

Lincoln University Dairy Farm - Farm Walk notes

Tuesday 29th July 2014

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**

Herd Management

8. All our animals are off farm at the moment except for 30 heifers that have calved.
9. We have the later calving mob at a wintering block around the corner, the mid calvers, early calvers, heifers and springers at the East block across the road.
10. Calved heifers are brought to the platform as they calve.
11. All animals have been injected with Selenium and B12 as our Selenium levels were low according to the latest blood samples.

Growing Conditions

12. 9 am average soil temperature was 5.1 degrees (2.4 degrees cooler than 2 weeks ago). We've had several consecutive frosts over the past 2 weeks but the air temperature hasn't dramatically dropped.
13. The farm had 13.4 mm rain over the last week and 38 mm over the last two weeks.
14. **Figure 1:** Soil temperature history for the last 2 weeks

15. **Figure 2:** Soil Moisture history for the last 2 weeks

Pasture Production and Management

16. This weeks measured average pasture cover is 2647 KgDM/ha up 175 kg DM/ha, from two weeks ago. The estimated average daily pasture growth rate for the last two weeks has been 18 kg DM/ha.

Feeding Management

17. Below is our Winter Farm average pasture cover track, the budgeted track is how we have historically planned to run the farm. Based on this seasons desire to push the end of the first grazing round out to later September the current APC is advantageous.

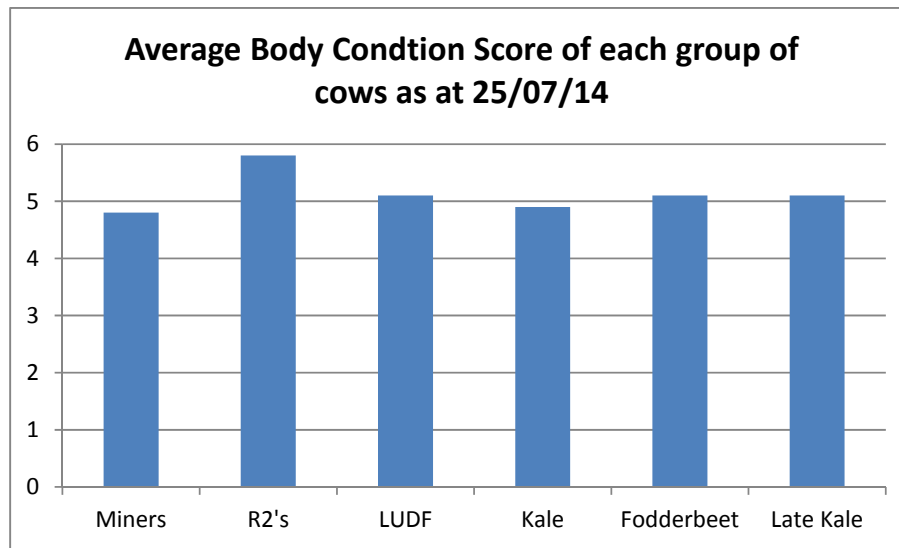
18. **Figure 4:** Feed wedge for the week as at the 29th July 2014. The demand line is calculated on the basis of having 30 heifers on farm and a pre-grazing cover of 3700 kg DM/ha. This shows the farm is on target.



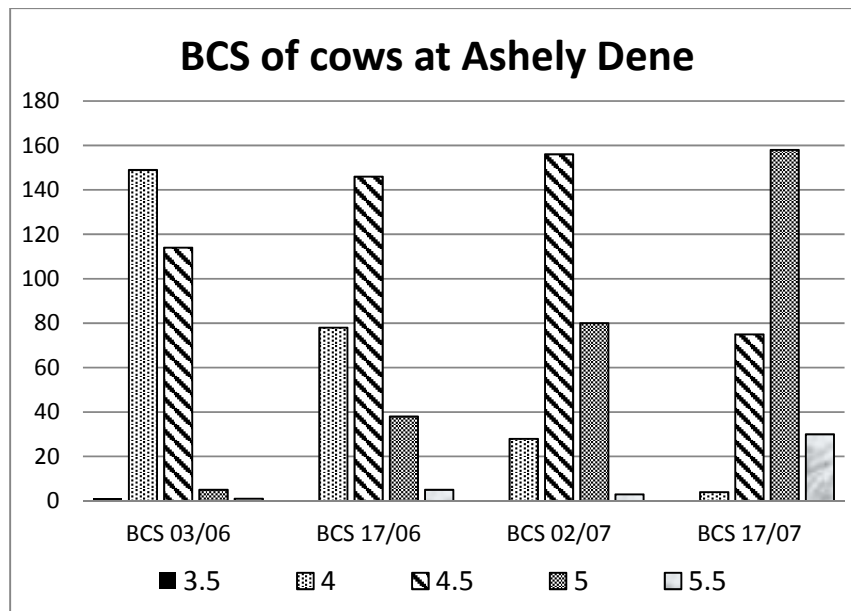
19. A predictive feed wedge for the next 7 days with growth rates of 20 or greater (likely given the weather forecast) allows paddock S2 to be grazed with the springers and APC to be held at approximately the current level. It would provide approximately 9 days feed for this group. This will occur if soil moisture levels continue to drop and will assist with managing pasture quality at the top of the wedge.
20. Apart from the possible 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.
21. The R2's and cows on the neighbouring grazing land are being fed a diet of grass and silage, allocation: 14kgDM/cow offered.

Herd Management

22. The herd was body condition scored over the past 2 weeks. 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). Those below target at present may well be at their target by the time they calve.
23. **Figures 5 and 6:** BCS results for the last fortnight.



a.



b.

24. Data sheet

LUDF Weekly report	1-Jul-14	8-Jul-14	15-Jul-14	22-Jul-14	29-Jul-14
Farm grazing ha (available to milkers)	160	160	160	160	160
Dry Cows on farm / East blk /Jackies/other	63/0/517	118/4/458	118/4/458	6/106/123/335	0/232/330
Culls (Includes culls put down & empties)	0	0	0	0	0
Culls total to date	0	0	0	0	0
Deaths (Includes cows put down)	0	0	0	0	0
Deaths total to date	0	0	0	0	0
Calved Cows available (Peak Number 560...)	0	1	1	10	28
Treatment / Sick mob total	0	0	0	0	0
Mastitis clinical treatment	0	0	0	0	0
Mastitis clinical YTD (tgt below 64 yr end)	0	0	0	0	0
Bulk milk SCC (tgt Avg below 150)					
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					
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 560					
MS/ha/day (total kgs / ha used					
Herd Average Cond'n Score	4.70				5.10
Monitor group LW kg WOW early MA calvers					
Soil Temp Avg Aquaflex	7.0	5.1	7.5		5.1
Growth Rate (kgDM/ha/day)	17		6		18
Plate meter height - ave half-cms	14.1		13.6		15.3
Ave Pasture Cover (x140 + 500)	2472		2410		2647
Surplus/[deficit] on feed wedge- tonnes	30		4.2		0
Pre Grazing cover (ave for week)	3650	3328	3385		3700
Post Grazing cover (ave for week)	1500	1500	1500		1550
Highest pregrazing cover	3650	3328	3500		3700
Area grazed / day (ave for week)	0.57	0.50	0.85		0.09
Grazing Interval	281	320	188		1882
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		
Pasture % Protein			22.2		
Pasture % DM - Concern below 16%			19.1		
Pasture % NDF Concern < 33			34.8		
Mowed pre or post grazing YTD					
Total area mowed YTD					
Supplements fed to date kg per cow (560 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)	1.2	5	6	24.6	13.4
Aquaflex topsoil relative to fill point target 60 - 80%	100	100	100	100	100

