

Focus Day Lincoln University Dairy Farm

Information Handout 9th October 2008

For further information visit:

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Next Focus Day: 19th February 2009

SIDDC - Partners networking to advance South Island Dairying













PROGRAMME

Another Wet Spring! Just an inconvenience or a disaster?

10.20 am	Welcome	Virginia Serra
	- Introduce Ron Pellow, SIDDC Exec Dir	
	- format for the day	
10.25 am	LUDF Seasonal Update	Peter Hancox, Adrian van Bysterveldt, and George Reveley
10.50 am	Split into Groups	Virginia Serra

	Group 1 Farm Staff	Group 2 Owners/Managers/Sharemilkers/Professionals
11.00 am	Stay at Calf Shed Area	Walk to Paddock
11.05am	Mating Management In calf programme – Mark Blackwell LUDF mating management – George R Semen use - No Bulls -	Pastures - Plating – Adrian van Bysterveldt - Rapid Pasture Meter – Hayden Lawrence - Paddock performance ranking – Graham Kerr - Silage making regime – Adrian van Bysterveldt
11.45 am	Switch	Switch
12.30 pm	Everyone to Calf Shed Area fo	r Wrap up

12.35 pm	Wrap up and Thanks	Virginia Serra
12.45 pm	LUNCH	agriseeds
1.30 pm	Afternoon Option: - C-dax - Calves on East Block - Other paddocks of interest	Hayden Lawrence Peter Hancox Adrian van Bysterveldt
2.30 pm	Finish	

Seasonal Update

Extremely wet conditions in July and August have been difficult for cows and men. Winter feed supplies in the province were barely adequate after very dry autumn conditions.

1. Our wintering plan

May

The 80 thinnest early calvers were dried off in early May and were then wintered on grass. Some on the platform (June) and off farm the remainder of the time.

June & July

- R2s on pasture in the Springston district close enough that they could come home to have Teat Seal infused 6 weeks prior to calving and go back to grazing.
- R3s also on pasture in the Springston District target 5.5 C.S.
- MA cows above 4.3 condition score depending on recent sore foot history and calving date – more vulnerable cows stayed on grass.
 - Two groups on kale one at Springston and the other at Lincoln University research area.
 - 126 MA light cows (as defined above) on platform, pasture grazing to 1500kgDM/ha residuals until June 21st and then off farm on pasture.

The cows on pasture reached their targets reasonably well but it was more of a struggle for the cows on kale. We were happy with the result but it required a lot of determination and planning to achieve.

2. Condition Score of the herd through winter and start of calving. Fig 1

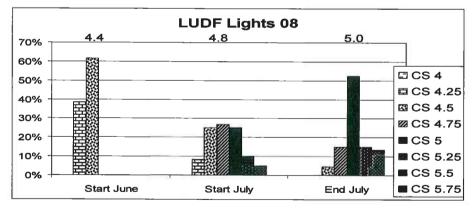


Fig 2

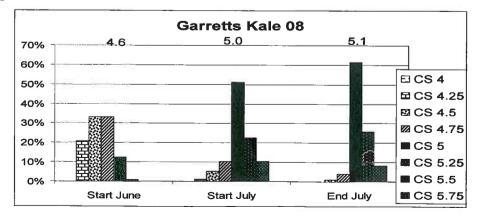
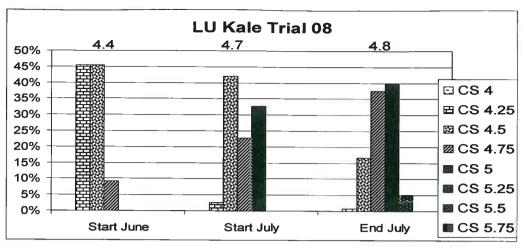


Fig 3



Take home message.

- Minimise the number of animals below the target condition score at calving.
- Split herd on condition score and feed differently to get each mob to target feed pasture to the most vulnerable

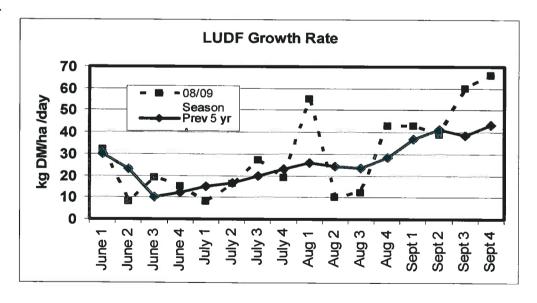
3. Conditions so far this Season

Rainfall

July165mmaverage 80mmAugust139mmaverage 70mmSeptember40mmaverage 40mm

Soil Temperature has been average or above. As a consequence pasture growth has consistently been better than last year and though variable has been close to the average for the farm.

Fig 4.



Nitrogen

The farm had its last N applications last season (other than to effluent areas) anywhere between Mid March and the end of April and eco-n was applied in both autumn and spring over the whole farm. (This required the use of a helicopter during August). At no time have the pastures looked nitrogen deficient. 40 kgN/ha was applied during 3rd & 4th weeks of August and the first 2 weeks of September. A round of 35kgN/ha is following this.

Supplementary feed

No silage was fed until the 7th of September by then loss of the feed to trampling and pasture damage was tolerable. **This is a planned strategy**, which aims at filling limited post calving appetites with only high quality grass, avoids the work/time associated with feeding out during the main calving period and avoids damage to pastures.

The Key management tools from dry off to balance date

A detailed feed budget (updated weekly) and simple graphs to track how the farm is going compared to budget.

Fig 5.

