Holstein to Jersey

The decision making process behind the change

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Jayden Jerseys

Farm Overview

- Purchased 134ha property in 2005 to convert to dairy
- Irrigated with 3 centre pivots covering 88ha of 110ha milking area
- Double 15 BouMatic Rapid Exit dairy + 300 cow feedpad with headlocks
- Calves reared in hutches then over to lease farm

The System

- Ryegrass grazing April to December
- Minimal grazing over Summer
- Partial Mixed Ration (PMR) fed all year with all grain fed in ration
- PMR consists of grain, corn silage, lucerne hay, rye silage
- Aim to grow all forage for PMR
- Corn for silage
- Grazing based on Feeding Pastures for Profit program

Production

- Milked 300 Holsteins year round peaked @ 186,000 kg/ms
- Moved to Jerseys four years ago and will milk 330 this year (2017/18)
- 2015/16 production 155,000 kg/ms on 304 lactations (510 kg/cow)
- 2017/18 forecast for 200,000 kg/ms on 380 lactations (550 kg/cow)

DairyBase Comparison 2011/12

- Based on Holstein herd

	Our Farm	DFMP NSW Farms
Home grown feed	13.5T/DM/ha (79%)	8.2T/DM/ha (61%)
COP $/kg/MS	$6.56	$6.33
EBIT $/kg/MS	$2.79	$1.29
ROA	7.4%	3.9%
ROE	5.9%	3.1%

So why the change?

- This is a decision based on our operation
- Decision won’t fit everyone
- BUT the process is valuable and relevant

Jersey Efficiency

- Feed is our biggest cost
- Jerseys can generate 22% more income from the same amount of feed
  (James Huffard 2014)

Comparison Calculation

- Current Jersey production 21L @ 9.5% solids = 2.0 kg/ms
- Ration is 4kg grain, 2kg DM corn silage + grass
- Holstein to Jersey 0.75 conversion
- Holstein production 2.0 ÷ 0.75 = 2.67 kg/ms
- On a similar ration would be around 6.8% solids
- 2.67 ÷ 0.068 = 39.2L /cow/day
- Our Holsteins wouldn't have achieved this let alone the extra 63.7 cents of freight

Health & Reproduction

- We have always bred and culled for health traits

- Constantly making changes to address issues
  - Conception
  - Calving ease
  - Foot health & mobility
  - Heat stress
  - Fat depression
  - Mastitis & SCC

Health & Reproduction

Getting cows pregnant

- Holstein 25-30% pregnancies per service
- Jersey 50-60% pregnancies per service
- Haven’t used any targeted breeding programs
- Need to be diligent on longer VWPs

Calving Ease

- The reputation is well earned
- 0.5% assisted calvings over 4 years

Health & Reproduction

Foot Health & Mobility

- Hard black hooves
- No need for hoof trimming program
- Move freely to and from pasture (saves $20,000 per year)

Health & Reproduction

Heat Stress

- Jerseys have a far greater heat tolerance than Holsteins

Fat Depression

- Widespread issue with Holsteins
- Jerseys on 3-5kg grain, 2kg DM corn silage + grass, fat sits around 4.8-5%

Mastitis & SCC

- SCC is the same across the breeds
- Lower mastitis → less stress on udder?

Herd Growth

- Shorter calving interval from higher fertility
- Leads to higher heifer numbers
- Lower cull rate (17%) than Holsteins (25%)
- Combined achieves 23% internal growth

Cost of Freight

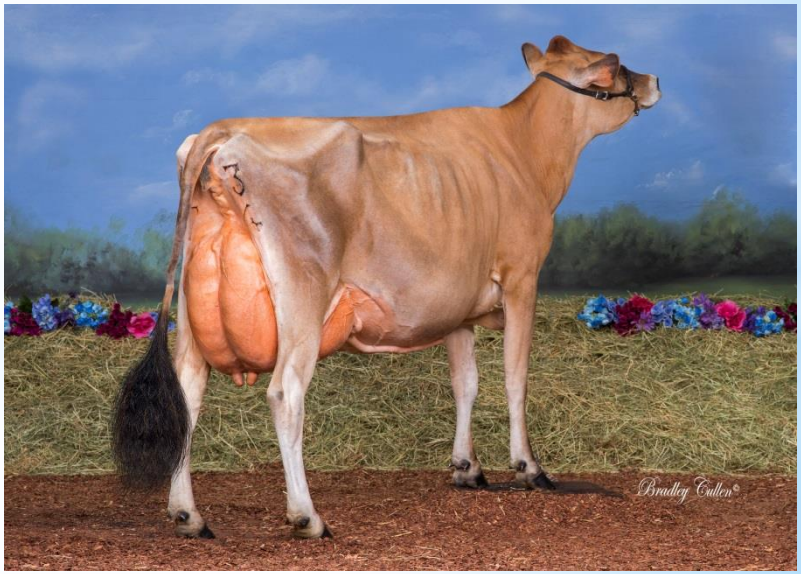
- Milk payment system moving to kg/MS instead of litres
- Didn't change for milk price
- Herd of cows producing 180,000 kg/ms
  - Holstein herd @ 3.8F, 3.2P = 2.57 m/L
  - Jersey herd @ 5.2F, 4.2P = 1.95 m/L
- Freight saving 2.57 – 1.95 = 620,000L @ 3.5c = $21,700

DairyBase Figures

	11/12 Holstein	15/16 Jersey	11/12 DFMP	15/16 DFMP
Home grown feed (T/DM/ha)	13.5 (79%)	15.3 (67%)	8.2 (61%)	8.2 (61%)
COP ($/kg ms)	$6.56	$5.56	$6.33	$7.02
EBIT ($/kg ms)	$2.79	$3.33	$1.29	$0.95
Finance & Lease cost	$1.69	$1.36	$0.55	$0.43
Net farm income	$1.10	$1.96	$0.71	$0.37
ROA	7.4%	9.3%	3.9%	2.1%
ROE	5.9%	11.8%	3.1%	1.1%
Cows per labour unit (FTE)	56	92	79	69
Employed labour (FTE)	3.5	2	1.7	2
MS per labour unit (kg ms/FTE)	32,286	46,814	38,920	33,799

Conclusions

- The decision to change to Jerseys has been the best business decision we have ever made
- Positive impact on business efficiency & profitability, workload & personal stress



Jersey is the modern day dairy cow and a key part in the future of a successful dairy industry.