Your Levy at Work

## WALSH FOCUS FARM <br> Justin \& Libby Walsh

## OPEN DAY, $18^{\text {th }}$ October 2018



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

## 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 <br> Walsh Farm <br> The Focus Farm Team |
| :--- | :--- |
| P 5 | Farm Physicals <br> 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 <br> Physical Data <br> 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 <br> 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 <br> with ~20 stud cows but also some Jersey crosses. <br> Annual stocking rate 2.0 cows/ha |
| Calving Pattern | Split calving (to match pasture growth curve) <br> $60 \%$ Autumn (Calving 1st Feb to mid-May) <br> $40 \%$ Spring (Calving 1 ${ }^{\text {st }}$ Aug - mid Nov) <br> Plan to tighten up both calving periods. |
| Heifer blocks | Burrier Heifer Block - 57 ha <br> Far Meadow Heifer Block - 80 ha <br> Hannigan's Lane - 14.2 ha <br> All blocks leased |
| Feeding (17/18 FY) | 2.3 tDM conc./cow (wheat/barley/canola meal mix) + additive <br> 1.9 t DM/cow purchased fodder (Oaten \& Vetch Hay, Maize and <br> Grass silage) |
| Feed Base | Kikuyu/ryegrass based pastures |
| Plant \& Equipment | Dairy - upgraded - 90 degree, 24 aside swingover, 10,000L vat <br> Duncan MK4 seeder, Vicon fert spreader, Hustler feed cart, <br> Major Cyclone topper, Berti mulcher, 4 tractors, Skiold disc mill <br> \& 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 |  |
| of imported feed | Feed budget done, feed secured until the <br> New Year (if no rain); <br> $-\quad 50$ tonne of canola <br> $-\quad 106$ t hay - ryegrass, cereal \& vetch <br>  |
|  | Nitrogen to grow feed if it rained; <br> $-80 \mathrm{~kg} / \mathrm{ha}$ urea applied over milking <br> platform \& Hannigan's on 7/09 |
| Potential to sow a maize crop for silage <br> under centre pivot | Decided it was too risky, particularly given <br> the cost and potential for the area to flood. <br> 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 <br> as well as contexted with the current <br> conditions. <br> Artificial breeding and herd costs high. <br> Feed costs @ \$4.20/kgMS driving high Farm <br> Working Expenses and therefore low <br> Operating Cash Surplus and EBIT <br> (\$0.13/kgMS) |
| Semen costs for joining, commencing 23/10 | Discussion resulted in Justin being <br> budgeted to spend no more than <br> \$20/straw. |
| Achieved straws @ av. \$18.50 (BPI 260, |  |
| Future breeding direction | Aiming for a more "efficient" cow - better <br> kgMS:kgLWT ratio than the current 84\%. <br> This wasn't resolved in discussion but will <br> be discussed at a later meeting. |
| Nitrogen use - strategic use to generate <br> feed on a dryland farm | Lots of discussion about response rates. |


|  | It was calculated that with current hay <br> prices, a response of 3kgDM/kgN was all <br> that was needed to make it economical. <br> Subsequent rain has meant another 80kg <br> urea applied over the whole farm. |
| :--- | :--- |
| Heifer rearing - agist R1's or on farm? | Currently have 61 R2 heifers being contract <br> reared by Heiferlink (due to block of land <br> becoming unavailable and seasonal <br> conditions). Option to send the R1's down <br> there. Costs were discussed (feeding at <br> home v. contract rates) and it was decided <br> to keep R1's on farm and reassess the <br> 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) <br> $-\quad$ Total <br> $-\quad$ Per cow | 110,031 |  |
| Purchased Concentrates Fed (tDM/cow) | 478 | 121,996 |
| Other Purchased Fodder (tDM/cow) | 2.3 | 488 |
| Total Homegrown Feed Consumed (tDM/cow) | 0.4 | 2.3 |
| T DM/ha consumed | 2.8 | 1.0 |
| Financials | 5.3 | 2.3 |
| Milk Price (\$/kgMS net) |  | 4.6 |
| Concentrates Purchased (\$/tDM) | 7.28 |  |
| Farm Working Expenses (\$/kgMS) | 314 | 7.23 |
| COP - including inventory changes (\$/kgMS) | 5.80 | 465 |
| EBIT (\$/kgMS) | 7.46 | 6.36 |
| ROA (\%) | 1.01 | 6.42 |
| ROE (\%)/ | 0.9 | 1.38 |
| Milk Price(cents/kgMS)/Grain Price(\$/T) | 2.6 | 2.3 |
| SEASON RATING (Annual average) | 2.31 | 9 |

