PRE-LAMBING MANAGEMENT OF EWES

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How the pregnant ewe is managed during the last six weeks of gestation will have a very definite effect on the birth weight, growth and survivability of the lamb. As the following management procedures are discussed, remember that each sheep operation is different. Modify and adapt these practices to your operation. Several of these procedures may be done at the same time. This will cut down on the number of times and the labor involved in handling the pregnant ewe. No harm or damage to the ewe and/or her fetus should occur if she is handled gently, but firmly, and if you use common sense.

4 - 6 Weeks Pre-Lambing:

1. Shear or crotching ewes

It is becoming more common to shear sheep before they lamb. The reason for this is that these sheared sheep will not put out as much moisture in the air, thereby reducing the humidity in the shed. Shearing also will remove any mudballs from the wool near the udder that could be mistaken by the newborn lamb for a teat. This would lead to lack of colostrum and milk and shortly to starvation.

Crotching is a short, quick modification of shearing. Only the wool in the vulva area and around the udder is removed. Shearing may also entice the ewe to seek the shelter of the shed instead of lambing outside.

Sheep that have been sheared will need more grain to compensate for the heat loss by shearing, especially in cold weather. Keep shorn ewes housed for 3 days as it takes this long for a ewe's body to adjust to being sheared.

2. Condition scoring of ewes

This is a good time to examine each ewe to determine her overall condition. This is done on a scale of 1 (very thin) to a 5 (overly fat). You are looking for 2 to 3 scoring in a late pregnancy. The number 1's and 5's are prime candidates for pregnancy disease, which will be discussed later. If at all possible, divide the sheep into three groups and feed accordingly. Number 1 & 2 need extra grain to attempt to get them up to a number 3 before lambing. Number 3 and 4 will need a small amount of additional feed. Number 5 ewes are difficult to handle because they are overly fat already. They should be put on a diet to reduce the amount of fat, which increases the chance of dystocia (difficult birth). On the other hand, they need some grain to aid in the prevention of pregnancy disease. What a dilemma. Additional exercise may help. Watch this group very closely. If ketosis (pregnancy disease) starts to show up, then additional grain is necessary to prevent more cases. It will probably end up as a disastrous learning experience. Learn from your experience and see that it doesn't happen next year.

If you need help in condition scoring contact your County Agricultural Extension Agent, a sheep producer who is experienced in scoring ewes, or your area or state livestock specialist.

3. Increase grain

The last 6 weeks of gestation is when the fetus grows the most. It is also the time when she is starting to get ready for her milk production. At the same time, especially in ewe lambs, there is additional growth to her body. In case of older ewes, they must maintain their weight and even gain a little. Up to this time, the ewe has probably been on pasture or fed only hay. This is acceptable up to this point. With the added demands on her body, she must be fed some grain. If she does not get grain, she may develop ketosis (also called pregnancy disease or paralysis).

Ketosis is a condition, nota disease caused by a bacteria or virus. It is strictly a management problem. When starting to feed grain, start at 1/4 to 1/2 pound per ewe per day. Gradually over a period of 1 to 2 weeks, increase the amount to 1 pound per day. You may need to feed 1½ to 2 pounds per day for shorn sheep and during extremely cold weather.

4. Ketosis, pregnancy disease or toxemia, lambing paralysis

This is a condition usually seen in the last 2 to 3 weeks of gestation. It is seen mainly in overly fat ewes, but may be seen in thin ewes, usually those carrying twins or triplets. Stressful conditions may help to precipitate this problem, such as storms, fasting, transporting. Basically, ketosis is caused by an inadequate intake of carbohydrates during late pregnancy. Symptoms include listlessness, no appetite, weakness and incoordination, lying on the chest, mucus from nose, rapid breathing, and possibly blindness.

Treatment of the individual animal is not too rewarding: 4-6 ounces of propylene glycol orally twice a day until ewe lambs, corticosteroids injections to induce lambing, or a caesarian section. Ewes will usually recover rapidly shortly after lambs are delivered.

Prevention is the best treatment. Increase the amount of grain fed to the ewes. Test the urine of several late gestating ewes for ketone bodies. Get a test strip from your veterinarian. If one or two ewes develop ketosis, it is a good indicator that more ewes may develop ketosis and that the entire flock is hovering on the brink of a disaster.

5. Vaccination program

All ewe lambs and older ewes not previously vaccinated need to be vaccinated at this time with Clostridium perfringes Type C&D and tetanus. Repeat in 2 to 3 weeks with just Cl. perfringes Type C&D; omit the tetanus.

A good immunized ewe should transfer a high degree of passive immunity to the lamb through the colostrum and milk. This should provide the lambs with protection for 2 to 4 weeks.