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Peter Hancox, Farm Manager

Lincoln University Dairy Farm - Farm Walk notes

Tuesday 15th July 2014

Critical issues for the short term

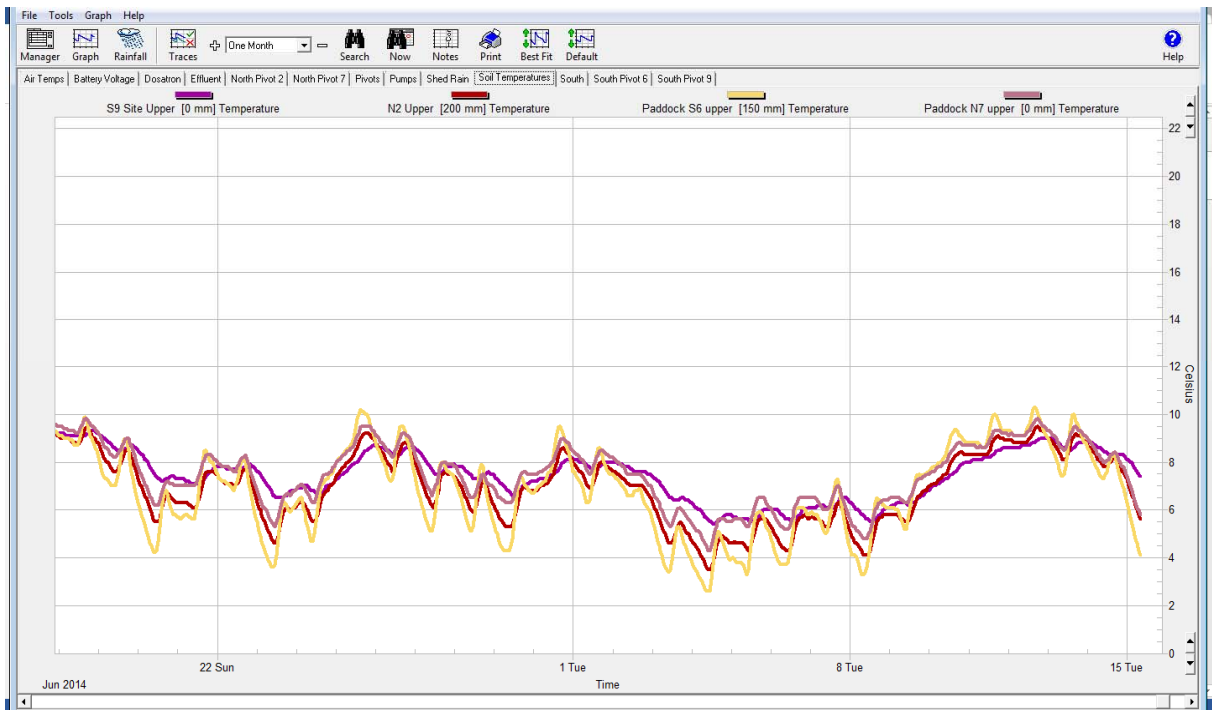
1. Achieving target grazing residuals and manage pasture cover to achieve desired target at calving.
2. Use dry cows to manage pasture cover and graze out paddock which need tidying up.
3. Use back-fences on all herds whenever paddock grazing takes more than 36 hours.
4. Manage ground conditions minimise damage to soil and pastures.
5. Monitor Cows on winter grazing to achieve targets at calving
6. Get programmed winter maintenance done.
7. Start magnesium supplementation
8. Set up calf pens for spring

Herd Management

1. We currently have 118 R2 heifers on farm. All cows will be returning from winter grazing to our East block run off (next door to the farm) next week. We will be removing later calving heifers off the platform this Thursday and only keeping the earliest calving heifers on the platform
2. All R2 heifers were teat sealed on the 30th June

Growing Conditions

3. 9 am average soil temperature was 7.5 degrees .5 degrees warmer than 2 weeks ago.
4. The farm had 6 mm rain over the last week and 11 mm over the last two weeks.
5. Soil temperature and soil moisture graphs follow showing soil temperature over the last 4 weeks. Very low temperatures two weeks ago with a week of frosts then warmer temperatures over the last week with less frosts and easterly air flow



