Lambing and Kidding Management

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"Perhaps one of the most important and least stressed management tools available to sheep [goat] producers is observation."
Some basics

Average gestation ~ 150 days

- 147 – 155 days
- Begin observations 140 days

Look for signs for parturition

- Off feed
- Isolation
- Restlessness
- Distended udder and teats
- Dilated vulva
- Hollow appearance in front of hips
Keys to success

• Nutrition
  • Pre-breeding season
  • Breeding season
  • Gestation

• Breeding season management
  • Dams and Sire
    • 50% of genetics

• Health
  • Vaccinations
  • Husbandry
    • Facilities

Increase offspring survival!
## Prepare Early

<table>
<thead>
<tr>
<th>Medical Item</th>
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<tbody>
<tr>
<td>Thermometer</td>
<td>Bottles, nipples (Pritchard teat), milk replacer</td>
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<tr>
<td>Flashlight</td>
<td>Heat lamp/hair dryer/warming box</td>
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<tr>
<td>Exam gloves</td>
<td>Frozen banked colostrum (or colostrum supplement if none saved)</td>
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<tr>
<td>Obstetrical gloves</td>
<td>Colostrum replacer (Land O’Lakes)</td>
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<td>Obstetrical lube</td>
<td>Milk replacer</td>
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<tr>
<td>Iodine solution (7%) + disposable clean cup</td>
<td>Esophageal feeding tube + syringe</td>
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<tr>
<td>Bucket (stainless steel is easy to disinfect)</td>
<td>Gauze</td>
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<tr>
<td>Electrolytes</td>
<td>Paper towels</td>
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<tr>
<td>Drenching gun +/- 60 cc oral drenching syringes</td>
<td>Towels, rags</td>
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<tr>
<td>Nutri-drench (or similar propylene glycol based energy drench) +/- propylene glycol</td>
<td>Lamb puller</td>
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Prepare facilities

Indoor
- Clean, dry, well-ventilated
- Jugs
  - 4 x 4
  - 12 – 24 hr

Outdoor
- Watch the weather
- Check fencing: Predator control
- Look for *booby traps*
- Well-drained soils
- Pastures with natural shelter
- Easy observation
- Inclement weather plan
Sheep

Shear if necessary

Full shorn or crutch
- Crutch – removing wool around vulva and udder before lambing
- Keep rear clean
- Lambs have an easier time nursing
- Encourages ewes to seek shelter from cold
Stages of parturition

Stage 1
- Uterine contractions and dilation of the cervix
- May last several hours (12 – 24 hr)
- Dams may isolate themselves
- End of stage 1 marked by the appearance of clear, whitish mucous discharge
- Presentation of lamb in birth canal

Stage 2
- Actual lambing/kidding
- Forceful uterine contractions – delivery of offspring

Stage 3
- Expulsion of the fetal membranes and placenta
Normal presentation
Dystocia

Lambing difficulty
- Distended uterus from multiple births
- Birthing complicated by disease – ketosis (pregnancy toxemia)
- Undialated cervix
- Fetus is large in proportion to the pelvic opening
  - Abnormally small pelvis
  - Fetus or fetuses in abnormal positions
  - Abnormally large fetus

May be more common with certain breeds and management situations
- Stress
- Predators
- Nutrition
- Sire selection
Abnormal Presentations

**Figure 3.** Breach Presentation

**Figure 4.** One Leg Back

**Figure 5.** Hind Legs Only

**Figure 6.** Head Back

**Figure 7.** Both Forelegs Back

**Figure 8.** Elbow Lock

**Figure 9.** Twins - Front and Back

**Figure 10.** Four Legs - One Head
Know when to assist

Dam continues to strain
  ◦ No waterbag
  ◦ No appearance of lamb/kid
  ◦ No progress in 1 hour, 30 minutes best.

Abnormal presentation of lamb/kid
Ask: Is assistance really needed

Cleanliness
  ◦ Equipment
  ◦ People
  ◦ Ewe
Know when to assist

Determine:

◦ Presentation
  ◦ Head first, backwards, or sideways

◦ Position
  ◦ Right-side up or upside-down

◦ Posture
  ◦ Where the legs are in relation to the body
Common Mistakes

Allowing dam to labor too long
◦ Remember, after 1-hour rule

Trying to deliver lamb/kid in abnormal position
◦ Correct position first

Applying too much force
◦ Cause unnecessary trauma to dam or offspring
◦ Be gentle and take your time

Call a vet if in doubt
After lambing/kidding

Identify new lambs/kids

Dam usually able to care for newborn(s)
- Minimal intervention is recommended

Best to leave alone unless a problem

Remember observation!
- Dam claims offspring
- Offspring nurse – 30 minutes to 1 hour after birth
- Look for afterbirth
Neonatal Care

