

## Lincoln University Dairy Farm - Farm Walk notes

Tuesday 14<sup>th</sup> June 2016

**LUDF – focus for 2016/17 Season: Nil-Infrastructure, low input, low N-loss, maximise profit.**  
 Farm system comprises 3.5 cows/ha (peak milked), Target up to 170kgN/ha, 300kgDM/cow imported supplement, plus winter most cows off farm. FWE of less than \$1 million and Target production of over 500kgMS/cow (>100% liveweight in milk production).

### Critical issues for the short term

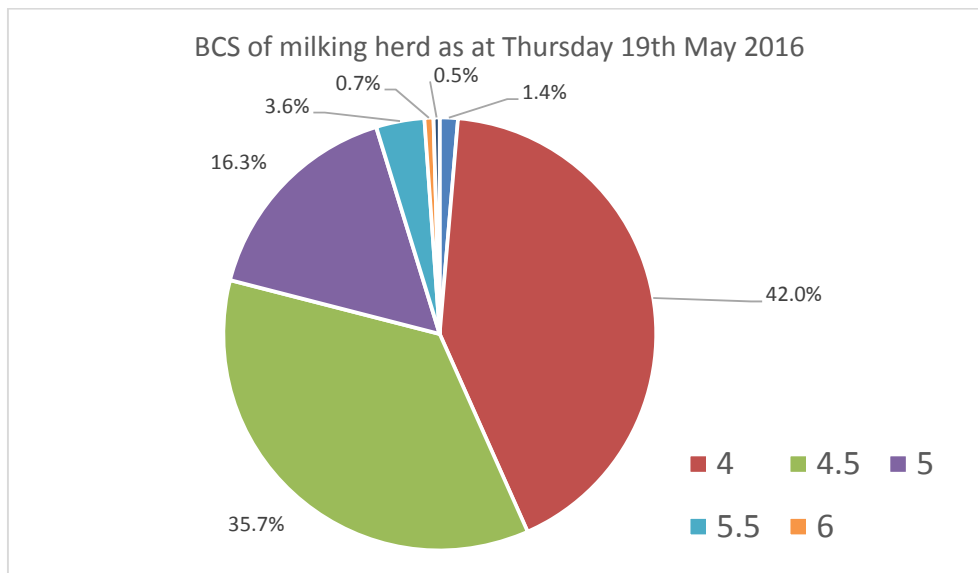
1. **Monitor cows on wintering for health issues.**
2. **Monitor average pasture cover and shape of the wedge on the milking platform to meet planned cover at end of July (start of calving).**
3. **Watch cow BCS to ensure all cows meet BCS targets at calving (min 5 for MA cows and 5.5 for R3yr's)**

### Key Numbers - week ending Tuesday 14<sup>th</sup> June 2016

Ave Past Cover	2123 kgDM/ha	Past Growth Rate	12 kgDM/ha/day
Round length	640 days (for 160 ha)	Ave Supplement used	0
No Cows on farm	15 (all dry) (lames)	Ave Soil Temp (week)	8.7 degrees

### Herd Management

4. 77 late calving cows left for Hororata on Thursday 26<sup>th</sup> May.
5. 295 early and mid-calving cows left for wintering on 30<sup>th</sup> May.
6. There are currently 15 dry cows on the platform (lames)
7. 155 R2 heifers are grazing at Hororata with the 40 bought in heifers.
8. The most recent whole herd BCS was Thursday 19<sup>th</sup> May before cows left the milking platform for winter grazing.



9. Animal health management of the milking herd before dry-off and wintering:
  - a. The milking herd was vaccinated against Leptospira 3 weeks ago.

