

The Australian

MAY  
JUNE  
2013

# dairyfarmer

**Co-ops' fresh  
milk deal  
with Coles**

**Fertility  
moves into  
ABV territory**

**Focus on  
feeding  
right**

## **Johne's victory in CALF REARING program**

**The official voice of the Australian dairyfarmer  
– free to all dairyfarmers**

*Proudly supported by*





# Robotic milker frees up farm labour

**W**HEN the Dornauf family decided to install a robotic rotary – the DeLaval AMR – on their Gala property in northern Tasmania, they expected the first year or two to bring some challenges. Eighteen months after installation, manager Nick Dornauf talks about the journey so far.

“We are really pleased with progress to date and the farm system runs better with every month that passes,” he said.

In fact, the farm runs so smoothly Mr Dornauf spends up to 50% of his time on other farming and advisory activities.

“We are really pleased with the level of voluntary cow movement we’ve achieved, and the system gives us the flexibility to focus on running the farm rather than diverting so much attention to the physical process of milking cows.”

This season the Dornaufs milked 335 cows through the robotic rotary. Next season they aim to milk 475 and eventually build up to 550-600 cows in 2014-15.



Like other AMS farmers, Nick Dornauf has found achieving voluntary cow movement in a grazing system requires attention to detail with pasture monitoring and allocation.

Most of the herd calves in spring, with a small batch calving in autumn. In early lactation, the cows average 2.4 milkings a day and even in late lactation they are averaging 2.1 milkings a day. Their projected production for this season is about 8200 litres per cow.

“Next season I’m expecting the early-



Cows move voluntarily from the paddock to be milked at Gala Farm.

lactation cows to milk more frequently than 2.4 times a day and production to increase. When the cows were in early lactation we were having regular technician visits which can disrupt voluntary cow movement so we haven’t seen the full potential yet.”

There have been challenges along the way.

“The first nine months were tough, but we knew to expect the unexpected because we are the first farmers using the AMR under commercial conditions,” Mr Dornauf said.

## Expecting the unexpected

DeLaval’s systems specialist Ron Mulder said the purpose of a pilot installation because as the Dornaufs’ was to identify the anomalies within different farming systems.

“In a lot of ways we are pioneers discovering and entering uncharted territory,” Mr Mulder said.

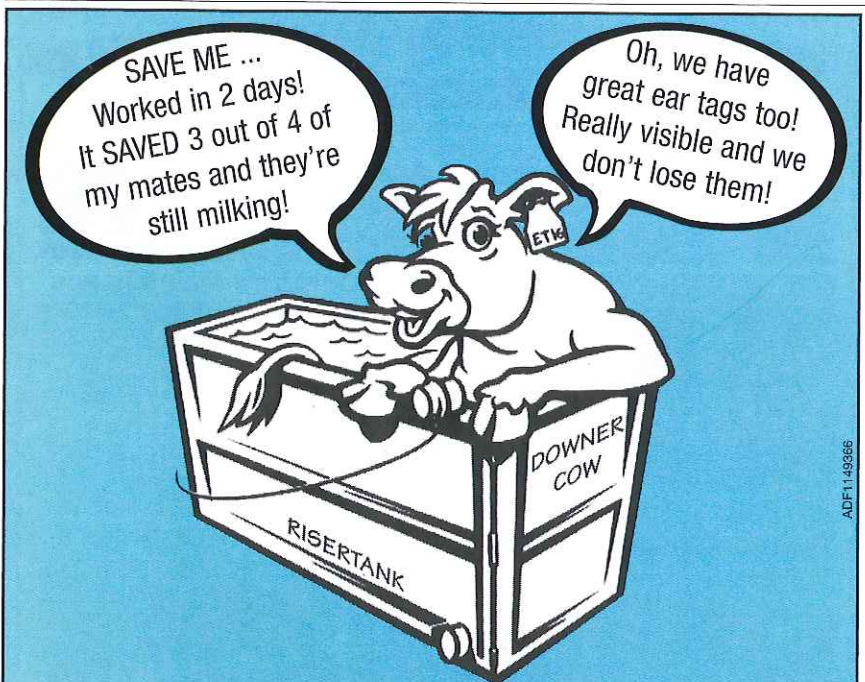
“For example, we discovered that the Dornaufs cows have faster letdown than cows in Sweden and Europe so they milk out about 25-30% faster than we expected. While these issues were resolved quickly and cheaply, they are the sorts of things we can only discover on-farm and under different farming systems.”

