

Justin and Libby Walsh Waljasper Holsteins

CASE STUDY



Farm background – the people

Justin and Libby Walsh operate a family farm on the south coast of NSW near Nowra. The Walshs have been running the farm for four years, following a succession plan with Justin's parents.

Currently, Justin and Libby lease a majority of the farm from Justin's parents. They own a proportion of the milking platform, the herd, and all the plant and equipment. Justin and Libby have operational control of the business and are responsible for operating and capital costs. The farm is majority dry land, with a small area irrigated pastures (10 Ha.), and they lease three separate blocks, all used for heifers.

After completing a degree at Sydney University in Agriculture Science, Justin returned to the farm and worked full-time for ten years with his parents before taking over management. They currently employ one permanent staff member and casual labour, Justin's parents and Libby also helps on the farm on a casual basis.

When Justin finished university and went back to the farm, his parents were not ready for succession to start. Instead, they implemented a transition plan. Justin said, "that is what moved things along." Everyone involved in the business had a clear view of the future.

Justin and Libby's focus is to build a profitable and resilient business, and believe the way to get there is through:

- Improved understanding of operational costs
- Reducing fixed costs
- Growing more homegrown feed and utilising it to capacity
- Milking a more efficient cow
- Development and review of budgets
- Continued analysis of farm financial and physical performance through DairyBase.

Farm description – at a glance

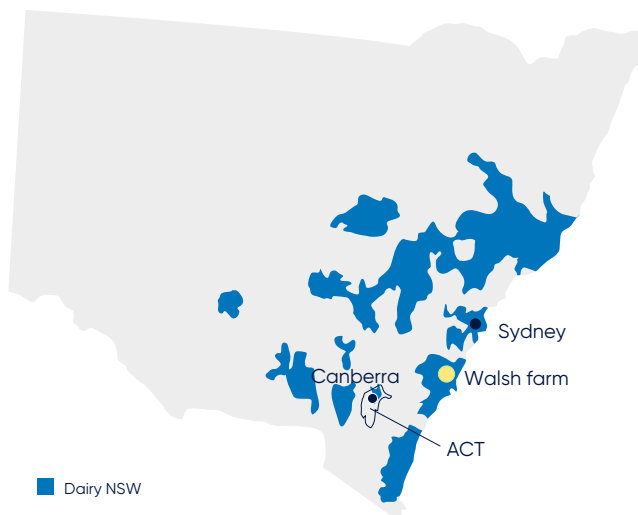
Farm details	Farm system	Farm performance (\$)
Milking area: 134ha	Herd type: 50% Holstein 50% Jersey and other	EBIT per kg of MS \$1.69 average and range \$0.81–\$3.55 over the past 4 years
Burrier Heifer Block: 57ha	Milking: 280	ROTA 2.7% average and range 0.9%–6.4% over the past 4 years
Far Meadow Heifer Block: 80ha	Split calving pattern: 60% Autumn (Calving 1st Feb to mid-May), 40% Spring (Calving 1st Aug – mid-Nov)	
Hannigan's Lane: 14.2ha	Concentrate feeding: 40% imported 2.3 t DM/cow/year (1.9–2.5)	
Average rainfall: 1250mm	Proportion of homegrown feed in the diet aims for 60%	
	501kg Milk solids/cow (465–571)	
	Production % liveweight 86 (80–90)	



Australian Government



Farm location



The story

Why they employ the current farm system?

The farm uses a pasture-based grazing system with medium to high grain inputs, depending on the year. They milk a herd of about 280 cows, that graze on a milking area of 124ha Kikuyu and ryegrass pasture.

Prior to Justin taking over management, the farm had targeted out of season milk with a year-round calving approach. Justin saw an opportunity to reduce their costs by matching the calving pattern to when pasture was available on their farm. They now use a split calving system (spring and autumn), that reduces their reliance on often expensive hand-feeding through winter. Justin said, "the key for us is to maximise the amount of directly grazed pasture. Understanding the true costs of homemade silage and grazed pasture treating it separately has been critical to our success." The Walsh's have been able to lower the cost of production and reduced their exposure to the feed market. Justin said, "for this farm now, the difference in price for out of season milk does not make up for the extra costs in production." Justin is still using a similar amount of concentrate per cow, but he now uses it to capture some extra profit through the 'marginal milk' approach.

