

Lincoln University Dairy Farm - Farm Walk notes

Tuesday 5th August 2014

LUDF – focus for 2014/15 Season: Nil-Infrastructure, low input, low N-loss, high profit.
Farm system comprises 3.5 cows/ha, 150kgN/ha, 300kgDM/cow imported supplement, plus winter most cows off farm. Target over 500kgMS/cow.

Critical issues for the short term

1. **Monitor and identify calving cows, tag and collect calves promptly.**
2. **Check all cow mobs for springers, closely observe cows for any signs of mastitis and metabolic conditions.**
3. **Achieve target grazing residuals and cow intakes while managing average pasture cover, shape of the wedge and maintaining pasture quality (especially in paddocks at the top of the wedge).**
4. **Hold to the Spring Rotation Plan to finish the first grazing round in late September.**
5. **Use back-fences on all herds whenever paddock grazing takes more than 36 hours.**
6. **Manage ground conditions to minimise damage to soil and pastures.**
7. **Ensure magnesium supplementation occurring**

Key Numbers

Ave Past Cover - 2686kgDM/ha	Past Growth Rate - 22kgDM/ha/day
Milk Production - n/a	No Cows Calved - 107

Herd Management

8. Early calving dry cows were brought back to the platform to graze one high pasture cover paddock last Thursday. They will graze this over 8 days then return to the neighbouring support block.
9. We have the later calving mob at a wintering block around the corner, dry and springing heifers are at the East block across the road.
10. Calved heifers are brought to the platform as they calve.
11. The farm now has two milking herds, the colostrums (cows in the first 4 days post calving) and those calved more than 4 days.
12. All cows are currently milked once a day. Colostrums will remain on OAD, while the main milking herd will move to twice a day when we start supplying milk this Friday.
13. All animals were injected with Selenium and B12 in late July as our Selenium levels were low according to the latest blood samples.

