

Your Levy at Work

WALSH FOCUS FARM

Justin & Libby Walsh OPEN DAY, 18th October 2018



The Focus Farm Project is an initiative of Dairy NSW and is funded by Dairy Australia and Dairy NSW.

Sheena Carter, Dairy NSW sheena.carter@dairyaustralia.com.au

John Mulvany, OMJ Consulting <a>omj@dcsi.net.au

Program

10.30am Welcome/Introduction

- Housekeeping
- Open Day aims
- Focus Farm Model
- Introduce the Focus Farm Team
- Key Farm Details
- Focus Farm aims/goals
- What has occurred since August 2018 discussions & outcomes
- Current daily position
- Dairy
- 11.45am Farm Tour (car pooling)
 - View herd, pasture management etc

1.15pm Lunch

- Historical Farm Performance and Budgets (18/19 and 'Dream')
- 2017/18 DFMP Data

Keeping you informed about the Focus Farm Project

- DNSW e-newsletter (Snapshot)
- DNSW hard copy newsletter (MilkFlow)
- DNSW Facebook page

Summary & Questions

Thank you's

Contents

P 4	The Focus Farm Project
	Walsh Farm
	The Focus Farm Team
P 5	Farm Physicals
	Farm Goals
P 6	Challenges and Actions so far
P 7	Farm Performance Summary (2016/17 & 2017/18)
P 8	Current Numbers
P 9	Income Estimate
P 10	Annual Farm Budget
P 11	Walsh DairyBase Summary for 2017/18
P 12	Are we there yet?
P 13-15	NSW DFMP Data – Farm Income & Costs 2017/18
	Physical Data
	2016/17 DFMP Data (c/- K. Kempton)
P 16	Rotation Right Tool – Top Farm
P 17	Rotation Right Tool – Bottom Farm
P 18	A Day in the Life of A Young Dairy Farmer
P 19-20	"Feeding This Spring in the Amazing World of Dairy" – John
	Mulvany, OMJ Consulting
P 22	Farm Maps

The Focus Farm Project

Focus farms have been a part of the NSW dairy industry in various forms over the years. Under the current model and partnership between Dairy Australia and Dairy NSW the Walsh's are the third Focus Farm in four years. The project focuses on a farming family or enterprise and aims to improve operating surplus through better understanding of operational costs, maximising home grown feed and reducing fixed costs. This is achieved by monitoring farm activities and expenditure.

The Focus Farm is not a "Best Practice" or "Demonstration" farm.

The Walsh Focus Farm is co-facilitated by Sheena Carter, Dairy NSW Extension Officer and experienced farm management consultant, John Mulvany, OMJ Consulting and will run for two years.

Walsh Farm – Waljasper Holsteins

Justin and Libby have been running the farm for nearly 2.5 years following succession planning with Justin's parents, Colin and Sue. They lease the farm from Colin & Sue, having also bought a portion of the milking platform themselves and the herd. They have complete operational control of the business and are responsible for all operating costs and capital works costs. There are also 3 separate lease blocks; Hannigans Lane (pasture/cropping), Burrier heifer block and Far Meadow heifer block.

The farm is predominantly a dry-land farm, however there is a small amount of irrigation on the Bottom Farm (10 ha centre pivot, 6 ha traveller).

Justin works fulltime in the business and has one permanent staff member, Matt. Libby, Colin and Sue help on the farm on a casual basis.

The Focus Farm Team

The Focus Farm has behind it a Support Group. This group is made up of 9 dairy farmers and 6 service providers. The role of the Support Group is to assist the Walsh's in achieving their business goals. They meet every 4-6 weeks on farm for about 4 hrs. This involves a review of actions since the previous meeting, a discussion of long term strategies, upcoming operations and potential challenges and ways in which these may be addressed as well as a farm tour. Agreement on future directions are generally made on consensus of the group.

Farmers	Service Providers
Sam Graham	Anthony Bennett
James Greenacre	Greg Duncan
Doug McIntosh	Lucy Duncan
Stewart Menzies	Phil Duncan
Phil Tate	Ewin Lewis
Matt Warnes	Tim Williams
Rob Wilson	
Tim Chittick	
Mel Chittick	

Farm Physicals

Total Area	214 ha
Effective Milking Area	124 ha
Cow Numbers	245 cows (peak this season); predominantly a Friesian herd
	with ~20 stud cows but also some Jersey crosses.
	Annual stocking rate 2.0 cows/ha
Calving Pattern	Split calving (to match pasture growth curve)
	60% Autumn (Calving 1 st Feb to mid-May)
	40% Spring (Calving 1 st Aug – mid Nov)
	Plan to tighten up both calving periods.
Heifer blocks	Burrier Heifer Block – 57 ha
	Far Meadow Heifer Block – 80 ha
	Hannigan's Lane – 14.2 ha
	All blocks leased
Feeding (17/18 FY)	2.3tDM conc./cow (wheat/barley/canola meal mix) + additive
	1.9 t DM/cow purchased fodder (Oaten & Vetch Hay, Maize and
	Grass silage)
Feed Base	Kikuyu/ryegrass based pastures
Plant & Equipment	Dairy – upgraded – 90 degree, 24 aside swingover, 10,000L vat
	Duncan MK4 seeder, Vicon fert spreader, Hustler feed cart,
	Major Cyclone topper, Berti mulcher, 4 tractors, Skiold disc mill
	& feed system
Fertiliser	Urea & DAP. Nitrogen applied at 133kgN/milking ha (17/18)

Farm Goals

"To build a highly profitable and resilient business."