Lincoln University Dairy Farm - Farm Walk notes

Tuesday 1st July 2014

Critical issues for the short term

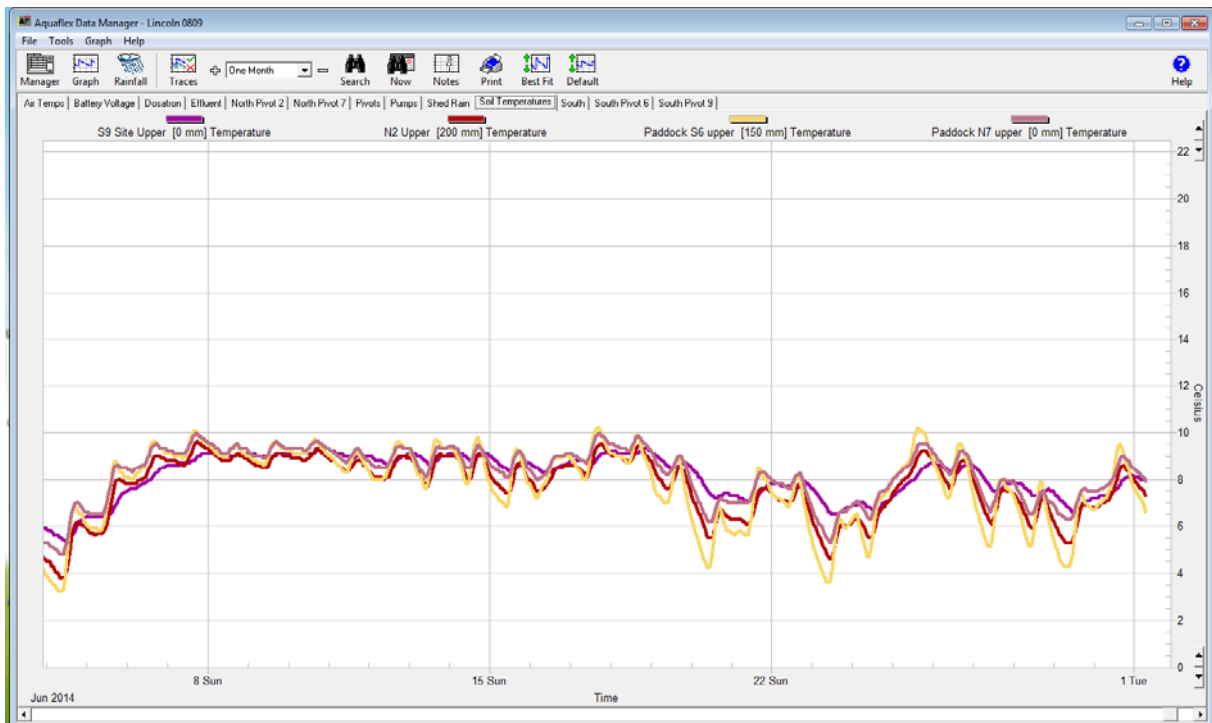
1. Achieving target grazing residuals and manage pasture cover to achieve desired target at calving.
2. Use dry cows to manage pasture cover and graze out paddocks which need tidying up.
3. Use back-fences on all herds whenever paddock grazing takes more than 36 hours.
4. Manage ground conditions minimise damage to soil and pastures.
5. Monitor Cows on winter grazing to achieve targets at calving
6. Get programmed winter maintenance done.

Herd Management

1. We currently have 63 cows on farm. These are our fattest cows and we have kept these on farm as we can on/off graze them if ground conditions become too wet.
2. All R2 heifers were teat sealed yesterday.

Growing Conditions

3. 9 am average soil temperature was 7 degrees 1.3 degrees cooler than 2 weeks ago.
4. The farm had 2.1mm rain over the last week.
5. Soil temperature and soil moisture graphs follow showing soil temperature over the last 4 weeks.