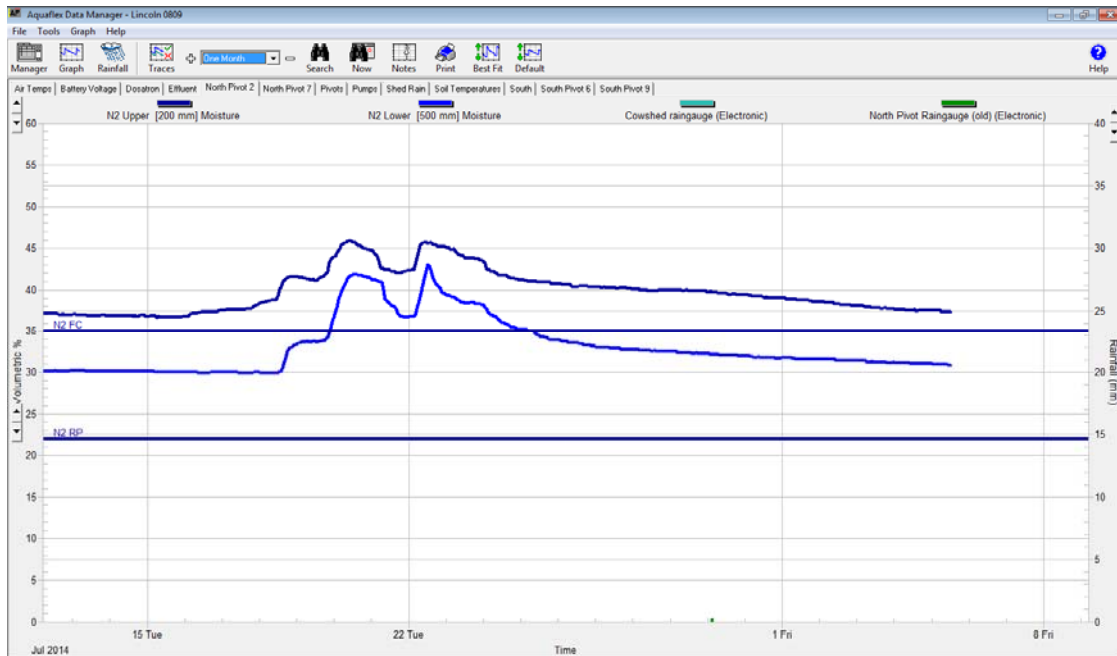
Growing Conditions

14. 9 am average soil temperature was 7.4 degrees (2.3 degrees warmer than last week). We've had several warm days with norwest conditions followed by two frosts.
15. The farm had 2.4 mm rain over the last week

Figure 1: Soil temperature history for the last 2 weeks



Figure 2: Soil Moisture history for the last month



As seen above soil moisture is now dropping below field capacity on the North Block, the lower end of the south block remains wetter than ideal.

Pasture Production and Management

16. The estimated average daily pasture growth rate for the last week has been 22 kg DM/ha/day. Current average pasture cover is 2686 KgDM/ha up slightly, from last week. This matches our desired APC at this point in calving.
17. No silage is being fed at this point in time, as available feed continues to meet demand from pasture alone.
18. No nitrogen has been applied yet. Soil temperatures South remain marginal to give good N-responses. In addition very few paddocks meet our N-application criteria for this time of the year (less than 2200kgDM/ha, soil temperatures above 6°C and rising).

Feeding Management

19. Below is our average pasture cover track, the budgeted track reflects our expectation of APC from the Spring Rotation Plan, based on extending the first round out till late September.

