



SHEEP SHEET

Fundamental Factors That Affect Lamb Survival

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- I. THE ROLE OF THE EWE
- II. THE SUCKLING BEHAVIOR OF THE LAMB
- III. THE ROLE OF THE SHEPHERD

I. THE ROLE OF THE EWE

Factors that affect the role of the ewe:

- Pre-natal Nutrition
- Dystocia
- Maternal Behavior
- Litter Size

Pre-natal Nutrition:

- Poor nutrition the last 6 weeks of pregnancy leads to lamb losses or a reduction in their size and vigor.

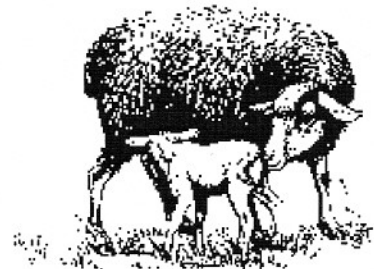
Dystocia:

- Difficulty in lambing can account for lamb mortality losses up to 10 percent.
- Dystocia can cause poor maternal behavior, especially in maiden ewes lambing for the first time.
- After a difficult birth, the ewe will tend to retreat from the lamb for a few hours. This results in delayed colostrum ingestion if the lamb sucks at all. Therefore if the lamb is born alive, the probability of death due to starvation, accidents, and predators is increased due to maternal desertion.

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Maternal Behavior:

- Maternal behavior functions to help the lamb find the udder and facilitates the progress of the lamb towards successful sucking.
- Immediately after lambing, the drive of the ewe to "mother up" a young animal is very strong. This maternal drive fades rapidly, so the first 12 hours of life are critical for the establishment of the normal ewe-lamb bonding process.
- The tendency of ewes to lamb away from the flock, thereby removing disturbances, facilitates the formation of this bond.
- Maternal licking stimulates the lamb's sucking drive, and here careful orientation helps it in its' teat-seeking attempts. Success is achieved when the lamb finds the teat and gets that first critical mouthful of colostrum.
- Suckling Twins - during the early states of lactation, ewes will allow one twin to suck without the other present. However, after the 3rd or 4th week, ewes will call the twins to suck and will not allow one to suck unless are both present.
- The ewe's behavior allows for the greatest possibility of survival!



Litter Size:

- Litter size influences lamb survival.
- The larger the litter the lighter the birth weights of lambs on the average.
- Highest mortality rates occur in light lambs, those under 6.5 lbs., and in heavy lambs, those over 10 lbs. These mortality rates are apparent until 12 weeks after birth.
- Conditions where the Role of Maternal Assistance is of Great Importance are as follows:

Poor pre-natal nutrition

A difficult birth.

Large crowded pens.

Mis-shaped teats.

Poor supply of milk.

Stressful weather conditions.

Failure of lamb to suckle.

II. THE SUCKLING BEHAVIOR OF THE LAMB

Factors that affect the suckling behavior of the lamb:

- **Suckling Drive**
- **Colostrum Ingestion**

Suckling Drive

- Newborn lambs will normally stand, proceed to seek the udder, and suck without aid.
- Maternal assistance will help to increase the suckling drive.
- The initial high level of the suckling drive seems to be due to inherent stimuli other than hunger.
- The suckling drive has been shown to decline quickly if a reward is not obtained expeditiously.
- Cold ambient temperatures depresses the suckling drive.
- Lambs will only attempt to suck if their temperature is above 99° F.
- Moderate chilling for a short time will only affect the suckling drive for the duration of the chilling. Its effects can be reversed by the external application of warm water.

- In cold, wet weather, lambs may starve to death within 20 hours of birth.
- Starvation accounts for losses up to and over 30 percent in some flocks.
- The following factors depress lamb suckling drive:

Cold and wet conditions

Energy loss

Accelerated weight loss

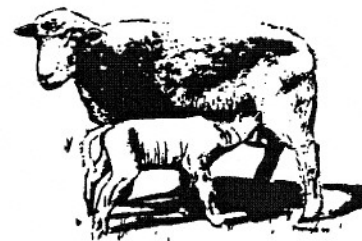
Discomfort

Chilling

Colostrum Ingestion:

- The 3 important functions of 'colostrum' milk:
 1. *Nutritive Value*
 2. *Maternal Antibodies ('passive immunity')*
 3. *Laxative Properties (avoid pinning)*
- Colostrum ingestion plays a critical role in lamb survivability. 85 percent of newborn mortalities on the day of birth 45 percent of lambs dying within 9 days are 'colostrum deprived lambs.'
- Generalized bacterial infection is a frequent cause of lamb mortality, and is particularly prevalent in colostrum deprived lambs; i.e.
 1. *Polyarthritis,*
 2. *Ewe infections;*
 3. *Pneumonia;*
 4. *Various septicemias (blood poisoning).*
- Formula for the successful killing of your lamb crop:

Colostrum Deprivation + Contaminated Environment + General Disease = 2/3's of lambs dying of those born in flocks.



III. THE ROLE OF THE SHEPHERD:

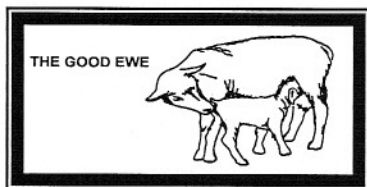
The role of the shepherd is crucial to success at lambing. The following list although incomplete perhaps identifies the key skills and important traits of an outstanding shepherd or shepherdess:

- Selecting Ewes
- Feeding Correctly (quality versus timing)
- Good judgement
- Good timing.



Selection:

- Select for good mothers, that is:
- Select for ewes which have little or no difficulty lambing.
- Select from ewes which own (claim) their lambs quickly (bonding).
- Select for ewes that lick their lambs, dry and help them find their teats by correct orientation and nuzzling.
- Select for a ewe found in the 'Classical Stance' of the "Good Mother" within 30 minutes of lambing is likely to produce the heaviest lambs at weaning. (This is the acid test of the good mother.
- Exceptions can be made for the inexperienced ewe lambing for the first time. But repeat bad mothers should be culled ruthlessly from the flock.



Good Judgement:

- In the sheep business, "Good Judgement" is when the shepherd can leave well enough alone, but to intervene when necessary, and to know those differences.

Good Timing:

- Timing in the sheep business is everything!
- The shepherd/shepherdess needs to be there at lambing time with a skilled hand for the various problems associated with:
 1. Dystocia
 2. Ewe & Lamb Bonding
 3. Young Ewes
 4. Small Lambs
 5. Very Large Lambs
 6. Multiple Births

And if you do all of these things, you will receive the rewards of sound animal husbandry principles! Many lambs saved!

For more information write:

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ADDITIONAL NOTES:

