



Institutional Animal Care and Use Committee™

Title: Sheep Center

SOP Number: 064

Purpose: To provide the highest quality of care for livestock housed in the Sheep Unit at the New Deal Farm, in order to maintain a quality herd for teaching purposes, and to prevent the development of disease or disorders that could compromise research studies.

PASTURE ACREAGE AND FORAGE PRODUCTION

- A. The sheep unit utilizes 5 permanently fenced pastures. Two pastures are 15 acres each and three pastures are 5 acres each.
- B. Sudan is planted in the late spring and is baled and grazed during the summer months. Wheat and oats are planted in the fall and are grazed during the winter and early spring. Wheat hay is baled if excess wheat is available.
- C. Pastures are fertilized with solid waste from the Burnett Center and the Swine Center before the land is broken and planted.

FACILITY MAINTENANCE

- A. Daily observation records and treatment records are kept in the sheep barn office.
- B. Daily maintenance is performed by Animal Science Faculty and Staff.
- C. Other facility repairs are performed by Animal Science department or TTU Physical plant as needed.

PRODUCTION SCHEDULE

- A. The main objective of the breeding program is to produce rams and ewes to be sold to commercial producers with a focus on teaching and research.
- B. The breeding herd consists of approximately 130 ewes and 15 rams.
 - 1. Up to 200 market lambs may be on feed at the center depending upon time of year. Refer to approved protocol
- C. Replacement ewe lambs are produced within the flock.
 - 1. Some rams are raised and some rams are donated by purebred breeders.
 - 2. A few wether lambs are sold as show lambs each year.
- D. Cull lambs are sold at Producers Livestock Auction or to Rancher's Lamb of Texas slaughter plant in San Angelo when they reach market weight in the fall.

MANAGEMENT PROCEDURES

- A. Dry ewes (non-pregnant Ewes).
 - 1. Ewes are maintained on Sudan pasture and Sudan hay from the time lambs are weaned until they are bred.
- B. Breeding.
 - 1. Ewes are fed for 30 days prior to breeding by feeding whole corn or milo (1 lb/hd/d) in addition to free access to hay and pasture.
 - 2. Rams are turned in with the ewes for a 54-day breeding season.
 - a. Mature rams are mated to 50 to 100 ewes and ram lambs are mated to about 25 ewes each.

- b. Rams are fitted with marking harnesses to determine breeding date.

C. Gestation.

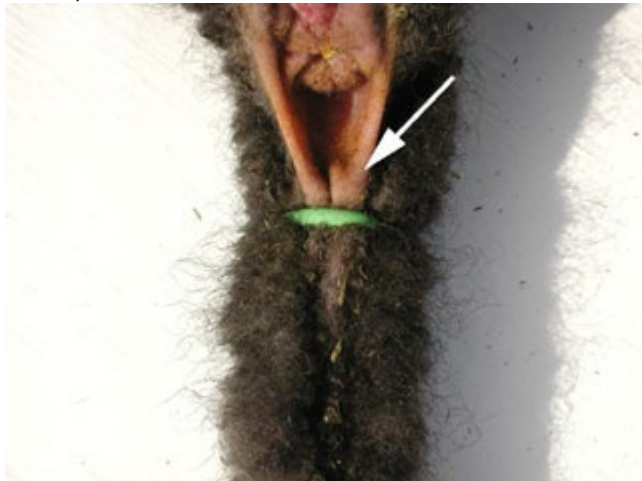
1. Ewes are run in one group for the first 4 months of gestation.
2. The flock is separated during the last month of gestation into groups of 30 according to lambing date and body condition.
3. Two weeks prior to lambing, ewes are moved into the lambing barn and placed into lambing groups of 15 ewes per group.
4. Ewes are maintained during the first 4 months of gestation on Sudan hay and wheat pasture.
5. During the last month of gestation, corn or milo are added to the diet to increase the caloric density of the diet.