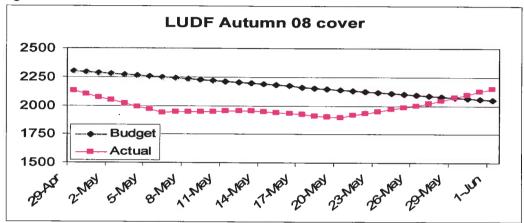


Fig 6.

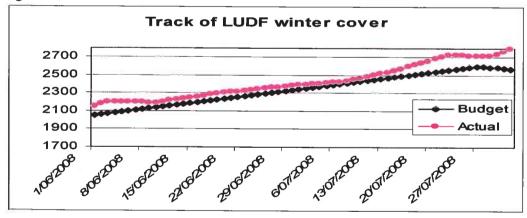
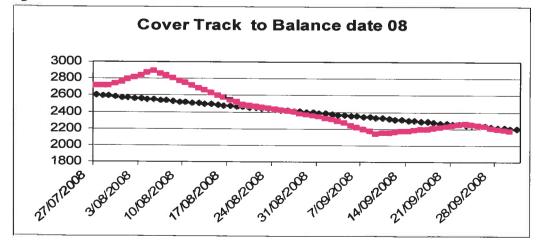


Fig 7.



The target lines on these graphs are generated from a feed budget.

The critical starting point is the cover required at balance date. We then work backward from that date putting in expected growth rates, and calving spread and cow numbers on farm for each week. When this is calculated through the result is the second critical average farm cover target which is the cover required on farm at the start of calving. Again back calculating from this with winter growth rates and cow demand on the milking platform and we end up at the third critical average farm cover which is the cover at dry off date – nominally the 1st June. Refer Page 18. LUDF Winter feed budget.

The first grazing round is also planned in detail, using expected calving rate daily demand and essentially rationing the land area to have the first round finish around the 13th of September. The wet conditions and determination not to ruin large areas of the farm resulted in the cows being allowed greater areas each week leading to the first round finishing on the 5th of September. Silage feeding began also at the start of the second round. This carried on for 25days and 68kgDM/peak cow was fed out.

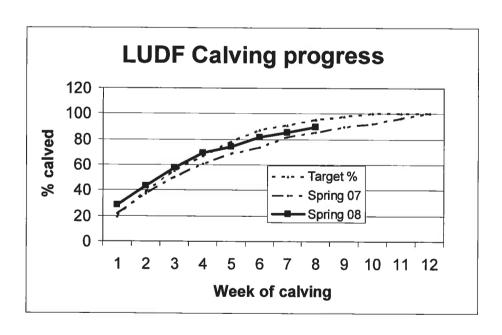
Wet conditions and pasture damage

A small paddock on the East block was sacrificed and one on the Heifer block no significant area was sacrificed on the platform. Grass seed has been sown into 1ha and much of the farm has been heavy rolled during September.

4. Calving

Calving has progressed at a greater rate than in previous seasons. The planned start for the Mixed Age cows was 4 days later than last season but the number of cows calved has tracked very close to the number on the same dates last season.

Fig8



LUDF Calving data comparison

Season	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Days to mid (all herd)		22	23	14	12	16	15
Days to mid (cows only)		22	23	22	16	22	18
4 wk calving rate %	64	63	61	69	76	66	70
% still to calve 1 month PSM	14	17	12	12.6	9	7	7
% treated as Anoestrus		36.7	24.3	14.5	17	16	

Last years wet difficult winter has the potential to set us back a year in our quest to improve the herd in-calf rate to 90% at 12 weeks of mating. This is compounded by the continued presence of late calving cows. These have come as a surprise to us because we were confident that our 6 pregnancy tests programme would give us accurate expected calving dates for all the cows. During last year no specific recording of bull matings occurred. The lesson for us has been that observation of and recording of bull matings is required to verify pregnancy scan results to confirm pregnancy dates.

Conditions were very difficult through the main part of calving. Springers were stood off on the dairy yard for 12 hours a day on a regular basis through late July and to the middle of August. Calved cows used the yard on the other half of the day on a daily basis until the 5th of August. This did result in some cows calving on the concrete. No major lameness resulted but a few of the first calvers were quite sore and stiff after this.

The simple two prostaglandin injection synchrony programme (see attached protocol) with our R2yr heifers continues to give us excellent results with 88% calving before the end of the 4th week of calving of the main herd.

5. Calf Rearing

As in previous seasons the calves are fed once each day and no specialist calf rearing assistance is employed. Calves had to be held longer inside during August, which put pressure on the facilities. Calves are normally outside after 2-3 weeks. We are very happy with the results.

6. Production Results

Milk Production

Fig 9

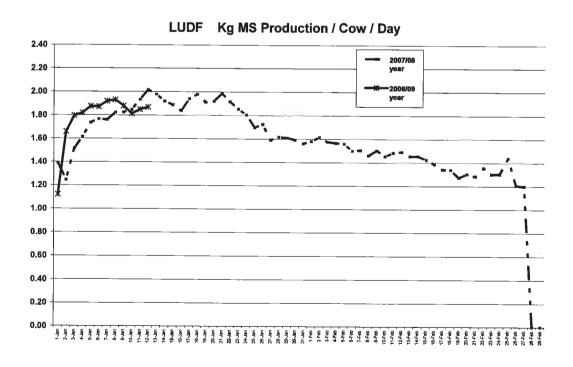
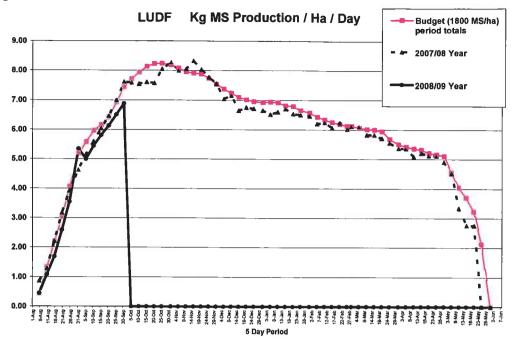


Fig 10



Comment

The fall in milk production per cow in mid September resulted from having to clean up a number of paddocks that had not been able to be grazed to 1500kgDM/ha in the first round. That feed has been dealt with now and the production per cow is rising again.

