Dairy NSW Media Release

Inaugural Focus Farm Report – Cochrane Wogamia Dairy

Farm Location: Wogamia, Longreach near Nowra.

Date: 8 August 2014

Welcome to the first Focus Farm Report for Dairy NSW. The Focus Farm project involves supporting and following the progress of a dairy farming family over a two year period with the aim of optimising farm profitability and business decision making. The project centres on having periodic meetings between the dairy farmers and a support group made up of other dairy farmers and dairy service providers. During these meetings issues that are facing the farm are discussed with close monitoring of farm activities and expenditure. The group members provide guidance through offering their perspectives on the different decisions that need to be made to deal with the everyday and the not-so everyday issues of dairy farming.

Wogamia Dairy, with Dan and Bec Cochrane, is the first Dairy NSW Focus Farm. Dan and Bec began running the farm 2 years ago. They currently have a herd of 370 dairy cows, predominantly Holstein/Friesian with some Illawarra, Aussie Reds, Jersey and crossbreds. The dairy is a 28 swing over herringbone which is 15 years old. The milking area of the farm is 115ha and set alongside a sweeping bend in the upper reaches of the Shoalhaven River. Fifty percent of the farm is under irrigation via a pivot or K-lines. Grazing is predominantly kikuyu in summer, oversown with ryegrass and oats in autumn for winter and spring grazing. Supplementary feeding involves barley and concentrate pellet delivered in the dairy and silage (sorghum, rye, kikuyu, corn), cereal hay, mill run and canola meal delivered via a mixer wagon on a feedpad.

Our first support group meeting was centred around all the support group members getting to know Dan and Bec Cochrane's dairy farm at Wogamia as well as getting to know each other.

On the farm tour we all gained an understanding of the good grass growing capacity of the farm due to the extensive investment in irrigation. Much of the discussion related to pasture management in terms of optimising efficiency with suppression of kikuyu and timely and appropriate pasture sowing procedures in autumn. For example, grazing then mulching and then sowing as well as rolling after sowing to improve early growth, while conditions are still warm, and to increase subsequent yield. The group saw examples of areas that had been effectively suppressed and were able to compare the results with areas where this had not been done. The relative merits of utilising existing stored fodder compared to buying more fodder, on the current inflated market, was also discussed. It was suggested that with the availability of hay in the coming season looking reliable and affordable that cashflow should be preserved by using existing home grown fodder inventories.

With the ever present threat of a dry season discussion also looked not only at pasture management strategies but also culling management. The use of behaviour assessment, pregnancy, cell count status and production levels where flagged as key decision making tools for culling cows when times are tight. The value of tools such as herd recording, pregnancy testing and review of computer records in assisting this process was stressed.

The use of key performance indicators (KPI) will be central to monitoring the progression of the farm over the next 2 years. Whilst we have established some KPIs for the farm below, the group will be considering other useful KPIs that are reflective of a NSW all year round calving system and aspects of modern dairy farming. These will be developed further with the input of the group at the next meeting as well as further discussions on pasture and fodder management.

Since the first meeting there has been a significant rain event and now the farm is in a strong position for pasture growth over the coming seasons with a greater capacity to conserve fodder.

Milking Area: 115

Production: July 2014

			00
M d d			1
M d d			502
r d			2
r			
M 000			1

Grazing and Supplement Feeding (kg DM per cow)

r r 02 M 00			55
05 M 500			15
r d r			2
r d			12 5 rr d
r M r			1
r r 2 r			115
d			2
r r r 2 r			

Daily Income over Feed Costs (IOFC)

M r			05
M			
			1 1
r d d d			5
d			51
M r r d d			

NB:

* Partial Mixed Ration includes Canola meal, Millrun pellet, Maize silage, Sorghum silage and Cereal hay.

**Total Feed Costs includes supplementary, conserved fodder and pasture improvement costs (fertilizer, seed, irrigation)

Dairy NSW Media Release

Focus Farm Report Meeting 2 – Cochrane Wogamia Dairy

Farm Location: Wogamia, Longreach near Nowra.

Date: 12 September, 2014

The second Focus Farm support group meeting at Dan and Bec Cochrane's was another session full of enthusiastic discussion on farm management and monitoring farm progress.

