

Dairy NSW Cochrane Focus Farm Update

The Cochrane Focus Farm so far in 2014:

It's hard to believe that we are at the end of another year and this focus farm has now been running for nearly six months. This gives us a great opportunity to review the decisions and actions taken on the farm in 2014 and a chance to look to the future for 2015.

In 2014, the Focus Farm project has seen the group come together for two support group meetings in August and September as well as deliver the first open day for this focus farm project in November.

Our first support group meeting involved everyone familiarising themselves with the Cochrane's dairy business, getting to know each other and spending time understanding how the focus farm project works. This 115ha pasture based dairy with a predominantly kikuyu, rye grass/oats pasture system and home grown silage of sorghum and maize, had an average milk production of 482kgMS/cow in 2013/14. On our first review of basic financials, Dan and Bec had a milk income of \$14.13/cow/day and a margin over total feed costs (including irrigation, seed, fertiliser) of \$8.33/cow/day.

The second support group meeting saw a lively discussion regarding which key performance indicators that the group felt would be most useful for analysing the operation's progress. We also dove deeper into the pasture management and crop selection. On the day of the meeting, there was a suggestion that there needed to be an increase in the pasture allocated to the cows. Dan chose to increase the pasture available by 15%, dropped grain in the bail by 1kg and they saw a 1.2L/cow/day increase in production. The per cow income was \$14.74 and the margin over total feed costs including pasture was \$10.22. When put in context with the stocking rate at the time of 3.1 cows per hectare, this implied a per hectare milk income and margin over feed costs of \$45.70 and \$31.69 respectively. The group felt that this was a good snapshot measure of performance as it gave an indicative return to the two key farm assets, the cows and the grazable land.

The next meeting was the open day and it was a great success with over 70 participants. It was terrific to see interest from as far as Bega and the Hunter Valley with many farmers making a day of it to come that far. The day gave the dairy community an opportunity to understand the Focus Farm project and get a bird's eye view of what's happening at Dan and Bec Cochrane's dairy. Neil Moss gave a presentation on the finer details of the pasture and feed budgeting plan and reviewed some of the risk assessment and planning he had done with Dan and Bec. There was good discussion on how they were planning to meet the dry matter requirements for the herd over the next 12 months. The integration of grazed pastures, conserved forages and purchased concentrates throughout the year was also mapped and presented to the participants on the day.

So how are things now in December 2015? The extremely hot days of November resulted in death of a large proportion of the millet seedlings that were sown in mid-November. One of these paddocks has now been fully oversown with forage sorghum; the other patched up with some additional millet. Milk production has come back in line with most of the state under the hot and sultry conditions and the change over from winter to summer pastures. With a large area out for crop at the moment, the herd is still receiving some partial mixed ration with 4 kg DM of corn silage, 1.5 kg

of cereal hay and 1 kg of canola meal and the dairy is providing 8 kgs of wheat based concentrate. Milk income is currently at \$12.88 per cow and \$38.02 per hectare and the margin over feed costs is \$8.00 per cow and \$23.60 per hectare.

Dan and Bec's direction for next year will be to continue on growing the margin over feed costs improving their capacity to continue improving the farm and to manage debt. Running a high stocking rate continues to bring with it risk and constant focus on risk management will remain important. They look forward to sharing ideas with the support group farmers and service providers, and challenging those ideas with some hard figures to see what options are likely to give them the greatest return. Dan said he wants to increase their accountants' involvement and concentrate more on analysing the farms margins over costs with a view to tightening the understanding of the financial outcomes of the farm.

It has been a great learning process so far for the Cochrane Focus Farm project and many thanks need to go to all the support group members and to Roxanne Cooley and Greg Duncan from Dairy NSW and Dairy Australia. We all look forward to what 2015 has in store!

Natasha Lees, Focus Farm Facilitator



Participants enjoying lunch at the first Cochrane Focus Farm Open Day



Dan Cochrane discussing the forage planning on the farm walk at the November Open Day.