7. Animal Health

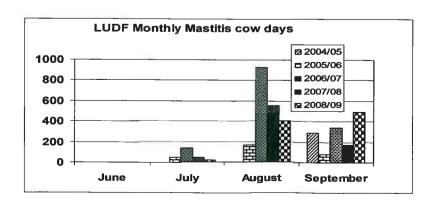
Mastitis

Mastitis has been a more significant problem than in previous seasons. The overall incidence to date has been 15% of the herd - about twice our typical rate. There has been 66% at calving and 33% following calving. The good news has been the very dramatic success of the Teat-seal in the first calvers.

Typically there have been 3 times more infections than the Mixed Age cows. This season their rate has been the same as the MA herd. The graph (Fig 11) shows that the incidence of mastitis was lower this August although the overall rate was up. The data indicates that 30 cases of mastitis at calving were prevented by the Teat-Seal this spring.

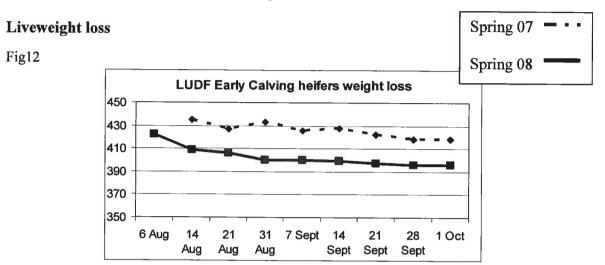
Cost of treatment \$1,460 for the group. Benefit needed to break even is \$48.60 for each 1st calving heifer with mastitis prevented at calving. Subsequent loss of milk production and cost of treatment easily cover this.

Fig 11



Milk Fever

Like most farms in the region we had more difficulty managing this compared to previous seasons. For instance in August there were 28 (6.8% of cows calved to date) cases compared to 12 (3%) in the same period last season. Greater volumes of dusted Mag Oxide (150gm/cow) were required to get the rate down to normal. Milk fever deaths are preventable and we will continue to target 0 deaths and light clinical cases not above 3 per 100 calving cows. See fig 13



These heifers have lost about 25kg of live weight, which is over half a condition score. This is above normal and reflects on the number of days they had to be stood off during late July and early August.

The herd average condition score at the end of September is 4.41. This is almost the same as the condition score of the herd at the same time last year.

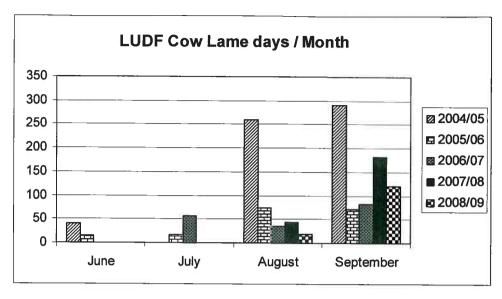
Cow Deaths out of 704 to calve

Fig 13

Month	Reason	06/07	07/08	08/09
June		0	1	0
July	Accidental	2	0	0
	Milk Fever	2	0	0
August	Accidental	3	0	1
	Bloat	1	0	0
	Other	1	2	1
	Milk fever	0	1	2
September	Liver problems	2	0	0
	Bloat	3	0	0
	Milk fever	0	1	0
	Other	0	0	2
October (to date)	Bloat	1	0	0
	Milk fever	0	1	0
	Johnnes	0	1	0
	Other			0
Total		15	7	6

Lameness

Fig 14



8. Time saving strategies used this year.

Activity	Time saved	Other benefits/costs
Train heifers to the cow shed etc (heifers syn to calve 7 days before mature cows)	Required 2 x 3 hours of the team.	Done when no other time pressure. More staff time at calving out in the paddock
Milking all the cows OAD until enough for milk pickup	An average of 2 hrs /day for 10 days = 20 hrs	Lots of time for staff to concentrate on calving cows during the busiest time for calving. Less Milk fever Less colostrum to feed to calves
Feeding all the calves only OAD (Pukawa System)	3 hrs /day for the first 6 weeks and 1 hour /day for the next 6 weeks = 170 hrs	More enthusiasm to do it once properly Done by on farm staff More time in the afternoon to do other jobs. Calves eat more meal
Calves outside on grass after 2 weeks. (when we could) (once dis-budded and DNA tested)		Better hygiene /few losses Less housing needed Less chance of disease spread Calves encouraged to eat grass sooner.
Colostrum, lame and other "sick" cows only milked OAD	1 hr/day for 2 staff for 90 days 30 min/day for 2 staff for 150 days = 330 hrs	Improved staff moral as all the messy cow stuff over and done in the morning. More time to do other jobs in the afternoon before milking. Less chance for hold-ups to get home by 5pm

9. Is our Planned Start of calving date correct?

For most of the history of this farm the planned start of calving was about the 1st August. Two years ago this moved forward by 5 days and this season it was 3rd of August.

Over the years several things have been happening which have changed the pasture demand /supply balance.