Much discussion was had regarding possible Key Performance Indicators (KPIs) outside the ones currently reported on. There were four areas highlighted as important indicators of how the farm is progressing:

- Lifestyle - recording of the number of nights off farm per month as well as number of milkings off for owner operator/month were considered as achievable indicators of how much of a break the owner operator is getting from the farm and the routine workload respectively.
- Human resources - much discussion was had about trying to ascertain the use of labour on farm. Measures such as Full Time equivalents per 100 000L were seen as very difficult to truly calculate accurately as a comparative measure as imputed and contracted labour and would be hard to keep track of. The idea of recording staff training sessions per year was seen as a small but important indicator of the level of staff skill development.
- Genetics - Genetic Focus Report, avg APR of team bulls.
- Reproduction - InCalf parameters developed for Year Round Calving systems were considered good indicators so that the 80 day submission rate, 100 day in-calf rate, 200 day not in-calf rate, conception rate by operator will be assessed, and % pregnant at Pregnancy Diagnosis. The last measure was considered important as a tool to review the efficacy of the Cow collar automated heat detection system at detecting returns to service.

The point was raised that for each of the KPIs, where appropriate, that a realistic target should be set in line with Dan and Bec's goals. This would provide the business with targets to work towards and for progress to be measured against.

Dan was keen to see greater production from his cows given the rain break and the significant growth in pasture even given the removal of PMR from the diet. This was assessed a number of ways. Neil Moss reviewed the current ration using the computer model CPM. Predicted production was within approximately 0.5 litres of actual. The group then inspected the pastures and the cows asking the question of how much pasture is enough or too much to feed cows and how much more could they eat if it was offerred. The group discussed and assessed the amount of residual pasture left in the paddock and the "rumen fill" of the cows, indicated by the level of indentation in the left upper flank. Some felt that whilst it may appear that there was still plenty of feed for the cows the residual pasture left in the paddock was in fact heavily soiled with old manure or urine pads. At the time of the mid morning inspection there was very little additional pasture for the cows to access outside these heavily soiled animals and a large proportion of the cows were still actively walking and seeking more feed. The suggestion was made to increase the pasture made available to the

cows by 10 %, with the feeling that the cows are capable of taking in more dry matter and so should increase production. There may also be potential to further reduce concentrate feeding. The trade off here was Dan's desire to conserve as much fodder as possible for the coming summer. There were 17 hectares of silage that is to be cut at the next opportunity of dry weather to place in the pit for rye grass, oats and prarie grass silage. The point was raised that the rotation could be sped up a little given the rapid rise in pasture growth rates and this would both allow an increased allocation without compromising the area locked up for silage as well as help maintain pastue quality moving forward.

Interestingly, several days after the meeting Dan did increase the pasture available by 15%, dropped the grain in the bail by 1kg and saw an increase in production by 1.2L/cow.

Pasture samples were taken of the night feed paddock as well as the barley being fed in the bail to assess the actual MJME. This be used to both build a bank of feed tests for the farm through the seasons as well as improve the capacity of the nutritional model to more accurately predict production.

Milking Area: 115

Production: August 2014

Grazing and Supplement Feeding (kg DM per cow)

Daily Income over Feed Costs (IOFC)

NB:
* Partial Mixed Ration includes Canola meal, Millrun pellet, Maize silage, Sorghum silage and Cereal hay.
**Total Feed Costs includes supplementary, conserved fodder and estimated pasture costs based on, seed, fertiliser, irrigation)

Post script

Subsequent to visit and changes instigated, margin over feed costs has improved to $9.42/cow/day or approximately $330 per day, and targeted silage cut completed and in the pit.

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)

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Focus Farm Report Meeting 6 – Cochrane Wogamia Dairy

Farm Location: Wogamia, Longreach near Nowra.

Date: July 13, 2015

There has been some great progress at Wogamia in the last couple of months. The calf shed got up and running in early July and Dan and Bec are transitioning to the new system for calf rearing. The medium term plan, established from the February support group meeting, to install water troughs in the paddocks is now being made a reality with the first trough in place and work being done on connecting the lines.

The pasture/crop paddocks were starting to look sensational and the cows were responding with increased yield. Rumen fill of the cows was 3.5/5 and the average body condition score was 3/5 and most of the cows were sitting chewing there cud with plenty of residual pasture available (but not too much) by late morning indicating there is adequate feed and good pasture utilisation. The variation between paddocks was mainly only evident where better kikuyu suppression had allowed for better growth.

