

Walking free of footrot

Lameness can be time consuming to treat on a case-by-case basis, but a new protocol looks set to offer a practical approach to prevention.

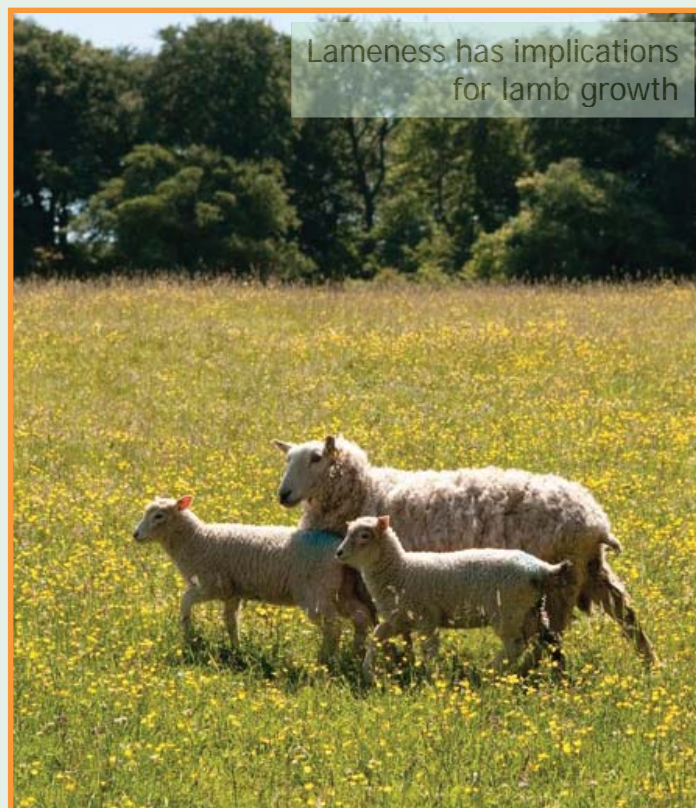
Banishing footrot isn't just good news for animal welfare, it's good news for the bank balance too. According to research by FAI Farms (www.fairms.co.uk) treatment and labour alone is costing UK sheep producers approximately £8 per ewe. Then there are the 'hidden' costs to consider — because immobile animals graze less effectively, there can also be implications for lamb growth rates and milk production.

Lameness has also been linked to an increase in the risk of concurrent diseases. For example, it is believed that there is a correlation between the occurrence of

lameness and the occurrence of fly strike.

The cause of lameness is often footrot or scald. If this is the case, not only is it time consuming to catch-up lame individuals, but bacteria can also spread rapidly between sheep. However, FAI believes the problem can be controlled if tackled on a whole flock basis.

Working with Ryan Haydon, a sheep, beef and dairy farmer based in West Sussex, FAI has created a new management protocol designed to provide a long-term solution to footrot. The protocol is currently being evaluated at three UK sites.



The protocol: a five-step approach

FAI Farms undertakes farm-scale development projects to improve animal welfare and, in addition to other livestock, has 1,000 Coopworth ewes and mixed crop lambs at Wytham, Oxfordshire. The unit is also home to 200 wool-shedding ewes. Footrot and scald have consistently been an issue, particularly in late summer and early autumn.

Warwick University led by Professor Laura Green, has carried out extensive sheep lameness research using flocks (including that of the FAI) to investigate the spread and control options of footrot and scald (www2.warwick.ac.uk). Through participation

in the project FAI gained an increased understanding of the management and treatment of lame sheep and was able to gain effective control of the problem.

FAI began monitoring incidence of lameness in April 2009. In the first year, 461 ewes and lambs were treated for footrot or scald, equating to a lameness incidence rate of 18.5%. This is estimated to have cost £3,364; approximately £7.30 per sheep.

In the same year, FAI met Haydon, an innovative farmer who had struggled with lameness in his sheep flock and tried various methods before settling on a combined protocol involving vaccination.

This approach has proved successful, reducing then maintaining lameness at virtually zero for the past six years. FAI and Haydon then collaborated to develop a more formalised protocol, ready for testing on other farms.

With a focus on prevention, the protocol consists of five key actions:

- 1 Cull badly or repeatedly affected animals
- 2 Vaccinate animals to stimulate immunity
- 3 Quarantine incoming animals
- 4 Treat clinical cases early
- 5 Avoid the propagation of infection at gathering and handling

See table over-page for details.

Footrot Reduction Protocol: 5 steps	Implementation
1 Cull badly or repeatedly affected animals	Use management marks to identify treated animals then cull tags or EID to identify ewes treated more than once or in multiple feet. Harsh culling in the first two years will eliminate any sheep particularly susceptible to infection.
2 Vaccinate	Introduce biannual vaccination using Footvax. Timing of vaccination to be determined by the farm's individual risk periods, with a recommendation of one dose in late December to help during the housing period and one after shearing.
3 Quarantine incoming animals	Animals to be kept separately for six weeks to allow for treatment of any lameness and the start of the vaccination programme. The aim is to protect both the existing flock and the newcomers.
4 Treat clinical cases early	Footrot and scald spread rapidly between animals, therefore sheep to be treated on the same day that lameness is identified. Routine foot trimming and over-trimming of clinically affected sheep to be avoided.
5 Avoid propagation of infection at gathering	Handling facilities to be designed to avoid gathered animals standing on wet, churned-up ground. The use of mobile handling pens and lime around water troughs and gateways is recommended. Foot-bathing to be used as appropriate.

“ At FAI's farm in Wytham, lameness incidence was 0.5% in June and July, with just two sheep requiring treatment. **”**



FAI will continue to evaluate the protocol

The results so far

The new protocol is currently being assessed by David Crutchley at the FAI's farm in Wytham, Huw Llandre at Llandre farm in Wales and Graham Dixon at Alwinton farm in Northumberland, on a total of more than 2,500 ewes plus their followers and lambs. The protocol was introduced at all farms in April 2009 and, thanks to sponsorship from Intervet/Schering-Plough Animal Health, FAI will monitor results for a total of three years.

Now, 18 months into the three-year assessment period, all three farms have reported a 'substantial reduction' in lameness. At Wytham, for example, lameness incidence was 0.5% in June and July

2010, with only two sheep requiring treatment. During the same period in 2009, 24 cases required treatment.

However, while these early results are encouraging, it is stressed that the protocol should not be seen as a 'quick fix' but rather a long-term strategy for sustained results.

As the project progresses, FAI Farms will continue to evaluate the success of the protocol and also plans to quantify the indirect costs of lameness, thereby quantifying the true value of a preventative approach

If the new protocol proves successful, it is hoped that it will be implemented widely across Europe and elsewhere.