This will be achieved via;

- Improved understanding of operational costs
- Reducing fixed costs, where possible
- Growing more home grown feed and utilizing it fully
- Milking a more 'efficient' cow
- Developing and reviewing an annual budget
- Continued analysis of farm financial & physical performance (DairyBase)

Challenges and actions so far

The list below is a summary of some of the activity that has resulted as part of the Support Group meetings;

August meeting

Challenges	Actions/Outcomes
Drought – very little pasture and high cost	Feed budget done, feed secured until the
of imported feed	New Year (if no rain);
	- 50 tonne of canola
	 106 t hay – ryegrass, cereal & vetch
	Nitrogen to grow feed if it rained;
	 80kg/ha urea applied over milking
	platform & Hannigan's on 7/09
	15 cull cows sold
Potential to sow a maize crop for silage	Decided it was too risky, particularly given
under centre pivot	the cost and potential for the area to flood.
	Keep the ryegrass going as long as possible.
Budget	Developed for discussion at next meeting

September meeting

Challenges	Actions/Outcomes
Budget (18/19FY) – very tight!	Budget was reviewed and commented on
	as well as contexted with the current
	conditions.
	Artificial breeding and herd costs high.
	Feed costs @ \$4.20/kgMS driving high Farm
	Working Expenses and therefore low
	Operating Cash Surplus and EBIT
	(\$0.13/kgMS)
Semen costs for joining, commencing 23/10	Discussion resulted in Justin being
	budgeted to spend no more than
	\$20/straw.
	Achieved straws @ av. \$18.50 (BPI 260,
	Fertility 114.5)
Future breeding direction	Aiming for a more "efficient" cow – better
	kgMS:kgLWT ratio than the current 84%.
	This wasn't resolved in discussion but will
	be discussed at a later meeting.
Nitrogen use – strategic use to generate	Lots of discussion about response rates.
feed on a dryland farm	

	It was calculated that with current hay prices, a response of 3kgDM/kgN was all
	that was needed to make it economical.
	Subsequent rain has meant another 80kg
	urea applied over the whole farm.
Heifer rearing – agist R1's or on farm?	Currently have 61 R2 heifers being contract
	reared by Heiferlink (due to block of land
	becoming unavailable and seasonal
	conditions). Option to send the R1's down
	there. Costs were discussed (feeding at
	home v. contract rates) and it was decided
	to keep R1's on farm and reassess the
	situation/season in December.

Farm Performance Summary (2016/17 & 2017/18)

The Walsh's have a very good understanding of the drivers of resilient and profitable dairy businesses operating in a pasture based system. They have undertaken analysis of their business performance for the last 2 years with their data in DairyBase. This has given them the ability to see areas of improvement and also areas that they need to focus on to increase profitability. The figures MUST be contexted with the seasons and farm resources they have to work with.

Physicals	2016/17	2017/18
Milking Area	124	124
Cows	230	250
Annual Stocking Rate (cows/milking area)	1.9	2.0
Milk Solids (kgMS)		
- Total	110,031	121,996
- Per cow	478	488
Purchased Concentrates Fed (tDM/cow)	2.3	2.3
Other Purchased Fodder (tDM/cow)	0.4	1.0
Total Homegrown Feed Consumed (tDM/cow)	2.8	2.3
T DM/ha consumed	5.3	4.6
Financials		
Milk Price (\$/kgMS net)	7.28	7.23
Concentrates Purchased (\$/tDM)	314	465
Farm Working Expenses (\$/kgMS)	5.80	6.36
COP – including inventory changes (\$/kgMS)	7.46	6.42
EBIT (\$/kgMS)	1.01	1.38
ROA (%)	0.9	2.3
ROE (%)/	2.6	9
Milk Price(cents/kgMS)/Grain Price(\$/T)	2.31	1.55
SEASON RATING (Annual average)	3/10	1/10

Current numbers (@ 16/10/18)

Production:	
Effective milking area (ha)	124. Currently 63.5 ha in rotation
Cow numbers	Total milkers = 220; milkers in vat = 212
"Spring' Calvers left to calve	30
kgMS/cow/day	1.8 kgMS/cow/d
Litres/cow/day	25.5 L/cow/d
Fat %	3.80%
Protein %	3.25%
BMCC	102,000
Av. DIM	168

Grazing and Supplementary Feeding	(kg/cow/day – as fed)
Wheat @ \$420/t or 42c/kg = \$0.67/cow	1.54
Barley @ \$400/t or 40c/kg = \$1.43/cow	3.58
Canola @ \$397/t or 39.7c/kg = \$0.15/cow	0.39
Additive @ 32c/gram = \$0.22/cow	68.75 g/cow/d
Total Supplementary feed cost = \$2.47/cow	Total kg/cow (as fed) = 5.5kg
Margin Over Supplementary Feed Cost	
October milk price (\$/kgMS)	\$6.95
Income/cow	\$12.51
[=milk price x kgMS/cow]	(49c/L)
Supplementary feed cost/cow	\$2.47 (5.0 litres)
[conc pricexkg+conc pricex kg+additiveetc]	
MOSFC/cow	\$10.04
Nett milk/cow	20.5 litres
[Nett milk/cow = \$10.04/49cpl]	
Daily Grazing	
Area in rotation (ha)	63.5
Area out for silage (ha)	60.5
Total Daily Allocation (ha)	2.77
Current Stocking density (cows/ha)	79.4

N.B. Walsh's are aiming for a MOSFC of \$10/cow

Pasture Consumption (using rough back calculation) and 'Eat Rate'

Energy required	MJ
Maintenance (12% BW)	70
Milk (5.2 MJ/L x 25.5L)	133
Total energy required	203MJ/cow
'Brought in' feed	
Wheat @ 1.54kg x 0.9 (DM) x 13.6MJ	19
Barley @ 3.58kg x 0.9 x 12.9MJ	42
Canola @ 0.39kg x 0.9 x 13MJ	5
Total energy imported	66MJ/cow
Energy shortfall/Pasture consumption	
Shortfall = 203 - 66	137
Assuming pasture has 11MJ/kg	12.5 kgDM/cow/d
Eat Rate	
220 cows x 12.5Kg pasture = 2750 kgDM	
Current Milking area = 63.5 ha	
2750/63.5 ha	43.3 kgDM/ha
(Current growth rate = ~60kgDM/ha)	