D. Lambing.

1. Ewes are lambbed in 20 x 60-foot pens and remain in those pens for about 5 days until ewes and lambs have bonded adequately.
2. After a minimum of 5 days, ewes and lambs may be moved outside to wheat pasture.
3. Lambs have access to free choice creep feed until they are weaned.
4. Lambs are usually born unassisted and most nurse without assistance.
5. Weak lambs are assisted in nursing and receive supplemental colostrum soon after birth.
6. Dystocia in ewes is uncommon, but if a ewe requires assistance, appropriate PPE should be worn, including gloves, coveralls and surgical mask.
7. Placentas will be carefully removed and discarded.

E. Navels are dipped in Iodine and the lambs are weighed and ear tagged within 12 hours of birth. Tail Docking

1. Docking is an accepted management practice as a means of insuring cleaner and healthier lambs, helping to improve reproductive performance in breeding ewes and to increase the value of market lambs
2. Tails are banded by day 14 by the application of Elastrator bands.
3. Lambs are restrained on their back by someone holding the lamb and restraining the feet or in a device for baby lamb restraint (docking cradle)
4. Locate the caudal fold. Tails should be docked at the distal end of the caudal folds, where the caudal folds on the underside of the tail attach to the tail.

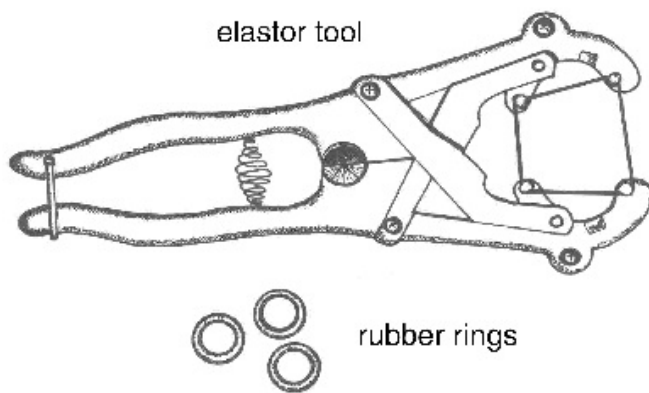


<http://www.infovets.com/books/smrm/C/C166.HTM>

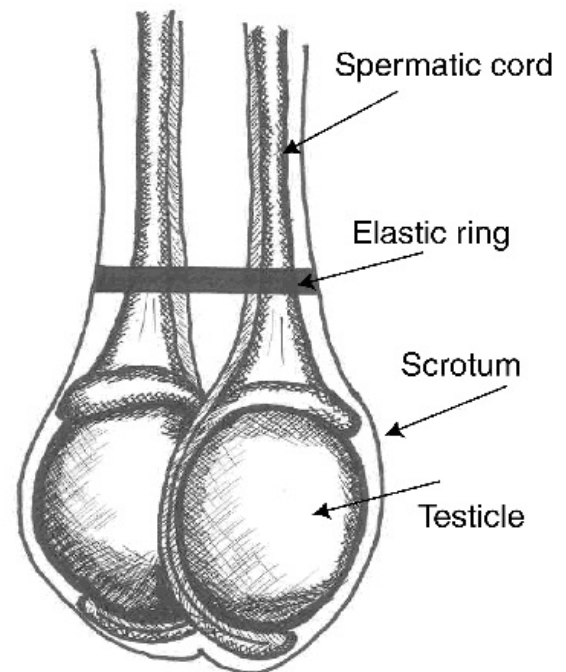
5. By placing an elastrator band around the tail, slide the instrument towards the body and place the band approximately 1" from the body, release the band and insure proper location. The lamb must be monitored for infection at the site of band placement and appropriate measures taken to disinfect the wound and prevent external parasites from infecting the area. In 24 hours, the tail may be removed from the lamb (just behind the elastrator band) to provide for a more sanitary environment.
6. Animals intended for show, where the tail length is required to be shorter, may be docked short.

F. Castration

1. Lambs are castrated using Elastrator bands before two weeks of age. Tail docking and castration typically occur at the same time to reduce handling.
2. Place a new clean elastic band on the elastrator and expand the ring. Place the band around the scrotum, slide the instrument towards the body, and place the band past both testicles. Release the band and ensure that both testicles are contained in the scrotum below the band. The lamb must be monitored for infection at the site of band placement and appropriate measures taken to disinfect the wound and prevent external parasites from infecting the area. The scrotum and testicles may be removed from the lamb (just behind the elastrator band) in 24 hours to provide for a more sanitary environment.
3. Based on age, lambs may be administered an NSAID for analgesia prior to castration or tail docking.