- a) Stocking rate has increased several times.
- b) Calving spread has reduced down to 12 weeks and will be shorter next season.
- c) Heifers are now synchronised to begin calving a week before the main herd.
- d) Mean calving date continues to creep earlier.
- e) We have lost access to a reliable supply of winter grazing through the mid July/mid August period, which means that the 200 later calving cows are coming home to the milking platform/support block earlier.

The result is that we can no longer get through even an average winter/spring without feeding out silage to calved cows (and even more silage to late calvers and springers).

In 03/04 we made a big leap in farm production and profit performance as a result of feeding just high quality grass to the calved cows instead of also needing to feed out silage. The last season we have been able to do this was the 05/06 season which apart for a minor snow at balance date was a year of well above average pasture growth in the spring. (see production graphs)

Next calving

- a) Stocking rate will again be 4.3 cows /ha.
- b) Calving spread will be reduced to 9 weeks.
- c) 28% replacements will be entering the herd and synchronised to calve 10 days before the mature herd.
- d) Days to mean calving date will be even less.
- e) We will have lost the 33ha heifer runoff, and so our mid July to mid August winter grazing is still in doubt.

Do nothing this coming Planned Start of Calving date and we will be in an even bigger feed deficit in the spring and even further away from our preferred position of feeding the calved cows only high quality grass. Feeding supplements also adds a large amount of extra work at an already busy time and feeding out options are severely restricted when we have a wet spring.

Management Option

Delay next years planned start of calving of the main herd by 3 more days to the 6 August. This delay in calving will still only make all grass possible if we can secure winter grazing for our later calving cows until mid August. We are going to mate our mature herd for 9 weeks with DNA proven FX semen this year. The gestation period for these matings is 1.8 days shorter than average and so to get an actual delay of 3 days in the planned start of calving we will begin mating 5 days later this year.

<u>FEEDFLO</u> Feed Budget & Pasture Cover Targets

Budget Start	01-May-08	Period Start	01-May	11-May	21-May	01-Jun	22-Jun	Q1-Jul	21-Jul	01-Aug	11-Aug	21-Aug	31-Aug	10-Sep	20-Sep	30-Sep
E	Days in Period	162	10	10	11	21	9	20	11	10	10	10	10	10	10	10
Effective Hect	ares =	161.5	161.5	161.5	161.5	161.5	161.5	161.5	161.5	161.5	161.5	161.5	161.5	161.5	161.5	161.5
Remov	e or Add Ha's	161.5				Livering						101.0	10.0			101.
FEED DEMAN				Stock n	umbers	on farm	& daily	dm intal	ke per a	nimal (/	After was	stage)				
Total Cows on			604	404					200	220	350	420	690	690	690	690
Cows Calving	(No. in each	period)	000	070					80	110	140	140	80	55	35	40
Average Milkin	off (last day of	репоа)	230 602	372 372					40	405	000	400	- W 100		Li EV	
revoluge miki	dm/day	4,133	16.5		16.5	(the second		1 H. F.	40	135	260 14	400	510 15.5	578	623 16.5	660 17
Dry Cows (Tot			2	32	(4	126			160	85	90	20	180	113	68	30
	dm/day	540		Y E		Files.		13	13	11	11	11	11	11	11	11
	Condition Sco	ore Monitor			scores a	dded =	190	Ave	dm for	maint &	preg =	5		dm/cond	score	= 180
Yearlings.	dm (day)													1748		
Calves.	dm/day															
	dm/day		a (V-)													
Feed Demand/		4,673	62	38					16	17	29	39	61	65	68	72
Stocking Rate	Cow Eg/ha		3.7	2.5		0.8			1.2	1.4	2,2	2.6	4.3	4.3	4.3	4.3
								:					7.0		7.0	7.5
PASTURE GRO	OWTH	4,672	30	kgs dm/ 25	ha/day 23	21	18	18	16	16	22	35	40	45	55	60
		,,					10		10	10	44	39	40	43	99	60
NITROGEN GR	OWTH	Total		Tonnes	of nitrog	en conta	aining fe	rtiliser a	pplied e	ach peri	od					
Urea	46.0 %N		11.					73,500		N		107.5	a(iii) ====		el Fall	
D.A.P.	18.0 %N	j														
S.O.A.	21.0 %N									WITE 1					03 79	y =
Total N applied kgs N per Eff H																
Response (dm/			10	10	10	10	10	10	10	10	10	10	10	10	10	10
Days for N Res			60	60	60	60	50	50	50	60	60	60	60	60	60	60
Response dm/l														1		
Nett Grass Gro	wth	4,672	30.0	25.0	23.0	21.0	18.0	18.0	16.0	16.0	22.0	35.0	40.0	45.0	55.0	60.0
SUPPLEMENT	S	Total		Supplem	nents fee	d per d	av in ead	ch period	i							
HQ Baleage	t DM	56	2.8	2.8			1						E line (a)	-"[*\$/nont		
	dm/day fed	53,565	2678	2678												
HQ Baleage	t DM	50				ar hij						1	1	1	1	1
HQ Baleage	dm/day fed t DM	47,826				114 (4)						957	957	957	957	957
	dm/day fed								1 1				M. Z.			i i i i i i i
				. В ;;, п≣			. 4 -4						7" 151-1	.		
	dm/day fed															- /
									- · · · · ·							N pijo
Total (kg dm/ha	dm/day fed a/day)	628	16.6	16.6	<u>i</u> _							5.9	5.9	5.9	5.9	5.9
Total Food Sun	he dm/ho/dov			40	00:	04	40	46:		- 10					•	
Total Feed Supp	лу ині/па/цау	5,300	47	42	23	21	18	18	16	16	22	41	46	51	61	66
Feed Utilisation			100%	100%	100%	100%	80%	80%	100%	100%	100%	100%	100%	100%	100%	100%
PASTURE COV	ER			kg dm/ha	on the	last day	of each	period								
Cover Change of	lm/ha/day	523	-14.9	3.6	23.0	21.0	14.4	14.4	-0.1	-1.1	-6.7	2.4	-15.3	-14.0	-7.3	-5.6
Predicted pastu		2,126	1,977	2,013	2,266	2,707	2,836	3,124	3,123	3,112	3,046	3,070	2,917	2,777	2,705	2,649
Updated pasture			1,977	1,894	2,147	2,300	2,430	2,718	2,717	2,706	2,639	2,663	2,510	2,371	2,298	2,242
Enter actual pas	Cover Dates:	1May	10May	1,894 20May	31May	2,300	30 tue	20 1-4	24 1-4	104	204:	204	00	400	200	25
Target Average Pastu		kgDM/ha	2,464	2,392	1,480	21Jun 1,480	30Jun 1,480	20Jul 1,480	31Jul 2,768	10Aug 2,376	20Aug 2,412	30Aug	9Sep 2,643	19Sep	29Sep	90ct 2,231
Pre grazing required		kgDM/ha	3,133	3,174	1,733	1,921	1,610	1,768	4,055	3,262	3,277	3,486	3,594	3,228	3,121	2,867
Post Grazing residual		kgDM/ha	1,480	1,480	1,480	1,480	1,480	1,480	1,480	1,480		1,480	1,480	1,480	1,480	1,480
Rotation length		Days	32	48	120	160		160	160	105	65	53	38	30	26	21
Area fed		ha/day	5.05	3.36	1.35	1.01	#DIV/01	1.01	1.01				4.25			