## 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 | $1.8 \mathrm{kgMS} / \mathrm{cow} / \mathrm{d}$ |
| Litres/cow/day | $25.5 \mathrm{~L} / \mathrm{cow} / \mathrm{d}$ |
| Fat \% | $3.80 \%$ |
| Protein \% | $3.25 \%$ |
| BMCC | 102,000 |
| Av. DIM | 168 |


| Grazing and Supplementary Feeding | (kg/cow/day - as fed) |
| :--- | :---: |
| Wheat @ $\$ 420 / \mathrm{t}$ or $42 \mathrm{c} / \mathrm{kg}=\$ 0.67 / \mathrm{cow}$ | 1.54 |
| Barley @ $\$ 400 / \mathrm{t}$ or $40 \mathrm{c} / \mathrm{kg}=\$ 1.43 / \mathrm{cow}$ | 3.58 |
| Canola @ $\$ 397 / \mathrm{t}$ or $39.7 \mathrm{c} / \mathrm{kg}=\$ 0.15 / \mathrm{cow}$ | 0.39 |
| Additive @ $32 \mathrm{c} / \mathrm{gram}=\$ 0.22 / \mathrm{cow}$ | $68.75 \mathrm{~g} / \mathrm{cow} / \mathrm{d}$ |
| Total Supplementary feed cost $=\$ 2.47 / \mathrm{cow}$ |  |
| Margin Over Supplementary Feed Cost |  |
| October milk price (\$/kgMS) | $\$ 6.95$ |
| Income/cow | $\$ 12.51$ |
| [=milk price x kgMS/cow] | $(49 \mathrm{c} / \mathrm{L})$ |
| Supplementary feed cost/cow | $\$ 2.47(5.0$ litres) |
| [conc pricexkg+conc pricex kg+additive..etc] |  |
| 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 ( $5.2 \mathrm{MJ} / \mathrm{L} \times 25.5 \mathrm{~L}$ ) | 133 |
| Total energy required | $\mathbf{2 0 3 \mathrm { MJ } / \mathrm { cow }}$ |
| 'Brought in' feed |  |
| Wheat @ $1.54 \mathrm{~kg} \times 0.9$ (DM) $\times 13.6 \mathrm{MJ}$ | 19 |
| Barley @ $3.58 \mathrm{~kg} \times 0.9 \times 12.9 \mathrm{MJ}$ | 42 |
| Canola @ $0.39 \mathrm{~kg} \times 0.9 \times 13 \mathrm{MJ}$ | 5 |
| Total energy imported | $\mathbf{6 6 M J} / \mathrm{cow}$ |
| Energy shortfall/Pasture consumption |  |
| Shortfall $=203-66$ | 137 |
| Assuming pasture has 11MJ/kg | $12.5 \mathrm{kgDM} / \mathrm{cow} / \mathrm{d}$ |
| Eat Rate |  |
| 220 cows $\times 12.5 \mathrm{Kg}$ pasture $=2750 \mathrm{kgDM}$ |  |
| Current Milking area $=63.5 \mathrm{ha}$ | $43.3 \mathrm{kgDM} / \mathrm{ha}$ |
| $2750 / 63.5$ ha |  |
| (Current growth rate $=\sim 60 \mathrm{kgDM} / \mathrm{ha})$ |  |

## Parmalat Income Estimate

The milk price below is ex GST and after levies on a $\$ / \mathrm{kgMS}$ 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 Annual Farm Budget and Financial Indicator



| Capital Costs | \$ |
| :---: | :---: |
| Plant | 0 |
| Farm Improvement | 0 |
| Shares | 0 |
| Total Capital Costs | 0 |
| Personal Costs |  |
| DRAWINGS | 80,000 |
| PAYG | 0 |
| Total Personal Costs | 80,000 |
| Finance Costs |  |
| TOTAL FINANCE |  |
| DEMAND |  |
| INCLUDING LEASING |  |
| OF MILKING AREA |  |
| AND SUPPORT AREAS |  |
| AND SERVICING |  |
| ALL DEBT | 153172 |
| Total Finance Costs | 153,172 |
| TOTAL EXPENDITURE | 1,017,762 |


