STOCK & LAND

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BELIED by its stature, an unassuming plot of land in north-west Tasmania is proving its worth to one of Australia's oldest dairy companies.

The plot, no bigger in size than two utes, is part of a pasture growth prediction system used by Van Diemen's Land at Woolnorth to accurately feed 20,000 milking cows.

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Cordoned off in a dormant grazing paddock, the chunk of turf is littered with probes assessing soil temperature and moisture every two minutes.

This real-time data is then, alongside rainfall and windspeed readings, combined with the Southern Oscillation Index, which calculates the development and intensity of El Ni o or La Ni a events in the Pacific Ocean, to simulate grass growth six weeks in advance.

"It's remarkably accurate," said VDL's dairy business manager Paul Niven, who began simulating pasture scenarios through the model in October last year.

He said the tool, which has been developed by Sense-T, the CSIRO and UTAS, was useful in January when the season could vary from "Western District desert" to lush green.

"We had average conditions in the end and from early November we knew what we were going to get, which enabled us to make a decision on how long we could keep cows in milk for," he said.

Drying off 13,500 autumn calving cows in December, January and February is no enviable task; however balancing the timing against feed availability is made easier with the system.

It (prediction system) gives me three months advanced warning on whether I dry them (cows) off - what my milk and grain price is and how much grass am I going to have," said Mr Niven, who described the Sense-T led project as "almost a game changer".

"If I had a high milk price and low grain price knowing it's going to be a desert, I would go and by a heap of grain.

"Equally if I had a low milk price and no grass, I'd probably dry the cows off so from a management perspective we would have to make different decisions according to the information.

"Drying off cows doesn't just happen, so advanced warning is helpful."

The project, in its second year, aims to use data in a prototype web and phone applications for producers.

UTAS project leader Richard Rawnsley said he could accurately predict 30-day grass growth with the system.

"A month-long forecast would be pretty useful to a dairy farmer," he said.

"In some ways they don't know the power of what they've got," said Mr Niven, who suggested the project would develop after its practical application with producers.

VDL's farms produce about 6.25 million kilograms of milk solids per year for dairy giant Fonterra and a compelling 30-minute drive through the 17,500-hectare Woolnorth property makes it hard to fathom how such scale is managed efficiently.

A standardised farm model certainly helps, according to Mr Niven, who manages 25 farms with varying size but identical structure.

As does "attracting and retaining good people".

Alongside the company's 25 apprentices, who are enrolled in Tas TAFE, older farmers have taken National Centre for Dairy Education Australia courses to put some theory behind practical knowledge.

VDL is also in the first year of its DairyComp 305 program rollout.

The software program, which enables remote access to specific cow information, will give VDL employees synchronised data on all 20,000 cows in the herd.

"One of the challenges for us is we could buy an off-the-shelf Australian product where we could run each farm as a farm, but we really run it as if there's one farm 25 sheds so therefore we're forever moving cows," Mr Niven said.

"Getting pregnancy-testing information on a centralised database can be a problem for all the farms."

Mr Niven said it would take another two years to integrate the program across the whole farm, with the eventual aim of having vets, artificial insemination technicians and other external people able to remotely edit the central database.

With a $122 million expansion at Woolnorth recently approved by the State Government, Mr Niven said the company was still in the capital raising process.

It was reported the Chinese Investment Corporation, which had regularly been cited as a potential investor in Australia's largest milk farm had walked away from a deal, but Mr Niven declined to comment.

He said a portion of Woolnorth's grazing country could be easily converted to dairy land for the 11 extra farms planned, while the rest would be cleared bushland.

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