

A CLEARER PICTURE

Having daily information on individual cow health has enabled Taranaki dairy farmers Sarah and Wayne Neilson to turn on the engine of their genetically capable cows and get them back in calf more easily.

Words **SHERYL HAITANA**



Getting multiple bull calves from the top cow in the herd is not an uncommon frustration for dairy farmers, but Waverley farmers Wayne and Sarah Neilson have been able to crack the code.

Their top Friesian cow who is producing more than 800kg milksolids (MS) had given them eight bull calves, despite attempts with sexed semen in the past. But since the couple invested in smaXtec boluses, they've been able to monitor her short cycle and pounce at the right time.

"As soon as we put the boluses in we saw she would have a rumination drop and a slight temperature increase, her activity went up, but it was a very small window and she went straight back to normal," Sarah says.

"We were obviously getting her in calf, but not to sexed semen. Now poor Wayne (who is our AB technician) is getting shoved out of bed at 11.30pm to inseminate her if it's her optimal window. I don't do that to him often,

just a few top cows, but we've had two heifer calves out of her now."

The ability to monitor each cow's oestrus cycle has dropped their not-in-calf rate from 18% to 8%.

"It was frustrating - we were sitting around 18-19% empty rate and we were monitoring feed, percentage of protein, weights, and we were thinking there has to be more to this," Sarah says.

"We are starting to build a picture now. We've gone from having 57% of normal heats identified to correctly identifying 74%. So effectively, heat detection accuracy has improved by 17%, including girls that have had silent heats that we may have missed previously - we now catch them, and that's been exceptional.

"We've gained more control over the use of sexed semen and we are using it to improve our top genetics. We have optimal timings for sexed semen use and have been able to identify conception windows for the cows."

FARM FACTS

- **Owners** Sarah and Wayne Neilson
- **Location** Waverley, South Taranaki
- **Area** 100ha milking platform
- **Cows** 340 Friesians
- **Production** 550kg MS/cow
- **Farm** Dairy/System 5
- **Automation** smaXtec boluses, drafting gate, weigh scales

ABOVE Sarah and Wayne Neilson have got a new picture of their herd which has driven a more proactive approach to animal health.

The success of the technology also gave the Neilsons the confidence to put the boluses into their yearlings last year and use sexed semen to maximise their top genetics coming into the herd.

A few seasons ago the couple were looking at the market for wearable technology to assist them and their staff on the dairy platform. They investigated several options on the market, but feel so grateful that they got



a recommendation to look at smaXtec, which is the only internal cow health monitoring system in New Zealand.

The boluses measure inner body temperature, drinking cycles, water intake, rumination activity via reticulum contractions, movement activity, and optionally pH value directly in the reticulum.

"This technology gives us so much data and a real picture of each cow; I love that," says Sarah. "We wanted something that ticked the boxes and something [that meant] we didn't need to be here all the time as we get busy with the other parts of the business."

"We are so thrilled. All you want is happy and healthy cows, and we are happy to advocate it to any farmer if it helps them."

Wayne, Sarah and their staff on farm have been able to shift to prevention rather than cure. They now have the ability to drench or administer anti-inflammatories if a cow has a temperature spike to give her a boost, which has reduced their dependence

on antibiotics and reduced their cow losses, Sarah says.

It's a mindset change, from looking at a cow in the paddock thinking she looks healthy but seeing on the app that she has a temperature increase or decrease and something is going on for her.

"Early mastitis intervention has been invaluable. We approximate that we identify subclinical cows around five days earlier using temperature alerts when they potentially would have been clinical cases prior to boluses. It's been amazingly pre-emptive."

At calving, it has given them greater insight into when cows are due to calve, but more importantly, how cows are managing that transition and how they are recovering.

"In the colostrum group, we ensure they return to pre-calving rumination levels and there are no suppressed appetite issues," explains Sarah. "We also check their glucose levels and watch for signs of post-calving infections. If their temperature is normal and their milk is clear, we know they're on track.

"There is no rushing her, so she is rested and can bounce back and turn around for mating and get back in calf."

The technology has the ability to manage cows individually and in groups and adjust the settings and the sensitivity for the health alerts accordingly. The smaXtec decision tree ensures everyone in the team is on the same page when making decisions based on the data. It makes it easy to

step off farm as well, Sarah says.

"Twice a day, our staff check the data, identify cows, draft any with health alerts, perform rapid tests, and they can follow the decision tree to determine the next steps."

They have come to rely on the technology year-round including when the cows are wintering at their runoff.

"We even have a base station at the dairy support farm, so that information is continuously used, whether monitoring transition cows over the dry period or our yearling heifers to monitor their health and utilise the information for mating.

"I can see where everyone is at all times, and check on them wherever I am. It's great," Sarah says.

The unique internal bolus system for monitoring the health and wellbeing of dairy cows is a great choice for New Zealand dairy farmers, offering considerable advantages, smaXtec's New Zealand Manager Jeff Hill says.

"The advantage of having an internal divide is we are measuring directly instead of externally so the accuracy is next level and it gives us access to even more insights.

"The internal temperature alerts are a game changer and our farmers are getting the alerts so early when the health issue is still sub-clinical, meaning cows can keep pumping milk all year round and reach their potential.

"It's the 'Gold Standard' in animal health monitoring." ● Visit smaxtec.com