Parmalat Income Estimate

The milk price below is ex GST and after levies on a \$/kgMS basis for the 18/19 FY;

	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	
	July	August	September	October	November	December	January	February	March	April	May	June	Total
Volume	141,054	150,151	164,835	172,176	164,694	141,634	129,980	108,739	140,599	142,736	143,837	147,303	1,747,738
Fat %	3.86	3.51	3.41	3.67	3.78	3.81	3.87	3.95	3.75	3.74	4.00	3.46	3.72
Protein %	3.27	3.33	3.33	3.27	3.22	3.16	3.17	3.24	3.26	3.27	3.36	3.29	3.26
Fat kg	5,441	5,259	5,614	6,304	6,219	5,392	5,031	4,295	5,277	5,318	5,752	5,072	64,974
Protein kg	4,605	5,002	5,483	5,624	5,299	4,477	4,123	3,521	4,587	4,665	4,826	4,841	57,053
Milk Solids kg	10,046	10,261	11,097	11,928	11,518	9,869	9,154	7,816	9,864	9,983	10,578	9,913	122,027
\$/kgMS	7.45	7.62	7.05	6.95	6.90	7.44	7.42	7.39	7.98	8.01	7.93	7.62	7.46

The 18/19 Cash Flow budget on the following page is based on the above income estimate for milk price and 17/18 DairyBase figures for most fixed costs with adjustments made for feed prices and volumes based on predictions for the upcoming year.

OMJ CONSULTING

"Serving Agriculture for Thirty years" Phone: 0409935578

email: OMJ@dcsi.net.au

EXPENSES

Herd Costs AB and Herd Test

Calf Rearing(to 1yo)

Animal Health

2YO

Yearlings

Shed Costs

Shed Power

Feed Costs

Ceral Grain

Canola

Silage:m/p

Cereal Hay

Vetch Hay

Irrigation

Agistment

Fuel and Oil

GROSS MARGIN

Overhead Costs

Repairs and Maint Farm

Repairs and Maint Plant

Rates and water

Farm Vehicles

Labour Costs

Gross Wages

Superannuation

Training Courses

Staff Amenities

TOTAL HRS

MS/HR 50 HOUR LABOUR UNITS

RETURN ON EQUITY (ROE) FOULTY NET WORTH

ROE(EBIT LESS INTEREST) % ROE(ROE/EQUITY%)

TOTAL NET SOLIDS FARM KG NET SOLIDS PER COW KG NET SOLIDS PER HA KG

71124

284 574 7.48 7.78

8.08

71,151

Protective Clothing

FARM WORKING EXPENSES

Contractors

Workcover

Farm Ins

Fertiliser Tonne PKS

Pasture silage and hay

Additives incl 2 T lead feed

Nitrogen Pasture renovation

Dairy Supplies

Annual Farm Budget and Financial Indicator Property Description

2018/2019 AS AT SEPTEMBER JUSTIN AND LIBBY WALSH NAME Prenared by John Mulvany Milking area Descriptions Support area TOTAL AREA 274 HA LAND OWNED 37 HA DATE 20th SEPTEMBER 2018 Irrigated Dryland Irrigated Dryland 124 90 LAND LEASED 237 HA Total 124 90 Total PHYSICAL FEATURES Capital Costs Plant PER COW Farm Improvement TOTAL KG BE 65016 Shares TOTAL KG PR 39,250 56977 157 Total Capital Costs 19,750 79 TOTAL LITRES 1747750 AVERAGE STOCKING RATE (AYC) 1.61 0 0 Personal Costs AVERAGE COW NUMBERS(AYC) 200 0 0 77 DRAWINGS 19,250 80.00 MAX HERD SIZE: 250 PAYG Total Personal Costs **Total Herd Costs** 78,250 AV F + PR /COW 488 80,00 Total Production F +Pr 121,993 MILKING AREA (HA): 124 STOCKING RATE COWS/MILKING HA 12,250 49 Finance Costs TOTAL FINANCE 2.02 cov MILK PRICE TOTAL SOLIDS EQUIV 6.500 26 \$7.48 DEMAND INCLUDING LEASING Total Shed Costs \$/KGMS BUTTERFAT PER COW: 18,750 260 KG OF MILKING AREA \$/T FRESH FAT + PROTEIN PER HA: 984 KG 4 202 LITRES PER COW 6991 220,500 AND SERVICING CENTS PER LITRE 420 52.2 35,625 475 ALL DEBT 15317 BUTTERFAT EQUIV 14.04 \$/KG Total Finance Costs PRICE 35,000 350 153,172 42,000 400 TOTAL EXPENDITURE 1,017,762 18,376 514 INCOME FINANCIAL INDICATORS 0 0 \$ per Litre \$ per kg ms \$ per cow \$ per ha 0 64,300 Milk Income 912,507 Income 0.593 4144 8354.2 8.5 19.750 79 COW Herd Costs 0.045 0.6 313 631.05 Stock sales 15% Culls Shed Costs 0.011 151.21 40.00 75 32,000 0.2 Stock purchases Feed Costs 0 294 4.2 2053 4138.9 0.28/ Calves 0.8 29,000 116 cov Overhead Costs 0.059 412 830.37 Other feed costs Total Feed Costs Labour(Paid) Finance Costs 0.6 1.3 Rebates/Interest/refunds 90 0.041 286 575.81 513,224 54% 0.088 613 1235.3 Total Farm Income 345.693 955.916 Gross Margin 0.198 2.8 1383 2788 Operating Surp Non Farm Income 0.098 1.4 685 1382 80,000 26.78 Budget surplus 0.010 0.1 73 146 TOTAL INCOME 1,035,916 Total Labour P+I 0.100 2,30 1.43 696 Farm Income on Finance Repayment: 16.0% \$/L 8,913 21.50 Farm Working expenses per kg milk solids \$6.43 0.45 16,37 OPENING BALANCE Imported Energy 60.7% Other O'head e.g. Admin Total Overhead Costs Cost of production excluding inventory chag Cost of production including inventory chag 7.70 \$/KGMS ng inventory chng 102 966 7.70 \$/KGMS SURPLUS/DEFICIT FEED CASH \$18,155 Tonne / cow WORLD FARM ONLY -61,845 Ceral Grain 2.1 60,000 Canola 0.3 Silage:m/p 0.4 5.400 CLOSING BALANCE \$18,155 ΤΟΤΑΙ 2.8 6,000 AV Conc. Price (\$/T) 416 TAX ACCRUAL BASED TAXABLE 74,919 Purchased Feed % Of Tota 58.5 WORLD PROFIT Cereal Hay 0.42 Total Labour Costs 71,400 Vetch Hay 0.143 Pasture silage C 784.590 Calf Pellets Purch. Fodder 0.15 Pasture and crops direct \$/TDM PASTURE CONSUMPTION (Tonnes D.M./HA) FARM OPERATING CASH SURPLUS 171,327 106.2 % OF FARM INCOME ON PRODUCTION COSTS 82.1 4.7 (Tonnes D.M./COW) 2.4 **OPENING VALUES** PEOPLE PRODUCTIVITY: LABOUR PAID HRS IMPUTED HRS RETURN ON CAPITAL-BUSINESS EFFICIENCY WORLD EQUITY SUMMARY 2,193,984 3180 22 \$/HR Total Assets Total Liabilities ADJUSTMENTS:L'STOCK/FODDER OPERATOR ALLOWANCE 0. 102648.0 3360 31 \$/HR 731,794 6540 Net Worth 1462190 DEPRECIATION 52500 0 % Equity \$ EBIT 16,179 18. 66.65% RETURN ASSETS OWNED 2.5 -2.5 \$ EBIT PER KG MS USE/AV. PRICE OF CONCENTRATES MS PER 50 HOUR LABOUR UNIT 48499 0.13 SENSITIVITY OF BUDGET 1 462 190 \$/tonne tonnes / cow **3.1** 60786 37911 2.8 81155 -27,729 -1.90 CHANGES in INCOME and PRODUCTION **2.6** 101523 Price Av KG/Cow 488 326 478 498 356 82398 60155 PRODUCTION NET OF PURCHASED FEEDS 386 416 446 476 6.88 -72 241 -55.041 -37,841 -493 63273 39155 15036
 7.18
 -36,393