Although further refinements continue, they are managed in discrete upgrades which DeLaval refers to as “service packs”. This approach allows minimal disruption between scheduled upgrades.

## Voluntary cow movement

The AMR is designed for batch milking or voluntary cow movement but the Dornaufs are committed to a voluntary system.

“It is the voluntary aspect that offers us the flexibility and lifestyle benefits that are



**Steinfort  
AGVET**

**Achieving Excellence in  
Veterinary Innovations**

3/132 North Rd, Warragul, Vic 3820  
(03) 5622 2486

[www.steinfortagvet.com.au](http://www.steinfortagvet.com.au)



**EnduroTAGS**

25 Industry Crt, Lilydale, Vic 3140  
(03) 9735 2844

[www.endurotags.com.au](http://www.endurotags.com.au)



important to our future," Mr Dornauf said.

The AMR is the first automatic milking system designed for large-scale pasture-based dairy farms and Mr Dornauf says it is much better suited to a seasonal calving system than AMS box units.

"Seasonal calving works for our pasture production system, and the AMR works for us financially and physically in that context. It has the capacity to milk the herd at peak production without having infrastructure sitting idle at other times of the year.

"One of the advantages of the AMR is that it milks the same number of cows per hour regardless of milk yield and/or stage of lactation of the herd. This is extremely important, as in the peak of production in a seasonal herd you do not want to have increased waiting times and added pressure on the system at the most important time of the year," he said.

Achieving voluntary cow movement in a grazing system requires attention to detail with pasture monitoring and allocation. If cows are consistently offered too much pasture they won't leave the paddock, resulting in a drop in milking frequency and production.

If too little pasture is allocated, milking frequency will increase, which may result in congestion at the AMR, and ultimately feed intake, milk production and milk harvesting efficiency will fall.

"Although we've learnt a lot from FutureDairy's experience with the Camden prototype, we are still discovering ways to improve voluntary cow movement on a larger scale.

"It is definitely worth observing cow behaviour and thinking about how we can adapt our system to the cows because we've found that small, low-cost changes can have a big impact on cow flow and therefore the system efficiency and utilisation," Mr Dornauf said.

### Game-changers

Looking back, two developments over the past 18 months have resulted in dramatic improvements in voluntary cow movement: the installation of a 'priority laneway' at the dairy and maintaining as much consistency as possible for the cows.

The dairy yard was modified to provide a VIP holding pen and laneway for certain cows to be given priority access to the milking platform. These may include cows that have had an incomplete milking, cows with a long interval since their previous milking and heifers in training.

"It's made a big difference in keeping them motivated to move around the farm on their own. It has proven to be exceptionally useful for introducing new heifers into the system," Mr Mulder said.

The experience in the early days highlighted to the Dornaufs the importance of



Chris Dornauf, Rebekah Tyler and Nick Dornauf in the cow traffic area of the dairy.

providing consistency for the cows, especially for maintaining voluntary cow movement.

"In those early days, there were times when the dairy was down for maintenance and modifications so the cows couldn't always be milked as soon as they turned up at the dairy. Our voluntary system became a bit of a hybrid system at times.

"Cows love consistency and we learnt not to change several things at the same time: that just confused the cows and the people.



DeLaval's Ron Mulder.

"It was a real turning point when the system settled down, allowing the cows and people to settle into proper voluntary milking routines.

"Now we think carefully about the timing of activities such as scheduling an upgrade with DeLaval or heifer training."

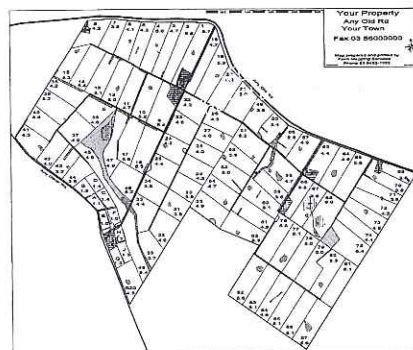
### Trusting the system

Mr Dornauf admits it took time to learn to trust the system – to be confident the combination of the robotic dairy and his farming practices would encourage voluntary

## Computer generated Maps

### Benefit from using

- Working maps of various sizes that combine aerial photos and GPS data
- Accurate maps for communication, measuring, planning and redesign
- Maps in a range of formats including black & white, colour, photo maps and magnetic whiteboards
- Farm conversions, irrigation plans and other improvements



[harry@farmmappingservices.com](mailto:harry@farmmappingservices.com)

Ring 03 64521002 or 0417 521002  
for an obligation free assessment.  
[www.farmmappingservices.com](http://www.farmmappingservices.com)

DF1132524



◀ cow movement without consistent intervention.