Dairy NSW Focus Farm Report – Cochrane Wogamia Dairy

Farm Location: Wogamia, Longreach near Nowra

Date: Third support group meeting 02 February 2015

The third Focus Farm support group meeting at Dan and Bec Cochrane's was one of the best we have had so far as we welcomed a couple of new farmers and the business's accountant to the group. This let us really sink our teeth into both the farms financial and practical management.

Farm Financials

Much of the discussion was around the total debt servicing and leases on land and equipment for the farm which was estimated to be approximately 25% of the farm income. Most of this comes from lease payments but there has also been investment in infrastructure, such as a machinery shed, bought-in cows, centre-pivot, automatic cup removers (ACRs) and a tractor. In addition there has been an investment in conserving fodder; so while cash flow is tight, there is a fodder bank for the more difficult autumn and winter months. The challenge ahead is to reduce the percentage of income put to debt servicing via continuing to increase milk production.

Production

Milk production has been variable through the summer heat and humidity and an opportunity with good cull cow prices has resulted in significant culling through the herd, mostly due to high somatic cell count cows. Utilising the sprinklers in the dairy yard was highlighted as an option to reduce heat stress; and since this was implemented after the meeting, Dan and Bec have seen an improvement in the cows comfort levels. Another suggestion was to bring feed to the cows (silage/hay in racks) after 9am rather than having them graze in the heat of the day; however the logistics of this on the farm at the moment didn't make that possible. They will be using a partial mixed ration on the feed pad in the coming weeks in any case.

Mastitis

The bulk milk cell count has been up and down. Recently, milk cultures have identified that most of the clinical and subclinical cases have been environmental bacteria mastitis. There was also a belief that the BMCC had gone up since the ACRs were installed. As Dan and Bec are acutely aware of the loss of premium payments at the moment, they have started doing pre-milking teat disinfection and will be getting the ACRs checked, and then adjusted if need be. In addition, herd recording was undertaken subsequent to the meeting and in general all groups of animals had increased cell counts. Consideration was given to being able to milk HSCC cows last using Dan's automatic drafting system so as to reduce the transmission of mastitis bacteria between cows at milking. Further monitoring of the BMCC and herd recording will be ongoing; and if necessary, it has been suggested that a complete mastitis investigation be undertaken.

Water Troughs

Given the issues with the heat and its effect on production, it was highlighted that there would be benefits in the placement of water troughs in the paddocks (cows will drink more and eat more and nutrient transfer from out of the paddocks will be reduced as cows will spend more time in the paddock, rather than the laneways which is where the pipe system currently situates the troughs). A plan to map out the costs of placing water troughs (eg 6-8 per 16 ha paddock) is currently being undertaken.

Replacements

The herd currently sits at 50% under 3 lactations and 50% over 3 lactations so that will require around 35% replacements and there may be a need to buy in cows/heifers to keep milk volume and income at current levels. The importance of testing any bought-in cattle for contagious causes of mastitis, such as Strep ag and mycoplasma (and other diseases), was raised as well as ensuring mastitis management is optimal before any new stock enter the herd. In addition there was a discussion about buying Holstein Friesian heifers with extended terms of repayment which would assist cash flow.

By the next meeting Dan and Bec will have started using the feed pad and the summer heat should have reduced so a comparison of the difference in BMCC, production and margins will be interesting.

Milking Area: 105ha

Production: January 2014

274 cows (Vat Cows)
1.39 Kg Milk Solids/cow/day
3.63 Kg Milk Solids/ha/day
21.9 Litres/cow/day (in vat)
3.20% Fat
3.15% Protein
272 BMCC ('000 cells/ml)

Grazing and Supplement Feeding (kg DM per cow)

5.5 kg Grain – Wheat @ \$0.36/kgDM (\$320/t)
1.5 kg Pellets @ \$0.52/kgDM (\$465/t)
7 kg Total supplementary feed
11.8 kg Pasture Intake (kgDM/cow) approx:
62 ha Area in rotation (ha):
12 Rotation length (days):
5 ha Grazing area (ha per 24 hours):

Daily Income over Feed Costs (IOFC)

January Milk Price:	\$0.51/L
	\$8.03/kgMS
Income/cow (\$/cow):	\$11.17
Purchased Feed Costs (\$/cow/day):	\$2.46
Total Feed Costs* (\$/cow/day):	\$3.88 (based on pasture cost of \$120/tonneDM)
Margin Over Total Feed Costs (\$/cow/day):	\$7.29

*Total Feed Costs includes supplementary, conserved fodder and estimated pasture costs based on seed, fertiliser, irrigation)

Dairy NSW Focus Farm Report – Cochrane Wogamia Dairy

Farm Location: Wogamia, Longreach near Nowra.