The trial paddock containing two different varieties of hybrid ryegrass was starting to perform well. Early days yet, but some subtle differences in the two varieties establishment vigour were evident.

Pasture tests have shown that the pasture fat levels are high which may be contributing to the low milk fat % as well as the interaction with the wheat in the supplementary feed. The potassium levels in the pasture are quite high which may allow for a reduction in the amount potassium in the blended fertiliser. There was also low calcium which reinforces the need for the liming pf paddocks over time which was established from the soil test results discussed at the last meeting. Overall, pasture quality in all varieties tested was high with the Italian and perennial pastures showing marginally better overall quality than the short term annual and prairie grass at this stage. The test on last year's sorghum whole crop silage showed the value of this crop with it only being slightly lower in ME than good quality maize silage.

The next Open day will be focussing on calf and heifer rearing and is planned for September 9, 2015. So a lot of work will be going into preparing for the day.

Milking Area: 115ha

Production: June/early July 2015

280	Cows (Vat Cows)
1.59 Kg	Milk Solids/cow/day
4.46 Kg	Milk Solids/ha/day
24.5L	Litres/cow/day (in vat)
3.25%	Fat %
3.25%	Protein%
158 000	BMCC cells/ml

Grazing and Supplement Feeding

3.0 kg	Grain – Wheat @ $0.36/kgDM ($320/t)
1.0 kg	Pellets @ $0.53/kgDM ($480/t)

Partial mixed ration - Sorghum silage (13.5kg), Hominy (2kg), Millet silage (1.6kg), Bicarb (0.2kg).

10.13 kg	Total supplementary feed (kgDM/cow)
10.57 kg	Pasture Intake(kgDM/cow)
115 ha	Area in rotation (ha)
28 days	Rotation length (days)
4.12 ha	Grazing area (ha per 24 hours)

Daily Income Over Feed Costs (IOFC)

June/July Milk Price	$0.53/L
	$8.15/kgMS
Income/cow ($/cow):	$12.97
Supplementary Feed Costs* ($/cow/day):	$3.09
Total Feed Costs** ($/cow/day):	$4.19
Margin Over Supp Feed Costs($/cow/day):	$9.88
Margin Over Total Feed Costs ($/cow/day):	$8.78

NB:

*Supplementary Feed Costs includes supplementary, purchased and conserved fodder.

**Total Feed Costs includes supplementary, purchased and conserved fodder and estimated pasture costs based on, seed, fertiliser, irrigation (based on pasture cost of $100/tonneDM).

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Focus Farm Report Meeting 7 – Cochrane Wogamia Dairy

Farm Location: Wogamia, Longreach near Nowra.

Date: August 10, 2015

This month has seen the highest margin over total feed costs since we started the Cochrane Focus Farm project and it has increased by approximately $2.00/cow/day. This is due to a combination of solid milk production per cow, stable (slightly increased) milk price and the ability to reduce concentrate supplementation and cut out the feed pad due to excellent pasture availability. Dan and Bec have achieved this as a result of supreme pasture establishment, maintaining high levels of paddock fertility and careful winter grazing management. Pasture growth rate is rapidly accelerating now, facilitated by a deliberate decision to protect ground cover and keeping longer pasture residuals in early/mid-winter.

New heifers have been purchased and there has been a tough approach to culling for behaviour and cell count. Some of the heifers came from outside the region which raised the issue of needing to be aware of the risk of Theileriosis and that the movement of cattle around calving time should be avoided and tick control should be considered on newly introduced stock coming from an area that doesn't have ticks.

The new calf shed has been in use for a month and is going well. There was some discussion about the housing in the calf shed – currently the ridge capping on the gap at the peak of the roof has not been placed on – it was felt that so long as rain wasn't likely to get into the pens, it was best left off the roof to allow hot air to escape more easily. Suggestions were also made regarding optimising hygiene around the feeding areas at the front of the calf pens; a kick board could be placed between the concrete edging and the dirt floor to reduce the dirt and shavings being carried to the feeding area and separate the faecal contamination from the loafing area. Bec and Dan have started testing the colostrum quality with a Brix refractometer and the local veterinarian has been taking blood samples from the calves less than 7 days old to assess protein levels which reflect colostrum antibody transfer efficacy. The data collected from these tests will all be used in the presentations given at the up-coming Open Day.

