Lambing

- Lambing is when a sheep gives birth preferably to 1-3 lambs.
- Preparation for lambing is key to management.
- Parturition:
  - Gestation: about 149 days
  - Estrous 16-19 days
Lambing

- There are many types of lambing systems
- We lamb twice a year using natural breeding
Synchronizing estrus

- Reproduction can be synchronized in sheep through the use of hormones.
- Synchronization of estrus is useful for accelerated lambing or out-of-season lambing
- Three hormones are used:
  - Progesterone: Hormone produced after ovulation by the corpus luteum which forms on the ovary. Administering hormone during anestrus period causes ovulation. Can synchronize when used for a 10-12 day period, ovulation usually occurs about 2-5 days after the end of treatment.
  - Estrogens: The receptivity hormone. Is released normally by the developing egg on ovary before ovulation. Blood estrogen levels are the highest before and after estrus.
  - Gonadotrophins: Hormones that cause ovulation produced by pituitary, controls the release of FSH.
  - They can be administered through: ear implant, daily injection, feeding, or impregnated sponge inserted into the vagina.

http://aces.nmsu.edu/sheep/sheep_reproduction/hormonal_control.html
Preparing for pregnancy

- **Nutrition:**
  - **Before Breeding:**
    - Flushing: chance to gain weight before and during the breeding season. Done 3 weeks before breeding and through first cycle (17 days)
    - Flushing increases quantity of energy
    - Flushing is not successful on overweight ewes.
  - **Gestation:**
    - Last 6 weeks are most vital= fetus 70% of growth
    - Diet of high protein required
  - **Lactation:**
    - First few weeks same as gestation diet
Preparing for Pregnancy

- **Vaccinations:**
- **CD&T:** *Clostridium Perfringus* type D which is a bacteria in the digestive tract; causes Enterotoxemia or overeating disease. Present in most intestines, but stimulation of the release of toxins can be triggered by:
  1. change in feed
  2. increase in feed
  3. Excessively high energy diets
- Vaccinate ewes three weeks prior to lambing
- Vaccinate lambs
- Tetanus: *Clostridium tetani*

- **Vitamin E and Selenium:** Deficiencies can cause white muscle disease which is similar to muscular dystrophy. One to 4 weeks before lambing.

- **Covexin:** Protects against several clostridials
Pregnancy Diseases

- Water Contamination can cause abortion:
  - High levels of Nitrate in drinking water can cause illness and abortion

- Pregnancy Ketosis (Toxemia):
  - Metabolic disease due to poor nutrition or obesity
  - Lack of carbohydrates causes ewe to break down body fat storages which rapidly releases ketones which are bypassed during filtration in the liver in bloodstream

- Chlamydosis: causes abortions and can be transmitted through consumption of fetal fluids

- Campylobacter (Vibrio): abortions = foul smelling vagina discharge

- Toxoplasmosis: transmitted through cat feces

http://aces.nmsu.edu/sheep/sheep_health/campylobacteriosis.html
Signs of labor

- “Bagging up” - Udder will look distended and firm. (10 days)
- Lips of vulva swollen
- Separate from flock
- Don’t eat
Prolapsing

- Prolapsing can occur vaginally or rectally
- Rectal: can be caused from:
  - Tail docking
  - Coughing
  - More likely to prolapse again
Rectal Prolapse

http://www.sheepandgoat.com/articles/rectalprolapse.html
Backwards

A backwards (hind legs first) delivery is also a normal delivery. It is common with twins and triplets. You should never attempt to convert a backwards delivery to a "normal" frontwards delivery. Turning a lamb around can result in death of the lamb or damage to the uterus. Plus, it is not necessary.
Elbow Lock

- Elbow lock
  An elbow lock is a "normal" position except the lamb's elbows are locked in the birth canal. You will need to push the lamb slightly back into the birth canal to extend the legs.
Leg(s) back
If one or both legs are back, you need to cup the lamb’s hooves in your palm and bring them forward. A small lamb may be pulled with one leg back. If you are not able to bring the legs forward, you should slip a lambing rope onto one or both limbs and push the head back far enough to allow the legs to be drawn forward.
● Head back
If the front legs are forward, but the head is back, you will need to push the lamb back into the uterus, so you can turn the head around. You should attach a lambing rope to each leg so you don't lose them. The lamb should not be pulled out by the jaw. A lamb with a broken jaw cannot suck and will likely die. You can use the eye sockets to pull the lamb's head.
● Breech

A "true" breech birth is when the lamb is positioned backwards, with the rear legs tucked under and only the tail near the opening. A breech birth is common when the ewe has been straining for a long time and there is very little discharge and only a small water bag.

To deliver a breech lamb, the first thing you have to do is bring the rear legs forward by cupping the fetlocks in your palm. Once the rear legs are forward, you need to quickly deliver the lamb because once the umbilical cord breaks, the lamb will begin breathing and could risk drowning in its own fluids.
Simultaneous births
Sometimes, lambs are presented with their legs intertwined. Before attempting to deliver these lambs, you need to determine which legs belong to which head. It may be necessary to repel one lamb to allow easy delivery of the other. Ewes carrying triplets often have a higher percent of malpresented lambs, so flocks with high lambing rates require closer supervision during lambing.
Dead and Deformed Lambs

- Dead and deformed lambs
  The removal of delivery dead and deformed lambs often requires veterinary assistance. Deformed lambs often cannot pass through the birth canal. If a lamb is freshly dead, it may be possible to extract it, but lambs that have been dead for some time often must be removed in pieces.

- If your flock experiences excessive lambing problems, you need to consider your breeding and nutrition problems. For example, a lot of oversized lambs could mean you are overfeeding your ewes during late pregnancy or using too large of a sire breed on your ewes. In addition, ewe lambs should not be bred until they have developed sufficiently. The rule of thumb is not to breed ewe lambs unless they have achieved approximately 70 percent of the mature weight.