Welcome to the Galax Farm Supply’s Sheep producers meeting for February, 2006. The purpose of this meeting is to provide comprehensive information concerning sheep production. We will cover general health, vaccination protocols, and parasite control. If you have any questions after this meeting feel free to call Healing Springs Animal Hospital at 276-236-5103.

VACCINATIONS:
- Clostridium perfringens C, D, and Tetanus: vaccinate 30 days prior to lambing.
- Vaccinate lambs 2 weeks prior to weaning and 1 week after weaning.
- Chlamydia and Campylobacter: vaccinate one month prior to breeding
- Footrot: Vaccinate once a year, but results are variable
- Soremouth: Vaccinate ewe lambs 2 months prior to breeding. Booster every 3-4 years

REPRODUCTIVE MANAGEMENT:
There are three lambing seasons: winter, spring, and fall. There are advantages and disadvantages to each. Fall and winter lambing is more labor intensive due to weather constraints, feeding, and lower lambing yields. The main advantage to the fall and winter lambing is capturing the Easter market when lamb prices are the highest. The spring lambing system requires less feed, less intensive management, and the highest lambing yields. The disadvantage is the lower lamb prices.

Six weeks prior to breeding:
- Determine the ram’s body condition. The ideal body condition is 3.
- Determine the number of rams you need. Ram lambs can service 25 ewes. Mature Rams can service 35 ewes.
- Trim all feet and check ewes. Cull all those problem ewes from last year if missed and check udders for mastitis
- Vaccinate all breeding ewes with Campylobacter fetus to prevent abortions

Two weeks prior to breeding:
- Flush all ewes with one pound of grain (commercial grains are available as well as combinations of corn, wheatmids, and corn gluten)
- Deworm the entire flock.
- Keep in mind that clover and alfalfa have estrogen that affects the reproductive cycle of the ewe.

Breeding:
The ram’s influence on the flock will synchronize the ewe’s cycle. Forty to sixty percent of the flock will be in heat in 18 days after the ram’s introduction.
The normal breeding season is 60 days.
- Use a marking harness to track when a ewe is bred. A ram will continue to breed even when the ewe is pregnant.
- Rams require two pounds of grain per day to maintain their weight.
- Forty to eighty days post breeding an ultrasound can determine if a ewe is pregnant.
Six weeks prior to lambing:
Feed ewes half a pound of grain/head/day.
In the winter feed a 2\textsuperscript{nd} cutting alfalfa/grass mix hay
Make sure the ewes body condition is 2.5-3.0. Feed thin ewes separately.

One month prior to lambing:
Trim feet and shear wool from the udder and vulvar area
Vaccinate the ewe with Clostridium C,D,and T, Campylobacter fetus and intranasal PI3.
Deworm the ewes. A periparturient egg rise happens at the last month of pregnancy. Increase grain intake to 1 lb/head/day. Feed 2\textsuperscript{nd} cutting alfalfa/grass mix hay

Lambing:
Check ewes in the morning, afternoon, and evening. Check ewes in the middle of the night can stimulate them to lamb earlier.
At each lambing place the ewe and her lambs in a lambing jug for 48-72 hours until they have bonded.
Strip the ewe teats to remove the wax plugs.
Dip the navel in 1% iodine or chlorhexidine solution.
All triplets and any lambs that are weak need to be supplemented with colostrum. You can use cow colostrum or milk the ewe. Tubing lambs is a simple, effective practice to save newborns. Feed 2-4oz of colostrum depending on lamb’s status.
Feed ewe one pound/lamb/day after lambing.
Always provide a heat lamp to prevent weak and cold lambs
Castrate and dock tails while in the lambing jug. Use a 1% iodine on the castration and docking site to prevent infection. Soak instruments in a virosan or chorhexidine solution in between lambs.
Use a nursery pen for several weeks to help sheep and lambs integrate back into the flock.
Always separate the ewe that haven’t lambed from the ones that have.
Start offering a creep feed 30 days post lambing with free choice 2\textsuperscript{nd} cutting alfalfa/grass mix hay and water.

Weaning:
Give the lambs Clostridium C, D, and T vaccine two weeks prior to lambing and then one week after.
An alternate program is to vaccinate at 8weeks of age and then 3 weeks later.
Eliminate grain from the diet 3-4 days prior to weaning, then fast ewes 48 hours prior to weaning.
Ewes can now be supported by good pasture with no supplementation.

COMMON REPRODUCTIVE PROBLEMS:
Vaginal prolapse: Need to be repaired immediately. The best repair is to use 2-0 vicryl. The ewes will go into labor and the lamb will push through the suture. This best treatment is nutrition. Do not feed coarse or rough hays.

Pregnancy toxemia: They need increased calories in fewer bites. There is a spatial problem in the sheep. The uterus gets bigger and presses on the rumen. Lack of nutrition causes an increase in ketones. Ketones are toxic to the body and cause the sheep to go off feed. Treatment requires providing caloric intake to maintain the sheep and help the lambs develop. Birthing usually reverses the effects and the sheep will start eating.

Ringworm: The cervix does not get the stimulus to dilate. The cervix in most cases can be manually dilated. A C-section may be required.
PARASITE CONTROL:
This is now a big problem in sheep and goat production. The most common intestinal parasite is Haemonchus contortus, “the barber pole worm.” Resistance is a huge problem, but it is not a specific dewormer problem or nationwide problem. Resistance will be specific to each individual farm. The best way to determine the level of parasite resistance on your farm is to do frequent fecals and maintain good deworming records. Fecals prior and post deworming will help determine which dewormers work for individual farms. Several theories on deworming exist. Change dewormers with the season. Use fecals to determine when to deworm. Collect a representative sample consisting of 5% of the flock. Use a Haemonchus eye chart and only deworm the ones that need it. Cull all ewes that repeatedly need deworming. Only keep the ewes that do not require frequent dewormings. Cydectin is now approved for sheep in an oral drench formation. Do keep in mind that there is a large resistance to the avermectin family. Fasting the sheep prior to deworming and combining dewormers may enhance performance. Examples are Synanthic with Dectomax and Valbazen and Ivermectin.

Dosages:
VALBAZEN: 3ml/100lb (do not use in pregnant animals)
DECTOMAX/IVERMECTIN: 1ml/75lb using the injectable form orally
SYNANTHIC 22.5%: 2ml/100lb orally
CYDECTIN-CATTLE POUR-ON: 5ml/100lb orally
CYDECTIN-SHEEP DRENCH: 1ml/11lb orally
LEVAMISOLE: 2.5ml/100lb subcutaneous (problems have been associated with injections)

Tips to control parasites:
Feed off the ground
Rotational grazing
Deworm and move to clean pastures (pasture free of small ruminants for one year.)
Graze hay fields after first cutting