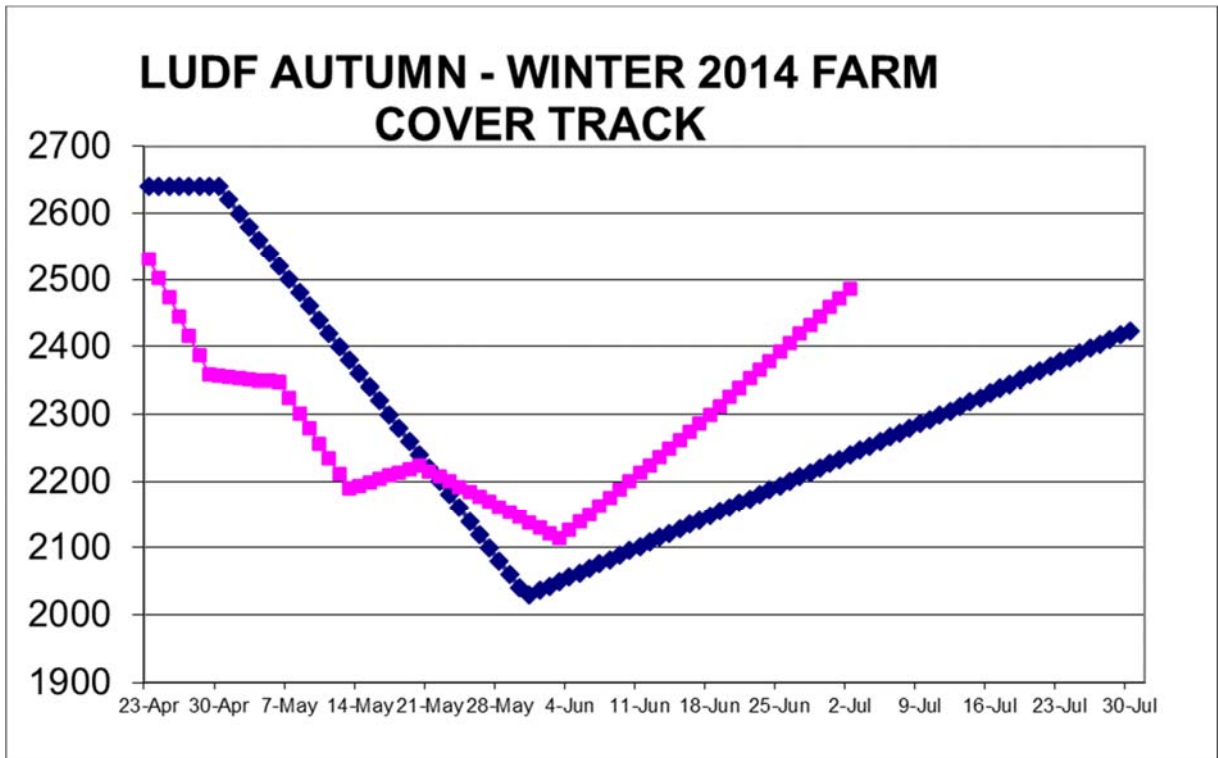


Pasture Production and Management

- This weeks measured average pasture cover is 2472kgDM/ha up 186 kg DM/ha, from two weeks ago. Our estimated average daily pasture growth rate for the last two weeks has been 17 kg DM/ha.

Feeding Management

- Below is our Autumn Winter Farm average pasture cover track, the budgeted track is how we would normally plan to run the farm.

