NEWS TO EWES

Lambs Galore

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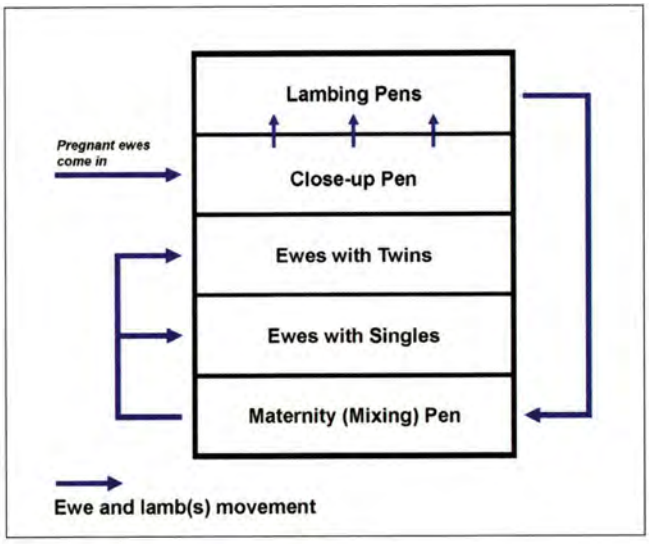
Introduction

The Traditional Lambing Season in Kentucky is January/February, the coldest months of the year. Shepherds subject themselves to these two stresses because tradition has shown the number of lambs born per ewe is high, labor is readily available, barn(s) are available for lambing, spring grass can be used by both ewes and lambs, lambs can be marketed before encountering internal parasite problems, and prices for milk-fed slaughter lambs (100 to 120 lb) are usually high in May/June. Although management expertise is required for any lambing season to be successful, the level of expertise is probably more critical during the Traditional Lambing Season because of the cold temperatures and Lambs Galore. Furthermore, the belief that **more shepherding skills are required in the first 2 to 5 days after lambs are born than are required before and/or during the actual lambing process** becomes fact in the Traditional Lambing Season.