The Open day will be held on **Wednesday September 9, 2015,** starting at 10am and will have a focus on calf and heifer rearing. We very lucky to have **Dr Gemma Chuck** from The Vet Group, Victoria, will be presenting practical applications of her recent research on calf rearing, with a particular focus on the management of the first 7 days. **Dr Andrew Havadja** will discuss the calf rearing experience at Wogamia and some of the practical options for better calf rearing. **Vicki Timbs** will talk through aspects of optimising heifer growth and development to improve production levels. The day will finish with a free BBQ lunch. This is a unique opportunity for everyone to come along and consider the current calf and heifer rearing practices that you could apply to your business.

Milking Area: 115ha

Production: early August 2015

290	Cows (Vat Cows)
1.79 Kg	Milk Solids/cow/day
4.52 Kg	Milk Solids/ha/day
26.8L	Litres/cow/day (in vat)
3.36%	Fat %
3.31%	Protein%
172 000	BMCC cells/ml

Grazing and Supplement Feeding

5.5 kg	Grain – Barley @ $0.36/kgDM ($322/t)
1.0 kg	Pellets @ $0.53/kgDM ($480/t)
5.85 kg	Total supplementary feed (kgDM/cow)
14.27 kg	Pasture Intake(kgDM/cow)
115 ha	Area in rotation (ha)
28 days	Rotation length (days)
4.12 ha	Grazing area (ha per 24 hours)

Daily Income Over Feed Costs (IOFC)

June/July Milk Price	$0.54/L
	$8.02/kgMS
Income/cow ($/cow):	$14.36
Supplementary Feed Costs* ($/cow/day):	$2.25
Total Feed Costs** ($/cow/day):	$3.60
Margin Over Supp Feed Costs($/cow/day):	$12.11
Margin Over Total Feed Costs ($/cow/day):	$10.76

NB:

*Supplementary Feed Costs includes supplementary, purchased and conserved fodder.

**Total Feed Costs includes supplementary, purchased and conserved fodder and estimated pasture costs based on, seed, fertiliser, irrigation (based on pasture cost of $100/tonneDM).

Dairy NSW Media Release

Cochrane Wogamia Dairy Focus Farm Open Day #2 Report

Farm Location: Wogamia, Longreach near Nowra.

Date: September 9, 2015

A cracking day was had by all attending the second Open Day of the Cochrane Wogamia Focus Farm project. There was a great roll up of local dairy farmers and service providers. The focus of the day was calf and heifer rearing and we were lucky enough to have Dr Gemma Chuck from The Vet Group, Timboon, Victoria to be our key speaker on colostrum management. Gemma talked through the importance of colostrum feeding with the three "Q's" being the most important – "Quickly, Quality, Quantity". Quickly - colostrum needs to be given within 12-24 hours of birth, ideally within 6 hours. This is because the calves' ability to absorb the antibodies (infection fighting cells) that are in the colostrum, gradually reduces over the first 24 hours of life. Colostral antibodies are pivotal to helping calves fight infective diseases. Quality - we need to use high quality colostrum. It is possible to measure the colostral quality using a brix refractometer which is a very affordable and simple technique that can be used on the colostrum. It gives a reading on the level of solids/antibodies in the colostrum and a decision can be made on whether that batch is adequate to use. Quantity – recommendations are that calves get two colostrum feeds in the first 24 hours of 2-3 L. The decision on whether its 2L or 3L depends on the size of the calf and quality of the colostrum.

The benefit of measuring colostrum quality when harvested, with the brix refractometer was further showcased by Dr Andrew Havadjia - he practically displayed how to use the device and interpret results. In addition, he discussed the experience at Wogamia with assessing the effectiveness of colostrum feeding via testing calves blood protein levels. Blood taken from apparently healthy calves up to 7 days of age was collected and tested for the level of total protein. The protein levels at this age align well with the antibody absorption in the first 24 hours of life.

The importance of keeping up the good work in growing heifers after weaning was also highlighted with Vicki Timbs with the groups looking at some of the Wogamia heifers and making assessments on body condition and appropriate weight and age for joining and the impacts on production and fertility.

The day finished with a quick discussion panel made up of local advisors on flood management issues given the recent flooding in the Nowra region. This was an opportunity to inform everyone of the support available from DPI, LLS, milk factories and Dairy Australia and for people to raise questions about river level management. It was a great day for all in attendance and we look forward to next one.

Dairy NSW Media Release

Focus Farm Report Meeting 8 – Cochrane Wogamia Dairy

Farm Location: Wogamia, Longreach near Nowra.

