BABY LAMB MANAGEMENT

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Lambing season is the critical time when the sheep producer's skill, effort, and concern determine the success of the entire operation. Dozens of problems occur. Many, however, can be traced back to poor management, inadequate equipment or an indifferent attitude. Attention to small details and the willingness to go the extra mile in giving babies special treatment can pay big dividends.

Perhaps one of the most important and least stressed management tools available to sheep producers is observation. A complete knowledge of sheep production is useless if producers do not have the ability, or more frequently, do not take the time to recognize problems as they arise. A part of a producer's daily routine should include close observation of all ewes and lambs. It is surprising the number of things that can be seen by spending just a few minutes per day looking at your sheep. After a few producers come to know their sheep very well. They know how they normally act, move, play, eat, etc. Good producers know when sheep are not feeling well. This gives them a head start on identifying problems during lambing.

LAMMING FACILITIES

A new lamb is a 5-to-14 pound sucking wet baby that has left a warm, well nourished environment for a harsher life outside. Now it must initiate breathing and maintain body temperature. If producers can't provide the lamb with a suitable environment they should choose to lamb later when weather is warmer.

The facility components of a shed lambing system include: 1) an area for ewes about 1 to 3 weeks prior to lambing, 2) a drop pen for ewes within a week of lambing, 3) lambing jugs for newly born lambs until they are 24 to 72 hours old, 4) nursery pens for a few ewes and their lambs 24 hours to 3 days after lambing, and 5) mixing pens for ewes with lambs for ewes with lambs 3 to 30 days of age.

The need to lamb 100 ewes in a facility large enough for only 50 ewes is a common problem. However of 100 ewes, no more than about 35 will lamb per week. Also, after the newborn lamb has dried off, has been fed, and has had the opportunity to adjust to a harsher environment, it can be moved to cooler and presumably less costly quarters.

Outside Lots

This should be a large outside lot that ewes can be kept in prior to lambing. This lot usually contains the ewes that are several weeks from lambing. Ewes closer to lambing are usually kept in a drop area close to the lambing shed. This lot should have access to a sheep working facility and the lambing shed.
Lambing Barn

A lambing barn does not have to be fancy nor does it require a new building. In most cases existing facilities can easily be converted into workable lambing barns.

The most common facilities used are unheated lambing barns. They protect the animal from rain, wind and snow and provide temperatures just higher than outside temperatures. In certain areas heated lambing facilities may be beneficial, with temperatures maintained at 35 to 45 degrees F. However, when heated barns are utilized proper ventilation is more critical. If ammonia can be smelled in the barn ventilation is inadequate.

Drop Area: A space to house ewes that are within a week of lambing during adverse weather will come in handy. This space usually only needs to be large enough to house about 35 to 50% of the ewe flock. This area should be large enough to allow 12 to 14 square feet per ewe. As lambing progresses less ewes will be in this group. The size of this area can be reduced accordingly making room for mixing pens. Also by dividing the drop band into small groups of ewes (10 to 20 ewes per pen) it may be possible to avoid having a night lamber. If you are unable to house the drop band inside, a lamber should be on duty at all times during cold weather, as the lambs must be brought inside immediately after lambing.

Lambing Jugs: One lambing jug for every 7 to 10 ewes in the flock should be adequate. They should be at least 4 by 4 feet and preferably 5 by 5 feet. Ewes will usually remain in these jugs from 12 to 24 hours.

Nursery Pens: The first set of nursery or mixing pens that the ewes are placed in should be large enough (16 to 20 sq. feet per ewe and lambs) to hold about 5 to 7 ewes with their lambs. Ewes should remain in these pens another 24 to 48 hours, therefore, approximately two or three of these pens for every 100 ewes in the flock will be needed.

MANAGEMENT

Prelambing Shearing

It is desirable to shear ewes about two weeks prior to lambing. This will enable you to house more ewes in the same shed space. Also it is easier for the lambs to start suckling and encourages the ewes to seek shelter from cold and to take their newborn lambs with them.

Prelambing Deworming

In the northern United States a large percentage of the internal parasites undergo arrested development (hypobiosis) during the winter months. Be sure to use a dewormer that is effective against these arrested larvae. Around lambing something occurs to stimulate maturation of these larva to adults. The result is a periparturient rise in worm egg counts and the beginning of an internal parasite problem. Just before lambing is an ideal time to worm the ewes. However, make sure that the drug you are using is safe for pregnant ewes.

Lambs are born about 145 days after the rams are turned in with the ewes. Make sure you have purchased supplies and set up the lambing facilities well before lambing begins. Once lambing begins your time will be better spent looking after the sheep.
The Lambing

The lamber's role is to assist delivery when necessary and to see that the lambs survive. Shortly after lambing the lambs should be picked up and the ewe, along with her lambs, placed in a lambing jug. A high percentage of mismothering can occur in the drop pen and therefore it is essential that the lamber be very attentive. If the lambing area is only being checked periodically it is beneficial that ewes in the close-up ewes be divided into small groups.