| PHYSICAL FEATURES |  |
| :---: | :---: |
| TOTAL KG BF | 65016 |
| TOTAL KG PR | 56977 |
| TOTAL LITRES | 1747750 |
| AVERAGE STOCKING RATE (AYC) | 1.61 |
| AVERAGE COW NUMBERS(AYC) | 200 |
| MAX HERD SIZE: | 250 |
| AV F + PR /COW | 488 |
| Total Production F + Pr | 121,993 |
| MILKING AREA (HA): | 124 |
| STOCKING RATE COWS/MILKING HA | 2.02 cows/ha |
| MILK PRICE TOTAL SOLIDS EQUIV | \$7.48 |
| \$/KGMS |  |
| BUTTERFAT PER COW: | 260 KG |
| FAT + PROTEIN PER HA: | 984 KG |
| LITRES PER COW | 6991 |
| CENTS PER LITRE | 52.2 |
| BUTTERFAT EQUIV | 14.04 \$/KG |


|  | INCOME | \$ | FINANCIAL INDICATORS |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | \$ per Litre $\quad$ \$ per kg ms | \$ per cow | \$ per ha |
|  | Milk Income | 912,507 | Income | $\begin{array}{ll}0.593 & 8.5\end{array}$ | 4144 | 8354.2 |
| \$/COW |  |  | Herd Costs | 0.045 0.6 | 313 | 631.05 |
|  | Stock sales 15\% Culls | 40,000 | Shed Costs | $0.011 \quad 0.2$ | 75 | 151.21 |
|  | Stock purchases |  | Feed Costs | $0.294-4.2$ | 2053 | 4138.9 |
| \$/COW | Calves | 2,500 | Overhead Costs | 0.059 0.8 | 412 | 830.37 |
|  | Rebates/Interest/refunds | 909 | Labour(Paid) | $0.041 \quad 0.6$ | 286 | 575.81 |
|  |  |  | Finance Costs | $0.088 \quad 1.3$ | 613 | 1235.3 |
|  | Total Farm Income | 955,916 | Gross Margin | $\begin{array}{ll}0.198 & 2.8\end{array}$ | 1383 | 2788 |
|  | Non Farm Income | 80,000 | Operating Surp. | 0.098 1.4 | 685 | 1382 |
|  |  |  | Budget surplus | $0.010 \quad 0.1$ | 73 | 146 |
|  | TOTAL INCOME | 1,035,916 | Total Labour P+1 | $0.100 \quad 1.43$ | 696 |  |
|  |  |  |  | Farm Income on Finance Repayment: | 16.0\% | \$/L |
|  |  |  |  | Farm Working expenses per kg milk solids | \$6.43 | 0.45 |
|  | OPENING BALANCE | 0 |  | Imported Energy | 60.7\% |  |
|  |  |  |  | Cost of production excluding inventory chns | 7.70 | \$/KGMS |
|  |  |  |  | Cost of production including inventory chng | 7.70 | \$/KGMS |
| CASH | SURPLUS/DEFICIT | \$18,155 |  | FEED | Tonne / cow |  |
| WORLD | FARM ONLY | -61,845 |  | Ceral Grain | 2.1 |  |
|  |  |  |  | Canola | 0.3 |  |
|  |  |  |  | Silage:m/p | 0.4 |  |
|  | CLOSING BALANCE | \$18,155 |  | TOTAL | 2.8 |  |
|  |  |  |  |  |  |  |
|  |  |  |  | AV Conc. Price (\$/T) | 416 |  |
| TAX | ACCRUAL BASED TAXABLE | 74,919 |  | Purchased Feed \% Of Total | 58.5 |  |
| WORLD | PROFIT |  |  | Cereal Hay | 0.42 |  |
|  |  |  |  | Vetch Hay | 0.143 |  |
|  |  |  |  | Pasture silage | 0 |  |
|  |  |  |  | Calf Pellets | 0 |  |
|  |  |  |  | Purch. Fodder | 0.15 |  |
|  |  |  |  | Pasture and crops direct \$/TDM | 106.2 |  |
|  |  |  |  | PASTURE CONSUMPTION |  |  |
|  |  |  |  | (Tonnes D.M./HA) | 4.7 2.4 |  |