Lambing in the Barn

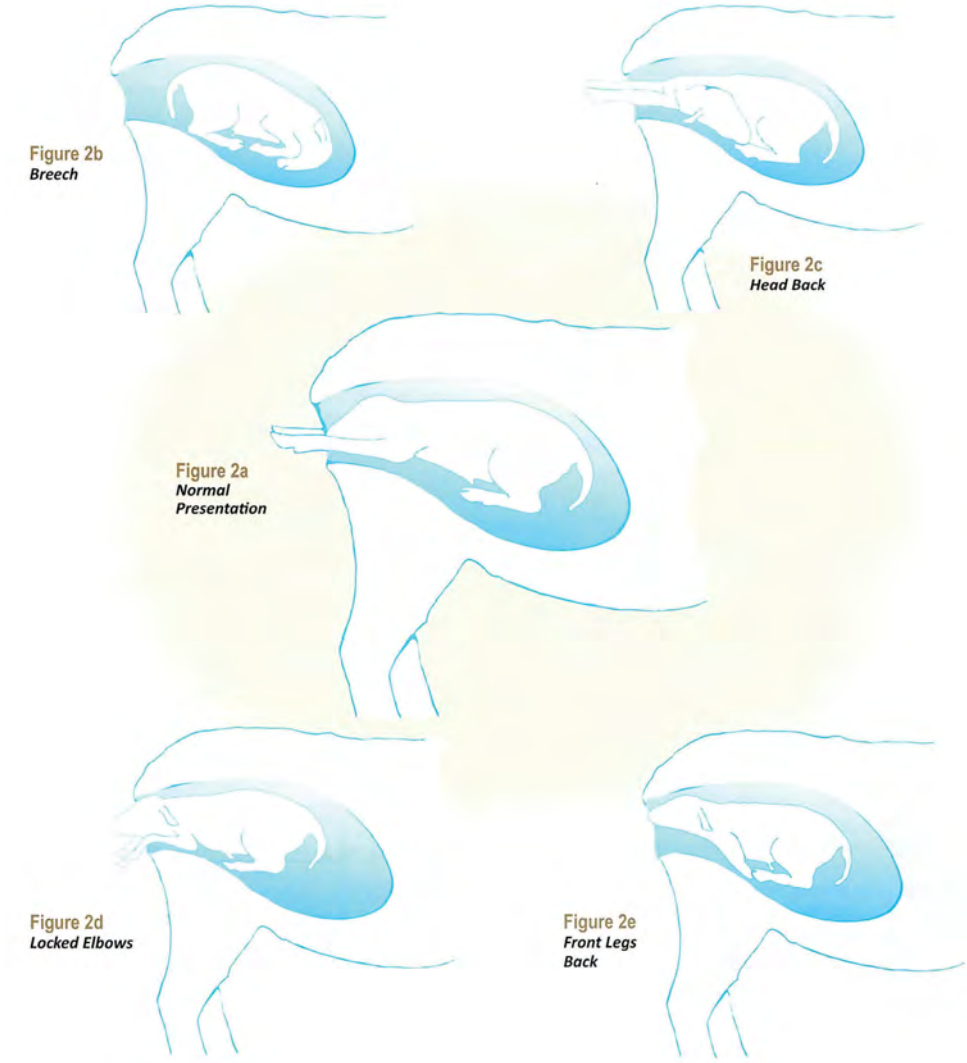
Ewes that lamb in January/February in Kentucky require shelter. This may be in a tobacco barn, hoop structure, open-sided barn, or other facility where ewes can get inside (out of the weather) to lamb. Figure 1 is an example setup for a lambing facility. Lambing Pens (Jugs) are for ewes and their new lambs born in the Close-Up Pen. This pen is fluid in regard to numbers---as ewes and lambs are moved to the Lambing Pens, they are replaced with other ewes that are becoming close to lambing. After ewes and lamb(s) bond in the Lambing Pens, they move to the Maternity (or Mixing) Pen. This pen contains ewes with singles and twins that are all about the same age. As this pen fills, ewes with twins and singles are segregated into separate pens so ewes can be fed differently for maximum milk production. Additional pens for ewes with twins versus those with singles can be made, depending on the flock and barn sizes. Ewes and their lambs can even be moved to barns completely separate from the Lambing Facility when the lambs are a week or two old.

Figure 1. Example Lambing Facility Outline



The lambing process is a complex one in which hormonal and nervous reflexes are delicately coordinated to achieve a desire end. Although pregnancy may last from 140 days in Finns to 151 days in Southdowns, the average length across all breed is 147 days. Pregnancy length can also be affected by litter size (single vs. twins vs. triplets), sex of lamb, and age of ewe. During the early stages of lambing, the visible signs may be a sunken appearance on each side of the ewe's rump, a pink colored enlarged vulva with vaginal discharge, and an appearance that the fetus has "dropped." The ewe may paw at bedding, lie down, get up, and turn her head towards her rear and bleat. In the final stages, she will usually lie on her side and raise her head skyward as each involuntary contraction exerts pressure to expel the lamb. Hopefully, each fetus will be positioned in the birth canal as shown in Figure 2. Unfortunately, however, some abnormal presentations may

Figure 2. Fetal Position in Birth Canal



occur (Figure 2b, c, d, e, etc.). Every lambing situation is different, so each shepherd has to respond to each abnormal presentation to make sure as many lambs as possible are alive when they are expelled from the ewe.