Date: Fourth support group meeting 27 March 2015

Our meeting this month started out with a follow up on how things have gone regarding the suggestions from the last meeting. Herd recording was done and the average herd SCC was 348 000 cells/ml with the 4 year old plus cows being the main problem group although all groups did show evidence of significant subclinical mastitis. As suggested emollient had been added to the teat disinfectant and the automatic cups removers are to be re-checked. Dan had the plans for installing water troughs into the paddocks costed out and it came to approximately \$20,000 which will be part of the medium to long term plan. The meeting focused mostly on the continuing mastitis management and feed management.

Mastitis

The results of the milking time visit, made by the local veterinarian were reviewed:

- Teat scores were pretty good with 18% rough or very rough which is below the warning level of 20% but close to the borderline for action so it was suggested that it is worth keeping an eye on it and perhaps doing quarterly monitoring
- Faecal contamination pressure seems to be an issue that may be significantly contributing to the cell count. A good proportion of the cows sitting in the laneway around the water trough before morning milking. The plan to get the water troughs in the paddocks should alleviate this problem in the future. There is also faecal build-up on the feed pad so the plan would be to scrape the feed pad when rain is anticipated to reduce the faecal load. The importance of washing down the pit between runs was highlighted and that this may be made easier by installing big hoses in the pit to reduce risk of udder and cluster contamination.
- Reduce buying cows/heifers from saleyards and untested farms

Feeding Management

The current feed inventory was assessed:

- Bailed millet - 30tonne DM (7.5ME)
- Rye Silage - 100 tonne DM (10.4 ME/kgDM)
- Whole crop sorghum silage - 240 tonne DM (9 ME/kgDM) predicted
- Leaf Sorghum silage - 170 tonne DM (7.5-8 ME/kgDM)
- Pasture – kikuyu only 8.5-9 ME

Discussion centred around the current feed management of: 4.5 kg wheat, 1.5 kg pellet and a partial mixed ration being fed on the feed pad - Canola meal, Millrun pellet, Maize silage, Millet silage, Grass silage, bread, distiller's grain and cereal hay. The suggestion was made to increase the pasture (kikuyu) being fed from 7.5kg currently to more like 10kg and reduce the amount of supplementary feeding. When this was put through the farm consultant's calculation spreadsheet, the margin over feed costs was reduced. It was realised that by relying on grass reduced the costs of production but

moreover reduced the production volume to a greater extent so that there was a loss of income overall. This is because the grass at the time was at a lower quality and the milk price at the time was quite high. This raised the question: pasture may seem to be the cheapest feed but is it the most profitable feed?

The next meeting will be looking at a re-assessing the financial status of the farm as well as looking at a snap shot of the herd's reproductive performance.

Milking Area: 115ha

Production: March 2015

325	Cows (Vat Cows)
1.48 Kg	Milk Solids/cow/day
480 Kg	Milk Solids/ha/day
22.8L	Litres/cow/day (in vat)
3.27%	Fat %
3.20%	Protein%
191 000 cells/ml	BMCC

Grazing and Supplement Feeding

4.5 kg	Grain – Wheat @ \$0.36/kgDM (\$320/t)
1.5 kg	Pellets @ \$0.53/kgDM (\$480/t)
	Partial mixed ration - Canola meal, Millrun pellet, Maize silage, Millet silage, Grass silage, bread, distiller's grain and Cereal hay.
13.2 kg	Total supplementary feed (kgDM/cow)
7.45 kg	Pasture Intake(kgDM/cow)
70 ha	Area in rotation (ha)
14 days	Rotation length (days)
5 ha	Grazing area (ha per 24 hours)

Daily Income Over Feed Costs (IOFC)