Figure 3: Average Pasture Cover

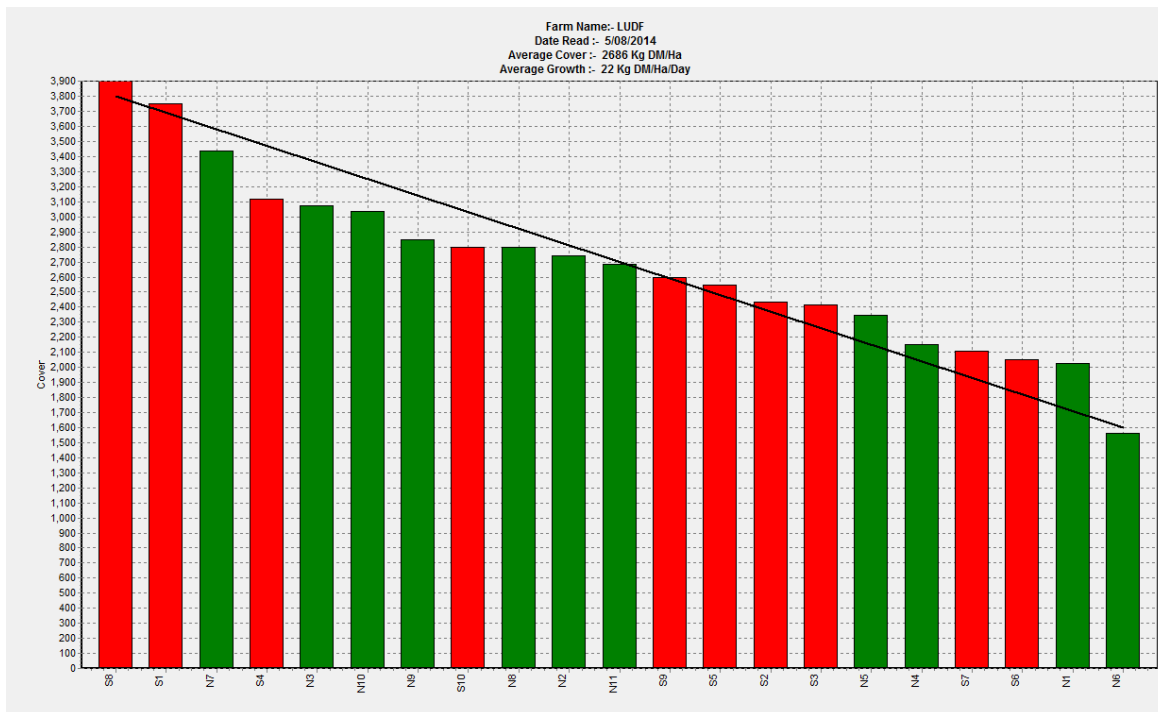
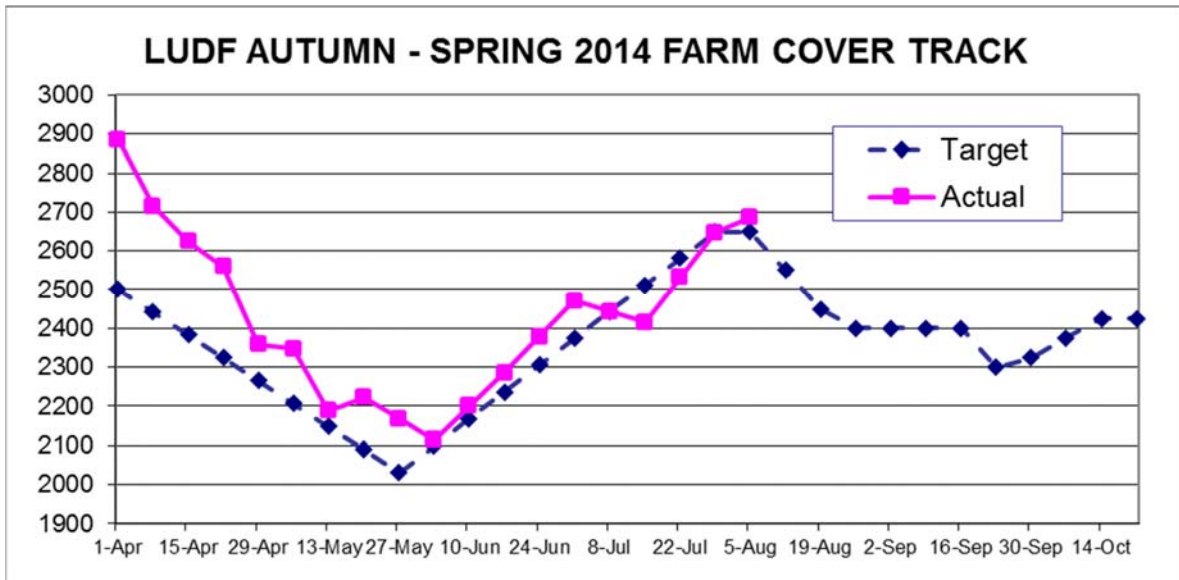


Figure 4: The current feed wedge is below. The demand line is taken from the Spring Rotation Planner which was calculated presuming pregrazing covers were 3800. Actual pregrazing pasture cover for the colostrums and milkers are 3950 kgDM/ha.