Date: October 21, 2015

This month there has been a slight drop in income over feed costs due to a reduction in pasture allocation to encourage cows to eat harder into pasture residuals to improve late spring pasture quality and for optimising spring silage harvest. It is planned that with the continuation of irrigation of pasture and accrual of silage, Dan and Bec will only be looking to need 4-5 loads of cereal hay for the springers .

The perennial rye, prairie, chicory, lucerne and clover pasture is growing well at the moment and should last another month or so with irrigation.

Dan and Bec have had a staff restructure and have employed an experienced animal herd manager who will complement their current employee whose role will be crop and pasture manager. This will allow Dan more to concentrate on whole farm management.

Dan and Bec's goals for the next financial year are to aim to:

- increase total milk production to 3million litres
- improve summer feed management through improved in-paddock stock water access, managing kikuyu better, use of high quality forage in silage racks in close paddocks during heat of the day and utilising the feed pad efficiently
- take at least 2 weeks holiday
- develop animal management protocols and routines

Dan felt that the Focus Farm Project has given them the opportunity to be surrounded by peers that give them the confidence to take on the challenges of becoming a progressive dairy farm business.

Milking Area: 115ha

Production: October 2015

315	Cows (Vat Cows)
1.69 Kg	Milk Solids/cow/day
4.62 Kg	Milk Solids/ha/day
24.4L	Litres/cow/day (in vat)
3.7%	Fat %
3.2%	Protein%
147 000	BMCC cells/ml

Grazing and Supplement Feeding

6.5 kg	Grain – Barley @ $0.36/kgDM ($322/t)
1.5 kg	Pellets @ $0.53/kgDM ($480/t)

7.2 kg	Total supplementary feed (kgDM/cow)
12.94 kg	Pasture Intake(kgDM/cow)
115 ha	Area in rotation (ha)
16 days	Rotation length (days)
4.5 ha	Grazing area (ha per 24 hours)

Daily Income Over Feed Costs (IOFC)

June/July Milk Price	$0.51/L
	$7.39/kgMS
Income/cow ($/cow/day):	$12.47
Supplementary Feed Costs* ($/cow/day):	$ 2.78
Income Over Supp Feed Costs($/cow/day):	$ 9.69
Income Over Supp Feed Costs($/ha/day):	$27.38

NB:

*Supplementary Feed Costs includes supplementary, purchased and conserved fodder.

**Cost of pasture has not been included. This will range from 10-20c per kgDM during the year.

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Your Levy at Work

Focus Farm Report

Date	December 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

0492 | Oct 2015

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Your Levy at Work

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

0492 | Oct 2015

Dairy NSW Media Release

Focus Farm Report Meeting 12 – Cochrane Wogamia Dairy

Farm Location: Wogamia, Longreach near Nowra.

Date: June 14, 2016

This month has seen our last support group meeting. This was an opportunity to review the progress of the farm over the last 2 years.

Analysis of all the records we have kept over the period has highlighted the following:

- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]

[illegible]

[illegible]

[illegible]

Milking Area: 115ha

Production: June 2016

360	Cows (Vat Cows)
1.6 Kg	Milk Solids/cow/day
24.2L	Litres/cow/day (in vat)
3.2%	Fat %
3.4%	Protein%
150 000	BMCC cells/ml

Grazing and Supplement Feeding

3.5 kg	Grain – Wheat @ $0.35/kgDM ($315/t)
12.45 kg	Total supplementary feed (kgDM/cow)
8.44 kg	Pasture Intake(kgDM/cow)
115 ha	Area in rotation (ha)
28 days	Rotation length (days)
4.11 ha	Grazing area (ha per 24 hours)

Daily Income Over Feed Costs (IOFC)

June Milk Price	$0.53/L
	$8.03/kgMS
Income/cow ($/cow):	$12.81
Supplementary Feed Costs* ($/cow/day):	$3.19
Total Feed Costs** ($/cow/day):	$4.03
Margin Over Supp Feed Costs($/cow/day):	$9.63
Margin Over Total Feed Costs ($/cow/day):	$8.78

NB:

*Supplementary Feed Costs includes supplementary, purchased and conserved fodder.

**Total Feed Costs includes supplementary, purchased and conserved fodder and estimated pasture costs based on, seed, fertiliser, irrigation (based on pasture cost of $100/tonneDM).