 7.48
 -545

 7.78
 35,303
 -18,443 18,155

36,855

74.203

506

111,551

54.753

91,351

44148

25023

5898

13227

18155

-2845

-23845

44845

-7839

-30714

-53589

-76464

Farm Business Summary								
Physical Parameters								
Usable Area	ha	214						
Milking Area	ha	124						
Cows Milked	Number	250						
Annual Stocking Rate	Milking cows / Milking ha	2.0						
Milk Production - Litres	Total Litres	1,747,738						
Milk Production - Kg Milksolids	Total Milksolids	121,996						
Homegrown Feed - Milking Area	t DM / Milking ha	4.7						
Homegrown Feed - Usable Area	t DM / Usable ha	3.7						
Proportion of Homegrown Feed	% of Diet	42%						
Cows per Labour Unit	Milking cows / FTE	76						
		Total	% Total	Per kg MS	Per Cow	\$ Per Ha	\$ Per Ha	Per Litre
Cash		(\$)	(Income)	(\$/kg MS)	(\$/cow)	(\$/milking ha)	(\$/usable ha)	(cents/Litre)
Milk Income		882,500	84.7%	7.23	3,530	7,117	4,124	50.5
Total Farm Cash Income		867,640	83.3%	7.11	3,471	6,997	4,054	49.6
Total Farm Working Expenses		776,295	74.5%	6.36	3,105	6,260	3,628	44.4
Farm Operating Cash Surplus		91,346	8.8%	0.75	365	737	427	5.2
Finance Costs (Interest & Lease)		96,400	9.3%	0.79	386	777	450	5.5
Net Farm Cash Flow Before Tax and Drawings		- 24,461	- 2.3%	- 0.20	- 98	- 197	- 114	- 1.4
Profit								
Total Farm Gross Income		1,041,640	100.0%	8.54	4,167	8,400	4,867	59.6
Total Variable Costs		576,840	55.4%	4.73	2,307	4,652	2,696	33.0
Total Overhead Costs		296,155	28.4%	2.43	1,185	2,388	1,384	16.9
Cost of Production (includes inventory changes)		783,555	75.2%	6.42	3,134	6,319	3,661	44.8
Total Costs		872,994	83.8%	7.16	3,492	7,040	4,079	49.9
Earnings Before Interest and Tax (EBIT)		168,646	16.2%	1.38	675	1,360	788	9.6
Finance Costs (Interest & Lease)		96,400	9.3%	0.79	386	777	450	5.5
Net Farm Income		72,246	6.9%	0.59	289	583	338	4.1
Wealth								
Return on Total Assets (ROTA)		2.3%						
Equity as % of Owned Assets		67.5%						
Return on Equity (ROE)		9.0%						
Change in Net Worth		509,088	48.9%	4.17	2,036	4,106	2,379	29.1



ARE WE THERE YET???

No so	it's the	perfect	Focus	Farm
-------	----------	---------	-------	------

		"The
	16/17	Dream"
Physicals		
Cows	230	280
Total Solids	110,031kg	151,200kg
Production per cow		
Milk Solids	478	540
Litres	6,920	7,200
Fat %	3.7	4.1
Protein %	3.2	3.4
Pasture		
tDM/ha	5.1	7.6
tDM/cow	2.7	3.4
Concentrate (tDM/cow)	2.1	2.3
Purchased Fodder (tDM/cow)	0.7	0.35
Financials	;	
Cost of Production (\$/kgMS)	7.46	5.66
Farm Operating Surplus		
(Income - Farm Working		
Expenses)		
\$/kgMS	1.72	3.08
\$/cow	824	1,666
EBIT		
\$/kgMS	1.02	2.06
Per Cow	486	1,111

The Support Group's task is to think about what changes are needed to move from now to "The Dream" in 2 – 3 years, given reasonable seasonal conditions – which Justin and Libby haven't had yet!!