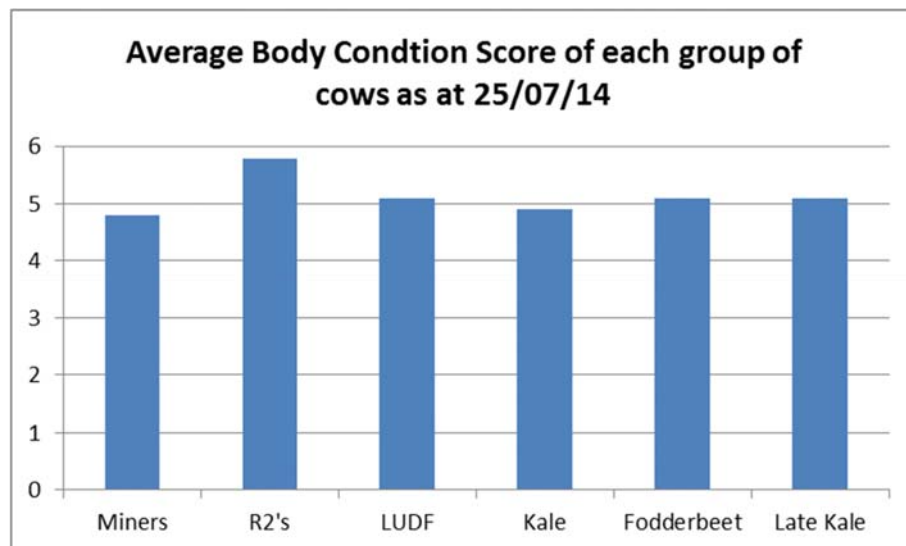
20. Feed quality results report DM% of 19-20% with ME over 12.6, and visually the high covers appear to be holding quality. There is little evidence of decay in the base. See the SIDDC website for the pasture quality details. <http://www.siddc.org.nz/lu-dairy-farm/pasture-quality/>
21. Apart from grazing of S2, we are trying to keep all dry cows off the milking platform to help carry enough cover through for the latter part of the first grazing rotation. The Spring Rotation Planner calculates this to be in last 10 days in September.
22. The R2's and cows on the neighbouring grazing land are being fed a diet of grass and silage, allocation: 14kgDM/cow offered. The springers in S2 are receiving 100% of their diet as pasture.

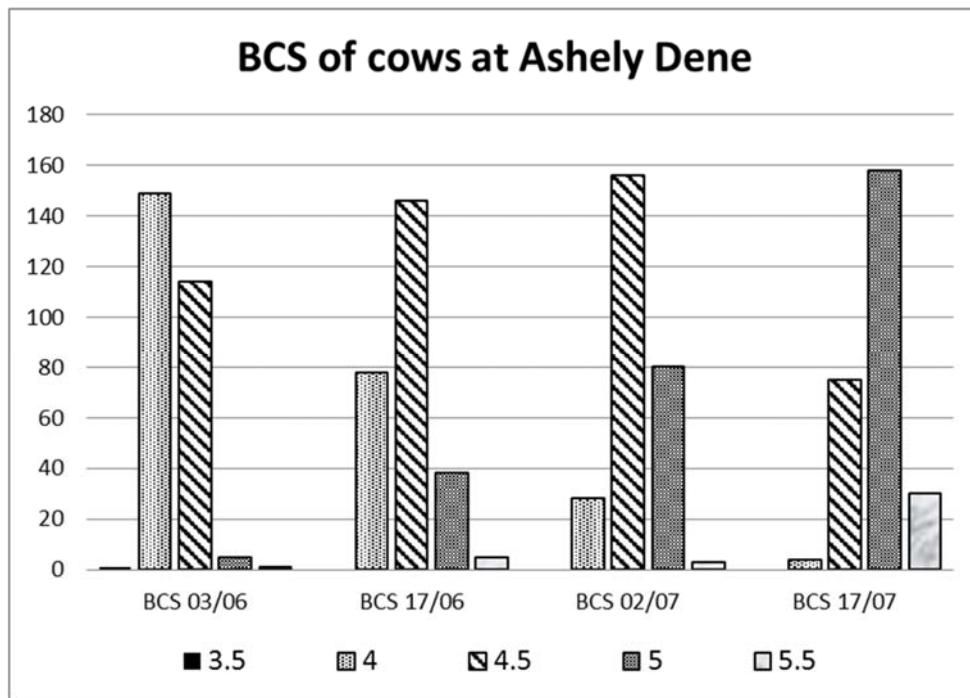
Young Stock

23. The yearlings have continued to grow well over the winter, growing 765g/day in June and 413g/day in July.
24. All calves are tubed when collected from the paddock. In wet weather calves are picked up throughout the day.
25. Bobby calves are fed colostrum until sold. Heifer calves are fed colostrum and penned into groups of 20, and normally moved out to paddocks after 10 days.