On the southern NSW coast, rainfall patterns can be unreliable. Justin said, "in reality, we can get rain at any time of the year, and we want to be in a position to take advantage of that." Reducing the risk in the feed market, while maintaining the ability to take advantage of rain later in the season is a significant component of their management approach.

When asked about the herd, Justin said, "we go for cow type, not breed. We want a versatile animal that is fertile and a consistent performer." They run a predominantly Friesian herd with some Jersey crosses and have an annual stocking rate of 2.1 cows/ha.

KEY TAKE HOME MESSAGES

Pasture utilisation – pasture management has been a central area of focus and success for the business. Justin said, "we have always been good at grazing our pastures, but we didn't grow enough. In the last few years, we have almost doubled dry matter pasture growth and also maintained a high level of that as directly grazed."

The Walsh's have achieved this through an improved understanding of pasture management and a better understanding of the extra costs involved with feeding homemade silage. Justin uses the rotation right tool to help monitor pasture utilisation and their grazing rotations in balance.

Data-driven decision making – Justin regularly monitors the extra costs and the extra benefits of production inputs, and he has an excellent understanding of marginal decision analysis.

Justin said "feeding levels are dependent on milk price, concentrate price, stage of lactation and time of the year. With so many moving parts, to have any chance of getting it right, it is essential to track milk production in response to changes in the farm system."

Business management skills and personal development – willingness to learn the business, agronomy and technical aspects of dairying was integral to Justin's development as a farm manager. Justin said, "understanding the dairy system was a start; however, being a successful manager means understanding how things operate on a deeper level." Justin is passionate about professional development and said more farmers should be doing it.

Decision making

The decision-making process is something that the Walsh's focus on; they use an analytical approach. Justin is an advocate for personal development and making sure that he has the skill set to get the most out of his business. They are also part of the Dairy Farm Monitor Project and track cash flow, profit and wealth over time.

For tactical 'day to day' decisions, Justin uses a data-driven approach. Justin says "I'll do the numbers when something changes, sometimes that means daily, but more often I'll do some sums if grain price or milk price change; or maybe we are growing some extra pasture, and I need to check the margins on our supplementary feeding program." Currently the Walsh's feed 2.1 tDM concentrate/cow (wheat/barley/canola meal mix), plus additive and 0.9tDM/cow of purchased fodder (oaten and vetch hay, maize and grass silage) annually. Justin said, "an important aspect of this is that we will do everything we can to avoid purchasing fodder. Entering the fodder market is the last resort because of the expense of it, it's not a strategic plan to be buying fodder every year like some other farms."

QUOTES FROM THE INTERVIEW REGARDING MARGINAL ANALYSIS AND DECISION MAKING

"The state of lactation is critical – early lactation the marginal response curve will shift outwards so you can afford to feed more."

"If you have a herd of fresh cows the response will be high."

"You must avoid averages – that is what can get you into trouble Big time – average response rates are no good when you are talking about feeding grain."

"This is all assuming that your grain feeding is discretionary – for example, in the drought, we had no choice but to feed grain."

"TEST IT OUT – vary the grain and see what happens – some people freak out, especially when we have lots of pasture. For example, in spring, milk price drops so we will try and get more pasture into the cows because the marginal response ratio is decreasing. If we start seeing decreases in profit after taking out the grain, we will put it back in. That happened a few weeks ago, we saw an opportunity to get some more pasture into the diet and exploit that – but then we saw too big of a drop in milk production, so grain went back into the diet."

Justin tracks input costs and milk production closely, including a detailed analysis of the concentrate feeding program. Justin's approach to input decisions draws on the farm management principles of opportunity cost, diminishing returns and resource substitution, and he understands how they apply in a practical sense to his farming system. Justin said, "I want to understand what the marginal response curve looks like for all my input decisions, even labour. The goal is to find the best combination of resources (labour, fertiliser, concentrates, etc), that will allow for the lowest cost of production, highest profit and ultimately enable the family to achieve their goals." Justin also says it's important to consider risk, "normally we work out the break-even response and then back down from that point to allow for some uncertainty."

Justin uses a marginal approach to make decision about the level of concentrates that he will feed. Justin said, "if you have an idea about the shape of the marginal response curve for milk production to the level of input (concentrate), then we can look at the marginal cost of feeding grain. The optimum level is when the marginal cost of feeding grain is equal to the milk price. It's a trade-off between trying to lower the cost of production and getting the most out of your cows. Normally if you're not feeding grain, then you're leaving money on the table. The hardest part when trying to get it right is the fact that the optimum level of feeding is a moving target. It is dependent on feed price and milk price, and it is critical to have a good understanding of the numbers, and how they interact."