Once the ewes and lambs have been brought in, the naval cord of the lambs should be clipped to a length of 2" and dipped in 7% tincture of iodine. Do not use a spray application of iodine; instead use a wide mouth jar and immerse the navel in iodine. This practice is considered "essential" for preventing losses from navel ill.

When the ewe and lambs are placed in the jug, a stream of colostrum should be milked from each teat in order to remove the wax-like plug in the teat canal. By doing this the lamb will be able to suckle with less difficulty.

This is a good time to assess the ewes milk production and make grafts if necessary. Shortly after the lamb is able to stand it should be assisted in suckling if it cannot do so itself. The value of colostrum within the first 2 hours of birth cannot be overemphasized. Antibodies developed by the ewe against infectious organism are transmitted through the colostrum to the lamb. These antibodies provide disease protection to the lamb for several weeks following birth. Without early absorption of these colostral antibodies, the lamb is susceptible to disease. The production of and the ability of the lamb to utilize colostral antibodies decreases dramatically shortly after birth.

If the lamb is weak, the best way to save its life is to stomach tube the lamb 4-6 oz of colostrum. To keep a source of colostrum on hand "steal" some from other ewes (cow colostrum from cow's 1st milking is next best). A lamb needs about 10 % of its body weight of colostrum to receive adequate antibody protection. 5% should be given in the first 4 hours of life. Example: for a 10-lb. lamb 10% is a pound or a pint. Needs ½ pint (a cup) in the first 4 hours...the rest over the next 8 hours. Many good milking ewes will produce three times that amount. Freeze this spare colostrum in ice cube trays or in small plastic bags and thaw out as needed. Warm colostrum gently (usually in a water bath). Do not thaw or heat in a microwave. The antibodies in colostrum are proteins and can be destroyed if cooked.

Reviving Chilled Lambs

The revival of chilled lambs may be one of the most immediate problems facing the producer after the ewe has lambed. Knowing the severity to which a lamb is chilled helps the producer decide upon the proper course of action. Researchers at the West Virginia Agricultural and Forestry Experimental Station have devised a set of guidelines whereby the body temperature of the lamb indicates to what degree chilling has occurred.

The normal rectal temperature of a lamb is 101°F. Lambs chilled below 101°F and above 97°F can be revived through nursing or force feeding, exposure to an external heat source such as a heat lamp and vigorous rubbing. Bedding, sacks or towels can be used to dry and warm the lamb. Lambs should be rubbed vigorously along the backbone and not over the rib cage as excessive pressure on the chest area can result in broken ribs. Limbs may also be exercised to stimulate muscular activity. If the temperature doesn't return to normal within an hour, methods used for reviving severely chilled lambs should be tried.
When a lamb’s rectal temperature drops below 97 °F it has undergone severe chilling. These lambs are often unable to move and the immediate application of a high heat source is required to revive them. This may take in excess of 3 hours but should be continued until the lamb is sufficiently revived.

Immersion in warm water is an effective means of accomplishing this. The water temperature should be increased gradually (to no greater than 115°F) to prevent the lamb from going into shock which can result in death. Placing the lamb in a plastic bag for the water bath will help the lamb retain its natural odor and reduce the chances of rejection when returned to its ewe.

Another method of reviving severely chilled lambs involves the use of a "hot box" which may be constructed of either cardboard or plywood (Figure 1). An opening is cut in the box to allow a hairdryer nozzle to pass through. Another opening should be provided to allow the lamb’s head to remain outside the box. The lamb should be placed on a raised rack allowing all body surfaces to come in contact with the circulating air.

Figure 1. Lamb Hot Box for Chilled Lambs. Courtesy: The Shepherd Magazine, Sheffield, Mass.

At this point we should be aware of one of the primary deficiencies in newborn lambs -- the lambs thermoregulatory system (internal thermostat) is only partially functional. It does not become completely functional until the lamb is about 3 days old. The lambs body temperature will fluctuate with changes in environmental temperatures.

During the first days of life the lamb will need to nurse at least 6 times a day. If the lamb becomes too chilled to nurse, it will soon die of starvation. The stress of chilling also reduces the lambs resistance to diseases such as scours and pneumonia. Providing shelter
for ewes with newborn lambs is intended to minimize losses in lambs due to environmental exposure. The period in the lambing pen is important in forming a strong bond between the ewe and her lambs that will be important in preventing losses due to abandonment in later life.