	2017-18 NSW Average farm financ	ial performa	nce per kil	ogram of	milk solids - :	statewide			
Farm inc	ome and cost category	State	ewide	North	ern NSW	South	nern NSW	State top	25% average
INCOME		\$/KgMS	Cents/litre	\$/kgMS	Cents/litre	\$/kgMS	Cents/litre	\$/kg MS	Cents/litre
Milk incon	ne (net)	\$7.27	53.9	\$7.62	56.5	\$6.81	50.6	\$7.25	53.7
Livestock	trading profit	\$0.62	4.6	\$0.62	4.5	\$0.63	4.7	\$0.62	4.6
All other fa	arm income	\$0.11	0.8	\$0.15	1.1	\$0.05	0.4	\$0.03	0.2
Total inco	me	\$8.00	59.3	\$8.39	62.1	\$7.49	55.7	\$8.00	58.6
VARIABLI	E COSTS								
Herd cost		\$0.36	2.7	\$0.38	2.8	\$0.34	2.5	\$0.32	2.4
Shed cost	t	\$0.28	2.1	\$0.33	2.4	\$0.23	1.7	\$0.23	1.7
	Home grown feed cost	\$1.23	8.5	\$1.35	10.0	\$1.09	8.3	\$1.24	9.2
	Purchased feed and agistment	\$2.66	18.7	\$2.76	19.5	\$2.53	17.7	\$2.23	16.4
	Feed inventory change	-\$0.01	0.0	-\$0.03	-0.2	\$0.01	0.2	-\$0.12	-0.9
	Water inventory change	\$0.00	0.0	\$0.00	0.0	\$0.01	0.1	-\$0.01	-0.1
Total feed	costs	\$3.89	28.8	\$4.09	30.2	\$3.63	27.1	\$3.34	24.7
Total varia	ble costs	\$4.53	33.6	\$4.79	35.4	\$4.20	31.3	\$3.88	28.8
GROSS N	/ARGIN								
per kilogra	am of milk solids	\$3.46	25.7	\$3.60	26.7	\$3.29	24.4	\$4.02	29.8
OVERHE/	AD COSTS								
Employed	labour	\$0.86	6.4	\$0.94	6.9	\$0.76	5.8	\$0.76	5.6
Repairs ar	nd maintenance	\$0.43	3.2	\$0.48	3.5	\$0.36	2.7	\$0.34	2.6
All other o	verheads	\$0.41	3.0	\$0.44	3.2	\$0.37	2.7	\$0.26	1.9
Imputed la	abour	\$1.05	7.8	\$1.22	9.1	\$0.84	6.2	\$0.93	7.0
Depreciati	on	\$0.38	2.9	\$0.39	2.9	\$0.38	2.8	\$0.30	2.2
Total over	head costs	\$3.13	23.2	\$3.46	25.6	\$2.71	20.2	\$2.59	19.3
Total varia	ble and overhead costs	\$7.67	56.8	\$8.26	61.0	\$6.91	51.5	\$6.48	48.1
EARNING	S BEFORE INTEREST AND TAX								
per kilogra	am of milk solids	\$0.33	2.5	\$0.13	1.1	\$0.58	4.2	\$1.43	10.5

Farm Income and Costs 2017-18 NSW Dairy Farm Monitor Project

2017-18 NSW Farm Physical data

Farm Physical Parameters			
	Statewide	North	South
Number of farms in sample	32	18	14
Herd size (no. cows milked for at least 3 month	337	288	401
Annual rainfall 17-18	718	864	530
Total water use efficiency (tDM/100mm/ha)	0.6	0.6	0.8
Total usable area (ha)	251	188	333
Stocking rate (cows per usable hectare)	1.4	1.5	1.3
Milk sold (kg MS/cow)	488	459	526
Milk sold (kg MS/ha)	683	698	665
Home grown feed as a % of ME consumed	56%	57%	55%
Labour efficiency (cow / FTE)	77	70	85
People productivity (kg MS / FTE)	37,536	32,110	44,513

Figure 8: Sources of Whole Farm Metabolisable Energy

Proportion of ME in diet			
	Statewide	North	South
Pasture grazed	42%	47%	37%
Нау	8%	7%	10%
Silage	13%	9%	17%
Other	1%	1%	1%
Concentrate	35%	36%	35%
	100%	100%	100%

This is the same table from the previous year.

2016-17 AVERAGE FARM FINANCIAL PERFORMANCE- STATEWIDE

Farm income and cost category	State	wide	Norther	n NSW	Southern NSW			
INCOME	kg MS	c/l	kg MS	c/l	kg MS	c/l		
Milk income (net)	\$6.89	50.4	\$7.28	53.6	\$6.48	47.0		
Livestock trading profit	\$0.90	6.5	\$0.80	5.9	\$0.99	7.2		
Other farm income	\$0.15	1.1	\$0.17	1.2	\$0.14	1.0		
Total income	\$7.94	58.1	\$8.25	60.7	\$7.62	55.2		
VARIABLE COSTS								
Herd cost	\$0.38	2.7	\$0.35	2.6	\$0.40	2.9		
Shed cost	\$0.26	1.9	\$0.31	2.3	\$0.22	1.6		
Home grown feed cost	\$1.28	9.4	\$1.51	11.1	\$1.04	7.7		
Purchased feed and agistment	\$1.97	14.2	\$1.90	13.8	\$2.04	14.7		
Feed inventory change	\$0.02	0.1	\$0.06	0.4	-\$0.02	-0.2		
Total variable costs	\$3.91	28.4	\$4.12	30.1	\$3.68	26.6		
GROSS MARGIN								
per kilogram of milk solids	\$4.03	29.6	\$4.13	30.6	\$3.93	28.6		
OVERHEAD COSTS								
Repairs and maintenance	\$0.49	0.9	\$0.55	0.9	\$0.43	0.8		
Employed labour	\$0.90	6.5	\$0.95	6.9	\$0.85	6.2		
All other overheads	\$0.41	2.1	\$0.42	2.2	\$0.40	2.0		
Imputed labour	\$0.95	7.1	\$1.08	8.1	\$0.81	6.0		
Depreciation	\$0.36	2.7	\$0.38	2.8	\$0.35	2.5		
Total overhead costs	\$3.11	19.2	\$3.38	20.8	\$2.83	17.5		
EARNINGS BEFORE INTEREST AND TAX								
per kilogram of milk solids	\$0.92	10.4	\$0.75	9.8	\$1.10	11.1		