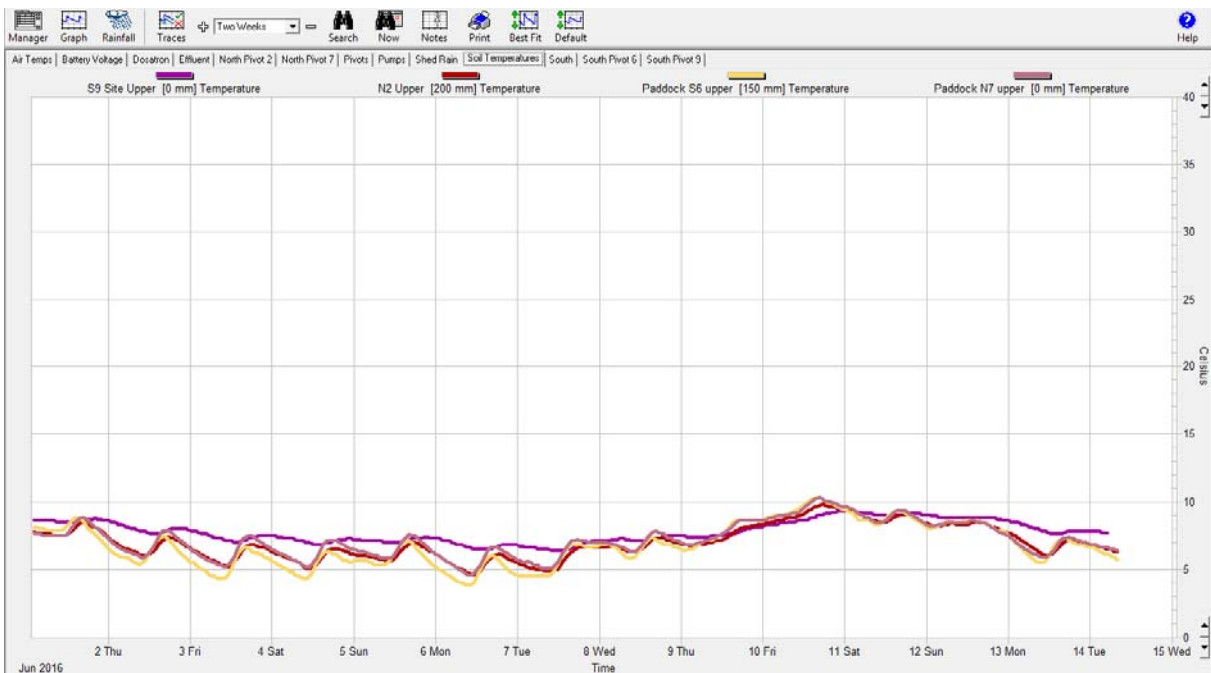
- b. All cows got a B12 and selenium boost injection before going to wintering blocks.
10. Replacement heifers management:
- a. All R2 heifers will be teat sealed, weighed and given a short acting B-12 plus selenium jab
  - b. All 2015 born heifer replacements (total 155) are away grazing. They will be moved to Hororata on Thursday they will be weighed and receive a short acting B-12 plus selenium jab

**Growing Conditions**

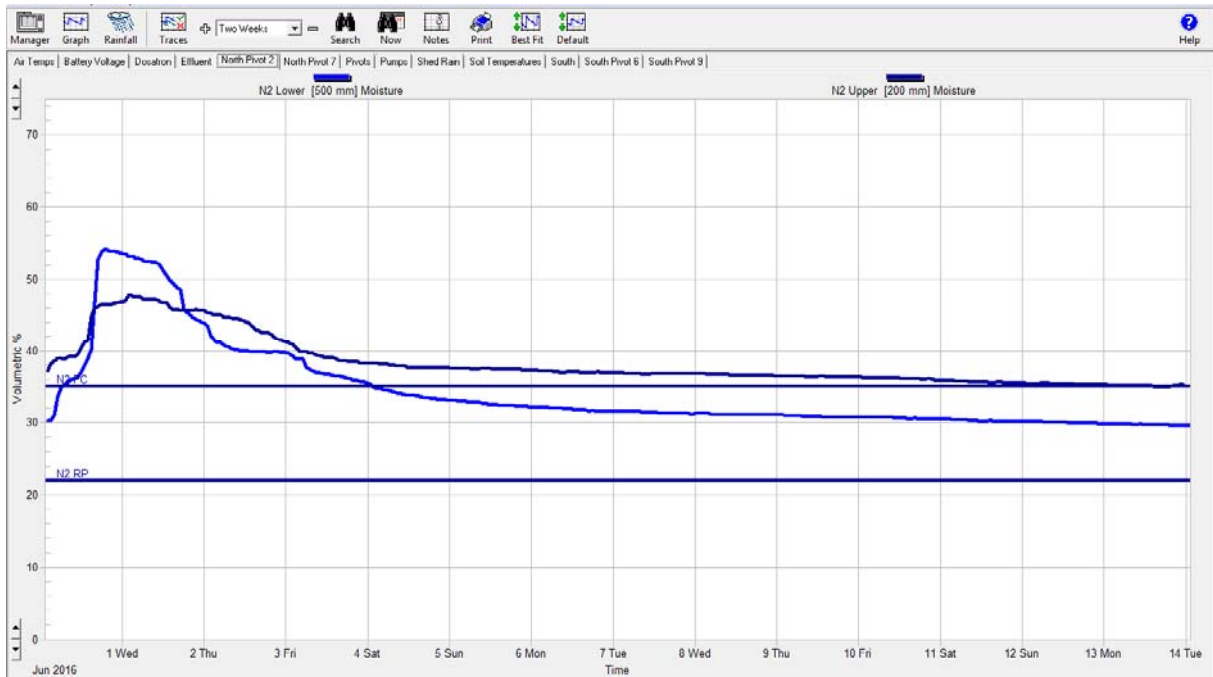
11. The average 9 am soil temperature for the week increased from last week, reaching 8.7°C, up 3°C from last week and remains 2 degrees warmer than at the same time last season.
12. The farm received 3.8 mm of rain through the week. Conditions underfoot remain remarkably firm despite this recent rain.