| PEOPLE PRODUCTIVITY: LABOUR |  |
| :---: | :---: |
| PAID HRS | 3180 |
| IMPUTED HRS | 3360 |
| TOTAL HRS | 6540 |
| MS/HR | 18.7 |
| 50 HOUR LABOUR UNITS | 2.5 |
| MS PER 50 HOUR LABOUR UNIT | 48499 |
| RETURN ON EQUITY (ROE) |  |
| EQUITY NET WORTH | 1,462,190 |
| ROE(EBIT LESS INTEREST) | -27,729 |
| \% ROE(ROE/EQUITY\%) | -1.90 |
| PRODUCTION NET OF PURCHASED FEEDS |  |
| TOTAL NET SOLIDS FARM KG | 71124 |
| NET SOLIDS PER COW KG | 284 |
| NET SOLIDS PER HA KG | 574 |


| EQUITY SUMMARY | $\$$ |
| :--- | ---: |
| Total Assets | $2,193,984$ |
| Total Liabilities | 731,794 |
| Net Worth | 1462190 |
| \% Equity | $66.65 \%$ |


| RETURN ON CAPITAL-BUSINESS EFFICIENCY WORLD |  |  |  |
| :---: | :---: | :---: | :---: |
|  | ADJUSTMENTS:L'STOCK/FODDER |  | 0.0 |
|  | OPERATOR ALLOWANCE |  | 102648.0 |
|  | DEPRECIATION |  | 52500.0 |
|  | \$ EBIT |  | 16,179 |
|  | \% RETURN ASSETS OWNED |  | -2.5 |
|  | \$ EBIT PER KG MS |  | 0.13 |
| USE/AV. PRICE OF CONCENTRATES |  |  |  |
| onne |  | tonnes / cow |  |
|  | 2.6 | 2.8 | 3.1 |
| 326 | 101523 | 81155 | 60786 |
| 356 | 82398 | 60155 | 37911 |
| 386 | 63273 | 39155 | 15036 |
| 416 | 44148 | 18155 | -7839 |
| 446 | 25023 | -2845 | -30714 |
| 476 | 5898 | -23845 | -53589 |
| 506 | -13227 | -44845 | -76464 |

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ARE WE THERE YET???
No... so it's the perfect Focus Farm

|  | $16 / 17$ | "The <br> Dream" |
| :--- | :---: | :---: |
| Physicals |  |  |
| Cows | 230 | 280 |
| Total Solids | $110,031 \mathrm{~kg}$ | $151,200 \mathrm{~kg}$ |
| Production per cow | 478 | 540 |
| Milk Solids | 6,920 | 7,200 |
| Litres | 3.7 | 4.1 |
| Fat \% | 3.2 | 3.4 |
| Protein \% | 5.1 |  |
| Pasture |  |  |
| tDM/ha | 2.7 | 3.6 |
| tDM/cow | 2.1 | 2.3 |
| Concentrate (tDM/cow) | 0.7 | 0.35 |
| Purchased Fodder (tDM/cow) |  |  |
| Financials |  | 7.46 |
| Cost of Production (\$/kgMS) |  | 5.66 |
| Farm Operating Surplus |  |  |
| (Income - Farm Working <br> Expenses) | 1.72 | 3.08 |
| \$/kgMS | 824 | 1,666 |
| \$/cow | 1.02 | 2.06 |
| EBIT | 486 | 1,111 |
| \$/kgMS |  |  |
| Per Cow |  |  |

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!!

Farm Income and Costs 2017-18 NSW Dairy Farm Monitor Project
2017-18 NSW Average farm financial performance per kilogram of milk solids - statewide

