CASE STUDY: PURATA FARMING InSync with the environment

Making sure the farms supplying one of the country's dairy producers irrigate efficiently is central to how Purata Farming operates. Purata's Environmental Manager, Lucy Johnson, is the woman in charge of the company's environmental performance. Under her radar are 13 farms, 85 team members, 20 contract milked positions and 14,000 cows across just over 4100 hectares in Canterbury.

Being flexible is a mantra Lucy lives by. It also helps when you are scheduling irrigation to ensure efficient water use.

"It's really important to look at future weather forecasts so you can prepare to start and stop irrigating. At the start of the season we normally irrigate once every three days, and normally daily during the height of the season, but sometimes you don't need to irrigate every day depending on the weather and soil moisture levels."

Another key focus is making sure irrigation is only applied on productive areas of the farms. Keeping their pivots away from tanker tracks is important, but even more so is keeping the water on-farm.

"We definitely aim for not watering on the road. If you see that happening on our farms then ring me," says Lucy. She makes the comparison to townies watering footpaths and car parks.

"It's a waste of water where-ever you do it. I see a lot of sprinkler systems watering concrete paths. We probably could do better. It's about keeping abreast of the technology and if you can improve on your systems cost effectively, then making that investment."

Purata Farming takes its environmental responsibilities seriously. As one of the top water users in Canterbury and one of the region's biggest groundwater user (outside of irrigation schemes), Lucy says there's huge pressure to ensure the resource is well managed.

Central to this is Purata's investment in data management. Identifying their water needs informs their irrigation management.

"Our irrigation budget is one of the top spends in our business so knowing how much water we are using is important to us. Every day we don't need to pump is a commercial decision. It's a strong sustainability driver for us."

Keeping a tight rein on water use also means reduced energy bills. If we don't have to irrigate for three days, when we get a nice rain, then we won't. It's about looking at the whole farm system and matching the thinking to our irrigation systems."



But a philosophy focused on sustainable use of water wouldn't work if it wasn't embodied by everyone at Purata Farming. Lucy says the company invests significantly in training and awareness programmes for the team. "It's about delivering the message at each level so we can better support the team."

Small changes can very quickly produce results. Checking nozzles after strong winds to check they haven't blown away and regularly monitoring the performance of your irrigators during the season make a difference.

A focus on innovation also inspires Purata's irrigation strategy. Purata is also working closely with advisors to introduce irrigators to a new centralised data system that will record all irrigation outputs and activities on each farm. One arm of the system will have the ability to take photos of damaged infrastructure which will be GPS mapped and noted for repair. More pivots are also being brought on board as the company moves to better match farm systems to their irrigation potential, on-site weather stations are now telemetered and pro-active maintenance around irrigation pump sheds are also part of the package.

"We're looking to make sure we have the best data so we can make timely decisions. You have to know what your baseline performance is before you can decide what to spend money on."

SMART IRRIGATION

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