

Lincoln University Dairy Farm - Farm Walk notes

Tuesday 14 July 2015

LUDF – focus for 2015/16 Season: Nil-Infrastructure, low input, low N-loss, high profit.
Farm system comprises 3.5 cows/ha (peak milked), 150kgN/ha, 300kgDM/cow imported supplement, plus winter most cows off farm. FWE of less than \$1.13million and Target production of 500kgMS/cow.

Critical issues for the short term

1. Monitor cows on winter pasture and silage to achieve required condition score at calving
2. Monitor average pasture cover on the milking platform
3. Observing cows for signs of mastitis

Key Numbers - week ending Tuesday 14 July 2015

Ave Past Cover	1993KgDM/ha	Past Growth Rate	-2 kgDM/ha/day
Round length	615 days	Ave Supplement used	0 kgDM/cow/day
No Cows on farm	0	Ave Soil Temp (week)	4.0 degrees

CAUTION: *The pasture walk this week has been done by a different operator. This means that there will be an operator difference in the average pasture cover results of the pasture walk.*

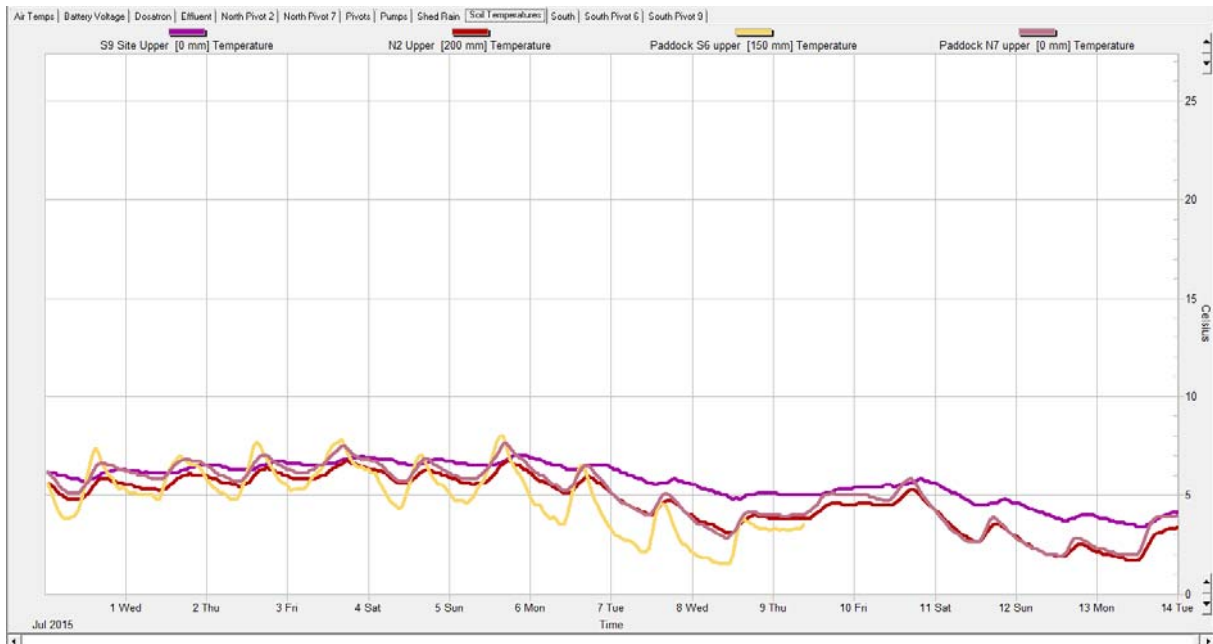
Herd Management

4. There is currently no stock on the farm. All cows left the farm on the 4th of July.
5. 122 of our light early calving cows went to winter grazing on Saturday 30th May. They are being offered 16 KgDM per cow made up of 14 kgDM grass and 2kgDM of silage. Another 225 cows went to winter grazing on the 3rd of June and are being offered 14 Kg DM made up of 12 kgDM of grass and 2kgDM of silage. These will be split into 2 mobs on calving date giving us the option of leaving one mob out grazing into August if required.
