

Succeeding through the seasons

Part 1: Case study farm overviews

Robert and Gai Singleton, Blighty, NSW

Robert and Gai moved to Blighty from a dairy farm near Coffs Harbour in 1994. They bought a rice, sheep and lucerne property in partnership with Robert's brother and converted it to a dairy property. They started building the rotary dairy in September 1994 and began milking on 22 December that year.

They began with the 140 cows they brought from Coffs Harbour and soon expanded to 200 cows. In 1995, they had a whole farm plan completed and by 1999 they had the farm laid out according to the plan.

Key Points

- Feeding infrastructure has been developed to improve feed use, provide a more balanced ration and improve cow comfort.
- More land has been purchased to increase the area available for growing feed.
- Pastures will continue to be grazed from April to November, however, the milking herd will be confined to the feedpad and fed a TMR from December to March.
- Summer forage crops, like maize and lucerne, will be grown for hay and silage.

Farm profile

Herd: 755 pure bred Holstein and Jersey cows in a ratio of 60% to 40%.

Calving pattern: Five batches spread through the year.

Farm size: Kenara 402 ha, Pinevale 268 ha, effective milking area 250 ha, 1,829 ML of water entitlement.

Dairy: 50-unit rotary dairy.

Production: 6,529,761 L/year and 500,624 kg MS/year.

Rainfall: 342 mm average for past 10 years; Deniliquin's long-term average is 409 mm.

Irrigation: Allocations have been low and variable over the past 10 years.

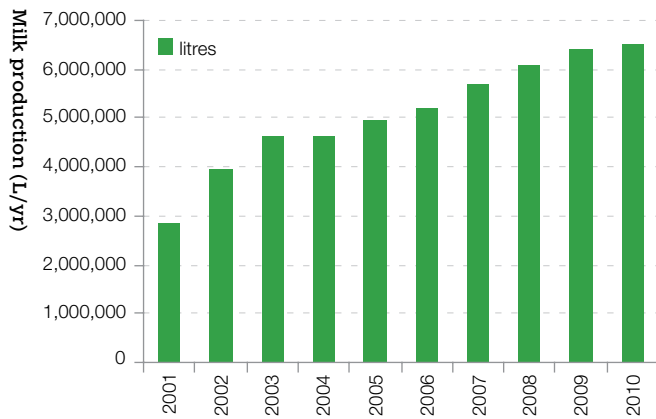
Predominant pasture: Longer rotation annual ryegrass with subterranean and shaftal clover. Through the drought grazing wheat and barley were used with good results.

Feeding: Pastures supplemented with up to 3.43 t of wheat, canola and lupins fed in the dairy and on the feedpad. Through the drought this was further supplemented with DDG and Tapioca.

Feeding system classification: Type 4 – hybrid system with pasture grazed for fewer than nine months of the year and a PMR is provided on a feedpad for the balance, with concentrates fed in the dairy.



Robert and Gai Singleton



Graph 1: Annual milk production.

Variable climate

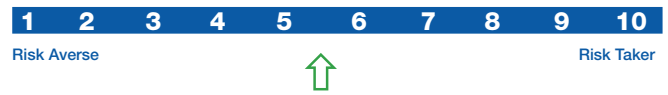
Robert and Gai have seen a steady decline in average annual rainfall and water allocations over the past 10 years. This has shifted the management system from being entirely pasture based, with perennial and annual ryegrass forming the base of all rations, to a system that is based on grazing cows on annual pastures from April to November and then feedlotting them from December to March.

The change of management was brought about by a number of factors:

- When assessing the herd’s ration with their nutritionist, it was found that the cows were grazing very little perennial pasture in the hot summer months.
- When temporary water prices peaked, growing perennial pasture became too expensive compared to buying forage. Summer irrigation ceased and the cows were fed a total mixed ration. Pasture in 2003/04 cost \$149/t of dry matter and reached a peak in 2008/09 of \$403 (see Graph 3).

- Rob found that feeding groups of cows on the feedpad was easier to manage than summer pasture.
- Cows were more comfortable on the feedpad with shade sheds than they were grazing and produced more milk.

Risk profile



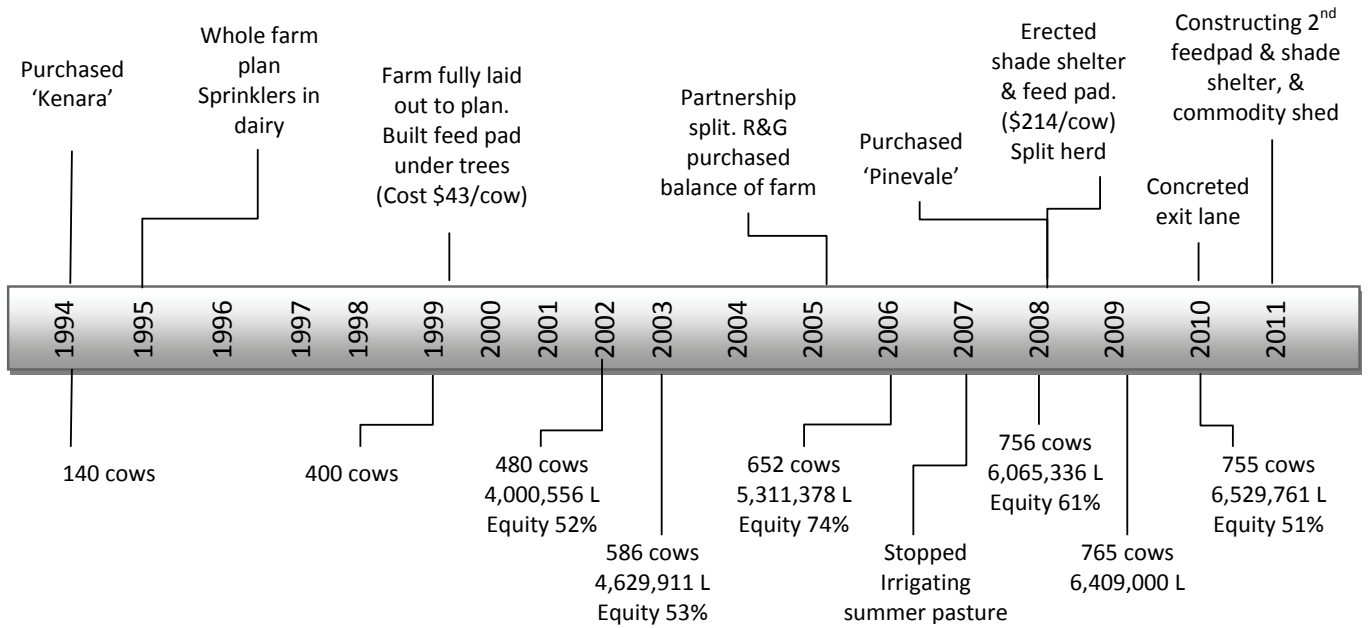
Leave little to chance, ensure you get the result you want.

