



# Lameness in Sheep

**Dr Petrea Wait**  
**District Veterinarian**  
**South East Local Land Services**

# Introduction

- Shelly hoof
- Foot abscess
- Footrot
  - Benign
  - Virulent
- Arthritis
- Other
  - Trauma
  - Scabby mouth
  - Strawberry footrot
  - Mineral/vitamin deficiency
  - FMD



# Shelly Hoof



- Separation of hoof wall from sole
- Packs with dirt and manure
- Wet conditions can lead to infection
- Lameness none to severe
- Hereditary? White footed Merinos, front feet.
- Treat by foot paring and cleaning, foot-bathing or antibiotics if infection, dry ground
- Prevention by regular foot trimming, selecting for good feet

# Foot abscess

- Infection inside the foot
- Trauma, wet conditions, heavy sheep
- Severe lameness, swelling above the hoof, pus discharge from heel, toe or coronet
- Usually one foot, front – toe, hind - heel
- Can lead to joint infection
- Treat with foot paring, antibiotics, dry paddocks
- Prevention with foot trimming, foot-bathing, avoiding wet paddocks and foot trauma, esp pregnant ewes – pregnancy toxaemia

# Foot abscess



# Footrot

- *Dichelobacter nodosus* – benign and virulent strains
- Will not infect dry feet
- Can live in sheep's foot for years
- Can only survive in environment for 4 days
- Needs correct environmental conditions to spread:
  - Temp between 10 – 20 degrees C, 4 – 5 days
  - 6+ weeks rainfall of 50mm/month
  - Active pasture growth, esp clover, leafy plants
- Young merinos most susceptible
- Severity of disease is dependant on environmental condition

# Benign footrot (scald / interdigital dermatitis)

- Moist inflammation between the claws, mild under running of heels (Score 1, 2, 3)
- Can progress to under running of sole (Score 4)
- Usually more than one foot affected
- Lameness usually mild but can become severe in heavy sheep
- Infection regresses with out treatment in dry conditions

# Virulent Footrot

- Severe and progressive under-running of heel, sole and wall (Score 3,4,5), putrid smell
- Develops quickly under favourable conditions with rapid spread
- 10% of flock have score 4 & 5 lesions
- More than one foot, severe lameness, flystrike
- Suppression of symptoms in dry conditions, becomes chronic with deformed feet
- **NOTIFIABLE DISEASE**







# Chronic Virulent Footrot



# Regulatory requirements for Virulent Footrot

- Must notify LLS inspector with in 48 hours
- Inspection of 100 sheep, +/- lab testing
- Difficult diagnosis on Monaro
- Flock quarantined, 'undertaking' signed
- Approved footrot eradication program
  - Destock
    - Restock in 7 days
  - Inspect and cull
    - Cull affected, footbathing, 6 weekly inspections until 2 clean turns, then clearance exam
  - Inspect and treat
    - Separate affected, foot bathing and antibiotics, 6 weekly inspections until 2 clean turns, then clearance exam
  - 2 years to eradicate disease, then destocking order
- Movement permits
- Sale to slaughter only
- Neighbour notifications
- Tracing – backwards and forwards

# Arthritis

- ‘Arthro’ – joint, ‘itis’ - inflammation
- Types of arthritis
  - Degenerative joint disease (age, wear and tear)
  - Immune mediated arthritis (rheumatoid)
  - Infectious arthritis (bacterial)
- Arthritis in lambs:
  - Suppurative
    - Joint ill
    - Strep, Staph, Actinomyces, E.coli, etc...
    - Blood borne, 2ndry to wound – marking, umbilical, grass seed
    - Severe lameness, hot, swollen joints, pus discharge
    - Diagnosis – joint fluid and culture, post mortem
    - Treatment – antibiotics early
    - Prevention – colostrum, good hygiene, fly control



# Arthritis - Erysipelas

- *Erysipelothrix rhusiopathiae* bacteria
- 10 – 14 days after marking or muelising
- Knee, elbow, hock, stifle
- Initial fever & joint pain, no swelling – recovery
- Chronic form at 6 months, thick, swollen, fluid filled joints.
- Diagnosis – joint fluid, post mortem
- Treatment – penecillin
- Prevention – colostrum, good hygiene, fly control
- Vaccination – Eryvac, ewes at joining then 4 weeks before lambing, annual booster.

# Arthritis - Chlamydia



- *Chlamydophila pecorum*
- Lambs 3 to 6 months old, British breeds (Dorset), rapid growth on improved pastures
- Ingestion, inhalation of infected faeces, urine, ocular discharges
- Initial fever, stiffness, lameness, conjunctivitis, swollen, fluid filled joints.
- Diagnosis – blood test x 2, joint fluid/PM and exclusion of other causes, PCR
- Treatment – Oxytetracycline
- Prevention – colostrum, good hygiene, fly control

# Other causes of lameness

- Trauma
  - Usually individual animal
  - Bruising, abrasion, laceration, fracture
- Scabby mouth
  - Scabs to face, udders, feet
  - 2ndry infection can lead to lameness
- Strawberry footrot
  - Dermatophillosus (lumpy wool)
  - Wet conditions
- Mineral/vitamin deficiency
  - Selenium, Vit E, Copper, Calcium, Phos, Vit D
  - Weakness, go down when driven, sudden death
  - Abnormal gaits, sway back
  - Rickets, fractures
- Foot and mouth disease
  - Exotic disease
  - Blisters then sores between toes, above hoof, around mouth, udder
  - Highly contagious, rapid spread