"Initially it was quite a steep learning process for the cows and us. We had to adapt our management practices and standard operating procedures to make the most of the AMR and all the information we now have access to," said Mr Dornauf.

Mr Mulder said there came a point when the manager needed to just walk away and trust the system would milk the cows. "For some people this could be a difficult thing to do. It is a very differ-

ent approach to conventional dairying."

Mr Dornauf said the family never thought the dairy farm would run itself completely without human intervention.

"We invested in the AMR because we wanted to invest in a method of dairy farming that would meet our social and economic needs and allow us to sustainably farm for the next 20 or 30 years."

### Overseas eyes our grazing systems

Mr Mulder noted a growing global interest

in the three-way grazing systems developed for Australia's automatic milking farms.

Automatic milking systems (AMS) have been in wide use for many years in the Northern Hemisphere.

Most are installed on farms where cows are housed indoors for most of the year.

"There's growing interest in a system that enables voluntary cow movement when cows are housed outdoors, even if it is just for part of the year," he said. **D**

## Single-sided herringbone gives attention where needed

THE Dornaufs decided to build a 14-unit single-sided herringbone adjacent to their robotic rotary at their Gala farm in northern Tasmania. The main purpose was for milking colostrum and 'hospital' cows without disturbing voluntary cow movement.

The DeLaval AMR does not have the capacity to divert and dispose of milk that can not go in the bulk milk vat. At FutureDairy's Camden AMR, colostrum and 'hospital' cows were diverted by the 'smart gates' to a holding pad and milked in a batch before plant cleaning.

FutureDairy project leader Dr

Kendra Kerrisk said this approach meant there was a period of 60-90 minutes twice a day when the platform was unavailable to the rest of the herd, resulting in some interruption to voluntary cow movement. Because it was a year-round calving herd, the number of colostrum/hospital cows was spread fairly evenly throughout the year.

"With a seasonal-calving herd, the potential interruption at the Dornaufs' was likely to be considerable in early lactation. They decided to build a single-sided herringbone with its own vat to accommodate these cows," Dr Kerrisk said.

The single-sided herringbone has achieved the aim of avoiding interruption to voluntary cow movement but it has also had some unexpected spin-off benefits.

Gala manager Nick Dornauf said the facility allowed a routine where colostrum and hospital cows were treated and milked when staff have the time to provide the extra attention these cows needed, which had a flow-on effect of improving animal health and welfare.

It has also reduced the risk of antibiotic milk ending up in the vat through user error.



## Strep ag could be lurking in your herd!

*Do you purchase cows? Have you checked for Strep ag lately?*

- > *Strep agalactiae* is a highly contagious mastitis causing bacteria which spreads from cow to cow during milking
- > Strep ag infections lead to increased somatic cell counts and decreased milk production
- > Many Strep ag positive cows show no obvious signs of infection
- > With a good management plan, Strep ag eradication is practical and cost effective

*Don't purchase cows without testing for Strep ag! Screen and monitor your herd with bulk tank testing.*

*Talk to DTS or your udder health advisor about an **RtMastitis PCR test** - convenient sample submission, same day results.*

clientservices@dtsfoodlabs.com.au  
www.dtsfoodlabs.com.au

Dairy Technical Services Ltd  
5/352 Macaulay Road, Kensington VIC Australia 3031  
Tel: +61 (3) 8371 7600 Fax: +61 (3) 9372 2013

**DTS**  
FOOD LABORATORIES  
YOUR TRUSTED PARTNERS IN QUALITY  
INCORPORATING FACTA  
FOOD ALLERGEN CONTROL TRAINING ANALYSIS

**facta**  
Food Allergen Control Training Analysis