Rotation Right Tool – Top Farm

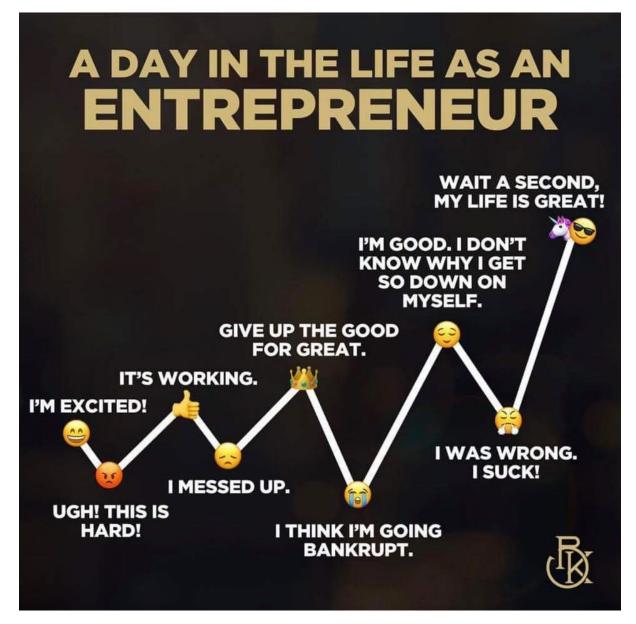
Note: Tool s				kg var per feed			pasture/crop to be offered to the herd in order to maintain Name:												oped by P	10 0	S vie' Ma	d 2011	+			
Area in Curren		34.6	Hectares	• ·	1 or 0		15		Underfe	eding risk	INA		Πος	Rotatio	n l enat	h (D		oped by P			ding risk	L-19-P		60		
Area in Guirei	Cow number	220.0	Est. Feed / Ha	1000			15			7	1	2	20			4	l (B		80		4	5			60 60	٦
Area to be	-						.31			.02			73			44			15		-	86			.58	-
1.3832			ings per day	1		10.5	10.5		9.2	9.2		7.9	7.9		6.5	6.5		5.2	5.2		3.9	3.9		2.6	2.6	
Paddock Name	and Type		ck Area ils (e)	Paddock '10' = Av	5	Estimated Feeds Rounded	Number of feeds from paddock		Estimated Feeds Rounded	Number of feeds from paddock		Estimated Feeds Rounded	Number of feeds from paddock		Estimated Feeds Rounded	Number of feeds from paddock		Estimated Feeds Rounded	Number of feeds from paddock		Estimated Feeds Rounded	Number of feeds from paddock		Estimated Feeds Rounded	Number of feeds from paddock	
Identification	Туре	Area (ha)	Area in rot'n	1000	10																					
A - Beside bull	Rye/Kyk	2.97	2.97	1000	10 10	1.3	1	13.5	1.5	1	13.5	1.7	2	6.8	2.1	2	6.8	2.6	3	4.5	3.4	3	4.5	5.2	5	
B - Little Hill	Rye/Kyk	1.50	1.50	1000	10 10	0.7	1	6.8	0.7	1	6.8	0.9	1	6.8	1.0	1	6.8	1.3	1	6.8	1.7	2	3.4	2.6	3	
C - Hill	Rye/Kyk	2.05	2.05	1000	10 10	0.9	1	9.3	1.0	1	9.3	1.2	1	9.3	1.4	1	9.3	1.8	2	4.7	2.4	2	4.7	3.6	4	
D - Corner	Rye/Kyk	1.95	1.95	1000	10 10		1	8.9	1.0	1	8.9	1.1	1	8.9	1.4	1	8.9	1.7	2	4.4	2.3	2	4.4	3.4	3	-
- Corn Picker		2.96	2.96	1000	10 10		1	13.5	1.5	1	13.5	1.7	2	6.7	2.1	2	6.7	2.6	3	4.5	3.4	3	4.5	5.1	5	-
F - John/Dot	Rye/Kyk	2.46	2.46	1000	10 10		1	11.2	1.2	1	11.2	1.4	1	11.2	1.7	2	5.6	2.1	2	5.6	2.8	3	3.7	4.3	4	
G - Lenahans	Rye/Kyk	2.99	2.99	1000	10 10		1	13.6	1.5	1	13.6	1.7	2	6.8	2.1	2	6.8	2.6	3	4.5	3.5	3	4.5	5.2	5	-
H - 2nd last	Rye/Kyk	3.23	0.00	1000	10 10		0	####	0.0	0	.	0.0	0	#####	0.0	0	#####	0.0	0	#####	0.0	0	####	0.0	0	
I - Corner	Rye/Kyk	3.01	3.01	1000	10 10		1	13.7	1.5	1	13.7	1.7	2	6.8	2.1	2	6.8	2.6	3	4.6	3.5	3	4.6	5.2	5	-
J - Big Flat	Rye/Kyk	3.65	3.65	1000	10 10		2	8.3	1.8	2	8.3	2.1	2	8.3	2.5	3	5.5	3.2	3	5.5	4.2	4	4.1	6.3	6	
K - 5 side	Rye/Kyk	1.60	1.60	1000	10 10		1	7.3	0.8	1	7.3	0.9	1	7.3	1.1	1	7.3	1.4	1	7.3	1.9	2	3.6	2.8	3	
L - New Gully	Kyk	2.12	2.12	1000	10 10		1	9.6	1.1	1	9.6	1.2	1	9.6	1.5	1	9.6	1.8	2	4.8	2.5	2	4.8	3.7	4	
N - Gully	Rye/Kyk	4.47	4.47	1000	10 10		2	10.2	2.2	2	10.2	2.6	3	6.8	3.1	3	6.8	3.9	4	5.1	5.2	5	4.1	7.8	8	_
) - Square/new		2.85	2.85	1000	10 10	1.2	1	13.0	1	1	13.0	1.6	2	6.5	2.0	2	6.5	2.5	2	6.5	3.3	3	4.3	4.9	5	-
tree		4.00	0.00	1000	10 10		0	####	0.0	0	.	0.0	0	####		0	####	0.0	0	#####	0.0	0	####	0.0	0	
Long		7.10	0.00	1000	10 10		0	####	0.0	0	####		0	####		0	####	0.0	0	####	0.0	0	####	0.0	0	
laneways		0.00	0.00	1000	10 10		0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	
				0		0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	
				0		0.0	0	#####	0.0	0	#####	0.0	0	####	0.0	0	#####	0.0	0	#####	0.0	0		0.0	0	-