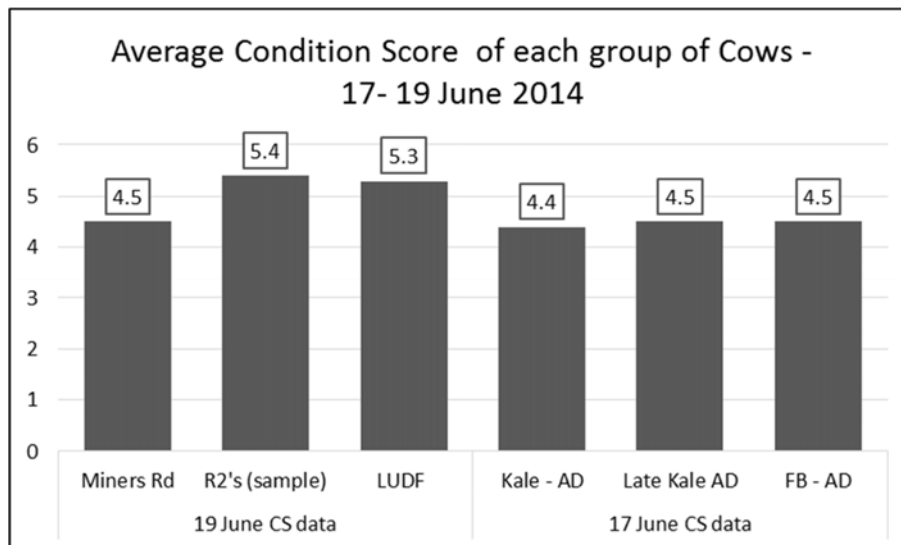


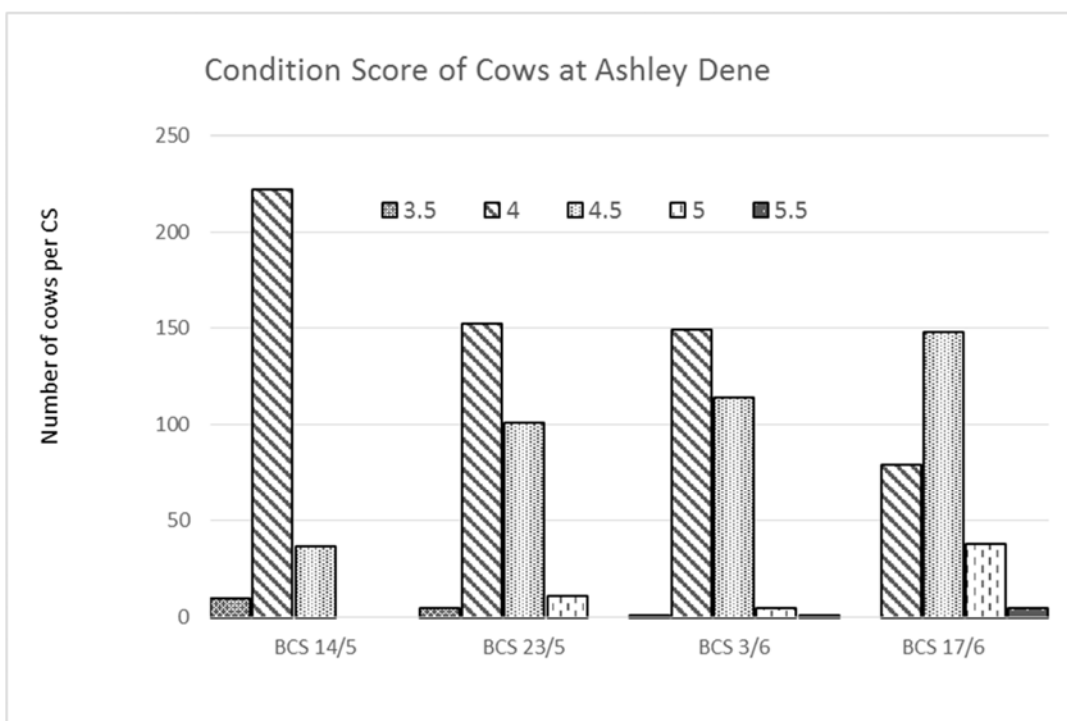
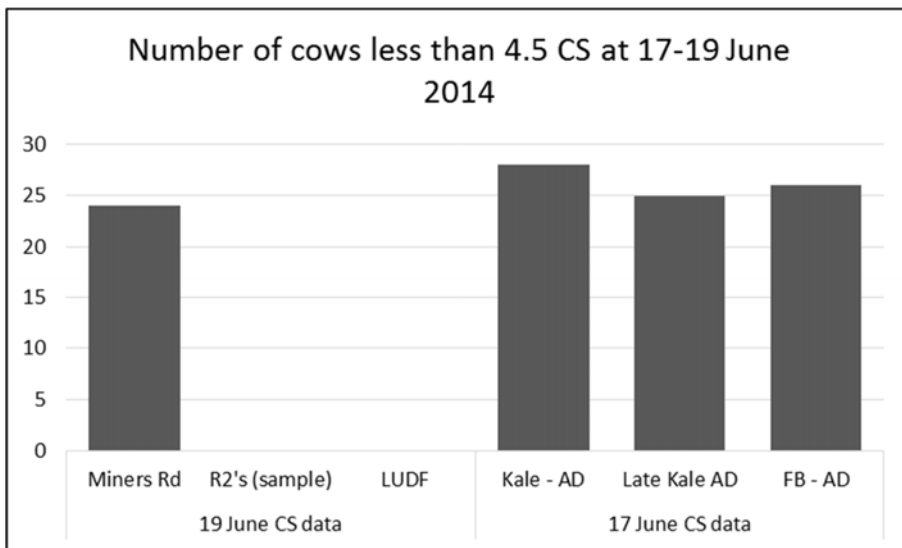
8. Below is the feed wedge for this week, this is done on the basis of having 63 cows on farm and APC target of 2227kg DM/ha. We currently have a 30 tonne surplus



