



CASE STUDY

Ryan Teutenberg

At a glance

Ryan Teutenberg, Hinenui Genetics

Stock: ewes 2000 recorded, 250 unrecorded, ewe hoggets 1300 recorded, ram hoggets 1100, cows 275, heifers 113 x R2, 116 x R1, steers 110 xR2, 116 xR1

HDX lightweight button paired with TSU

Challenges

- Manually reading brass ear tags is challenging.
- Can't rely on harnesses.

Benefits

- Tissue sampling is significantly easier than blood cards, so they could dock 700 per day, as opposed to 250
- Single sire mating, so parentage is easy to identify.
- Minimise disruption at lambing. A daily ride to check for cast ewes is all that's required.
- Extra data improves selection accuracy for clients.
- Taking a data set of weights and select the fastest growing lambs, rather than the ones that weigh the most on the day.



Livestock Intelligence™

MSD Animal Health Intelligence

Being an early adopter of clever technologies is helping a leading sheep stud enterprise stay ahead of the competition and expand its business.

Hinenui Genetics is based on the North Island's East Coast and operates the country's largest Coopworth recorded flock plus a smaller Romney recorded flock. Both flocks are renowned for producing highly facial eczema tolerant, high growth rate rams.

The business is a family affair. Day-to-day management of their Muriwai property, south down the coast from Gisborne, is in the hands of Ryan Teutenberg, son of Brett and Lucy. Ryan's sister Deanna and her husband Phil Cook run Hinenui's other property at Rere, further inland.

In 2002, Brett was an early adopter of using DNA to assign parentage for lambs born in the recorded flocks. This meant the many hours each day spent catching, tagging and matching lambs to ewes for the thousands of lambs born in the stud's recorded flocks was over. Instead, a tiny blood sample was collected at docking time and sent away to extract the DNA that allowed them to match each lamb to its dam. "We single sire mate so we know which sire has been with each group of ewes. So, parentage is taken care of without a lot of work over lambing time," Ryan says. Six years ago, they shifted from collecting blood samples to tissue sampling from each lamb.

When combined with the introduction of a clever pre-packed tag and tissue sample collection system, Ryan says the tedious days of docking ended. "We were using blood cards up until about six years ago and they were an absolute pain. Tissue sampling is so much easier."

The triple-pack system was developed by Allflex and comes pre-numbered and barcoded, so each lamb has a tissue sample taken for DNA analysis, plus its lifetime electronic identification (EID) tag and a visual tag inserted in three operations down the docking chute. "These neat little packs from Allflex come with all the bits you need. All we have to write down is the sex of the animal." "It meant we went from docking 250 in a typical day, to 700. And that isn't a strenuous day."

Last docking, they collected nearly 4000 tissue samples so every animal on their farms is fully DNA profiled. "The barcode on the tissue sample unit (TSU) has the EID information on it so it makes the process almost error free. We tag and take the sample at docking and it's a really simple process."

Hinenui Genetics use Shepherd Complete, available from Zoetis Genetics, to assign parentage. The samples collected at docking can also be used to identify genetic traits, including meeting requirements to achieve FEGold status in both their Romney and Coopworth flocks. They record information through Sheep Improvement Ltd (SIL) and focus on the five goal traits - reproduction, survival, growth, meat and wool.

Aside from facial eczema tolerance, growth and meat are the core traits for Hinenui. Along with better accuracy, tissue sampling minimises the disruption at lambing that can occur when tagging lambs at birth. These days, a daily ride around to check for cast ewes is all that is required during lambing time. "We still check daily but try to be as hands off as possible. It's always annoying to see a cast ewe dead," says Ryan.

Hinenui Genetics was an early adopter of electronic identification for the gains it provides in speed and accuracy. Ryan can still recall those early days of manually reading brass ear tags. "We had to spit on the brass tags, and sevens looked like nines sometimes. It was very tedious." They progressed to bigger visual tags on the ewes which made it easier to record numbers more accurately but didn't eliminate the manual

recording challenges. "When we went to DNA sampling nearly 20 years ago, we didn't have to tag at birth anymore. But then when we went to EID tags a few years ago, that was awesome." Tasks like weighing ram lambs is now just a morning's work so they are weighed more frequently to add accuracy to each ram's breeding values. It's also allowed the family to expand their recorded flocks to meet increasing demand for their rams.

"With Sheep Improvement Limited (SIL), we also know the more information we put in on individual animals, the more we can extract out." That extra data is improving selection accuracy which is great for their clients too. Last mating, the value of EID tagging and tissue sampling to determine parentage was highlighted to the Teutenbergs after they got a surprise at the number of ewes a new sire had tupped without leaving any crayon mark on them. They noted 120 ewes had harness crayon on them after the ram was removed after two weeks with a mob of ewes. Another sire was introduced a week to 10 days later. But at scanning time, when their scanner aged the unborn lambs into seven day blocks, they found out this particular ram had tupped 200 ewes in the group, 40% more than had shown up with crayon marks. "What this showed was we can't rely on harnesses because they aren't bullet proof.

DNA was still needed to 'clean' up the data set for us.

"The Teutenbergs say they rarely have cases of tags being lost. When they do come out, another tissue sample is all that's required to determine which ewe it is in the flock so it can be re-tagged. In terms of technology at their yards, a panel reader was added to the race before their Racewell weigh crate. Their only other modification was to remove an old fluorescent light from above the reader because it was emitting 'noise' and preventing the reader from working correctly. Ryan sees the most opportunity for commercial flock owners who start using EID tags is in improving the growth rate of lambs.

Using the FarmIQ app, he says it's a simple task to take a data set of weights and select the fastest growing lambs, rather than the heaviest at weighing day. "Which is what you want. High growth rate means you're getting lambs away earlier and a higher percentage off mum," he says.



Allflex Livestock Intelligence, part of MSD Animal Health, is the world leader in the design, development, manufacturing and delivery of solutions for animal identification, monitoring and traceability. Our solutions empower farmers to act in a timely manner, to safeguard their animals' health, while achieving optimal production outcomes for a healthy food supply.

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