6. The balance of the MA cows (80) were on the platform until 18th June when they were moved next door to the runoff (due to limited winter growth on the milking platform)
7. BCS done at the end of May recorded an average BCS of 4.55, increasing 0.14 of a condition score from 2 weeks before. 328 cows (72.8%) were either 4 or 4.5 BCS, giving a very narrow range. Of the remainder, 4 were below BCS 4 and 78 were BCS 5 or greater.

Growing Conditions

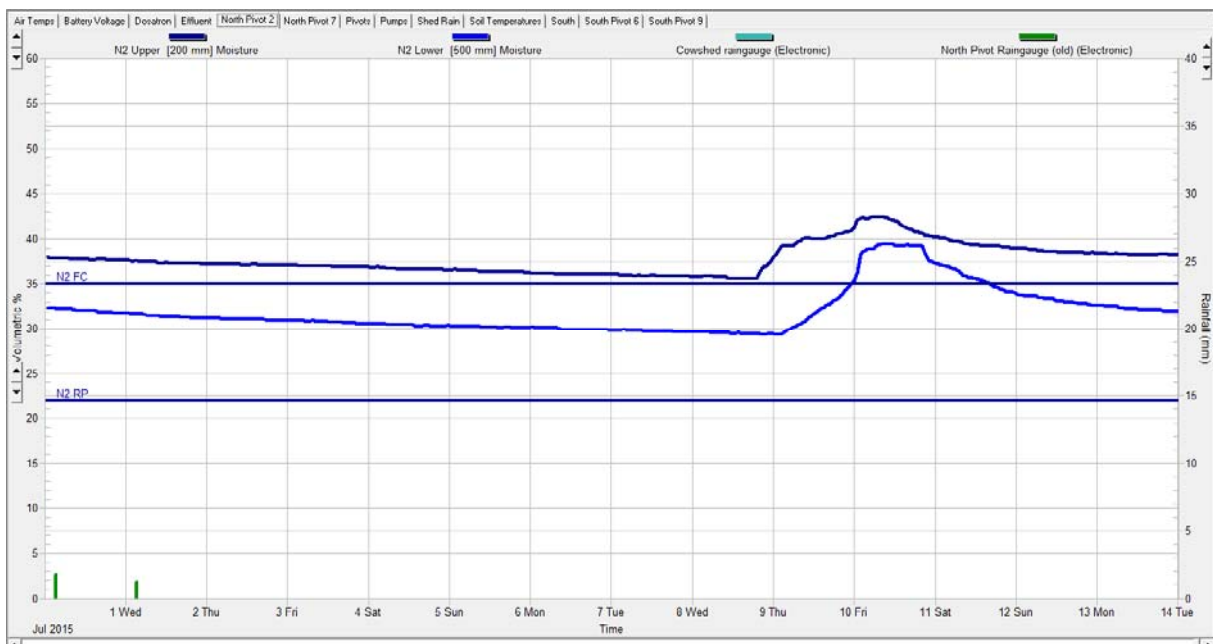
8. 9 am average soil temperature for the week was 4.0 degrees (0.4 degrees higher than 2 weeks earlier).

Figure 1: Soil temperature history for the last 2 weeks



9. We have had 28.8 ml rain total over the last 2 weeks.

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



Pasture Management

10. There has been no grazing done on the milking platform in the past fortnight.
11. Our demand line this week is not calculated based on current demand but according to the target average pasture cover tracker for winter. This targeted an APC of 2517kgDM/ha at the 30th of June. Using this APC and target residual of 1550kgDM/ha allowed the pregraze target to be calculated as follows. Pregraze cover = (APC minus residual) x 2 + residual or $(2517 - 1550) \times 2 + 1550 = 3484$ kgDM/ha. This provides a better understanding of where the farm is in terms of cover compared to where we had budgeted to be.