Lambs and ewes must be watched for signs of problems such as starvation, scours, and pneumonia. Early diagnosis is essential to effective treatment. To facilitate early diagnosis, ewes and lambs in the lambing jugs should be observed several times each day. Get all ewes and lambs up. Healthy lambs will usually stretch and try to nurse when gotten up. Observe lambs for general appearance and attitude, i.e. droopy ears, hunched up, sunk in sides, etc. If the lamb doesn't look "right" try to determine the source of the problem, i.e. hypothermia, starvation, scours, dehydration, pneumonia, physical injury, ewe with mastitis, ewe not letting lamb nurse, etc.

If all is going well the ewe and her new family should be ready to move to the nursery pens by 12 to 24 hours. If there are no nursery pens available, it is recommended to keep the ewes in the jugs another day or two. Upon leaving the jug the lambs and ewe should be identified with ear tags, paint brands, etc. so that if problems arise after they are turned loose they can be brought back together.

Summary of Procedures:

LAMBING TIME

(About 140 Days After Rams Are Turned Out)

- Be There/Keep Records
- Brand Ewes and Lambs With Lambing Number
- Clip, Dip & Strip
- Clip umbilical cord about 1 to 2 inches from lamb’s body and dip the remaining stump in strong (7%) tincture of iodine. Check ewe to make sure both teats are fully open and functioning.
- ¼ ml of BoSe
- BoSe under the skin
- Make Sure Lamb Nurses
- Lamb should receive colostrum within 1 to 2 hours after birth.
- Warm Up Chilled Lambs

AFTER LAMBING - IN JUGS (Birth to 3 days of age)

- Number of Jugs
- Need one jug for every 10 ewes.
- Length of Stay
  - Remove lambs from jugs as soon as all are doing well. The normal recommendation is to move ewes and lambs to mixing pens on the 3rd day after lambing.
  - Many producers, however, feel that it is more desirable to move ewes and lambs to small mixing pens (3 or 4 ewes and their lambs) as soon as possible (24 hours).
- Check Every Lamb frequently Each Day
- Watch for signs of pneumonia, scours and starvation.
- Provide Place for Bottle Lambs
Lambing Time Equipment
- propylene glycol for treatment of pregnancy disease
- bearing retainers for treating prolapses, lamb puller
- thermometer, surgical scissors or pocket knife, suturing material
- lubricant plus disinfectant for assisting ewe during lambing
- mild soap, bucket and warm water
- antibiotic, uterine boluses
- injectable vitamin E and selenium mixture
- old towels to wipe off and dry newborn lambs
- heat lamps
- frozen colostrum from ewe or cow
- bottles, nipples, and stomach tube for helping weak or orphan lambs
- ear tags and paint brands for identification, lambing record book
- docking and castrating equipment
- mastitis treatment, scour remedies

Grafting Lambs
It is a good management practice, if possible, to graft lambs not receiving enough milk from their own mothers onto other ewes. A number of grafting methods are possible.
1. Slime Graft - Use fetal fluids from the ewe that the lamb is to be grafted to and rub the fluids and membranes on the lamb just before grafting.
2. Wet Graft - Immerse lamb to be grafted as well as the ewe's own lamb in a saturated salt solution.
3. Stanchion - Place the ewe's head and neck in a set of stocks where she can eat and drink but must allow lambs to nurse. Grafts of this type require from three to five days.
4. Lamb Coat - Skin the pelt off the lamb that died and tie the skin on the lamb to be grafted.
5. Stocking Graft - Place a stocking (burlap cover) over a ewe's own lamb for two to three days and then remove it and turn it inside out and place it on the lamb to be grafted.

When attempts to graft lambs fail, it is necessary to put the newborn lambs on milk replacer or even put them on goats if available.

Taken from The Sheepmen's Production Handbook (SID, Inc.), Revised 1986

Tips For Rearing Lambs Artificially
Within two to four hours after birth, decide which lambs among those from multiple births you should remove. Look for the weaker or smaller ones to choose for artificial rearing. It is important to make this decision early. Relatively weak lambs remaining with the ewes can experience more stress than those reared artificially.

Consider the following tips:
1. It is essential that newborn lambs receive colostrum milk. Cow's colostrum will work if ewe's milk is not available. Do not dilute with water or warm too quickly if colostrum is frozen.
2. Lambs should be removed from sight and hearing distance of ewe.
3. Provide a warm, dry, draft-free area to start lambs.
4. Lambs will require some assistance the first day or two to teach them to nurse on whatever feeding device is used.
5. Avoid placing young lambs with older lambs, as they may be pushed aside and not be able to obtain milk replacer. Remember that lambs nursing ewes drink 25 to 40 times per 24 hours.
6. Hang a light over the milk replacer-feeding device and dry ration feeder.
7. Inject lambs in the first few days with Iron Dextran, Vitamin A-D-E, and Selenium-Vitamin E. At 15 days of age, vaccinate for overeating (Clostridium perfringens type C & D).
8. Start lambs on high-quality lamb creep feed at two weeks of age. Provide ample fresh water in front of lambs at all times. Do not feed hay or oats the first three weeks of age as it encourages bloat. Caution! Do not feed leafy alfalfa until two weeks after weaning, as it may encourage bloat.
9. Wean at 30 days of age or at a weight of about 25 pounds and when the lambs are eating creep feed.