Rotation Right Tool – Bottom Farm

Rotation R	light Too	ol - Guio	deline to	determ	ini	ng a	area of	f pastu	re/c	crop to	be of	fere	d to th	ne hero	d in	order t	to mair	ntai	n a des	sired re	otat	ion len	gth			0.29	
Note: Tool	set for O	ne Feed j	per day	kg var per feed		1or 0					Name:										hil Sha	t-19-P	S.xls' Mod	J. 2011			
vrea in Curren	t Rotation	34.8	Hectares	1		1	1	5		Underfe	Underfeeding risk Desired Rotation Leng					n Lengt	h (D	ays)			Overfee	ding risk		(60		
	Cownumber	220.0	Est. Feed / Ha	2000			1	5		1	7		2	20		2	24		3	30		4	0		6	60	
Area to be	offered ea	ach grazir	ng (d) - He	ectares			2.	32		2.	.03		1	.74		1.	.45		1.	.16		0.	.87		0	.58	
1.3936		÷	ings per day	1			21.1	21.1		18.5	18.5		15.8	15.8		13.2	13.2		10.6	10.6		7.9	7.9		5.3	5.3	
Paddock Na		Paddoo		Paddock		5	Estimated Feeds	Number of feeds from		Estimated Feeds	Number of feeds from		Estimated Feeds	Number of feeds from		Estimated Feeds	Number of feeds from		Estimated Feeds	Number of feeds from		Estimated Feeds	Number of feeds from		Estimated Feeds	Number of feeds from	
Туре		Deta		'10' = Av		ge	Rounded	paddock		Rounded	paddock		Rounded	paddock		Rounded	paddock		Rounded	paddock		Rounded	paddock		Rounded	paddock	
Identification	Туре	Area (ha)	Area in rot'n	2000	10										1						1						+
A - Top Group	Rye/Kyk	5.79	4.00	2000	10	10	1.7	2	18.2	2.0	2	18.2	2.3	2	18.2	2.8	3	12.1	3.4	3	12.1	4.6	5	7.3	6.9	7	5.2
B - Long	Rye/Kyk	7.10	0.00	2000	10	10	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####
C - Bank +	Rye/Kyk	6.22	6.22	2000	10	10	2.7	3	18.8	3.1	3	18.8	3.6	4	14.1	4.3	4	14.1	5.4	5	11.3	7.1	7	8.1	10.7	11	5.1
D - Pig	Rye/Pas	3.17	3.17	2000	10	10	1.4	1	28.8	1.6	2	14.4	1.8	2	14.4	2.2	2	14.4	2.7	3	9.6	3.6	4	7.2	5.5	5	5.8
F - New	Rye/Pas	2.63	2.63	2000	10	10	1.1	1	23.9	1.3	1	23.9	1.5	2	12.0	1.8	2	12.0	2.3	2	12.0	3.0	3	8.0	4.5	5	4.8
G - Drain +	Rye/Pas	4.08	4.08	2000	10	10	1.8	2	18.5	2.0	2	18.5	2.3	2	18.5	2.8	3	12.4	3.5	4	9.3	4.7	5	7.4	7.0	7	5.3
H - Square	Rye/Pas	4.12	4.12	2000	10	10	1.8	2	18.7	2.0	2	18.7	2.4	2	18.7	2.8	3	12.5	3.5	4	9.4	4.7	5	7.5	7.1	7	5.4
I - W/Bridge	Rye/Pas	4.33	4.33	2000	10	10	1.9	2	19.7	2.1	2	19.7	2.5	2	19.7	3.0	3	13.1	3.7	4	9.8	5.0	5	7.9	7.5	7	5.6
J - Sludge 1	Rye/Pas	4.26	0.00	2000	10	10	0.0	0	####	0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####
K - Sludge 2	Rye/Pas	3.86	0.00	2000	10	10	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####
L - Left Long	Rye/Pas	9.72	0.00	2000	10	10	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####
M - Right Long	Rye/Pas	9.72	0.00	2400	12	12	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####
N - T/Irrigator	Rye/Kyk	16.59	0.00	2600	13	13	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####
O- Lane ways	Rye/Pas	3.82	3.82	2000	10	10	1.6	2	17.4	1.9	2	17.4	2.2	2	17.4	2.6	3	11.6	3.3	3	11.6	4.4	4	8.7	6.6	7	5.0
P - Peters	Rye/Kyk	2.47	2.47	2000	10	10	1.1	1	22.5	1.2	1	22.5	1.4	1	22.5	1.7	2	11.2	2.1	2	11.2	2.8	3	7.5	4.3	4	5.6
below bank		6.00	0.00	2000	10	10	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####
				0			0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####	0.0	0	####

A Day in the Life of a Young Dairy Farmer

Below is a diagram that the Walsh's feel summarises their journey over the last 2 years perfectly...!