Cow Condition

26. The herd was body condition scored through late July. The average was 5.1 (including the heifers) with only 4 animals below BCS 4.5 and 61 at BCS 4.5. The rest are BCS 5 and above. Our heifers BCS is between 5.5 and 6 with only 3 animals at BCS 5. The target at calving is all MA cows at BCS 5 (or above) and all R2's at BCS 5.5 (or above).
27. **Figures 5 and 6:** Latest available BCS results.





b.

28. Data sheet

LUDF Weekly report	8-Jul-14	15-Jul-14	22-Jul-14	29-Jul-14	5-Aug-14
Farm grazing ha (available to milkers)	160	160	160	160	160
Dry Cows on farm / East blk /Jackies/other	118/4/458	118/4/458	6/106/123/335	0/232/330	160/60/265
Culls (Includes culls put down & empties)	0	0	0	0	7
Culls total to date	0	0	0	0	7
Deaths (Includes cows put down)	0	0	0	0	1
Deaths total to date	0	0	0	0	1
Calved Cows available (Peak Number 560)	1	1	10	28	107
Treatment / Sick mob total	0	0	0	0	4
Mastitis clinical treatment	0	0	0	0	4
Mastitis clinical YTD (tgt below 64 yr end)	0	0	0	0	4
Bulk milk SCC (tgt Avg below 150)					0
Lame new cases	0	0	0	0	0
Lame ytd	0	0	0	0	0
Lame days YTD (Tgt below 1000 yr end)	0	0	0	0	0
Other/Colostrum					0
Milking twice a day into vat					
Milking once a day into vat					
Small herd					
Main Herd					
MS/cow/day (Actual kg / Cows into vat only)					
MS/cow to date (total kgs / Peak Cows					
MS/ha/day (total kgs / ha used					
Herd Average Cond'n Score				5.10	
Monitor group LW kg WOW early MA calvers					
Soil Temp Avg Aquaflex	5.1	7.5		5.1	7.4
Growth Rate (kgDM/ha/day)		6		18	22

Plate meter height - ave half-cms		13.6		15.3	15.6
Ave Pasture Cover (x140 + 500)		2410		2647	2686
Surplus/[deficit] on feed wedge- tonnes		4.2		0	2
Pre Grazing cover (ave for week)	3328	3385		3700	3950
Post Grazing cover (ave for week)	1500	1500		1550	1650
Highest pregrazing cover	3328	3500		3700	3950
Area grazed / day (ave for week)	0.50	0.85		0.09	0.71
Grazing Interval	320	188		1882	224
Milkers Offered/grazed kg DM pasture					
Estimated intake pasture MJME					
Milkers offered kg DM Grass silage					
Silage MJME/cow offered					
Estimated intake Silage MJME					
Estimated total intake MJME					
Target total MJME Offered/eaten (includes 6% waste)					
Pasture ME (pre grazing sample)		12.5			12.6
Pasture % Protein		22.2			20.5
Pasture % DM - Concern below 16%		19.1			19.5
Pasture % NDF Concern < 33		34.8			36.2
Mowed pre or post grazing YTD					
Total area mowed YTD					
Supplements fed to date kg per cow (630 peak)					
Supplements Made Kg DM / ha cumulative					
Units N applied/ha and % of farm	0	0	0	0	0
Kgs N to Date (whole farm)	0	0	0	0	0
Rainfall (mm)	5	6	24.6	13.4	2.4
Aquaflex topsoil relative to fill point trget 60-80%	100	100	100	100	100

Farm walks occur every Tuesday morning. Farmers or their managers and staff are always welcome to walk with us. Please call to notify us of your intention and bring your plate meter and gumboots. Phone SIDDC – 03 423 0022.

Peter Hancox, Farm Manager