**13. Figure 1: Soil temperature history for the last 2 weeks**

14.



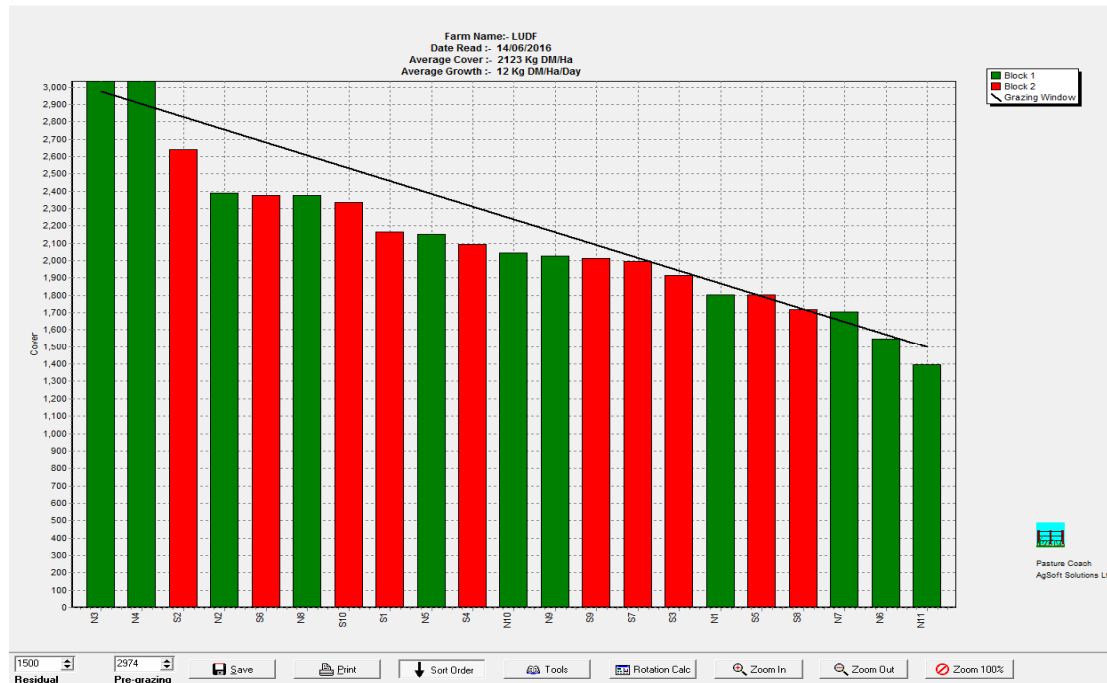
**Figure 2:** Soil moisture history for the last 2 weeks (Paddock N2).