March Milk Price	\$0.57/L
	\$8.81/kgMS
Income/cow (\$/cow):	\$13.87
Purchased Feed Costs (\$/cow/day):	\$4.18
Total Feed Costs** (\$/cow/day):	\$4.92 (based on pasture cost of \$100/tonneDM)
Margin Over Total Feed Costs (\$/cow/day):	\$8.94

NB:

**Total Feed Costs includes supplementary, conserved fodder and estimated pasture costs based on, seed, fertiliser, irrigation)

Focus Farm Report

Date	December 2016 2015	Region	NSW Dairy
Farmers	Daniel and Rebecca Cochrane	Milking area	115 Hectares
Farm location	Wogamia, Nowra	Irrigated	60 Hectares

Production			
Cow numbers	320	Fat %	3.75
Kg Milk solids/cow/day	1.77	Protein %	3.15
Litres/cow/day	25.6	BMCC	229 000

Grazing and Supplement Feeding	
Pellets costing 49c/kgDM (\$445/t)	1.5kg
Barley costing 32c/kgDM (\$290/t)	6.5kg
Canola meal costing 46c/kgDM (\$415/t)	1.0kg
Pasture (kgDM) approx.	7.0kgDM
Area in rotation (ha)	90
Rotation length (days)	16
Grazing area (ha per 24 hours)	5
Additional feed - Grass silage costing 17c/kgDM (\$60/t)	10kg
Additional info	00

Daily Income Over Feed Costs (IOFC)			
December	Milk price (\$/kgMS)	\$7.83	\$/L \$0.54
Income/cow			\$13.84
Supplementary feed cost/cow			\$4.15
Total feed costs* (\$/cow/day)			\$4.86
MOFC – Margin Over Total Feed Costs (\$/cow/day)			\$8.98

* Total feed costs include supplement, conserved fodder and estimated pasture cost (based on cost of \$100/tonne DM)

Comments

In general production is very good and is up 1000L/day on the same time last year. Conditions have tightened with the onset of summer so priorities are to irrigate the maize crop and possibly let the rye grass paddocks go dormant. Suggested plans for managing the heat stress of the coming summer involve giving the herd a small allocation of high quality pasture then at 9-10am let them back onto the feed pad with a full allocation of feed before resting under the trees amongst hay racks. In addition utilisation of sprinklers in the afternoon milking and on forecast hot days in the morning as well, was advocated.

Natasha Lees

Focus Farm Report

Date	January 2016	Region	Dairy NSW
Farmers	Dan and Bec Cochrane	Milking area	115 Hectares
Farm location	Wogamia, Nowra	Irrigated	60 Hectares

Production			
Cow numbers	320	Fat %	3.85
Kg Milk solids/cow/day	1.66	Protein %	3.15
Litres/cow/day	23.8	BMCC	191 000

Grazing and Supplement Feeding	
Pellets costing 49.4c/kgDM (\$445/t)	1.0kg as fed
Pasture silage costing 19.6c/kgDM (\$55/t)	7.5kg as fed
Dried Distillers Grain costing 21.2c/kgDM (\$270/t)	3.0kg as fed
Pasture (kgDM) approx.	8.4 kgDM
Area in rotation (ha)	80
Rotation length (days)	16
Grazing area (ha per 24 hours)	5
Barley 30cents/kgDM (\$270/t)	6kg as fed

Daily Income Over Feed Costs (IOFC)			
January	Milk price (\$/kgMS)	\$7.71	\$/L \$0.54
Income/cow			\$12.83
Supplementary feed cost/cow			\$3.05
Total feed costs* (\$/cow/day)			\$3.89
MOFC – Margin Over Total Feed Costs (\$/cow/day)			\$8.93

* Total feed costs include supplement, conserved fodder and estimated pasture cost (based on cost of \$100/tonne DM)

Comments

Figures show that production has increased by 15-30% compared with last year, given only a 10% increase in herd size. Production per cow is up by 15% (1.4 to 1.66 kgMS/cow). This is due to better pasture utilisation, improved heat stress management and better water management (multiple troughs in the paddocks). The high January rainfall has increased lameness due to the deterioration of laneways. Herd expansion was discussed with the feed pad capacity and laneways being the main limitations. Dan felt that the Focus Farm Program has empowered them to make better farming decisions.