Older ewes that have been vaccinated the previous year may get by with only a “booster” two weeks before lambing. However, if a problem occurs, it will be necessary to vaccinate twice before lambing. At 4 to 6 weeks and again at 2 weeks before lambing.

If black leg (Cl. chauvoei) or malignant edema (Cl. septicum) is a problem on your farm, then use a vaccine that also contains these organisms.

It is essential that the rams are vaccinated at the same time as the ewes.

6. Parasite Control

It is essential that a good parasite control program be practiced. Parasites are one of the major causes of economical losses to the sheep industry. It may be in the form of weight loss, more days to market, poor wool crop, lower conception and lambing rate, weak lambs, lower milk production and death. A good parasite program will allow the ewes to remain in good flesh, reduce the transfer of parasites to the lamb and increase milk production.

(a) **Internal Parasites** should be treated during the last month of gestation. There are a number of products available. They may be in boluses, drench, injectable or mixed with feed or salt. Most all of the products at this time may be given safely at this time. Be sure to read label for any cautions or contraindications.

Wormers most commonly used for sheep: (Common trade name in parenthesis).

Levamisol	(Tramisol)
Thiabendazole	(TBZ)
Ivermectin	(Ivomec) Drench

These drugs are not FDA approved, but may be used "extra-label" if a client-patient-veterinarian relationship exists. They are listed for information only. See note on page 4 concerning reference to trade names.

Cambendazole	(Camvet)
Fenbendazole	(Panacur, Safe-Guard)
Mebendazole	(Telmin)
Oxfendazole	(Benzelmin) - good for tapeworms
Ivermectin	(Ivomec)

Thiabendazole is not used as much now as it has been reported that many of the internal parasites have developed some resistance to this drug. However, it will still work on many farms.

Phenothiazine may be fed continuously by mixing 1 lb with 10 lbs of loose trace mineral salt. Remove from salt 2 weeks before shearing as it may cause a pink staining of the wool. *Caution:* Place salt under cover to protect from rain. Rain plus salt equal a very poisonous deadly brine for all livestock. Do not feed cattle salt to sheep. It contains too much copper. Copper toxicity and death may result.

Coccidiosis:

If Coccidiosis is a problem, feed Lasalacid at 30-60 mg per head per day for the last 4 to 6 weeks of gestation. Or mix 2 lbs of 6% Deccox in 50 lbs of salt fed free choice. If you suspect a worm problem, have your veterinarian run a fecal exam to determine which worms are present. This will vary over a year's time.

(b) **External parasites** control works best when applied to shorn sheep.

Coumaphos	(Co-Ral)
Fenvalerate	(Ectrin)
Permethrin	(Ectiban)
Ivermectin	(Ivomec) - not FDA approved

Ectrin is good, but it doesn't stay on the back too well — runs off.

Expar will stick on backs of shorn sheep because of its carrier. It works well with ticks and reportedly has some fly control property in the summer.

Ivermectin is frequently used as it will control most of the internal and external parasites except tapeworms, liver flukes and the biting louse. It is expensive, but very effective.

7. Selenium/Vitamin E injection 4 weeks before lambing

This will prevent White Muscle Disease (WMD) in newborn lambs. Several additional benefits have been attributed to Selenium/Vitamin E injections: (1) Drastic reduction of "ringwomb" or failure of the cervix to dilate or open at lambing time. (2) Reduction in the cases of retained placentas. (3) Increased milk production. (4) Increased conception rate.

The preferred route of administration is by injection, either IM (in the muscle) or S/C (subcutaneous - under the skin). Selenium in the feed is poorly absorbed by the gut in sheep and cattle. Kansas is not supposed to be a selenium deficient state, but too many cases of WMD are being reported by veterinarians throughout the state. There are some elements such as sulfur, copper, zinc and lead that may tie up the selenium either in the soil or in the animal. The addition of selenium does not take into account the Vitamin E requirement. These two compounds work together synergistically.

Do not give Vitamin A injection at the same time as selenium/Vitamin E. The Vitamin A reduces the sodium selenite to selenous acid which is not effective in preventing white muscle disease.

One company has recommended not giving selenium/Vit E in late pregnancy as it might cause abortion. This has not been found this to be true in Kansas.

2 WEEKS PRE-LAMBING:

(1) Repeat clostridium perfringes Type C and D. Tetanus may be omitted, if given earlier.
(2) Parasite control if not given earlier.

(3) Get lambing area, jugs and equipment ready for lambing.

COMMENT:

To save time, vaccinate all ewes 4 to 6 weeks before the first ewe is to lamb.

If lambing season lasts longer than 6 weeks, it is advisable to revaccinate those ewes that have not lambed with Clostridium perfringes Type C and D.

Note: Trade names in this educational publication are used as reference only and do not represent endorsement by the Kansas Coooperative Extension Service.

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