<https://www.omafra.gov.on.ca/english/livestock/beef/facts/07-029.htm>



G. Weaning.

1. Lambs are weaned between 60 and 90 days of age, depending upon the availability of pasture and the body condition of the ewes.

2. Ewes are taken off feed and water for 24 hours prior to weaning to minimize complications of mastitis.
3. Ewes remain without feed for an additional 24 hours after lambs are weaned.
4. Hay is added to the diet after day 1 and the intake of the ewe is slowly increased until she is on a maintenance diet.
5. Lambs are divided into groups of about 25 and fed a diet for young, growing lambs.
6. Replacements are selected at about 5 months of age after the lambs have fully adjusted to the growing diet.

H. Culling.

1. Ewes are culled each year after lambs are weaned.
 - a. Ewes may be culled because of bad teeth, spoiled udders (mastitis), failure to raise a lamb and overall health.
2. About 15% of the ewe herd is culled each year.

HEALTH CARE

A. Foot care.

1. Hooves are trimmed at least once yearly because little wear occurs on the soft, cultivated pastures.

B. Shearing.

1. Ewes are sheared in February prior to lambing.
2. Lambs are sheared in June after they are weaned.
3. Wool is marketed through a wool warehouse to be determined by proximity and market price.

C. Vaccinations:

1. Lambs are vaccinated (subcutaneous) for Overeating and Tetanus (CD&T) at 1 month of age and a booster is given 1 month later.
2. Ewes and rams receive a yearly booster for Overeating and Tetanus (CD&T) prior to the breeding season.

D. Deworming:

1. All sheep are dewormed three times per year using an oral drench.
 - a. Anthelmintics most commonly used are Ivermectin, Valbazen or Panacur.
2. These are periodically rotated to prevent causing increased immunity by the parasites.

E. Diseases/Illness: The most common diseases/illnesses are listed below with the most common medicinal treatments.

1. Treatment records are recorded in the treatment section of the daily observation notebook kept at the sheep barn office.
2. Respiratory diseases: Penicillin, Erythromycin, Oxytetracycline, or Nuflor: dosage on label, administered S.Q. or I.M. daily
3. White Muscle Disease: Bo-Se, 2 ml I.M. for 3 days
4. Polyarthritis: Oxytetracycline 200 4 ml S.Q. for 3 days
5. Urinary calculi: Drench with ammonium chloride drench and give 6 ml Banamine I.M. daily
6. Milk Fever: 25 ml CalDex I.V. twice daily

7. Ketosis: 25 ml CalDex I.V. twice per day or drench with 50 ml propylene glycol or dextrose orally twice per day
 8. Pregnancy Toxemia: 60 ml Propylene Glycol orally twice daily for 3 days
 9. Lambs are evaluated and treated based on Veterinary consultation recommendations.
 10. Rectal prolapses are amputated with an elastrator band. Penicillin is administered for five days (IM) after the rectum is banded.
 11. Coccidiosis: Lambs are treated with Corid or Ponzauril according to label instructions.
- F. It is everyone's responsibility to inform the University Veterinarians when an animal becomes ill or a change in behavior is noted.
1. When an investigator, student or farm personnel detects an animal issue, they should:
 - a. Complete the "TREATMENT/OBSERVATION FORM" in the Notebook.
 - b. Indicate the date, pen number, animal number, problem observed and name or initials of the person making the report.
 - c. If any treatment was given record drug, dose, times applied/administered.
 - d. Outcome/Resolution must be recorded.
 2. Seriously ill or injured animals should be reported **IMMEDIATELY**.
 3. Contact the Unit Manager, Animal Care Services Veterinarian, or Facilities Manager:

