



The FeetFirst project is co-funded by Merino Inc, the Ministry for Primary Industries and The New Zealand Merino Company.

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ON THE QUEST TO FOOTROT-FREE FINE-WOOL SHEEP

FeetFirst

Dr Mark Ferguson

The FeetFirst project is looking for a new weapon to add to the arsenal to combat footrot. It comes in the form of a new genetic test. If the project goes to plan, the test will effectively define the likelihood of any fine-wool sheep contracting footrot when conditions are conducive to its spread.

However, to be able to provide this new weapon, we must have participation from the entire industry to get sufficient numbers to build an accurate test. If you have footrot at home and are willing to join the fight (or would just like to find out more), please get in touch with Brenna Sharland on 03 335 0911.

With some good rain over the summer period, many growers are reporting an increase in the prevalence of footrot across the fine-wool growing regions. If you have noticed limping in

hoggets or ewes about to be weaned, it is likely we can work with you to bring us one step closer to the new genetic test. We need 8,000 samples (4,000 from sheep with footrot and 4,000 from sheep that do not have footrot) from 100 properties. This sounds like a big task – and it is!

Progress to date

- 25 farms have completed the entire protocol and samples have been collected and in many cases genotyped.
- 17 farms have had samples collected from sheep with footrot, but the project team are waiting for a sufficient challenge before collecting samples from the sheep without footrot (to confirm their 'clean' status).
- A total of 1,844 samples have been collected from sheep with footrot.
- A total of 1,188 samples have been collected from sheep without footrot.
- Around 25,000 sheep have been tipped and inspected to find the sheep and collect the samples.
- A further 23 farms have indicated their willingness to be involved and are likely to meet the requirements

of the project and will be sampled in the coming months.

- An additional 21 farms have indicated a willingness to be involved but for various reasons (eg. the prevalence of footrot was too low, have used footvax on all sheep etc.) they may not be able to be involved.

AT LEAST 35 new farms with footrot need to be identified and sampled to meet the target of 100 farms.

Who can be involved?

If you can tick all of these boxes, you can (and should) be involved:

- ☐ I have a mob of sheep with footrot.
- ☐ The sheep have not received footvax in the previous 12 months.
- ☐ The sheep have not been treated with an antibiotic in the previous 2 months.
- ☐ They are at least 6 months old.
- ☐ There are times through the year that the sheep go for greater than 4 weeks without a footbath.

What does it involve?

In short, the process involves a team of vets and/or project staff coming out to your property to conduct the sampling. If you do not have facilities on the property to efficiently tip sheep, they will organise a conveyor to use during the day.

There is a full protocol available to interested growers. Please contact Brenna Sharland if you would like one emailed or posted to you 03 335 0911 or brenna.sharland@nzmerino.co.nz.

First visit:

The aim of the first day is to find 40 sheep that have score four footrot (like the photo above) or chronic footrot. These sheep will be tagged and a tissue sample will be collected.

At the same time, and from the same mob, the team will aim to find around 80 sheep that have four normal shaped hooves with absolutely no signs of imperfection or infection. These are the 'clean' sheep and they will be tagged but no tissue sample will be collected on this first visit.

Once both groups of sheep are identified, the first inspection and sampling is complete. From here, there are two options.

Option A (preferred):

The 40 sheep with footrot and the 80 'clean' sheep are drafted out and put in a mob together in paddocks that are conducive to the spread of footrot, with no treatment. These sheep remain together until some of the 'clean' sheep start to show signs of footrot. The project/vet team will then revisit the property and only tip the 80 'clean' sheep. They will be looking to find the sheep that still are free of infection. These sheep will then have tissue samples collected. The sheep that do have signs of infection will have their tags removed. Ideally the sheep that have stayed clean will remain tagged so that they can be identified in the future.

Option B:

The 40 sheep with footrot (and any others in the mob with footrot) are removed from the mob and sold or treated. The 80 'clean' sheep remain in the original mob and wait until the next natural challenge develops. There can be some foot bathing of this mob to work in with normal management, but ideally this is kept to a minimum. The tagged 'clean' sheep must not receive antibiotics or footvax.

Once a natural challenge has developed in the mob, the project team will return and the tagged 'clean' sheep will be drafted off and their feet inspected. The sheep that have remained clean will have tissue samples collected and be returned to the mob.

Protocol flexibility:

The decision about which protocol is followed, and the time required between inspections, will vary between farms and times of the year. The project team are committed to work with the grower to minimise the impact on the farming business, while recognising the importance of gathering a rigorous data set.

Contact

If you have any questions about the project, please feel free to contact

Brenna Sharland (03 335 0911) or Dr Mark Ferguson (021 496 656).