

CASE STUDY: MARK & DEVON SLEE

Technology investment enables smart irrigation practice

Sustainable irrigation practice and investment in technology have played a major part in Mark and Devon Slee's supreme award win in the 2014 Canterbury Ballance Farm Environment Awards. Annette Scott reports.

Mark and Devon Slee are among New Zealand's top performing irrigators. The couple has significantly invested in technology and personally committed to reducing their environmental footprint.

An opportunity to tell a good news story prompted the Ealing dairy farmers to enter the Ballance Farm Environment Awards (BFEA).

Their value of persistence, smart thinking and long slog for incremental gains over a 20-year period set the standard and the couple came out tops with their Melrose Dairy operation, winning the supreme award in the 2014 Canterbury BFEA.

They also took out the LIC Dairy Farm Award, the PGG Wrightson Land and Life Award and the WaterForce integrated management award.

The Slees have integrated smart ideas into smart systems, building on intergenerational programmes that are not just about profitable productivity but equally about environmental management, animal welfare, compliance and the community in which they farm.

"This is not about us, we did not enter for ourselves. We have been under the radar for 20-odd years now, we have had opportunities in the past to enter but I guess our skins have thickened up and we decided it was time to tell the story," Mark Slee said.

"The (dairy) industry is full of challenges and we are not going to solve all the challenges overnight but with time and education, resources and technology, we can do an even better job towards sustainability," he said.

Slee has long had a strong interest in irrigation. He is a current IrrigationNZ board member, a past director of the Mayfield-Hinds irrigation scheme and of Rangitata Diversion Race Management Ltd.

When the family's home block was converted to dairy there was a border-dyke irrigation system. As neighbouring farms have been purchased, eight centre pivots have been key to irrigation development.

Existing shareholding in the Mayfield-Hinds irrigation scheme has allowed the intensification of land to be possible using existing water. Now less than 6ha of land has the less-efficient flood irrigation.

With the full use of technology to monitor soil moisture and assess water need, the outcome has been highly targeted and the result is the efficient operation of the farm dairies and the irrigation system.

The careful management of resources has been a key focus.

The Slees recognised the benefits of spray irrigation many years ago, making an early switch from flood irrigation to the much more efficient centre-pivot system.

"We always saw centre pivots as the way of the future. It was tough times in the early days, with borderdyke irrigation it took 28 days to get around the farm and even though we had good irrigation it was just the way we could use water that meant we couldn't feed the cows the way we wanted to," Slee said. "We had to look at how we needed to improve and we knew we had to go to spray irrigation. We put in two pivots on the first block and we realised pretty quickly how efficient the water was and we went back and developed the whole farm.

"So 1992–2014 has been quite an incredible story for us. We have had the ability to grow more grass, grow profitability and improve environmental benefit."

Existing shelterbelts have been retained where possible, but in areas where trees had to be removed to accommodate the irrigation system, these trees have been replaced with low-growing native species. "In actual fact we have planted more trees than we removed."

Integrating trees into the farming systems has cost Melrose Dairy \$180,000 in plantings and maintenance.

Originally sheep farmers from Southland Slee's parents Syd and Morrell moved to Mid Canterbury in 1980 and converted the 365ha sheep property at Ealing, south of Ashburton, in 1987.

"It was tough times, very tough times, we (family) just couldn't carry on sheep farming. We went to dairy and well, the rest is history really," Slee said.

Mark and Devon took over management of the dairy farm in 1991. They went on to buy the home farm, adding two neighbouring properties and a dairy support unit.

Now large-scale dairy farmers, their business, Melrose Dairy Limited, is based on 1014ha with a milking platform of 660ha carrying 2600 cows on three dairy units. Last year the operation produced 1834kg Milksolids/ha, well above the region's average.

BFEA judges hailed the Slees as top industry performers. "They have demonstrated the ability to run a highly profitable dairy business while ensuring excellent environmental management," the judges said.

They described Melrose Dairy as a proven family operation that has achieved long-term growth and success through innovation, discipline and sound business management.

Melrose Dairy is an industry leader in profitability. It is one of four top privately-run Canterbury farms against which Lincoln University measures the performance of its dairying operations.

During the 2012-13 season, Lincoln achieved a profitability margin of more than \$4600/ha compared with \$5200/ha for Melrose Dairy, which was top of this benchmark group.

Public benchmarking was a brave move by the Slees and their performance in the group reflected their outstanding management.

The operation runs two 60-bale farm dairies and one 50-bale unit. Irrigation is provided via a centre-pivot system and herd size is kept under 1000 to place less pressure on the cows and staff.

Melrose Dairy employs 13 fulltime and two part-time employees. Two of the dairy units are run by managers, with a contract milker on the third. Outstanding staff management and a high level of awareness and consideration towards staff has resulted in low staff turnover.

Melrose Dairy Ltd is the first supreme dairy winner in the awards since 2006.

"It's all been a huge challenge and that's why I am standing here looking to get the story out there. It (BFEA) is not about us it's about the industry," Slee told the more than 200 attendees at the open farm day last month.