**Tube Feeding**

Sometimes lambs are born too weak to nurse. Without that first colostrum, their survival rate is very low. If left to fend for themselves, they don't make it. However, many can be saved by tube feeding, even those too weak to suck.

The key is getting milk into them as soon as possible after birth. The milk should be warm but not hot. Generally 2-4 ounces every two hours will do the trick. Return the lamb to its mother as soon as it is strong enough to stand and nurse. Leaving it away from mother too long may result in the ewe rejecting the lamb.

The tubing should be 14 to 18 inches long and preferably rubber like that used for surgical purposes. What it can be attached to the spout of an antibiotic syringe (like those used to treat mastitis in dairy cattle); a needle-type syringe (preferably a 60 cc or about 2 ounce); or an all rubber ear syringe.

The tubing should be moistened or lubricated with a water-based lubricant before inserting it into the lamb's throat. It is very important to get the tube in the stomach and not the lungs. Mistakenly pouring milk into the lungs can cause pneumonia. If possible, it is best to insert the tubing into the lamb without it being attached to the syringe.

There are three ways to check if the tube is going into the right place. First, if a bump is encountered when inserting the tube, backup and try again. The length of tube inserted into the lamb should indicate whether the stomach is reached or not. Secondly, if air is felt coming out of the empty tube after it has been inserted, the lungs have been reached. Remove the tube and try again. Thirdly, the tube can be felt with a gentle pinch behind the windpipe.

The positioning of the lamb before inserting the tube depends on the amount of assistance available. In any situation, the head and neck of the lamb should be extended forward to allow a more direct path for the tube to get into the stomach.

If alone, place the lamb on a table or series of straw bales so that the lamb is at a handy height to work with. Have all four feet facing you and hold the body with your left forearm. Straighten the lamb's head and neck with your left hand while at the same time using your fingers to open the lamb's mouth to receive the tube.

If you have help, have the person hold the lamb by the elbows and let the lamb's rear hang. Use one hand to open the mouth and hold the head steady and the other to pass the tube.
TROUBLE SHOOTING CHART FOR “STARVING” LAMBS

1) IS EWE OFF-FEED, DEPRESSED, LISTLESS, ETC.? —yes—> CONSIDER PREGNANCY DISEASE (KETOSIS)

IS EWE SICK? —yes—>

2) IS EWE DOWN WITH TREMORS OR GRINDING TEETH? —yes—> CONSIDER MILK FEVER

— NO —

1) HAS EWE LICKED LAMB? —yes—> FAILURE CONFIRMS PROBLEM

IS EWE REJECTING LAMB? —yes—>

2) IS EWE THE ACTUAL MOTHER? —yes—> TRY TYING EWE

3) IS EWE SHOWING PREFERENCE —yes—> TRY USING STANCHION FOR A MATE OF THIS LAMB FOR FEW DAYS

— NO —

1) ARE TEATS CLEAR OF WAX? —yes—> MAKE SURE MILK IS FLOWING

DOES EWE HAVE MILK AND A NORMAL, HEALTHY UDDER? —yes—>

2) IS A MATE TAKING ALL THE MILK? —yes—> SUPPLEMENT LAMB OR REMOVE MATE FOR AN HOUR OR TWO EACH DAY

— NO —

1) DOES EWE HAVE MASTITIS? —yes—> TREAT WITH ANTIBIOTIC

2) ON ONE SIDE ONLY? —yes—> LEAVE ONE LAMB TO NURSE, FOSTER OR BOTTLE TWIN

IS UDDER HARD OR LUMPY? —yes—>

3) ON BOTH SIDES? —yes—> FOSTER OR BOTTLE LAMB(S)

4) IS THE UDDER ENGORGED —yes—> IF ENTIRE UDDER IS A SOLID MASS, ALLOW LAMB(S) TO SUCK FOR LET-DOWN STIMULUS ALSO SUPPLEMENT LAMBS

IS EWE IN GOOD CONDITION? —yes—>

1) IS UDDER HEALTHY BUT EMPTY? —yes—> SUPPLEMENT LAMB(S) BUT ALLOW SUCKING TO STIMULATE MILK PRODUCTION

— NO —

EWE IS IN POOR CONDITION? —yes—>

1) IS EWE’S CONDITION EXCEPTIONALLY POOR? —yes—> FOSTER OR BOTTLE LAMB(S). MAY LEAVE ONE LAMB ON EWE AND INCREASE HER NUTRITION

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