



# Sheep and Goat Management: Vaccines and Health

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# HEALTH: VACCINES AND DEWORMING





# Vaccines for Sheep and Goats

- Annually across flock:
  - Clostridium type C and D
    - Annual booster
    - Some prefer the 8-way
  - To consider: Parainfluenza (Pi3), campylobacter (Vibrio)
  - You might hear: orf, foot rot, chlamydia, E.coli, rabies, CL
- CD-T pre-breeding to females and Rams/Bucks (30 d prior)
  - Booster females 3-4 wks before parturition
  - Give to lambs/kids: 2 weeks prior to weaning and at time of weaning
    - Give to kids at banding/disbudding



# External Parasites

- Lice, ticks, mites, etc.
- Ewes/Does:
  - Pour/inject prior to lambing/kidding
  - Wool sheep: immediately after shearing
- Products:
  - UltraBoss
  - Ivomec Plus





# Internal Parasites

- Internal
  - Strongyles
    - *Trichostrongyle* spp.
    - *Nematodirus* spp.
    - *Haemonchus* spp.
  - Whipworms
    - *Trichuris*
    - *Capillaria* spp.
  - Tapeworms
    - *Monezia* spp.
  - Coccidia
    - *Eimeria* spp.







# Internal Parasite Control

- Pasture factors
  - Stocking density needs to be < 6-8 head/acre
  - Bermuda, brome, other improved pastures, form a dense canopy
    - 155°F in sun-exposed fecal pellets
  - Sparse brush allows for heat and drying of fecal pellets
  - Changes will be reflected in worm burdens in 3 to 8 weeks





# Internal Parasite Control

- Animal factors
  - Young animals
  - Genetics
    - 20% of animals harbor 80% of worms [sheep and goats]
  - New purchases, social, weather stresses
  - Immunosuppression of individuals
  - Periparturient rise
    - Large increase in infections from 2 weeks prior to until 8 weeks after delivery



# Internal Parasite Control

A white ram with large, curved horns is the central focus, standing in a pen. In the background, other sheep are visible behind a metal fence. The setting appears to be a farm or a veterinary facility.

- Drugs factors
  - Drugs are related
  - Rotation of dewormers is not currently recommended
- No new drugs are being made
  - There are no “better dewormers”
  - There are no “broad spectrum dewormers”
- No drug has ever been or ever will achieve 100% kill
- Drug resistance is a random event
  - But we do speed it up





# Plan of Attack

- Deworm frequently? High doses?
  - **NO!!**
  - Monitor risk
- Ways to monitor
  - Composite sampling of fresh dung (DrenchRite)
    - Test 10% of each animal group or 10 animals, whichever is greater
    - For dewormer decisions and evaluation
    - Serial monitoring of herd
  - Selective sampling of individuals
    - For individual thin animals



# Parasites

- Diagnostic strategy
  - \*\*Fecal Egg Count Reduction Test (FECRT)
  - Modified Stoll's, deworm, repeat Modified Stoll's in 14 d
- Used to verify drug efficacy
- Reduction of EPG by >90%
- Lower reduction = trouble
  - Resistance
  - Lack of efficacy
    - Dose, route, drug, weight





A photograph of a ram with large, curved horns standing in a pen. The ram is the central focus, looking towards the camera. In the background, other sheep are visible behind a metal fence. The setting appears to be an indoor or semi-enclosed area with a concrete floor and a white wall.

# Internal Parasite Control

- Treatment strategies
  - **Goal is not no worms!**
  - **BUT**, manageable numbers in animals and on pasture, who are susceptible to treatment if they become a problem



# Resources

- **Genetic information:** Nsip.org
- **Lifetime Ewe Management:** <http://www.lifetimewool.com.au>
- **Purchase feeds on nutrient costs (APP)**
  - <https://www.igrowlivestocktools.org/#!/calculators/feed-cost>
- **WYO Ranch Tools:** <https://uwyoextension.org/ranchtools/>
- **KSU:** <https://www.agmanager.info/decision-tools>
- **Parasites:** <https://www.wormx.info/>
- **Targeted Grazing:** <https://targetedgrazing.org/>