### Pasture and Feed Management

15. Fertility patches remain obvious in a number of paddocks including those not necessarily at the top of the wedge.

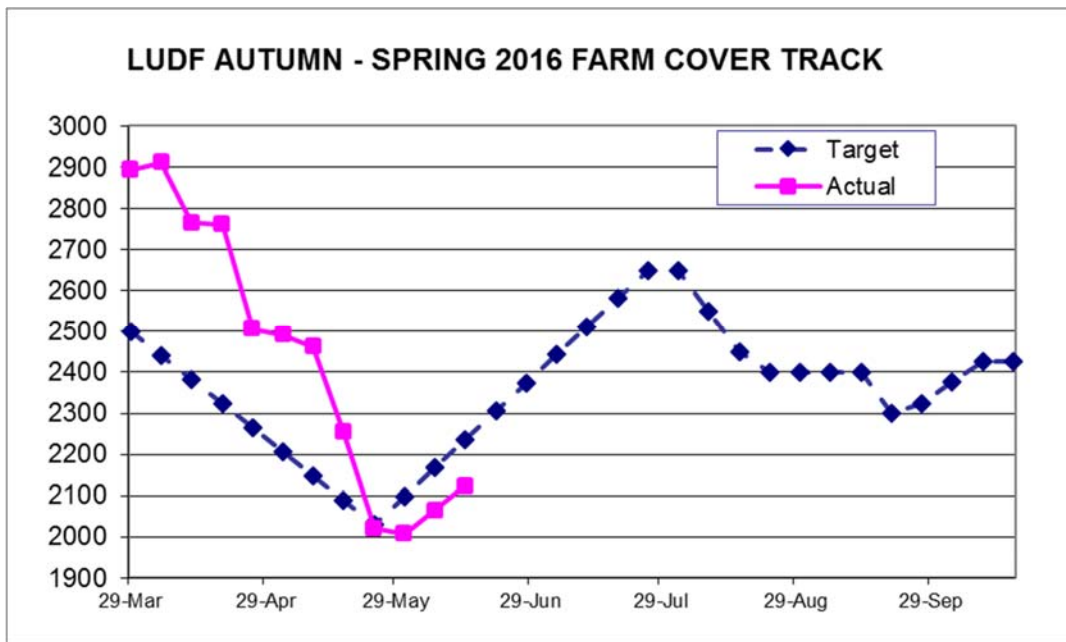
**Figure 3: This week's feed wedge**



16. Based on the full farm area of 160 ha in the grazing round, and with only 15 cows on the platform, our daily demand is only 1.4kgDM/ha/day.

17. Our target remains to accumulate pasture cover over the next 42 days to reach target average pasture cover at calving. We are aiming for a minimum APC of 2600 kgDM/ha by planned start of calving, to allow us to effectively set up our spring rotation planner. An average growth rate of 10kgDM/ha/day over the next 42 days will be required for us to achieve our target of 2600kgDM/ha at PSC.

18. Below is our autumn/winter pasture cover tracker.



**Feeding Management for the coming month:**

19. For the coming month our aims are to:

- i. Continue to monitor average pasture cover over the coming weeks, particular after the frosty weather forecast from the end of this week. Note that farm walks will be fortnightly from this week onwards.
- ii. Monitor udder health in newly dried off cows.

LUDF Weekly report	10-May-16	17-May-16	24-May-16	31-May-16	14-Jun-16
Farm grazing ha (available to milkers)	160	160	160	160	160
Dry Cows on farm / East blk /Jackies/other	40/0/0/0	40/0/0/0	405/0/0/0	67/0/0/373	15/0/52/372
Culls (Includes culls put down & empties)	36	0	0	5	0
Culls total to date	118	118	118	123	0
Deaths (Includes cows put down)	0	1	0	0	0
Deaths total to date	12	13	13	13	0
Calved Cows available (Peak Number 560)	406	405	405	0	0
Treatment / Sick mob total	1	0	0	0	0
Mastitis clinical treatment	1	0	0	0	0
Mastitis clinical YTD (tgt below 64 yr end)	95	95	95	95	0
Bulk milk SCC (tgt Avg below 150)	178	169	197	0	0
Lame new cases	3	0	0	0	0
Lame ytd	179	179	179	179	0
Lame days YTD (Tgt below 1000 yr end)	3588	3612	3612	3612	0
Other/Colostrum	0	0	0	0	0
Milking twice a day into vat	391	396	405	0	0
Milking once a day into vat	14	9	0	0	0
Small herd	0	0	0	0	0
Main Herd	391	396	405	0	0
MS/cow/day (Actual kg / Cows into vat only)	1.42	1.34	1.23	0.00	0.00
MS/cow to date (total kgs / Peak Cows	510	516	522	522	0
MS/ha/day (total kgs / ha used)	5.31	3.39	3.12	0.00	0.0
Herd Average Cond'n Score	0.00	0.00	4.40	0.00	0.00
Monitor group LW kg WOW early MA calvers	0	0	0	0	0
Soil Temp Avg Aquaflex	12.3	11.6	9.1	8.7	8.7
Growth Rate (kgDM/ha/day)	49	24	13	22	12