Having the skill set to get the questions right has been critical to their success in harsh conditions over the last few years. When asked about decision making at an industry level, Justin said, "a lot of the time farmers are

asking themselves the wrong question, and then they end up with the wrong answer." The Walsh farm has been a focus farm for the last two years, and he says that this has accelerated change in their decision making and management strategies, and given him the confidence to follow through on a plan.

Management strategy history

A business transition plan was vital for the business. When Justin finished university and went back to the family farm, they were not ready for succession to start. After the transition plan, things started to move along. Justin could see there was room for the business to grow and took part in **Churn Milk into Money** – John Mulvaney in 2015.

"Honestly a light bulb moment, it was the first time I heard someone talking about the dairy industry the way I saw it. To have someone from outside our area with a different culture, come in and say things about marginal thinking and profitable farming, it changed the way I approached dairy farming. It was the best two days I could have done, and it helped me to understand what I was thinking wasn't crazy- It gave me the confidence to make decisions on-farm. I thought we should try and do this; I'm going to take hold of this business and unlock the profit that is there." Justin Walsh – 2020

After that came **Pasture for Profit** – Phil Shannon.

"That is when we started to make serious gains. Everything started to fall into place." Justin Walsh 2020

The last few years have been about putting the principles in place and getting the main settings right:

- Stocking rate
- Cow type (not breed)
- Calving pattern and pasture growth
- Feeding system (know what you are aiming for).

From there, managing risk is the focus, taking advantage of upside risk and mitigating against downside risk, market, environmental and financial. To be in a position to manage risk (upside and downside), Justin has developed a daily operating spreadsheet. Justin said, "it's a snapshot of everything that is going on in a particular day." The spreadsheet includes:

- Production
- Feeding
- Margins
- Stock numbers
- Herd profile.

Justin said, "I make sure that I get the daily operating position right. I'm not trying to get it perfect; perfection is the enemy of profit. I try to get every day as close to right and then the end of the year sorts itself out."

Justin uses the dairy business-standard chart of accounts and says "it makes it easy to do the financial analysis for the business that tells us if we are profitable" and "the chart of accounts gives me a budget to work off so then at the end of the year I can plug in what I think next year's grain or milk price might be, pasture production etc. Then I can plan and budget my decisions and develop a management strategy."

ADVICE FOR YOUNG FARMERS

Justin's answers directly:

You have to be a particular type of person – mental health is essential – you need to know that there will be ups and downs. Monitoring your mental health is very important. Especially with your staff, I don't try to set my expectations above their ability – matching team with appropriate jobs

We have tried to make this farm a modern workplace with the right conditions

The most important farming tool is a calculator – know how to use it

Getting the significant settings right is imperative – then having a simple, repeatable system.

The numbers behind the story

Farm details

	2016/17	2017/18	2018/19	2019/20
Milking Cow Numbers	230	250	260	280
Milking area (ha)	124	124	134	134
Rainfall (mm)	896	529	940	618

Primary indicators

	2016/17	2017/18	2018/19	2019/20
Business Efficiency				
EBIT per kg Milk Solids (\$)	1.02	0.81	1.40	3.55
Return on Total Assets managed (%)	0.9	1.4	2.1	6.4
Return on Equity (%)	2.6	0.2	3.6	22.7

Secondary Indicators

	2016/17	2017/18	2018/19	2019/20
Milk price (\$/kg MS)	7.29	7.23	7.91	9.10
Total Variable Costs (\$/kg MS)	4.01	4.73	5.01	4.59
Total Feed Costs (\$/kg MS)	2.85	3.94	4.35	4.07
Homegrown Feed Costs (\$/t DM)	62	83	111	123
Total Labour Costs (paid plus imputed) (\$/kg MS)	1.79	1.54	1.55	1.30
Cost of Production (including inventory changes) (\$/kg MS)	7.46	7.00	7.19	6.26

Tertiary indicators

	2016/17	2017/18	2018/19	2019/20
Milk solids as a % of Cow liveweight	82	84	80	98
Proportion of homegrown feed in the diet (%)	53	41	52	47
Homegrown feed consumed (t DM) per 100mm rainfall	0.32	0.69	0.55	0.70
Homegrown feed consumed (t DM/ha)	5.14	4.77	7.06	6.93
Milk solids per Labour Unit	32,538	47,103	43,684	56,523

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