Ewe/Lamb Management First 24 Hrs

Once the newborn takes its first breath of cold, fresh air in the Close-Up Pen, the ewe should be "all over it" to dry it, get it to its feet, and direct it to the teat. Bonding time between ewes and lambs in this pen can vary from a few minutes to 4 to 6 hours depending on ease of lambing (normal vs. abnormal presentations), ewe age, mothering instinct, size of lamb, number of lambs born per ewe, lamb vigor, and environmental temperature. The shepherd has to make the call as to the length of this bonding period. After the initial bonding, move ewe and lamb(s) to a Lambing Pen. Check each lamb's eyes and mouth for any abnormality and dip the navel in a 7% iodine (tincture of iodine) solution. Some shepherds may weigh each lamb. Even if a weight is not taken, give the lamb a number and record the ewe's number, lamb sex, date of birth, and any problems encountered with the ewe and/or lamb(s) during the entire lambing process. Check the ewe's udder for colostrum (milk) flow and make sure every lamb has nursed. It is so, so critical for the lamb to consume colostrum as soon as possible after birth, especially in cold weather. For example, the newborn lamb may leave an environment in the uterus of the ewe that was 103 degrees Fahrenheit and enter an open-air environment that is zero degrees Fahrenheit. This lamb is wet, has little ability to control its body temperature, has limited nutrient stores, and, therefore, has an immediate need for nutrition (colostrum). The colostrum is its only immediate source of nutrients. Colostrum also provides antibodies to the lamb for disease prevention and, simultaneously, it serves as a laxative to start functioning of the digestive tract. The timing of colostrum consumption is critical. The newborn lamb should receive a supply by 30 minutes to an hour after birth. It must continue to consume colostrum for 18 to 24 hours. So, if the lamb has not nursed by the time it enters the Lambing Pen, the shepherd must help it nurse. If it is weak, if the weather is extremely cold, if the ewe doesn't want to claim the lamb, or if other problems are encountered, milk some colostrum from the ewe into a 60-cc syringe connected to a stomach tube. Administer the colostrum directly into the digestive tract of the lamb via the stomach tube (Figure 3). This procedure may have to be repeated any number of times during the first 24 hours after the lamb is born (2 ounces every 2 to 4 hours). **The stomach tube may be the most important piece of equipment in the shepherd's inventory!**

Once the ewe and lamb(s) are settled into the Lambing Pen that is bedded with fresh, clean straw, provide a small bucket of 50-degree Fahrenheit water to the ewe. She will be more thirsty than hungry. Tie the bucket 18 to 24 inches off the ground so baby lambs can't fall into it any time during the 2 to 5 days they will be confined to this 4 feet x 5 feet Lambing Pen. Usually the ewe will not require any feed for the first 18 to 24 hours after lambing. Thereafter, provide 1 to 2 lb of grass or alfalfa hay 2x per day for the rest of her stay in the Lambing Pen. Check on the ewe and her lamb(s) every 2 hours during the day, after supper, and again before going to bed every day while in the Lambing Pen.

Trouble Shooting the Ewe and Her Lamb(s)

When checking the "normality" of newborn lambs, it is a good idea to know how normal, healthy ones act. Normal lambs vocalize very little. They nurse, sleep a lot, and may even play a little in the Lambing Pen. They sleep in a curled position and may have to be gotten up when making the rounds at 2-hour intervals during the day, after supper, and before bed time. The normal lamb will stretch when it gets up, will go the ewe to nurse, will have a warm mouth, and will have a full belly. When standing, its back will be level (Figure 4). It will have a rectal temperature between 102 and 103 degrees Fahrenheit. Shepherds should be alert to any variations from these "normal" activities, especially hypothermia.

Hypothermia (Chilling)/ Hypoglycemia (Low Blood Sugar)

Rectal temperature is the primary guide to identification and treatment of hypothermia in newborn lambs. Lambs with mild hypothermia have a temperature between 98 and 102 degrees Fahrenheit whereas those with severe hypothermia may be less than 98 degrees. Hypothermia is caused

Figure 3. Administering colostrum via a stomach tube

Figure 4. Normal, healthy lambs

by excessive body heat loss coupled with reduced heat production. Newborn lambs are unable to regulate their body temperature for the first 36 hours after birth, so environment (cold weather) and management greatly affect how much body heat may be lost. In contrast, to generate body heat, the lamb may use any of the fat it may have in its body at birth. But, the best source of energy is ewe colostrum for the first 24 hours, then plenty of milk. If these sources are not available, lambs will suffer from hypothermia, starvation, and finally death.

