be strong candidates for culling. Usually, a small percentage of ewes in a flock create most of the problems. If the problem ewes can be eliminated, it is amazing how the problems at lambing are reduced. Keeping good records during the production year and then using them is a good investment in time.

Evaluating body condition of the ewe flock and flushing, if needed, can help decrease the length of the lambing season. This can help prevent shepherd burnout at lambing and reduce lamb mortality.

Conducting a breeding soundness exam on rams and making sure they are fit can also ensure that ewes will get settled quickly and shorten the lambing season. The use of a ram marking harness or other device that will allow producers to know when ewes are due to lamb can be of great help in making plans for the upcoming lambing season.

Certainly, pre-breeding vaccination programs for flocks with abortion problems can help
prevent disasters at lambing.

**Before Lambing**

In any sheep production operation, the ewe is the factory producing lambs and wool to sell. To produce a good product, one needs to take care of the factory. Particularly, this is important in the last trimester of pregnancy when the majority of fetal growth occurs and when mammary tissue synthesis is occurring.

Of utmost importance is the nutrition of the ewe the last 30 to 45 days of gestation. Energy intake is the single most critical nutritional consideration, especially in flocks with high lambing rates. Ewes should be consuming about 3% of their bodyweight daily in total dry matter feed intake of feedstuffs that contain 55 to 60% TDN. Insufficient energy intake will result in thin ewes, weak lambs, inadequate colostrum consumption, ewes that tire during lambing, and reduced milk production through all of lactation.

The amount of selenium, vitamin E, calcium and phosphorous should be at optimum levels during late gestation. Clean, fresh water that is not too cold should be available for ad libitum consumption. Crude protein content of the diet should be in the range of 11 to 12% (dry matter basis) of the diet.

Feed additives such as lasalocid or antibiotics can often help prevent health problems in ewes and lambs, and hence, reduce lamb death loss and management problems. Ewe vaccination, primarily for clostridial diseases, also should be done during late gestation.

Shearing ewes before lambing can be a valuable management procedure to reduce lamb mortality. Ewes are better mothers, less likely to lie on lambs, will seek shelter when lambing, and will help create a cleaner environment for nursing lambs and in the lambing barn itself. Also, the wool crop is more valuable when removed from ewes before lambing.

**During Lambing**

The most common causes of lamb mortality, in order of importance, are usually: hypothermia/starvation, pneumonia, scours, birthing trauma, and accidents. Thus, if these causes can be prevented, lamb mortality will be reduced.

Hypothermia and lamb starvation are closely linked. Young lambs can take quite a lot of cold weather if they are dry, out of winds and drafts, and have a full belly of milk. When all these conditions are not met, then the lambs are at increased risk for hypothermia, starvation, and stress induced diseases. Ewes have to produce adequate quantities of milk, especially when more than one lamb is nursing, to have a reasonable chance of raising lambs to weaning. Udder health and nutrition are the key to producing adequate milk.
Adequate intake of colostrum as soon as possible after birth is crucial in helping to prevent disease. Colostrum contains the antibodies to diseases prevalent to that flock or for diseases vaccinated against and go a long way toward preventing diseases in lambs.

Cleanliness of facilities, ventilation and air flow through sheds, and the absence of drafts are crucial in helping prevent scours or pneumonia. If e. coli scours, coccidia or pneumonia are ongoing health problems in a specific flock or facility, one needs to work closely with a veterinarian to develop a prevention and treatment program.

Difficult births can stress lambs or injure them to the point of disease outbreak or outright death. If certain ewe lines or rams have a history of hard lambing, they should be strongly considered for culling. Certainly, replacements should not be kept from them.

Shepherds should possess a keen eye during the lambing season. Regular checks on lambs can help prevent disasters. A normal lamb should feel good. They should stretch after rising, shake and be bright and alert. Their belly should be full and they will usually only need to nurse every 2-3 hours. Their fecal material should have a normal consistency. They should not be breathing rapidly and their body temperature should be within a normal range (100.5 to 103.5 F).

**Other Considerations**

If the management, nutritional and health programs of a flock are sound, the next area of improvement for increasing lamb survival is through genetic selection. The heritability of lamb survival is considered low, yet, if one applies rigid selection pressure on both the easy keeping sheep and those that tend not to be as fit, real progress can be made. The only practical, long-term solution to increasing lamb survival on both an individual flock basis and on an industry-wide basis is through selection. Keeping good records and using them is time well spent. Also, the use of crossbreeding programs in commercial sheep operations can give immediate benefits to lamb vigor at birth and lamb survival.

**Summary**

To increase lamb survival:

1) Have a sound pre-breeding management program.

2) Pay close attention to ewe nutritional and health status during late gestation.

3) Keep facilities clean, well ventilated and draft free.
4) Make sure lambs get adequate colostrum intake.

5) Develop a health program for specific flocks.

6) Select sheep that are easy lambing, good mothers, heavy milking, and vigorous at birth.

7) Select against problem sheep.

8) Use crossbreeding when applicable.

Back to Article Directory