Sheep Unit Manager
806-834-7185 Office
806-786-4340 Cell Phone

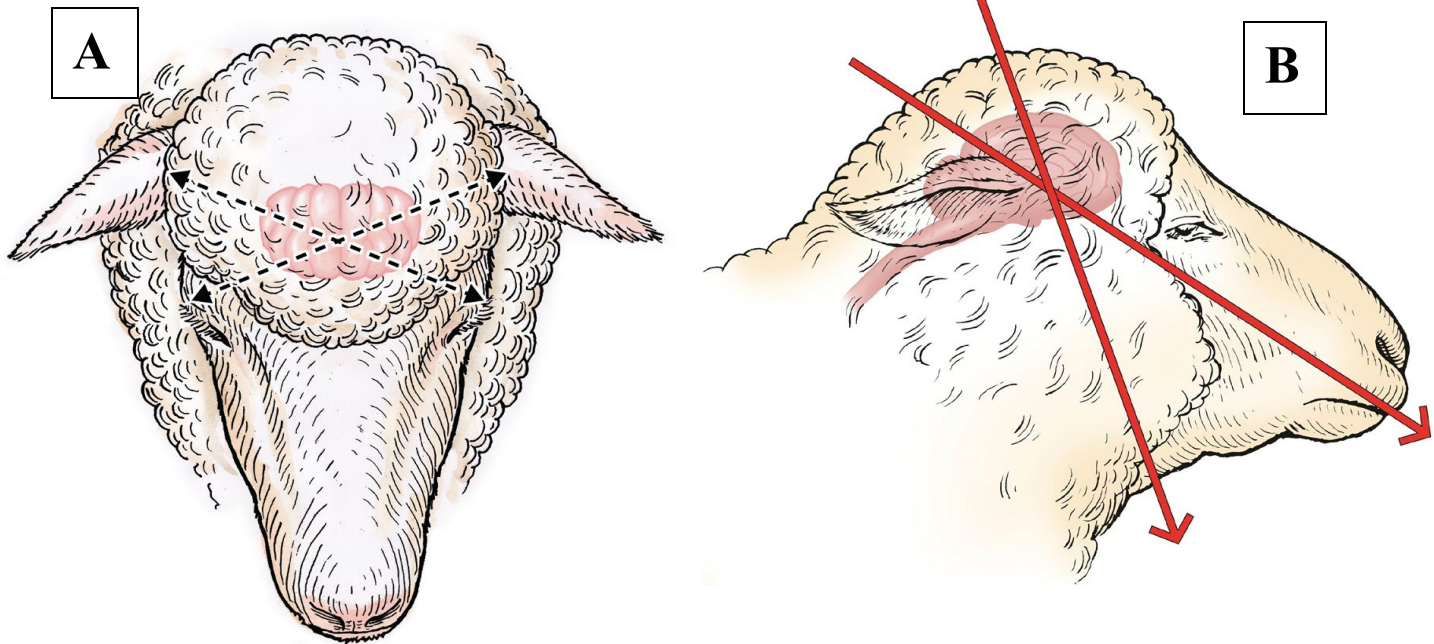
Attending Veterinarian
806-834-8588 Office
806-239-2120 Cell Phone