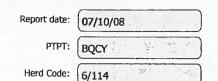
07-Oct-08
C:\Canterbury\LUDF\2008 -2009 season\(LUDF Feedflo winter spring 08.xia)Budget

This programme has been developed by and remains the property of Livestock Improvement FarmWise

Lincoln University Dairy Farm Year ending May 31 Octuber update Bud 2008/09		00/00		
	get for 20			
****		Actual 07 - 08	Difference	
	281,670	1,772/ha	4,530 kgms	
Cows Peak number &prodn 680cows 4.28/ha 421/cow	⊩			
Staff 4.00 FTE's 170cows/FTE 71,550ms/FTE				
Income c/kgMS	c/kgMS		\$ change	
Milk Income 95% 1,888,920 6.60	7.71	2,173,027		-13%
Surplus dairy stock 3% 51,000 0.18	0.55	155,342	-104,342	-67%
Other stock sales 3% 53,373 0.19 Other Income 0% -				#FD 1/61
004	0.00	0	. 0	#DIV/0!
100% 1,993,293 6.96	8.27	2,328,369	-335,076	-14%
Stock Purchases -	0.27	2,320,303	-333,070	-1470
Gross Farm Revenue 1,993,293 12,536/ha		2,328,369	-335,076	-14%
				
<u>Expenses</u> 2008/09	2007/08	Actual	\$ change in	% change in
\$/cow c/kgMS	c/kgMS	\$	expense	expense
Administration 31,100 45.7 0.11	0.10	28,464	2,636	9%
Animal Health 41,061 60.4 0.14	0.15	42,422	-1,361	-3%
Breeding Expenses 51,506 75.7 0.18	0.19	52,305	-799	-2%
Electricity 17,961 26.4 0.06	0.06	17,012	949	6%
Employment 236,722 348.0 0.83	0.67	189,376	47,346	25%
Feed purchased 59,460 87.4 0.21	0.22	61,345	-1,885	-3%
Silage making & delivery 41,364 60.8 0.14 Replacement grazing 130.428 191.7 0.46	0.12	33,032	8,332	25%
	0.37	103,824	26,604	26%
	0.36 0.32	102,596	22,004	21%
Fertiliser & Lime 145,151 213.4 0.51 Freight & Cartage 680 1.0 0.00	0.32	90,050 3,022	55,101 -2,342	61% -77%
Irrigation Costs 72,720 106.9 0.25	0.01	66,489	6,231	9%
Rates & Insurance 14,745 21.7 0.05	0.05	13,914	831	6%
Regrassing 14,088 20.7 0.05	0.03	8,248	5,840	71%
Repairs & Maintenance 56,000 82.3 0.20	0.25	71,007	-15,007	-21%
Shed Expenses 10,750 15.8 0.04	0.02	5,228	5,522	106%
Vehicle Expenses 22,000 32.3 0.08	0.07	18,787	3,213	17%
Weed & Pest 1,908 2.8 0.01	0.01	1,977	-69	-3%
Accommodation allowance 4 houses 20,000 29.4 0.07	0.07	20,000	0	5,0
Cash Farm Working Expenses 1,092,245 1,306 3.82	3.30	929,098	163,147	17.6%
Depreciation est 107,426 0.38	0.34	94,666	·	
Total Operating Expenses 1,199,671 4.19	3.63	1,023,764		
Dairy Operating Profit 793,622 1,167 2.77	4.63	1,304,605	-510,983	
4,991/ha		8,205/ha		
Cash Operating Surplus 901,048		1,399,271		
5,667/ha		8,664/ha		
Capital Changes			0	
Fonterra shares		54,448	-54,448	
Capital Improvements & Purchases 272,000		106.530	165,470	
		100,000	0	
Principal		_	0	
Principal - Vehicles -				
Vehicles - 0		160,978	111.022	
Vehicles - 0 Total Capital changes 272,000		160,978 \$1,238,293	111,022 - 609.245	
Vehicles - 0 Total Capital changes 272,000 Cash Surplus \$629,048 3,956/ha		160,978 \$1,238,293		
Vehicles - 0 Total Capital changes 272,000	% of total ga	\$1,238,293	- 609,245	season's value
Vehicles - 0 Total Capital changes 272,000 Cash Surplus \$629,048 3,956/ha		\$1,238,293	- 609,245	season's value 6,138,000
Vehicles - 0 Total Capital changes 272,000 Cash Surplus \$629,048 3,956/ha Capital (at start of period, June 2008) change (\$) % change Land & Improvements \$44,353 \$/ha 8,249,664 2,111,664 34.4% Fonterra Shares 281,670 1,608,336 -256,191 -13.7%	81%	\$1,238,293	- 609,245	
Vehicles - 0 Total Capital changes 272,000 Cash Surplus \$629,048 3,956/ha Capital (at start of period, June 2008) change (\$) % change Land & Improvements \$44,353 \$/ha 8,249,664 2,111,664 34.4% Fonterra Shares 281,670 1,608,336 -256,191 -13.7% Farm with shares \$61,040 /eff ha 9,858,000	81 % -10%	\$1,238,293	- 609,245	6,138,000 1,864,527