Figure 3: This week's feed wedge:

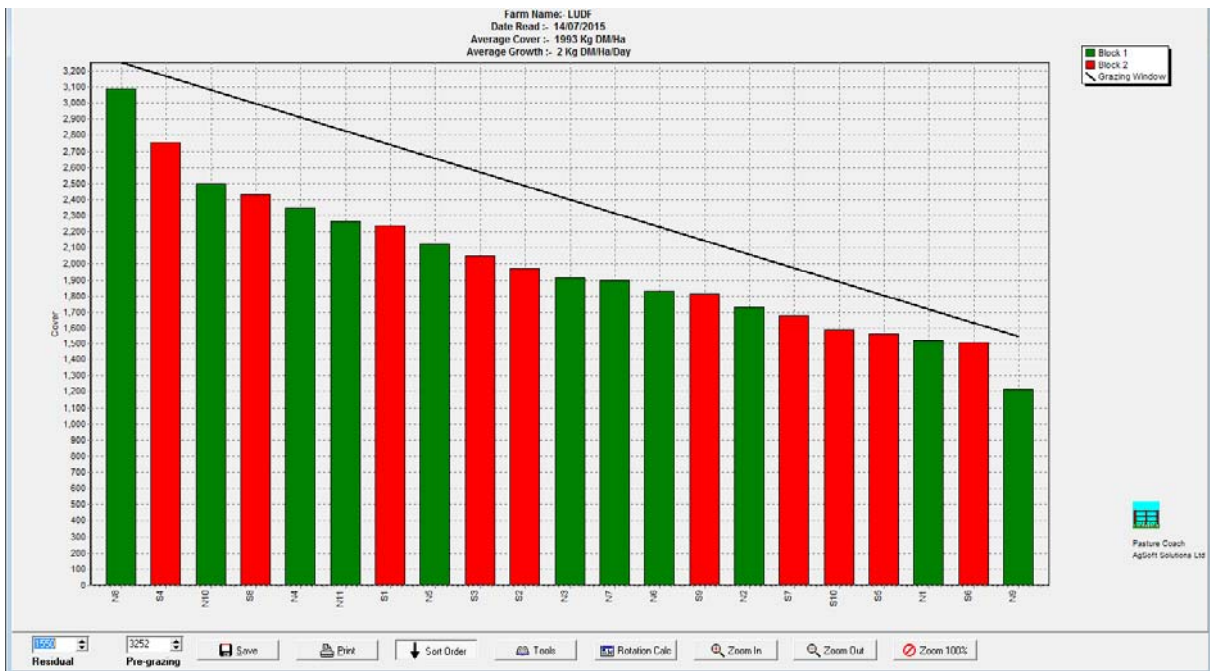
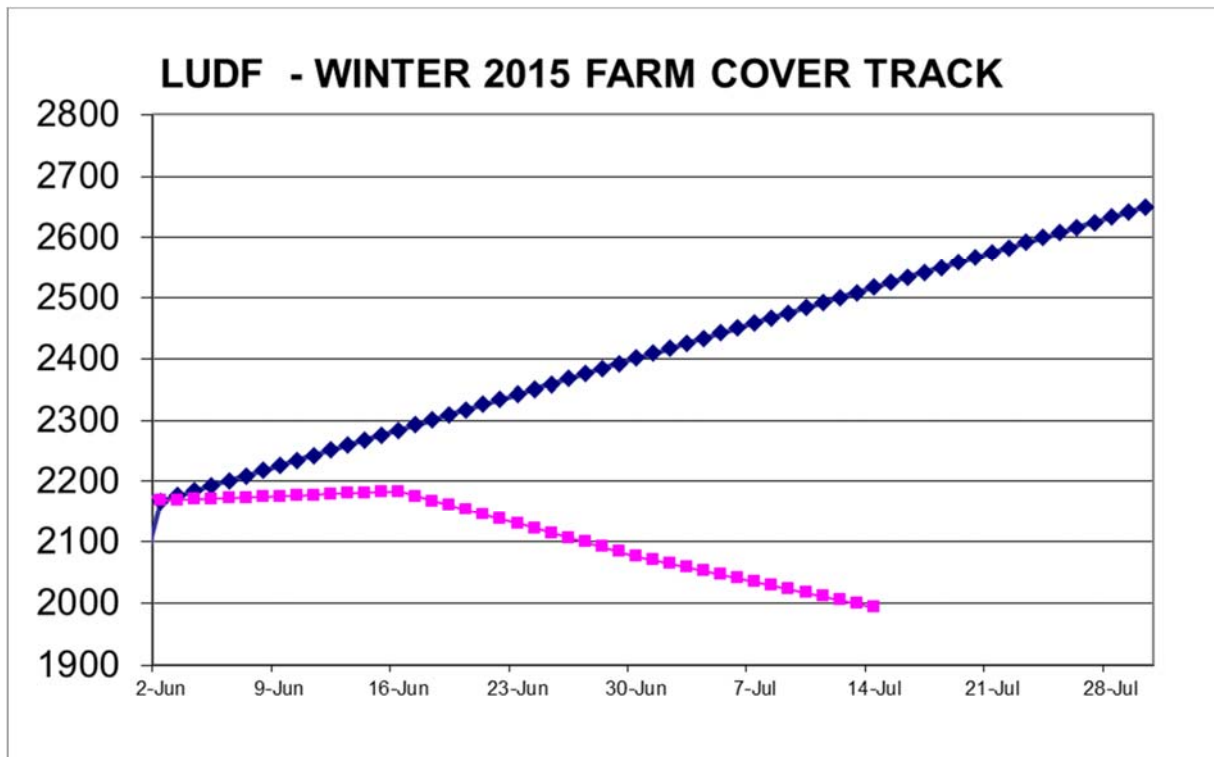