Plate meter height - ave half-cms	14.0	12.5	10.9	10.8	11.6
Ave Pasture Cover (x140 + 500)	2462	2256	2020	2007	2123
Surplus/[deficit] on feed wedge- tonnes	28.3	0	[9.9]	[8.1]	0
Pre Grazing cover (ave for week)	3158	3163	2931	2850	2720
Post Grazing cover (ave for week)	1600	1600	1500	1500	1500
Highest pregrazing cover	3226	3236	2992	2850	2720
Area grazed / day (ave for week)	4.97	5.63	5.50	1.18	0.25
Grazing Interval	32	28	29	136	640
Milkers Offered/grazed kg DM pasture	17	17	17	0.0	0.0
Estimated intake pasture MJME				0	0
Milkers offered kg DM Grass silage	0	0	0	0	0
Silage MJME/cow offered				0	0
Estimated intake Silage MJME				0	0
Estimated total intake MJME	210	210		0	0
Target MJME Offered/eaten (includes 6% waste)				0	0
Pasture ME (pre grazing sample)		12.0		0.0	0.0
Pasture % Protein		24.1		0.0	0.0
Pasture % DM - Concern below 16%		14.6		0.0	0.0
Pasture % NDF Concern < 33		42.3		0.0	0.0
Mowed pre or post grazing YTD	236.5	236.5	236.5	236.5	
Total area mowed YTD	312.3	312.3	312.3	312.3	
Supplements fed to date kg per cow (560 peak)	409.2	409.2	409.2	409.2	0.0
Supplements Made Kg DM / ha cumulative	964.35	964.35	964.35	964.35	0
Units N applied/ha and % of farm	0	0	0	0	0
Kgs N to Date (whole farm)	179	179	179	179	0
Rainfall (mm)	0	8.2	38.2	37	3.8
Aquaflex topsoil rel. to fill point target 60 - 80%	50-70	50-70	60-90	90-100	90-100

Upcoming farm walks: 28<sup>th</sup> June, continuing fortnightly until 1<sup>st</sup> August 2016, always at 9am. 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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Peter Hancox, Farm Manager, Natalia Benquet, Charlotte Westwood.

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3. Watch cow BCS to ensure all cows meet BCS targets at calving (min 5 for MA cows and 5.5 for R2's and R3yr's)

### Key Numbers - week ending Tuesday 28<sup>th</sup> June 2016

Ave Past Cover	2232 kgDM/ha	Past Growth Rate	18 kgDM/ha/day
Round length	0 (for 160 ha)	Ave Supplement used	0
No Cows on farm	1 ( early slip )	Ave Soil Temp (week)	8.8 degrees

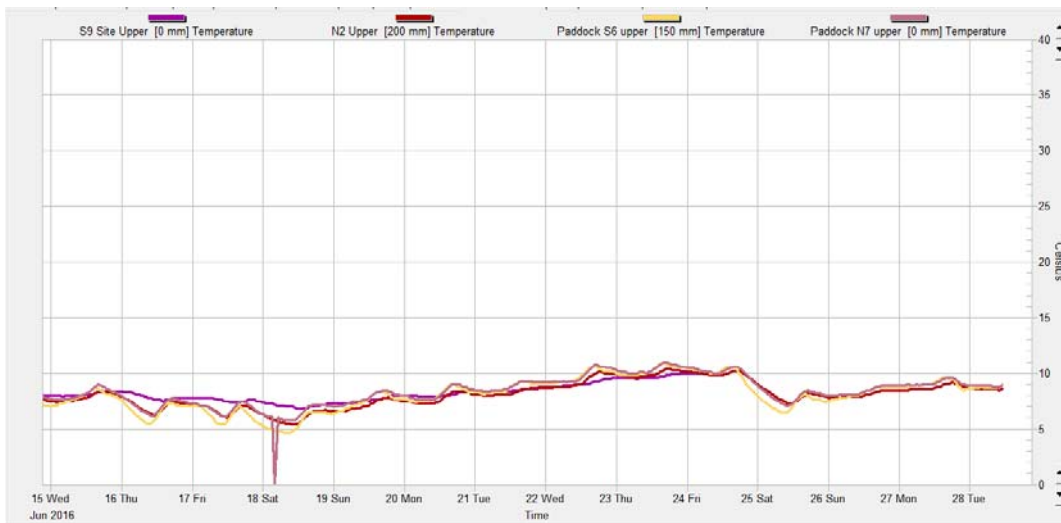
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5. 295 early and mid-calving cows left for wintering on 30<sup>th</sup> May.
6. 15 dry cows (lames) are at the East Block
7. 142 R2 heifers are grazing at Hororata with the 40 bought in heifers.
8. Animal health management of the milking herd before dry-off and wintering:
  - a. The milking herd was vaccinated against Leptospira 4 weeks ago.
  - b. All cows got a B12 and selenium boost injection before going to wintering blocks.
9. Replacement heifers management:
  - a. All R2 heifers were teat sealed on the 20<sup>th</sup> June, weighed and given a short acting B-12 plus selenium jab
  - b. All 2015 born heifer replacements (total 155) are away grazing. They are now grazing in Hororata. They were weighed and received a short acting B-12 plus selenium jab