Clinical Veterinarian
806-834-7373 Office
660-562-4425 Cell Phone

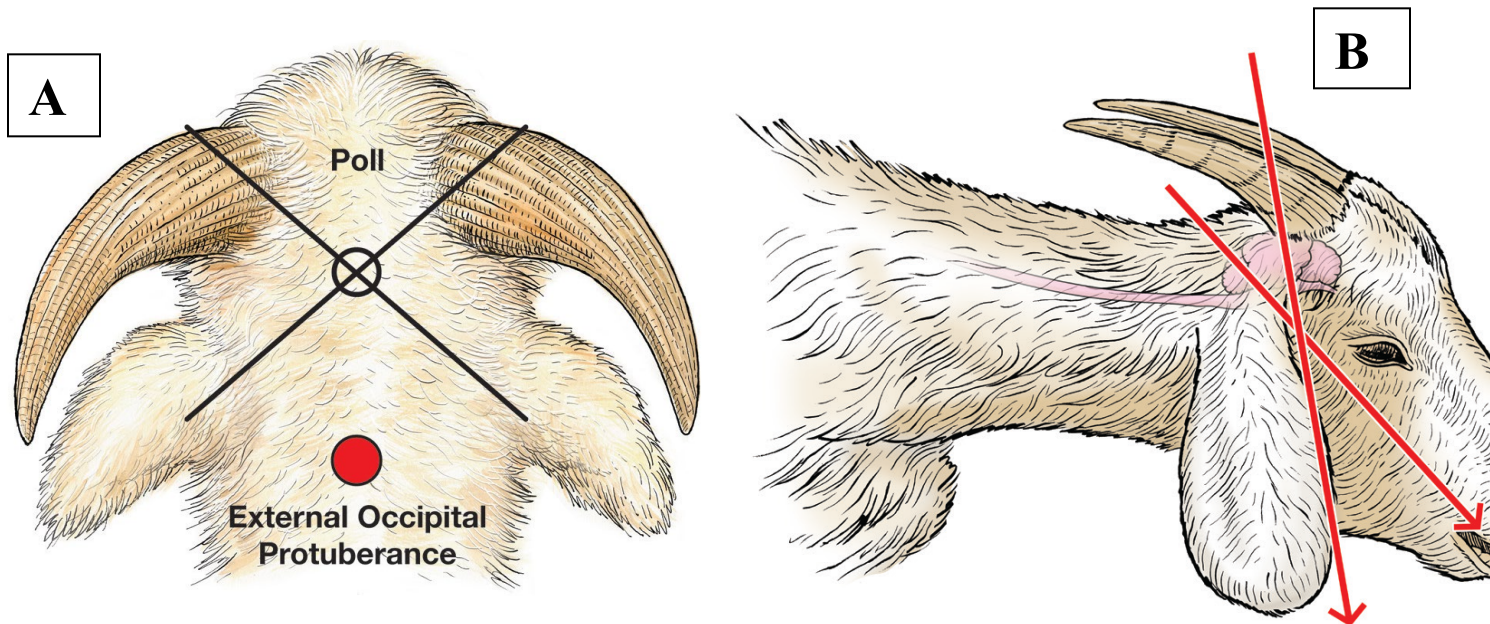
EUTHANASIA (SHEEP & GOATS)

- A. Euthanasia is not planned and will only be performed due to acute illness/injury in which treatment is not feasible or chronic illness/injury in which animals are not responding to treatment.
- B. Chemical euthanasia
 1. Pentobarbital overdose
 - a. Death must be confirmed via auscultation and lack of corneal reflex
- C. Physical euthanasia
 2. Gunshot
 - a. Only personnel properly trained in gunshot are permitted to euthanize animals via gunshot

- b. The gun should not be held flush with the skull and held no closer than 6-12 inches from the target



For polled sheep or goats (A), place the PCB perpendicular to the skull over the anatomic site identified as slightly caudal to the poll (the crown or the highest point on the head) at the intersection of 2 lines drawn from the outside corner of each eye to the middle of the base of the opposite ear. Alternatively, a site located on the dorsal midline of the head, which corresponds with the external occipital protuberance of the skull, may be used. When using the site associated with the external occipital protuberance, place the PCB flush with the skull at the external occipital protuberance while angling or aiming the muzzle of the PCB toward the mouth. Panel B indicates direction.



For horned sheep or goats (A), place the PCB perpendicular to the skull over the anatomic site identified as slightly caudal to the poll (also known as the crown or the highest point on the head) at the intersection of 2 lines drawn from the outside corner of each eye to the middle of the base of the opposite ear. Alternatively, a site located on the dorsal midline of the head, which corresponds with the external occipital protuberance of the skull, may be used. When using the site associated with the external occipital protuberance, place the PCB flush with the skull at the external occipital protuberance while angling or aiming the muzzle of the PCB toward the mouth.

- A. All sheep that are housed in the barn are fed twice daily in fence line feed bunks.
 - 1. Feedbunks and automatic waterers are cleaned once a week.

TRANSPORTATION

- A. An Animal Science truck and Gooseneck trailer (kept at the old dairy) are used about six times per year when sheep are shipped to market.
- B. Please refer to Animal Transportation SOP030.

References

Sheep Production Handbook, 2002 Edition 7, American Sheep Industry Association

Battaglia, Richard Handbook of Livestock Management, 3rd Edition, Prentice Hall, 1998

Guide For the Care and Use of Agricultural Animals in Research and Teaching, Federation of Animal Science Societies, Fourth Edition, 2020

AVMA Guidelines for Euthanasia. 2020. American Veterinary Medical Association.