Herd Management and Mating

9. The herd was body condition scored 10 days ago, the average was 4.7 and 17.6% were below BCS 4.5. We are confident that we will meet our required targets (every cow minimum 5 Cs at calving and first and second calvers 5.5 at calving). To achieve this we have put our lowest Cs early calving cows (127) on grass and silage 12Kg Dm of grass and 4Kg Dm of silage offered, our later calving and better condition score cows (270) have gone on crop 12 Kg Dm crop and 2Kg Dm oat balage this is part of the P21 research project. We will keep our fattest 63 cows on the milking platform over winter to help keep the shape of our feed wedge as we have the option of removing these if growth gets too low. Of the 580 cows condition scored, 103 were below 4.5 most of these will be at minimum 5 condition score by their calving date.





10. Data sheet

LUDF Weekly report	10-Jun-14	17-Jun-14	24-Jun-14	1-Jul-14
Farm grazing ha (available to milkers)	160	160	160	160
Dry Cows on farm / East blk /Jackies/other	68/0/0/517	63/0/0/517	63/0/517	63/0/517
Culls (Includes culls put down & empties)	0	0	0	0
Culls total to date	0	0	0	0
Deaths (Includes cows put down)	0	0	0	0
Deaths total to date	0	0	0	0
Calved Cows available (Peak Number 630...)	0	0	0	0
Treatment / Sick mob total	0	0	0	0
Mastitis clinical treatment	0	0	0	0
Mastitis clinical YTD (tgt below 64 yr end)	0	0	0	0
Bulk milk SCC (tgt Avg below 150)	0	0	0	0
Lame new cases	0	0	0	0
Lame ytd	0	0	0	0
Lame days YTD (Tgt below 1000 yr end)	0	0	0	0
Other/Colostrum	0	0	0	0

Milking twice a day into vat	0	0	0	0
Milking once a day into vat	0	0	0	0
Small herd	0	0	0	0
Main Herd	0	0	0	0
MS/cow/day (Actual kg / Cows into vat only)	0.00	0.00	0.00	0.00
MS/cow to date (total kgs / Peak Cows 630)	0	0	0	0
MS/ha/day (total kgs / ha used)	0.0	0.0	0.0	0.0
Herd Average Cond'n Score	0.00	0.00	0.00	4.70
Monitor group LW kg WOW 347 early MA calvers	0	0	0	0
Soil Temp Avg Aquaflex	0.0	8.3	6.7	7.0
Growth Rate (kgDM/ha/day)	0	27	0	17
Plate meter height - ave half-cms	0.0	12.8	0.0	14.1
Ave Pasture Cover (x140 + 500)	0	2286	0	2472
Surplus/[deficit] on feed wedge- tonnes	0	17.1	0	30
Pre Grazing cover (ave for week)	0	0	3600	3650
Post Grazing cover (ave for week)	0	0	1500	1500
Highest pregrazing cover	0	0	3600	3650
Area grazed / day (ave for week)	0.00	0.00	0.57	0.57
Grazing Interval	0	0	281	281
Milkers Offered/grazed kg DM pasture	0.0	0.0	0.0	0.0
Estimated intake pasture MJME	0	0	0	0
Milkers offered kg DM Grass silage	0	0	0	0
Silage MJME/cow offered	0	0	0	0
Estimated intake Silage MJME	0	0	0	0
Estimated total intake MJME	0	0	0	0
Target total MJME Offered/eaten (incl. 6% waste)	0	0	0	0
Pasture ME (pre grazing sample)	0.0	0.0	11.8	0.0
Pasture % Protein	0.0	0.0	23.0	0.0
Pasture % DM - Concern below 16%	0.0	0.0	13.1	0.0
Pasture % NDF Concern < 33	0.0	0.0	43.6	0.0
Mowed pre or post grazing YTD				
Total area mowed YTD				
Supplements fed to date kg per cow (630 peak)	0.0	0.0	0.0	0.0
Supplements Made Kg DM / ha cumulative	0	0	0	0
Units N applied/ha and % of farm	0	0	0	0
Kgs N to Date (whole farm)	0	0	0	0
Rainfall (mm)	4	34.8	5.2	1.2
Aquaflex topsoil relative to fill point target 60 - 80%	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.

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