

## LAME SHEEP IN SPRING

By Colin Trengove, Pro Ag Consulting

Why do good springs always bring lameness to the fore? Wet years tend to accentuate many animal health issues and lame sheep is a common one.

This can be dietary related but more commonly associated with microorganisms invading the horn and skin of feet or joints. There are also several exotic causes of lameness such as Foot and Mouth disease and Screw Worm fly that cannot be ignored. For this reason it is essential that a thorough investigation be carried out to determine the cause of the lameness and an appropriate treatment strategy put in place.

A flush of feed combined with wet conditions provides an ideal environment for various bacteria to invade softened skin and cause inflammation and pain. Arthritis of various joints is one consequence, especially in lambs with the infection acquired through the wet umbilical cord or skin cuts at marking. In addition, recent research by Dr Joan Lloyd has shown a 50% increased risk of arthritis where the tail is removed at the first or second tail joint.

The number of feet affected and severity of the lameness will depend on which bacteria are present. Toe and foot abscess in one or two claws in up to 20% of a mob is a regular occurrence in most winters in higher rainfall areas. It presents as an acute lameness usually affecting one foot with evidence of swelling, redness and sometimes pus associated with either a crack in the toe or infected hoof. Rams and late pregnant ewes are typically affected and foot paring can assist diagnosis. As with any abscess prompt drainage is the best treatment and antibiotics may assist recovery.

### **Foot Abscess**



Ovine interdigital dermatitis (OID) more commonly referred to as “scald” begins as the name suggests with inflammation of the skin between the digits caused by invasion of *Fusobacterium necrophorum* – a common bacteria found in soil. This can present as prominent lameness in up to 30% of a mob, but disappears as conditions dry out and feed quality deteriorates. Foot

bathing in 10% zinc sulphate can alleviate this condition where welfare concerns arise, but generally treatment is not warranted.

### **Foot Scald**



Scald can develop into footrot if *Bacteroides nodosus* is also present. This bacterium is an obligate anaerobe meaning that it only persists deep in horn tissue. Consequently it is only found in infected hooves and is spread by contact with infected sheep or where they have recently been. A seven-day quarantine between the presence of footrot infected sheep and non-infected sheep is considered adequate to avoid transmission of the disease. There are 10 strains of *B. nodosus* with contrasting virulence that along with environmental conditions dictate the severity and duration of the lameness experienced. Lameness associated with benign strains tends to disappear over summer, while virulent strains eat into the horn tissue usually affecting several feet and require a combination of vigilant hoof paring and antibiotics or vaccine to combat the infection. It is a notifiable disease causing significant production loss and so specialist diagnosis and advice is best sought to eradicate this condition from a mob or flock.

Lameness is sometimes apparent especially in lambs on highly digestible protein diets such as legumes. It is thought to be associated with the rapid conversion of dietary nitrogen into ammonia quicker than the liver can process it into protein and urea. The consequence is similar to excessive grain consumption presenting as tentative stepping or reluctance to walk. There is little to be seen on hoof examination and it usually resolves with a change of paddock or the inclusion of grain or more fibre in the diet.

Occasionally lameness is associated with either scabby mouth virus or *Dermatophilus congolensis* infection (known as "dermo" or strawberry footrot). These cause distinctive lesions between the digits and above the coronet due to inflammation and bleeding leading to crusty exudates. Diagnosis may be assisted by the presence of corresponding scabby mouth or dermo nodules on the muzzle and ears. The infections clear up in 3-6

weeks, but close examination of affected feet is critical as they can become fly struck resulting in the need to footbath in flystrike chemicals.

***Scabby Mouth on the feet***



For further information seek professional advice from your Livestock Consultant, Animal Health Officer or Veterinarian.