Prevention and control of footrot

Footrot is……

- one of the commonest forms of lameness in sheep
- the biggest cause of welfare prosecutions related to sheep
- highly infectious
- often caused by over-trimming feet
- more common when the weather is warm and wet
- quickly spread when stocking rates are high e.g. during winter housing
- a major economic influence on a flock causing reduced growth rates, reduced lambing percentage, reduced birth weights, reduced milk yields and increased risk of fly strike caused by bacterial infection

The bacteria that cause footrot

*F. necrophorum* causes scald. It is ever present in the environment and so cannot be eradicated. If untreated, the damage caused by scald infection provides the opportunity for *D. nodosus* bacteria to enter the hoof. *D. nodosus* survives in the hoof of a sheep but can also survive on pasture for 7 to 10 days. There are many strains of *D. nodosus* and they each differ in the amount of damage they can do to the hoof.

There are 10 simple ways to prevent and treat footrot

1. Inspect your flock regularly for lame sheep
   - Treat and isolate all lame sheep as soon as lameness is seen
   - If more than 5% of sheep are lame at any one time, review the cause and the control methods being used

2. Make sure the diagnosis is correct
   Footrot is not the only cause of lameness

   Other causes of lameness include: granulomas, hoof abscesses, contagious ovine digital dermatitis (CODD) and arthritis. Treatments for these may differ.
   Seek veterinary advice if unsure as treatment may differ.

3. Avoid routine foot trimming
   Foot trimming is no longer recommended as a routine control method. It is very easy to over-trim feet and this allows the entry of bacteria through the damaged tissue

   - Only trim overgrown feet
   - Make sure that foot shears are sharp and well maintained
   - Disinfect foot shears between animals and remove clippings - bacteria can survive in the clippings for up to 6 weeks

A toe granuloma - often caused by poor trimming technique

Leaving scald untreated can lead to footrot later in the season

Poor trimming technique

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4. Use the correct chemical products
   - Formalin (3% solution) and zinc sulphate (10% solution) can help to treat mild cases of footrot
   - Chemicals can be applied using mats or by walk-through or stand-in footbaths
   - Follow the manufacturer’s instructions, incorrect use can mean that treatment is ineffective and can damage the hoof
   - Walking sheep through water to clean the feet before footbathing and standing the sheep on a hard surface after footbathing will improve the effectiveness of the product

5. Inspect your handling facilities
   - Keep handling facilities clean and easy to use
   - A concrete inspection area will make the identification and treatment of footrot easier

6. Use clean grazing
   - Footrot bacteria can only survive on pasture for 7 to 10 days so move the group to ‘clean grazing’ after footbathing
   - Clean grazing is land which hasn’t been grazed by sheep for 7 to 10 days
   - Put infected animals in isolation fields to help prevent footrot spreading throughout the flock

7. Introduce footrot control at housing
   - Housing provides the ideal environment for the transmission of footrot bacteria
   - Identify any lame animals before housing
   - Treat and isolate infected animals from the main group for the whole period
   - Inspect housed animals regularly
   - Remove lame sheep immediately, treat and keep in separate group
   - Keep bedding dry

8. Adopt a strategic culling policy
   - Animals that are repeatedly lame, those with badly misshapen feet and those not responding to antibiotic treatment should be culled
   - Culling infected animals will help reduce infection between sheep
   - Susceptibility to footrot is influenced by genes – so avoid breeding from sheep that have had footrot
   - Select rams with good feet. Speak to the breeder of purchased stock about their policy on breeding animals which are better able to resist footrot

9. Biosecurity
   - New strains of D. nodosus can be introduced through animal movement so buy in sheep from as few sources as possible
   - Isolate all new animals and those bought back from tack for at least 3 weeks
   - Use footbathing during this period and treat any lame animals promptly
   - Do not introduce lame sheep into the main flock
   - Consult your vet if any animals fail to respond to treatment or if unusual signs are seen

10. Develop a flock health plan
    - Work with your vet to develop a whole flock approach to footrot
    - A year round approach will help to minimise sudden outbreaks

Getting control of footrot will take time initially but will save money and labour in the long-run

**DO**
- Inspect and treat all lame sheep immediately
- Use appropriate treatment and always follow the manufacturers instructions
- Involve your veterinary surgeon in your prevention, treatment and control programme

**DON’T**
- Overtrim feet
- Introduce lame sheep into the flock
- Breed from sheep with a history of footrot