Vehicles - 0 Total Capital changes 272,000 Cash Surplus \$629,048 3,956/ha Capital (at start of period, June 2008) change (\$) % change Land & Improvements \$44,353 \$/ha 8,249,664 2,111,664 34.4% Fonterra Shares 281,670 1,608,336 -256,191 -13.7% Farm with shares \$61,040 /eff ha 9,858,000 486,100 68.6% Cows 1,194,600 486,100 68.6%	81 % -10% 19%	\$1,238,293	- 609,245	6,138,000 1,864,527 708,500
Vehicles - 0 Total Capital changes 272,000 Cash Surplus \$629,048 3,956/ha Capital (at start of period, June 2008) change (\$) % change Land & Improvements \$44,353 \$/ha 8,249,664 2,111,664 34.4% Fonterra Shares 281,670 1,608,336 -256,191 -13.7% Farm with shares \$61,040 /eff ha 9,858,000 Cows 1,194,600 486,100 68.6% R2 Heifers 291,600 111,600 62.0%	81% -10% 19% 4%	\$1,238,293	- 609,245	6,138,000 1,864,527 708,500 180,000
Vehicles - 0 Total Capital changes 272,000 Cash Surplus \$629,048 3,956/ha Capital (at start of period, June 2008) change (\$) % change Land & Improvements \$44,353 \$/ha 8,249,664 2,111,664 34.4% Fonterra Shares 281,670 1,608,336 -256,191 -13.7% Farm with shares \$61,040 /eff ha 9,858,000 0 486,100 68.6% R2 Heifers 291,600 111,600 62.0% R1 Heifers 240,000 120,300 100.5%	81% -10% 19% 4% 5%	\$1,238,293	- 609,245	6,138,000 1,864,527 708,500 180,000 119,700
Vehicles - 0 Total Capital changes 272,000 Cash Surplus \$629,048 3,956/ha Capital (at start of period, June 2008) change (\$) % change Land & Improvements \$44,353 \$/ha 8,249,664 2,111,664 34.4% Fonterra Shares 281,670 1,608,336 -256,191 -13.7% Farm with shares \$61,040 /eff ha 9,858,000 Cows 1,194,600 486,100 68.6% R2 Heifers 291,600 111,600 62.0% R1 Heifers 240,000 120,300 100.5% Plant/Mach 152,550 27,550 22.0%	81% -10% 19% 4% 5%	\$1,238,293	- 609,245	6,138,000 1,864,527 708,500 180,000
Vehicles - 0 Total Capital changes 272,000 Cash Surplus \$629,048 3,956/ha Capital (at start of period, June 2008) change (\$) % change (\$) Land & Improvements \$44,353 \$/ha 8,249,664 2,111,664 34.4% Fonterra Shares 281,670 1,608,336 -256,191 -13.7% Farm with shares \$61,040 /eff ha 9,858,000 0 Cows 1,194,600 486,100 68.6% R2 Heifers 291,600 111,600 62.0% R1 Heifers 240,000 120,300 100.5% Plant/Mach 152,550 27,550 22.0% Total debt Inc. Current A/c on June1 - - -	81% -10% 19% 4% 5%	\$1,238,293	- 609,245	6,138,000 1,864,527 708,500 180,000 119,700 125,000
Vehicles - 0 Total Capital changes 272,000 Cash Surplus \$629,048 3,956/ha Capital (at start of period, June 2008) change (\$) % change (\$) Land & Improvements \$44,353 \$/ha 8,249,664 2,111,664 34.4% Fonterra Shares 281,670 1,608,336 -256,191 -13.7% Farm with shares \$61,040 /eff ha 9,858,000 0 Cows 1,194,600 486,100 68.6% R2 Heifers 291,600 111,600 62.0% R1 Heifers 240,000 120,300 100.5% Plant/Mach 152,550 27,550 22.0% Total debt Inc. Current A/c on June1 - <	81% -10% 19% 4% 5%	\$1,238,293	- 609,245	6,138,000 1,864,527 708,500 180,000 119,700
Vehicles - 0 Total Capital changes 272,000 Cash Surplus \$629,048 3,956/ha Capital (at start of period, June 2008) change (\$) % change (\$) Land & Improvements \$44,353 \$/ha 8,249,664 2,111,664 34.4% Fonterra Shares 281,670 1,608,336 -256,191 -13.7% Farm with shares \$61,040 /eff ha 9,858,000 0 Cows 1,194,600 486,100 68.6% R2 Heifers 291,600 111,600 62.0% R1 Heifers 240,000 120,300 100.5% Plant/Mach 152,550 27,550 22.0% Total debt Inc. Current A/c on June1 - - -	81% -10% 19% 4% 5%	\$1,238,293	- 609,245	6,138,000 1,864,527 708,500 180,000 119,700 125,000