By John Mulvany

FEEDING THIS SPRING IN THE AMAZING WORLD OF DAIRY

Recently an expat kiwi dairy farmer in Tasmania said to me, "I don't do marginal milk, it's just too risky".

It's a good reminder that depending upon where you dairy farm and the conditions you are currently experiencing there are two types of milk. The first is milk from pasture, the one that generally drives farm profit; the second is the milk from supplements which is called marginal milk, because its production should depend on the difference between its cost and the income it generates. Sometimes marginal milk is very profitable - but not always.

At the time of writing this article there appear to be two clear types of dairy farm situations in Gippsland and in fact across the dairy nation:

- There are farms with virtually no grass and no cheap milk where the decision to feed supplement even at current prices is non-negotiable.
 - The decisions this group of farmers are making are centred on the questions "Will a milker cover her feed cost?" and "At what point do I dry a proportion of the herd off and feed them as dry cows?"
 - These farms are spending 80 -100% of milk income on feed; the other expenses are either mining equity or coming from reserves.
 - Decisions in these situations require a fine balance between preservation of the business, to be able to bounce back, and financially being able to afford to bounce back.
 - Cost and access to feed are paramount and most of this group are identifying the "feed window" they want to fill, which might be 30 40 days or longer.
 - o A very tough scene.
- The second group of farmers are those with grass.
 - The level of supplement that's fed in spring and marginal milk produced is actually discretionary like my Tassie farmer above highlighted.
 - In the old days, at the type of feed prices we have now, most farmers would just have turned the supplement dial down a bit in spring (because they could) and then turned it up in summer because they had to!
 - The complication at present is the external price and availability of fodder- it's gold and in the absence of grass plus no fodder the proverbial hits the fan!
 - There have been a lot of messages about nitrogen in spring- that's a no brainer on both milking area and support areas.

When it comes to marginal milk there are various milk price to feed ratios that people talk about that are often confused. The following table using information from a recent Focus Farm meeting may help clarify the situation. All Gippsland dairy farmers are paid for solids so I suggest you look at the solids ratio more than the litres.

Table 1. Milk Price and Feed Price ratios(Milk price \$5.11/kg MS at 4.1% BF and 3.3% Pr or 38c/L; Grain price \$400/T)

Ratio	Foc us Farm Example	Your figures
1. <u>Solids vs Grain Basis</u>		
Cents/kg milk ÷ \$/T grain	511 ÷ 400 = 1.27	Your milk price in spring
Based on 0.08kg milk solids response per kg fed.		cents/kg MS
This ratio needs to be greater	At a ratio of 1.27 the cows have	Your grain price
than 1.5 to have absolute confidence in making money.	to be in the right stage of lactation and hungry	\$/T
		Your ratio:
2. Litres vs Grain Price		
Cents/L ÷ cents/kg	38 ÷ 40 = 0.95	Your milk price
This needs to be greater than 1.0		cents/L
to generate a margin. It's simple but can be misleading because		Your grain price
it's litres based		cents/kg
		Your ratio:

In most cases there will be minimal or no profit in concentrates in spring but if they are cost neutral and assist you to conserve more fodder and still have acceptable spring production with cows in good condition then it's an overall benefit.

For the farmer who has pasture a frequent comment at present is "...I'll still feed but probably a bit less, and the cows will just be bit hungrier..."For those who understand the "daily line" it means a little bit left with cows keen to come into the dairy, and certainly not right with lazy cows!

Equally some are saying that they will keep feeding at the same rate to help create silage, but be cautious - feeding to create fodder will only work if you change grazing management. Allocate to ensure that the cows still leave the right residual at a higher stock density per hectare (e.g. 90 cows/Ha/24hrs instead of 60 cows/Ha/24 hours). This means that more cows are grazing pastures that are a bit longer than normal in spring so it has a high risk of losing quality. Get this wrong and the cows will make you pay in the vat for "forest munching".

If you have pasture then irrespective of your spring feeding regime it's a year when it's worth calculating your net litres or solids. After all the net is what's left after the feed cost to pay other bills. A net figure of 1.7 kg milk solids or 21 - 23 litres (4.0% BF/3.3%Pr) would be a good outcome this spring. The following table shows the method to calculate the net figures.

1

Table 2. Calculation of Net Litres and Solids

Cows producing av.28 L at 4.0% BF and 3.3% pr (2.0 kg MS); Milk price \$5.50/kg MS or 39c/L; feeding 4 kg grain at 40 cents/kg.

Example	Your figures
Income: 2 kg MS x \$5.50/kg = \$11.00	
Supplement cost: 4 kg x \$0.40 = \$1.60	
Net after supplement: \$11.00 - \$1.60 = \$9.40	
\$9.40 ÷ \$5.50 = 1.71 kg MS net	
\$9.40 ÷ \$0.39/L = 24 Litres net	

If the level of concentrate feeding in spring creates a low spring net then the cash flow pressure it creates might not be worthwhile- it is a very fine balance.

Finally in regard to numbers for this season, as usual there is a huge variation and plenty of opinions:

- Those without pasture have already gone back to absolute core numbers and that includes young stock fewer mouths moderately fed.
- Those with pasture are generally trimming a bit earlier, BUT there are still quite a few farmers waiting until the end of spring to do a normal "clean out". As one of them said: "The way this industry changes who knows what will happen by December!"

There are no recipes for the perfect path this spring and generic advice is dangerous BUT there are very solid principles that apply year in and year out.

John Mulvany OMJ Consulting omj@dcsi.net.au

Milking Platform Maps