### Growing Conditions

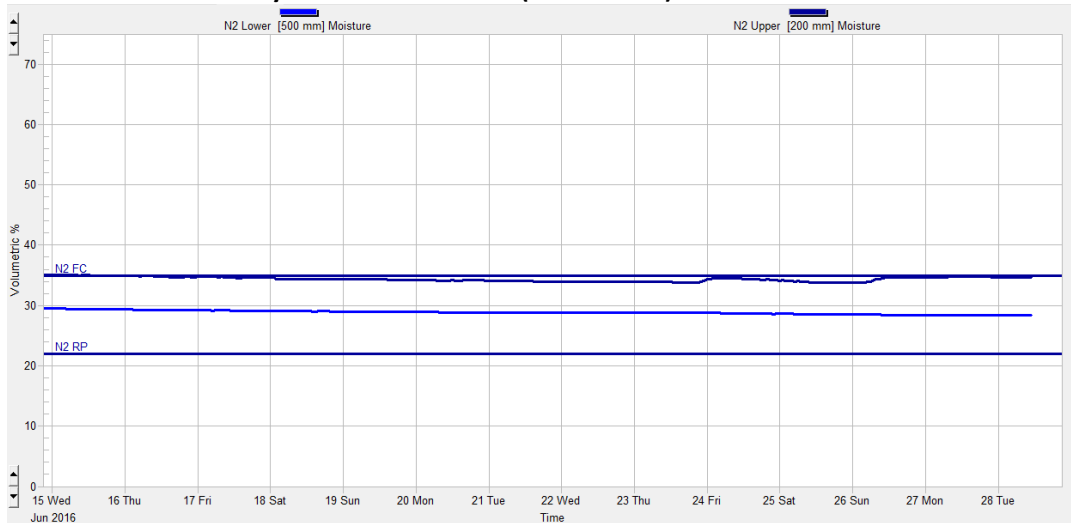
10. The average 9 am soil temperature for the week increased from last week, reaching 8.8°C, up 0.1°C from last week and remains 5.2 degrees warmer than at the same time last season.

### Figure 1: Soil temperature history for the last 2 weeks



11. The farm received 11.4 mm of rain through the week. The Aquaflex show that we are close or at field capacity. In general, conditions underfoot remain firm though there are some decidedly wet patches (mainly in the South Block).