Vehicles - 0 Total Capital changes 272,000 Cash Surplus \$629,048 3,956/ha Capital (at start of period, June 2008) change (\$) % change Land & Improvements \$44,353 \$/ha 8,249,664 2,111,664 34.4% Fonterra Shares 281,670 1,608,336 -256,191 -13.7% Farm with shares \$61,040 /eff ha 9,858,000 486,100 68.6% Cows 1,194,600 486,100 68.6% R2 Heifers 291,600 111,600 62.0% R1 Heifers 240,000 120,300 100.5% Plant/Mach 152,550 27,550 22.0% Total Capital 11,736,750 2,601,023 28.5% Change in capital for the 12 months 2,601,023 increase in capital Brief Analysis 2008/09 2008/09	81% -10% 19% 4% 5%	\$1,238,293	- 609,245	6,138,000 1,864,527 708,500 180,000 119,700 125,000 9,135,727 2007 - 08 2007-8
Vehicles - 0 Cash Surplus \$629,048 3,956/ha Capital (at start of period, June 2008) change (\$) % change Land & Improvements \$44,353 \$/ha 8,249,664 2,111,664 34.4% Fonterra Shares 281,670 1,608,336 -256,191 -13.7% Farm with shares \$61,040 /eff ha 9,858,000 486,100 68.6% Cows 1,194,600 486,100 68.6% R2 Heifers 291,600 111,600 62.0% R1 Heifers 240,000 120,300 100.5% Plant/Mach 152,550 27,550 22.0% Total debt inc. Current A/c on June1 - 11,736,750 2,601,023 28.5% Change in capital for the 12 months 2,601,023 increase in capital Brief Analysis 2008/09 2008/09 Milksolids payout \$6.60 \$5.80 \$6.50	81% -10% 19% 4% 5% 1% at a range o	\$1,238,293 ain f payouts \$7.50	- 609,245 Previous \$8.00	6,138,000 1,864,527 708,500 180,000 119,700 125,000 9,135,727 2007 - 08 2007-8 \$7.71
Vehicles - 0 Total Capital changes 272,000 Cash Surplus \$629,048 3,956/ha Capital (at start of period, June 2008) change (\$) % change in capital for the 12 months Brief Analysis 2008/09 2008/09 Milksolids payout \$ 8.60 \$ 5.80 \$ \$6.50 Return on Dairy Assets 6.8% 4.8% 6.5%	81% -10% 19% 4% 5% 1% at a range o	\$1,238,293 ain f payouts \$7.50 9.0%	- 609,245 Previous \$8.00 10.2%	6,138,000 1,864,527 708,500 180,000 119,700 125,000 9,135,727 2007 - 08 2007-8 \$7.71 14.6%
Vehicles - 0 Cash Surplus \$629,048 3,956/ha Capital (at start of period, June 2008) change (\$) % change Land & Improvements \$44,353 \$/ha 8,249,664 2,111,664 34.4% Fonterra Shares 281,670 1,608,336 -256,191 -13.7% Farm with shares \$61,040 /eff ha 9,858,000 200,000 486,100 68.6% R2 Heifers 291,600 111,600 62.0% R1 Heifers 240,000 120,300 100.5% Plant/Mach 152,550 27,550 22.0% Total debt inc. Current A/c on June1 11,736,750 2,601,023 28.5% Change in capital for the 12 months 2,601,023 increase in capital Brief Analysis 2008/09 2008/09 Milksolids payout \$6.60 \$5.80 \$6.50 Return on Dairy Assets 6.8% 4.8% 6.5% CFWE % of GFR 55% 62% 55%	81% -10% 19% 4% 5% 1% at a range o \$7.00 7.8% 52%	\$1,238,293 ain f payouts \$7.50 9.0% 48%	- 609,245 Previous \$8.00 10.2% 46%	6,138,000 1,864,527 708,500 180,000 119,700 125,000 9,135,727 2007 - 08 2007-8 \$7.71 14.6%
Vehicles - 0 Total Capital changes 272,000 Cash Surplus \$629,048 3,956/ha Capital (at start of period, June 2008) change (\$) % change in capital for the 12 months Brief Analysis 2008/09 2008/09 Milksolids payout \$ 8.60 \$ 5.80 \$ \$6.50 Return on Dairy Assets 6.8% 4.8% 6.5%	81% -10% 19% 4% 5% 1% at a range o \$7.00 7.8% 52% \$5,725	\$1,238,293 ain f payouts \$7.50 9.0%	- 609,245 Previous \$8.00 10.2% 46%	6,138,000 1,864,527 708,500 180,000 119,700 125,000 9,135,727 2007 - 08 2007-8 \$7.71 14.6%