Clip – shorten the navel cord

Dip – dip or spray navel cord with disinfectant
  ◦ Iodine or nolvasan

Strip – strip teats, removing wax plug for easier nursing

Sip – newborns
  ◦ 10% of body weight in colostrum in first 18 hours
  ◦ 10 lb = 16 ounces of colostrum
    ◦ Half by 8 hours old
  ◦ Increased mortality associated with little to no colostrum
  ◦ Inadequate dam nutrition = impaired colostrum quality and quantity

Slide adapted from Susan Schoenian
Neonatal Care

Sit lamb/kid upright if lying down
Clean nose/mouth of mucous
Stimulate weak by rubbing and drying off
Tube feed if necessary
  ◦ Has not nursed 4 hr after birth
  ◦ Will not suckle from bottle
  ◦ ***Ensure kid/lamb warm and responsive before tub feeding
Increase Survival

Major causes of mortality
- Starvation, Hypothermia, Trauma
- Scours, pneumonia

Colostrum
- Absorb antibodies from colostrum for first 24 hours
- Strip teats if necessary
- 10 lb lamb/kid needs 10% BW in colostrum
- Too week to nurse, tube or bottle feed if necessary
- Best from momma

Chilled lambs/kids
- Increase body temperature (normal = 102 – 103)
- Dry them off and warm them up
Increase survival

Observation

Assist with difficult births

Adequate nutrition for dam
- Pre and postpartum
- Dam nutrition affects fetuses and neonates
- Shelter and good husbandry

Predator control

Parasite control

Vaccinations
- CDT + tetanus toxoid 3 – 6 weeks before lambing/kidding
- Active immunity for dam, passive immunity for offspring
Hypothermia

SIGNS AND SYMPTOMS

- Hunched
- Sunken sides
- No suckle reflex
- Down, slow, lethargic
- Unresponsive
- Cold mouth
- Decreased body temperature

TEMPERATURE

- Normal = 102 – 103
- Hypothermia = 100 – 101
- Severe hypothermia = < 99

***If temperature below 99, get to 99 before feeding colostrum (stomach tube)***
Little Orphan Annie

Abandonment, rejection, or dam death

Options?

- Graft to another momma
  - Initiate as soon as possible after birth
  - Graft the largest, strongest kiddo
  - Graft to a singleton momma
  - Use jug or small pen
  - Rub birthing fluids on orphan from adopter dam

- Artificially rear
  - Weakest, smallest lamb
  - 1 – 2 days old, feed every 4 hours
  - 20% of BW in milk/day

- Sell if available market outlet
Post-lambing management

Monitor closely first few days

Process within first 24 hours if possible

Examine for congenital defects

Records
  ◦ Litter size
  ◦ Weight
  ◦ Apply identification
  ◦ Make note of any abnormalities, including difficult birth
  ◦ Castrate and dock if desired
    ◦ Avoid if wet weather
    ◦ Best done earlier rather than later
Lamb and Kid Nutrition

First phase:
- COLOSTRUM
  - High nutrient, high antibodies
  - Quality and quantity matters
  - Age of dam, health & metabolic status of dam

Second phase
- Forage and concentrate feeding
- Pre-ruminants until about 8 weeks
  - Ruminations as early as 8 – 12 d ***if given forages or concentrates
- Encourage rumen development early
  - Forage and creep ration intake
  - Milk alone will discourage rumen development
Creep Feeding

Supplemental nutrition for nursing lambs/kids
- Early-born, early weaned
- Artificially reared
- Limited forages
- Under producing mammas

Introduce at least 2 weeks before weaning

More efficient to feed kids/lambs than increase milk production

**Minimum 14% CP, > 18 – 20 CP**
- Concentrates – cracked corn, soybean meal, rolled oats
- High quality pastures
- Highly palatable
Weaning time

Wean by weight, not age
- 2.5 - 3 times birth weight

Dry feed consumption
- 1% of body weight

Less expensive to feed kids/lambs than dams + offspring

Watch out for high grain finishing diets
- 10% of the diet should remain roughage
Grain Finishing vs Pasture Finishing

**GRAIN**
- Improved feed efficiency
- Increased ADG
- Promotes accelerated lamb growth
- Internal parasites...
- Fatter carcasses
- Digestive disturbances

**PASTURE**
- Generally more economical
- Slower growth than grain finished
- Pasture management
- **Quality and Quantity**
- Internal parasites...
- Leaner carcasses
General Guidelines

Introduce concentrate diets slowly

10% of ration should remain roughage

Ammonium chloride inclusion (urinary calculi)

Consider coccidiostat

Bunk space

Husbandry

◦ Clean, dry
◦ Do not feed directly on ground
Questions?