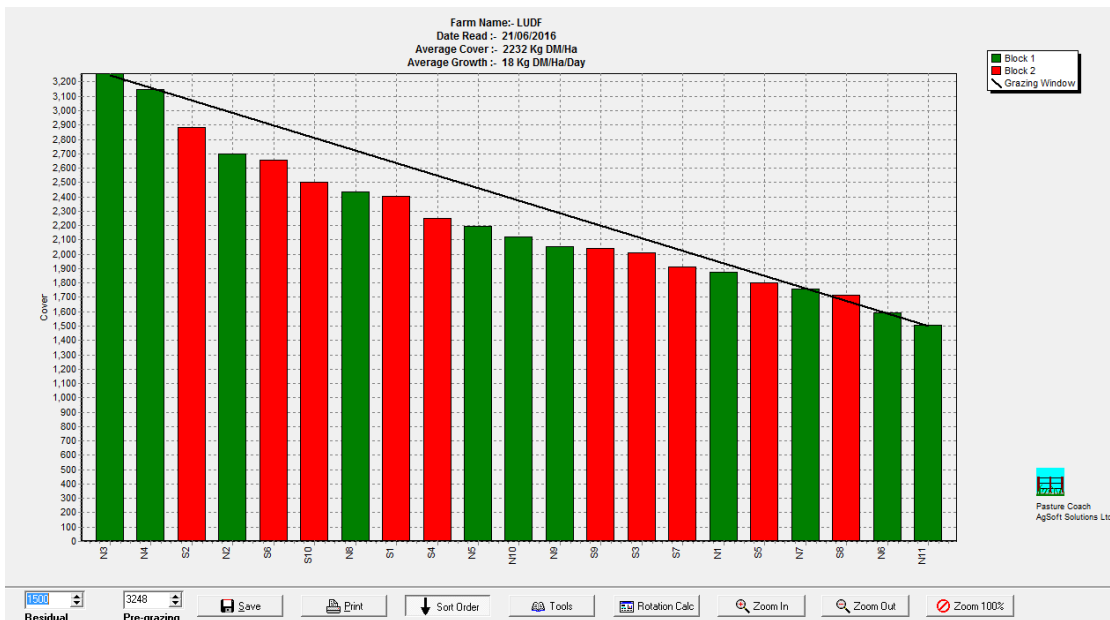
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**Pasture and Feed Management**

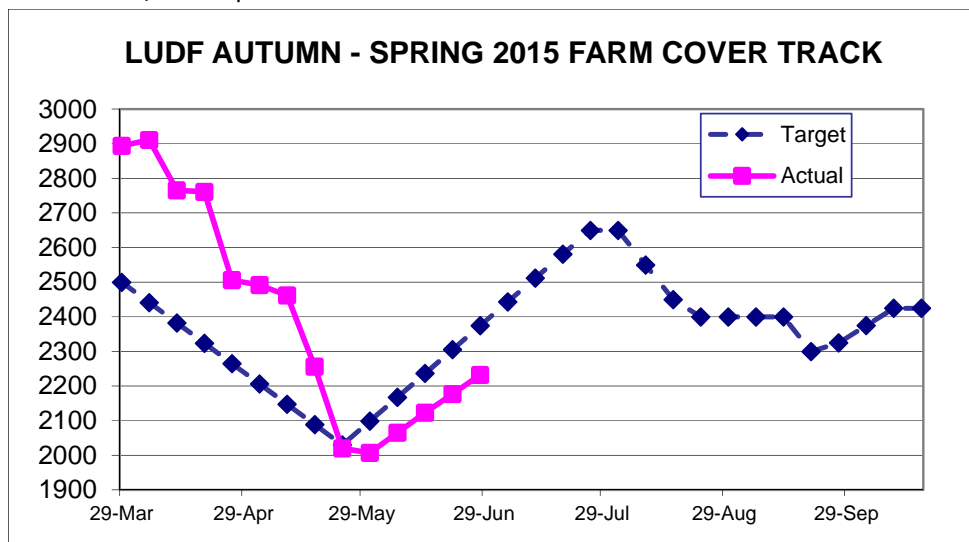
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**Figure 3: This week's feed wedge**



13. Based on the full farm area of 160 ha in the grazing round, and with only 1 cow on the platform, there is virtually no demand on the farm at this stage.

14. Below is our autumn/winter pasture cover tracker.



15. At this stage we are about 142 kgDM/ha below target.

16. Our target remains to accumulate pasture cover over the next 30 days to reach target average pasture cover at calving. We are aiming for a minimum APC of 2600 kgDM/ha by planned start of calving, to allow us to effectively set up our spring rotation planner. An average growth rate of 12kgDM/ha/day over the next 30 days will be required for us to achieve our target of 2600kgDM/ha at PSC.

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Note that farm walks will be fortnightly till August.

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Deaths (Includes cows put down)	1	0	0	0	0
Deaths total to date	13	13	13	0	0
Calved Cows available (Peak Number 560)	405	405	0	0	1
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)	95	95	95	0	0
Bulk milk SCC (tgt Avg below 150)	169	197	0	0	0
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Milkers offered kg DM Grass silage	0	0	0	0	0
Silage MJME/cow offered			0	0	0
Estimated intake Silage MJME			0	0	0
Estimated total intake MJME	210		0	0	0
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