| Farm income and cost category | Statewide |  | Northern NSW |  | Southern NSW |  | State top 25\% average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| INCOME | \$/KgMS | Cents/litre | \$/kgMS | Cents/litre | \$/kgMS | Cents/litre | \$/kg MS | Cents/litre |
| Milk income (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 farm income | \$0.11 | 0.8 | \$0.15 | 1.1 | \$0.05 | 0.4 | \$0.03 | 0.2 |
| Total income | \$8.00 | 59.3 | \$8.39 | 62.1 | \$7.49 | 55.7 | \$8.00 | 58.6 |
| VARIABLE COSTS |  |  |  |  |  |  |  |  |
| Herd cost | \$0.36 | 2.7 | \$0.38 | 2.8 | \$0.34 | 2.5 | \$0.32 | 2.4 |
| Shed cost | \$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 variable costs | \$4.53 | 33.6 | \$4.79 | 35.4 | \$4.20 | 31.3 | \$3.88 | 28.8 |
| GROSS MARGIN |  |  |  |  |  |  |  |  |
| per kilogram of milk solids | \$3.46 | 25.7 | \$3.60 | 26.7 | \$3.29 | 24.4 | \$4.02 | 29.8 |
| OVERHEAD COSTS |  |  |  |  |  |  |  |  |
| Employed labour | \$0.86 | 6.4 | \$0.94 | 6.9 | \$0.76 | 5.8 | \$0.76 | 5.6 |
| Repairs and maintenance | \$0.43 | 3.2 | \$0.48 | 3.5 | \$0.36 | 2.7 | \$0.34 | 2.6 |
| All other overheads | \$0.41 | 3.0 | \$0.44 | 3.2 | \$0.37 | 2.7 | \$0.26 | 1.9 |
| Imputed labour | \$1.05 | 7.8 | \$1.22 | 9.1 | \$0.84 | 6.2 | \$0.93 | 7.0 |
| Depreciation | \$0.38 | 2.9 | \$0.39 | 2.9 | \$0.38 | 2.8 | \$0.30 | 2.2 |
| Total overhead costs | \$3.13 | 23.2 | \$3.46 | 25.6 | \$2.71 | 20.2 | \$2.59 | 19.3 |
| Total variable and overhead costs | \$7.67 | 56.8 | \$8.26 | 61.0 | \$6.91 | 51.5 | \$6.48 | 48.1 |
| EARNINGS BEFORE INTEREST AND TAX |  |  |  |  |  |  |  |  |
| per kilogram of milk solids | \$0.33 | 2.5 | \$0.13 | 1.1 | \$0.58 | 4.2 | \$1.43 | 10.5 |

## 2017-18 NSW Farm Physical data

Table 1: Farm Physical Data - State Overview

| 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 | $42 \%$ | $47 \%$ | $37 \%$ |
| Hay | $8 \%$ | $7 \%$ | $10 \%$ |
| Silage | $13 \%$ | $9 \%$ | $17 \%$ |
| Other | $1 \%$ | $1 \%$ | $1 \%$ |
| Concentrate | $35 \%$ | $36 \%$ | $35 \%$ |
| $100 \%$ |  |  |  |

This is the same table from the previous year.

## 2016-17 AVERAGE FARM FINANCIAL PERFORMANCE- STATEWIDE

| Farm income and cost category | Statewide |  | Northern 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

Rotation Right Tool-Guideline to determining area of pasture/crop to be offered to the herd in order to maintain a desired rotation length


## Rotation Right Tool - Bottom Farm



## 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...!

# A DAY IN THE LIFE AS AN ENTREPREN=UR 

WAIT A SECOND, MY LIFE IS GREAT!

IM GOOD. I DONTT KNOW WHY I GET SO DOWN ON MYSELF.
GIVE UP THE GOOD FOR GREAT.


## 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.
- 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 $\$ 5.11 / \mathrm{kg}$ MS at 4.1\% BF and 3.3\% $\operatorname{Pr}$ or $38 \mathrm{c} / \mathrm{L}$; Grain price $\$ 400 / \mathrm{T}$ )

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

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 "...l'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/ $\mathrm{Ha} / 24$ 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 ( $4.0 \% \mathrm{BF} / 3.3 \% \mathrm{Pr}$ ) would be a good outcome this spring. The following table shows the method to calculate the net figures.

## Table 2. Calculation of Net Litres and Solids

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

| Example | Your figures |
| :---: | :---: |
| uncome: $\mathbf{2} \mathbf{k g}$ MS $\times \$ 5.50 / \mathrm{kg}=\$ 11.00$ |  |
| Supplement cost: $4 \mathrm{~kg} \times \$ 0.40=\$ 1.60$ |  |
| Net after supplement: $\$ 11.00-\$ 1.60=\$ 9.40$ |  |
| $\$ 9.40 \div \$ 5.50=1.71 \mathrm{~kg}$ MS net |  |
| $\$ 9.40 \div \$ 0.39 / \mathrm{L}=\mathbf{2 4}$ 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.

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## Milking Platform Maps