Robert and Gai ranked themselves between 5 and 6 on the risk aversion scale.

Rob said he was prepared to spend money to ensure he got the outcome he wanted. Through the drought, when water was at a reasonable price, he committed to buy the volumes he required early in the season to ensure that he could maintain milk production. Similarly, when water became too expensive, he committed to buying the volumes of forage and grain he required to ensure a similar production outcome.

Rob’s philosophy was “to leave as little to chance as possible and that if we could continue to grow production with a positive margin over feed costs, the business would remain in a position of strength.” He sees a drop in growth of milk production volumes as a threat to his business.





Graph 2: Historical timeline graph of capital purchases, development and growth.

Expansion and capital development

A trip to the US in 2007 confirmed Rob's plans for a management system shift on 'Kenara'. He learnt that:

- feed inventory provided security;
- feed quality was critical – “home-grown stored feed needed to be of the highest quality”;
- cow comfort was extremely important;
- managing cows in groups was easier; and
- feeding cows to production was important.

Rob built the shade shelter and feedpad facility, and split the herd. He also decided to invest in another farm to ensure he could start to build a forage inventory from home-grown feed, rather than relying on the volatile fodder market. The purchase of 'Pinevale' also provided further water security for the operation.

When assessing the value of any investment, Rob always looks at the associated costs and benefits, and how the investment fits into his long-term plans.

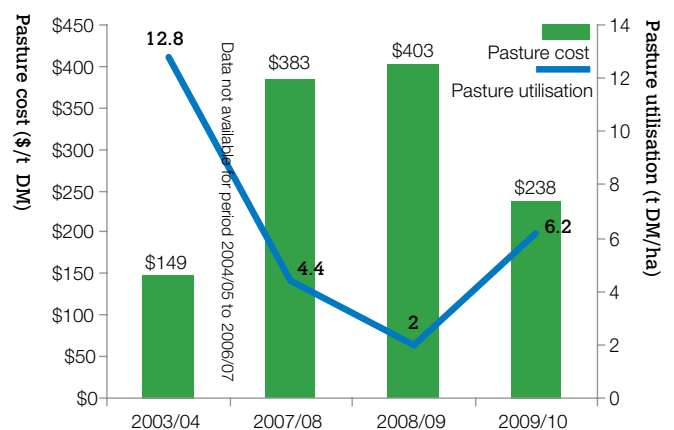
While the Singletons' equity position has declined as a result of the investment in land and infrastructure, they feel the investment has reduced their business risk and that they are more assured of getting the outcomes they desire in the face of variable climatic conditions.

Feeding strategy

When the Singletons moved to the farm in 1994, the feeding system was based on pasture and grain (System 2). They then moved to pasture plus grain and a PMR on the feedpad (System 3). System 3 worked well until water prices began to rise too high.

“In the early days of the drought we used water to provide security for the business. We bought water and grew home-grown feed. We didn't hesitate and we got in early. Back then there was an absolute focus on maximising pasture utilisation. It worked beautifully.”

“By 2006/07 water was becoming less affordable and it made the pasture too costly. At this point we changed our risk management strategy from water security to investing in infrastructure that would support the move to a profitable system of feedlotting through summer.”



Graph 3: Pasture utilisation v cost.

Rob does not intend to graze pastures through summer in the future and will focus on irrigating summer crops for hay and silage. He will probably grow maize in the future and is still a little undecided as to whether he will grow lucerne for hay.

“I will always need lucerne for the cows through the summer, but I am not sure that I can grow it myself and get the quality I need any cheaper than if I buy it,” he said.

Future challenges

- Managing cows in adverse weather conditions, from wet to hot and humid.
- Maintaining experienced staff.
- Water security.

Future plans

- Invest in more infrastructure to improve cow comfort and reduce feed losses in a variable climate, where it could be hot and dry or very wet and humid (shade, feeding facilities, feed storage facilities).
- More land to reduce risk.
- More cows – 1,000 cows in two years.
- Manage staff better by standardising systems and procedures ... “so that we can get the best out of them for the hours they work,” Rob said.
- Comfortable with current levels of debt as long as cow numbers and milk production continue to grow.

Rob summed up his approach to the dairy business by stating that “the farm needs to work for us, not us working for the farm”. He explained that the farm needed to continue to meet their lifestyle needs and allow them to have time away from the farm when they chose.

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