Natasha Lees

Focus Farm Report

Date March 2016

Farmers	Dan and Bec Cochrane	Region	Dairy NSW
Farm Location	Wogamia, Nowra	Milking area	115 Hectares

Production	
Cow Numbers	360 (340 in vat)
Kg Milk solids/cow/day	1.45
Litres/cow/day	21.3
Fat %	3.7
Protein %	3.1

Grazing and Supplement Feeding	
Pellets and wheat costing 49.4cents/kgDM (\$445/t) and 32.2c/kgDM (\$290/t)	1.5kg + 4.5kg
Pasture silage costing 19.6c/kgDM (\$55/tDM)	16kg
Distiller's Grain costing 21.2c/kgDM (270/t)	3kg
Pasture (kgDM) approx.	6.5kgDM
Area in rotation (ha)	28
Rotation Length	10
Grazing area (ha per 24 hours)	2.8

Daily Income over Supplementary Feed Costs (IOSFC)		
March	Milk Price (\$/kgMS)	\$8.53 (\$0.58c/L)
	Income/cow	\$12.37
	Supplementary Feed Cost/cow	\$3.73
	IOSFC/cow	\$8.64
	IOSFC/ha	\$27.03

Comments

Cost of pasture has not been included. This will range from 10c – 20c per kg DM during the year
 ## Milk price is current announced total package and inclusive of productivity and quality.
 Production has dropped due to recent hot and humid weather. Heat stress strategies were discussed at length. A sacrifice paddock for feeding out a mixed ration during the day whilst still allowing access to some pasture has been established, close to the dairy to reduce walking time, provide shade and allow access to high energy dense and palatable feed. Sprinklers are also used in the dairy yard. Bringing forward the afternoon milking to allow cows to cool off sooner and increase the afternoon dry matter intake was considered. A housed "loose barn" system in the future was also considered.

Natasha Lees



Your Levy at Work

Cochrane Wogamai Dairy Focus Farm Report Open Day 2 May 2016 Farm Location: Wogamai, Longreach near Nowra

The third of our series of open days at the Cochrane Wogamai Dairy was a great day for all the participants. There was a good roll up of local dairy farmers and service providers as always. The focus of the day was on reproduction, particularly looking at how transition management can impact on reproduction; how bull management is integral in optimising overall reproductive performance and how best to utilise genetics to impact profit.



As always, Daniel and Rebecca Cochrane are gracious hosts for their Focus Farm Open Days and we are grateful for their involvement in the Focus Farm project so that these days can spread education, knowledge and experiences to the wider dairy farming communities. We look forward to the next open day planned to be in July 2016.

Transition Management

Our first speaker was **Dr Ian Lean from Scibus, Camden, NSW**. Ian spoke of the benefits of good transition management and how reproductive performance is improved with the right transition period decisions. Specifically he spoke of the importance of the length of the transition period and how research has shown that when transition periods are set up for a “sweet spot” length of time, that is, 21 – 25 days, that there is an improved impact on reproduction.

Research has shown that there is a significantly lower calving to conception interval when a transition period is extended over a period greater than 20 days. Comparison was made between herds of cattle that had short transition periods, medium length transition periods and transition periods greater than 20 days - cows with transition periods between 20 and 28 days had the shortest calving to conception interval, and significantly reduced rates of cull and mortality while at the same time having increased yields of milk fat and protein over the first 200 days of lactation. A large part of transition management is focused on calcium metabolism management.

Cows with clinical or sub-clinical milk fever, are at a greater risk of having longer calving to first service, calving to conception and services per conception. This holds true for cows with metritis which is often linked to disorders of calcium metabolism as well. Transition rations need to be carefully balanced for magnesium, calcium and dietary anion-cation difference (DCAD) - all pivotal in reducing milk fever incidence.

By carefully addressing cows energy and protein needs as well and ensuring pre calving cows are getting good rumen adaptation and not losing weight, milk fever related disorders can be greatly reduced, milk production can be enhanced and reproductive performance improved.

