2012
A YEAR IN REVIEW

The Good,
The Bad
and
The Sick

PINK EYE

- Most common in summer and fall
- Prevalence and severity of disease vary greatly
  - From year to year
  - From area to area
- Young animals are most susceptible but animals of any age can be affected
- Outbreaks can affect up to 80% of animals and can last 4-6 weeks +

ECONOMIC IMPORTANCE

- Loss of body condition
  - Discomfort
  - Failure to feed
- Temporary blindness, permanent vision impairment
  - Poor reproductive performance
  - Starvation

CAUSES

- Cause: Moraxella bovis
- Cattle are the reservoir host
  - Bacteria is carried on the conjunctiva as well as the nostrils and vagina
- Eye irritation is needed to allow the bacteria to infect the tissue
  - Flies
  - Dust
  - Long grass and weeds

- Bacteria can live on flies or grasses for multiple days

CLINICAL SIGNS

- Conjunctivitis
- Tearing
- Blinking
- Photophobia
- Corneal opacities +/- corneal ulcers
- Purulent ocular discharge

Any animal observed with clinical signs should be isolated, treated and monitored

TREATMENT

- Usually a self-limiting disease
- Recovery can occur without treatment but early treatment will reduce the incidence of scarring of the eyes



TREATMENT

- Option 1:
- Topical Antibiotic Treatment
  - not practical from an economical or a practical standpoint

TREATMENT

- Option 2:
- Subconjunctival (Bulbar conjuctiva) antibiotic therapy
  - Effective, but does require excellent head restraint
  - 1 injection of Penicillin into the bulba conjunctiva
  - Reoccurance was higher than with parenteral treatment – possibly due to poor technique

TREATMENT

- Option 3:
- Parenteral antibiotic therapy
  - Effective
  - Easiest route of administration
  - Oxytetracycline LA (4.5mL/100lbs) SQ; repeated in 72 hours
  - Nuflor (3mL/100lbs) IM; repeated in 48 hours
    - Reports of faster recovery rate

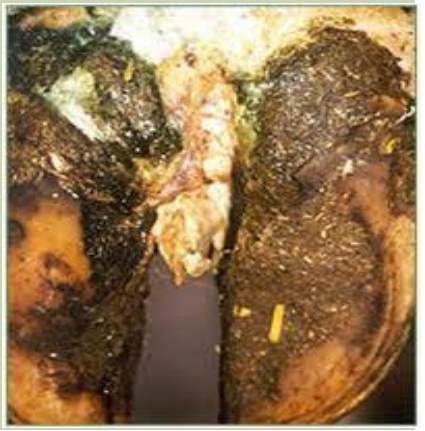
Exact antibiotic doesn't matter – just treat!

PREVENTION

- Management practices to reduce risk factors are the most effective to decrease incidence of disease.
  - Lower disease incidence = lower bacteria concentration = reduced risk of severe outbreak
- Fly control – 10-20 flies/animal = moderate to heavy
  - Fly tags
  - Pour on (Bos Pour On, Cylence)
  - Fly sprays
  - Back rubbers
- Appropriate pasture grazing and pasture clipping
  - Minimize weeds and grass seed-head development
- Vaccination
  - Current vaccines have limited efficacy

FOOT ROT

- 75% of all lameness cases of beef cattle
- Sporadic incidence but under “favourable” conditions, up to 25% of a herd can be affected
- Incidence is higher in areas where pastures are smaller and soil pH is higher
- Spikes occur 4-8 weeks after high rainfall



ECONOMIC IMPORTANCE

- Lame cows will lie down for longer periods
  - Eat less
  - Muscle and joint issues / difficulty rising
  - Poorer growth rates of calves
- Affected steers gained 0.45lbs/day less than non-infected steers (Brazzel, 1993)
- Treatment costs and time to treat are high
- Lame bulls will not breed
- If left untreated, joints may become infected
  - Not fatal, but leaves the animal severely lame and requires euthanasia if too progressed to slaughter

CAUSES

- Fusobacterium necrophorum
  - Anaerobic bacteria commonly found in the environment
  - Presence of other bacteria (ie. E.coli) increase the virulence of F. necrophorum
- Injury to the skin and underlying tissues between the toes is required
  - Walking on abrasive or rough surfaces
  - Standing in a wet and muddy environment for long periods
  - High temperatures and humidity causes skin to chap and crack
- Mineral deficiencies of zinc, selenium and copper increase incidence of disease
  - Needed for hoof health and general general health

TRANSMISSION

- Infected cattle will further contaminate the environment
- *F. necroforum* can survive in the environment for one to ten months (Edmundson, 1996)
  - Wet conditions may allow the bacteria to survive longer in the environment.
- Problem areas are muddy, high-traffic areas
  - Feeders
  - Gate exits
  - Mineral bins

CLINICAL SIGNS

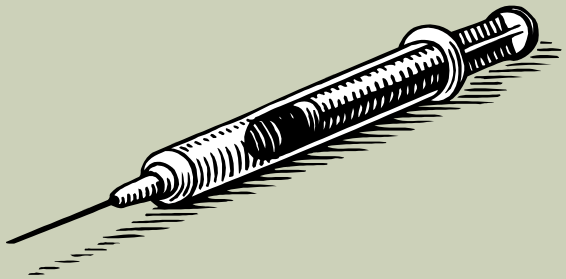
- Sudden onset of severe lameness
  - Very painful, often only toe touching
- Skin and soft tissue between toes becomes red and swollen
- Swelling from top of the hoof to dewclaws (or higher)
- If left untreated
  - Skin between toes will crack
  - Dead/decaying tissue will protrude
    - Foul odour
    - Greater possibility to spread to deeper structures and resist treatment

TREATMENT

- Antibiotics
  - Doesn't matter which one
  - Long acting or multiple treatments essential
- Choosing the right antibiotic
  - Size of animal – 300kg vs. 750kg
  - Production class - cow vs. feedlot finished steer
  - Severity of disease
  - Handling facilities

TREATMENT

- NSAID Therapy
  - Flunixin (ie. Banamine, Flunazine, Cronyxin)
  - Anafen
  - Metacam
- Reduces swelling and inflammation
- Decreases pain associated with condition



PREVENTION

- Rough areas smoothed or fenced off from cattle
- Cattle areas should be free of debris or potential damaging objects
- Scrape barnyards and pens frequently, ensure proper drainage
- Free choice minerals including zinc supplementation
  - Maintains integrity of the skin and hoof
- Vaccination is available
  - Most economical in the feedlot or other intensive rearing situations
  - Speak with us to see if it's the right choice for your farm

OTHER ISSUES?

- Calf Diarrhea
- Pneumonia
- Decrease reproduction
- …

Don’t hesitate to contact us to help control and prevent any other diseases you may be dealing with

QUESTIONS?