Fertility Focus 2007: Seasonal

Lincoln University C/O The Manager (University Dairy Fa PO Box 94 Lincoln 7647



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Dairy_{NZ} 🕏

17/06/07 and 23/12/07

25/10/07 - 08/01/08

(1) Overall herd reproductive performance



66% Your herd Aim above 78%

4

Empty rate Percentage of cows not pregnant after 11 weeks of mating

02/08/08

Your herd 22% (11-23%) Aim for

No of cows included:

These cows calved between:

Mating start & stop date: (estimated from AI or rectal pregnancy test data)

Planned start of calving:

±

Your herd's 6-week in-calf rate has been estimated - Supply results of early rectal pregnancy testing for greater accuracy.

% or nero in call after:	3 weeks	6 weeks	9 weeks	12 weeks of mating
Top result				
Average	A graph of % herd in cal	f through the mating per	riod could not be plotted.	naki istori
Below average	Supply the res	sults of early rectal preg	nancy testing.	

2 Drivers of the 6-week in-calf rate

3-week submission rate % of cows that were inseminated in the first 3 weeks of mating

87% Your herd 90% Aim above

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Non-return rate % of inseminations that were not followed by a

44% Your herd Seek 64% advice Aim above

Conception rate % of inseminations that resulted in a confirmed pregnancy

Your herd Aim above

Key indicators to areas for improvement

Calving pattern of first calvers Well managed heifers get in calf quickly and calve early.

Calved by Week 3 Week 6 85% Your herd 95% Aim above 75% 92%

Calving pattern of whole herd Did late calvers reduce in-calf rates?

Week 3 Week 6 Calved by Week 9 Your herd 64% 82% 93% Aim above 60% 87% 98% 京京京京京 * ** 444

Pre-mating heats A high % of well managed cows will cycle before the start of mating.

80% Your herd 85% Aim above

会会会会会 **编数**

3-week submission rate of first calvers Well managed heifers cycle early

Your herd 94% *** Aim above 90%

Heat detection A high % of early-calved mature cows should be inseminated in the first 3 weeks of mating.

93% COMMO! Your herd *** Aim above 95%

Non-cycling cows Treated non-cyclers get in calf earlier.

Wks 4-6 Treated By PSM Wks 1-3 8% 0% 0% Your herd

Rating	What does it tell me?	What should I do?
***	Top result .	Ideal - keep up the good work!
***	Average	Getting there - focus on getting the details right.
\$	Below average	Plenty of room to improve - seek professional advice.
196	No result	Not enough information provided - seek help with records.

Performance after week 6 If you ran bulls after week 6 of mating, empty rate helps assess bull performance.

Empty rate 。罗 類形態 Your herd

Behind Your Intermediate Fertility Focus Report

Report period: Cows calved between 17/06/07 and 23/12/07.

This was the most recent period with sufficient herd records that enabled an analysis to be completed

Calving system: Seasonal

Your herd has been classified as seasonally calving because most calvings occurred in a single batch lasting less than 21 weeks.

Level of analysis: Intermediate.

To obtain a more detailed and accurate report, pregnancy test more cows at an earlier stage of pregnancy. Pregnancy testing including age of pregnancy at less than 17 weeks is recommended.

Report date: 07/10/08

PTPT: BQCY

6/114

Version 1.0 Dairy_{NZ} =

2 LIC

incalf

FERTILITY FOCUS

Calvings up to this date requested for analysis:

Herd Code:

03/04/08

No of cows included:

693

17/06/07 and 23/12/07

Part A) Herd records cross check

Check that the herd records in the table are complete and correct.

Mating start & stop date: (estimated from AI or rectal pregnancy test data)

These cows calved between:

25/10/07 - 08/01/08

2007/08	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Total
No. of calvings		153	347	147	54	1							702
No. of AI matings			Tallia.		224	677	241				" USER		1142
No. of aged preg tests	a neogn								Manager 1		67		67
No. of non-aged preg tests					1			506	31				537
No. of cows culled or died		2	4	1	6	11	1	5	1	12	5	65	113

Part B) Notes on the calculations

Use the following notes to see how your results were calculated.

1) Overall herd reproductive performance

6-week in-calf rate

The 6-week in-calf rate reported HAS BEEN ESTIMATED from the mating information you provided. An actual result can only be calculated if early pregnancy test results are available. Supply results of early rectal pregnancy testing including age of pregnancy for greater accuracy.

Empty rate

The empty rate reported was based on the results of pregnancy testing. The range provides the lowest and highest likely estimate.

Drivers of the 6-week in-calf rate

3-week submission rate

686 cows had calving dates in the required range and 87% of these were submitted during the first 21 days of mating.

Non-return rate (1-24 days)

857 eligible inseminations were used in calculating the non-return rate.

Conception rate

A conception rate COULD NOT BE CALCULATED because insufficient pregnancy test results were available. Supply pregnancy test results to confirm the success or failure of at least 50 inseminations.

3) Key indicators to areas for improvement

Calving pattern of first calvers

166 cows with eligible calving dates were recorded as calving at less than 34 months of age. The calving pattern of first calvers was calculated from their records.

3-week submission rate of first calvers

162 first calvers had calving dates in the required range and 94% of these were submitted during the first 21 days of mating.

Calving pattern of whole herd

702 cows had calving dates that were eligible for this

Heat detection

241 cows at least 4 years old at calving had calved at least 8 weeks before planned start of mating and 93% of these were submitted during the first 21 days of mating.

Pre-mating heats

686 cows had calving dates in the required range and 546 of these had a pre-mating heat recorded.

Non-cycling cows

686 cows had calving dates in the required range and 53 of these were identified as being treated for non-cyding.

Performance after week 6

Early pregnancy test results are required to allow performance after the first six weeks of mating to be assessed.

Induced cows

No cows were identified as having Induced calvings. If you did induce cows, please ensure that they are all identified.

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