Reproductive Management

The second speaker, **Dr Andrew Havadjia of Nowra Vet Hospital** talked us through the experiences at Wogamia with regard to reproductive management, specifically talking about the use of the electronic movement collars to aid in heat detection.

Some of the issues associated with the use of collars was discussed along with Dan Cochrane and local dairy farmer, Tracy Russell, who showcased their experiences with trying to manage the technology associated with using movement monitors.

The main issues that they highlighted was that just because you start to use movement collars, does not mean you stop using other forms of heat detection all together.

For example Tracy still attaches tail base “scratchies” when she attaches collars. One of the main issues they have found is with battery life with their collars and being able to trust that the collars are actually working. Further discussion highlighted that the newer models of collars appear to have longer battery life. Importantly it was highlighted that the collars still only claim to pick up 90% of heats in pastured cattle reinforcing the need to still consider secondary methods of detecting heat and for farmers to keep their eyes open when spending time with the herd.

Bull Management

Dr Havadjia also discussed bull management. He highlighted that artificial insemination conception rates in today’s industry average close to 38%. With this in mind and the other frustrations that lead to reduced reproductive performance with using artificial insemination (AI), he went on to discuss the key things that are involved in preparing bulls to supplement AI programs, or in situations where bulls are used alone.

The main focus of bull management is to ensure firstly, that the bulls are physically capable of mating and secondly, to ensure that the bulls have viable semen and that they are not “shooting blanks”.

As part of the veterinary bull breeding soundness examinations that can be done by accredited veterinarians, the appropriateness of a bull can be assessed. Scrotal measurements are taken, a physical exam is done, particularly of the feet, legs and genitals. Semen is collected and the motility and colour is assessed as well as the actual morphology of the sperm being analysed at a laboratory. In addition, there are diseases such as pestivirus and vibriosis that can be tested from a semen sample.

Bull power was also discussed in terms of the number of bulls needed in a herd to ensure that the bull is not being over worked. One bull per 30 cows is the general recommendation, however, there would also be a need for more bulls than this, perhaps double, if the herd is on a synchronization program. The age of bulls is also important as when bulls get older than 4 years of age, they are more likely to break down. Disease prevention is a big part of bull management so the use of vaccination, particularly the vibriosis vaccination and the usual clostridial 7 in 1 vaccination are critical and should be given to all bulls. Other vaccinations to consider are pestivirus, Three Day Sickness and as always, treating the bulls for parasites such as worms and fluke is very important. Feeding bulls should not be overlooked - full access to dairy concentrate can cause digestive upsets and acidosis, but bulls still should get good access to high quality forages at all times and perhaps balanced grain supplementation when resting.

Genetics

The third speaker, **Anthony Shelley, the General Manager for Genetics Australia**, discussed aspects of genetics and the importance of using it in the modern dairying farm industries. His main focus was to encourage farmers to take the emotion out of the decision making when it comes to choosing bulls for genetic merit. He encouraged all farmers to become more objective in their genetic thinking and use the data that exists and is improving all the time.

He advocated the use of the Australian Breeding Values (ABV) as they present the Australian performance statistics. In addition, it is important to have farmers consider challenging themselves through genetic monitoring schemes such as Gene Screen. Anthony also discussed the use of genomics which involves using the genomic merit of young sires so that the next generation of genetics can be utilized. The reliability of genomics is improving all the time and it can offer great value.

Both sires and females can be genomically tested and this is increasingly being used as a tool by farmers to improve their herd genetics over time.

The use of sexed semen is becoming more common within the dairy farming industry and so Anthony discussed the merits of sexed semen. The main benefits come from having a younger, healthier herd, having surplus heifers to be able to sell for export and this all leads to increased profit. In addition, the benefit of reduced calving problems, higher milk production with a higher proportion of female calves as mentioned by Dr Lean and less need to manage bull calves should not be overlooked.

Cochrane Wogamai Dairy Focus Farm Open Day # 4 Report

Farm Location: Wogamai, Longreach near Nowra.

Date: Wednesday, 20th July, 2016.