Shepherding practices intended for preventing losses from hypothermia include: (1) providing shelter for ewes and newborns; (2) shearing or crutching wool producing ewes before lambing; (3) confine ewes and newborns in lambing pens for 2 to 5 days after lambing; (4) help lambs nurse during the first 24 hours after birth; (5) graft extra lambs to ewes that can raise an extra one; (6) cull ewes with poor milk production records before the breeding season; (7) make sure you have plenty of lambing pens (a common ration is 1 pen to 10 ewes); and (8) provide adequate nutrition in late gestation and early lactation so ewes will give plenty of colostrum and milk.

Hypothermic lambs do not get better on their own. Assuming lambs born in the Traditional Lambing Season are in a shelter, the following steps are recommended for treatment.

1. PRIOR TO LAMBING, lambs more than 5 hours old with severe hypothermia should be given an intraperitoneal injection of warm (20 to 25%) dextrose (glucose) solution at a rate of 5 cc per pound of body weight.
2. Towel-dry wet lambs and supplement with heat or warm in a box using dry heat from a hand-held hair dryer or heat lamp. Temperature in the box should not exceed 103 degrees Fahrenheit. Warm lambs to a rectal temperature of 99 degrees Fahrenheit.
3. Tube feed colostrum as described above.
4. Return lambs to the ewe when rectal temperature becomes normal (usually after 1 to 3 hours) and they can stand and nurse on their own. If they are still weak after treatment, but strong enough to be with their mother, continue to feed by stomach tube until they are able to nurse on their own.
5. If only one of a set of twin lambs is suffering from hypothermia, remove both lambs from the ewe when warming is taking place. Return both lambs at the same time so the ewe will claim both.

The procedures outlined are useful for lambs showing hypothermia symptoms regardless of the production system. However, these procedures are labor intensive and are most easily justified in a Traditional Lambing Season when there are Lambs Galore.

Out of the Lambing Pen

Healthy lambs and their mothers leave the Lambing Pens after the 2-to 5-day stay to enter the Maternity (Mixing) Pen. This is the perfect time to ear tag, dock and castrate lambs. If ewes were vaccinated for sore mouth as lambs, their lambs should be vaccinated at this time. If none of the sheep have been vaccinated for sore mouth, do not vaccinate the lambs. Lambs born to ewes that were vaccinated for over enterotoxemia and tetanus before lambing will be safe until 5 weeks old. If the ewes were not previously vaccinated, this is a good time to give the lambs their first dose of CD/T vaccine.

Each ewe's udder should be checked for "normality." Their feet can also be trimmed and they can be de-wormed. Although the FAMACHA system may have been used throughout the year to determine which ewes get de-wormed, all ewes in the Traditional Lambing Season will be carrying some stomach worms lying dormant as they enter the Close-up Pen. All ewes should be de-wormed as they leave the Lambing Pen because these parasites will come out of dormancy within a few days after ewes lambing (periparturient rise) and can decrease ewe productivity throughout lactation.

Summary

The Traditional Lambing Season in Kentucky offers significant management challenges for shepherds. Most certainly, dealing with cold weather and Lambs Galore requires a Lambing Facility that allows efficient flow of pregnant ewes, lambing ewes, and ewes and newborn lambs through it. Although getting as many live lambs on the ground as possible is always an objective, more shepherding skills are required during the first 2 to 5 days after the lamb is born than was required to make sure it was born alive. These skills include management of ewes and lambs during the first 24 hours after birth and knowing how normal lambs look and act versus those that may be suffering from hypothermia. Recognize the stomach may be the most important piece of equipment in the shepherd's inventory because of the colostrum that it can administer to hypothermia. Intensive labor expended in the Traditional Lambing Season can be paid for when Lambs Galore weigh 100 to 120 pounds and command high market prices spring.

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