The fourth and final Open Day held for the Cochrane Focus Farm project was a great “sign off” event for this inaugural Dairy NSW Focus Farm. The focus of the day was on farm business management and it provided a summing up of the journey that Dan and Bec Cochrane have been on over the last 2 years and the progress they have made along the way.

John Mulvany was the key note speaker and the physical and financial performance of the Cochrane Focus Farm was the major topic of discussion. The current position of the farm was analysed as well as a review of 2015/16 performance. Incorporated in discussions was the impact of lower milk pricing and seasonal challenges on the resilience of dairy farming businesses.

John used Dairy Australia’s database program Dairy Base to analyse the financial figures of the farm. Analysis of the physical parameters identified that the per cow production from the 400 cows (lactations) was 481 kg of milk solids which is comparable to the top 25% profitable NSW dairy farms at 501 kg. Interestingly, given the level of concentrate feeding of 2.6 tonne of dry matter/cow/lactation, the per cow production may seem low, however, this farm has seen a high herd turnover rate which is all a part of establishing and expanding a dairy herd in the early stages of a dairy farm business. This is mostly due to buying in cows to the herd combined with heavy culling which has been used to manage milk quality and reproductive performance.

The calculated pasture consumption figure of 8.9 tonne DM/ha, seemed low and did not concur with the monthly figures calculated at the support group meetings. There appears to be a loss of feed efficiency or losses of supplementary feed during feeding process. When these losses are compounded out on a daily basis over a year, then the annual pasture consumption figure will appear low. Thus the actual pasture consumption figure at Cochrane Wogamia dairy may well be more like 10-12 tonne DM/ha. Pasture consumption and feeding levels were the focus of considerable discussion on the day and John suggested that a shift on the efficiency of feed utilisation could “turn a quite profitable farm into a very profitable farm”. He identified that 46% of the feed used on the farm is home grown which while slightly low should increase to 55% as the feed efficiency improves, notably in the utilisation of purchased supplementary feeds.

The farm walk conducted by Dan and Neil Moss showed the enviable position Dan and Bec are in to optimise pasture utilisation. The extent of this was identified as something quite phenomenal as John was visibly impressed at the capacity of the Dan and Bec’s farm to grow grass.

Dan and Bec have achieved a higher efficiency in cows per labour unit than the top 25% most profitable dairies. However, due to the desire have a better lifestyle, which was one of

the initial stated objectives of the Cochrane Focus Farm, the cows per labour unit was slightly lower in 2015/2016 compared to 2014/2015. The cost of production on the Cochrane farm was calculated at \$7.21/kg MS and is close to the NSW average. John suggested this figure could decrease by \$1.00 per kilogram with minor adjustments to feed efficiency.

Milk production increased by 10% and profit per kilogram of milk solids increased by 15% to \$1.55/kg MS. This figure for profit is well above the NSW Dairy Farm Monitor average of \$1.01/kg MS but a target to work towards is in the top 25% at \$2.45/kg MS. Dan and Bec's business operates at much lower equity than the majority of NSW dairy businesses at 44.6% which is typical of early farming businesses but highlights the need to generate a high profit level.

Overall, there is a very healthy farm operating cash surplus, that is the amount available to service debt and for capital purchases, living expenses and tax (ie also before any imputed figures on labour or depreciation are considered). John stated that "Dan and Bec are on the verge of creating a very highly profitable business. The key to future success will be maintaining and sharpening the focus on margins, pasture intake and the daily line - all of which has been achieved via the Focus Farm. The longer term targets are of pasture consumption ... at 12T/Ha and generating 55 - 60% home grown feed with 75% of that being direct grazed. This will achieve a reduction in feed costs and a significant increase on profit to \$2.50/kg MS."

At the end of the Open Day, Dan Cochrane thanked his family and all the members of the support group for all their time and contribution to helping Dan and Bec build and grow their dairy into a progressive and successful business. As always, Dan and Bec Cochrane have been gracious hosts for their Focus Farm Open Days and in their role as the Focus Farmers. We are all grateful for their involvement in this Focus Farm project over the past 2 years and the opportunity it has provided to relay education, knowledge and experiences to the wider dairy farming community.