Figure 4: Autumn – Winter Target APC:



Feeding Management for the coming week

12. *The current pasture walk results come from a different operator doing the pasture walk, so there may be operator influenced variance in these average pasture cover results.*

13. Estimated pasture growth over the last 2 weeks, based on the pasture cover as plated is -2 kgDM/ha/day, There has only been 5 paddocks that have had positive growth over the last 2 weeks the other 15 paddocks apparently have lost cover.
14. On observation, the farm seems to have anywhere between 100-150 kgDM/ha more than what the plate meter has measured. This could be due to the operator difference this week.
15. There is no cow demand currently on farm with all stock off, and, taking the winter cover tracker above into account, we need to accumulate 38.6 KgDM /ha/day to allow APC to lift from current 1993 kgDM/ha to the target of 2650kgDM/ha by 30th July (17 days).
16. The feed wedge estimates a feed deficit of about 63.5 tonnes over 160 eff ha. To reach the target APC at calving, we therefore have to plan how we can most effectively fill this potential feed deficit through a combination of ways to potentially grow more pasture, whilst reducing demand for pasture, where possible.
17. Key decisions made so far:
 - a. We will follow the spring rotation planner as we did the last calving.
 - b. We will keep an eye on soil temperatures to ensure Nitrogen and Gibberellins are used as per best practice as soon as growing conditions are suitable to optimise pasture growth rate responses to either or both of these strategies.
 - c. Cows will be returning to the platform as they calve (springers and dry cows will be grazed else where to reduce demand on the milking platform)
18. Given the above, the management for the next week will be:
 - a. Keep all stock away from the platform until they calve (heifers are returning home tomorrow but will be grazed on the East Block). Heifers will be tagged on Thursday and will receive a injection of a short acting selenium product.
 - b. Build several different Spring Rotation Planners with different APC at the PSC to build a strategy around the best use of supplement during this first part of lactation.
 - c. Pasture walks will be done on a weekly basis starting from next week, Tuesday 21st July 2015.

Data sheet

LUDF Weekly report	9-Jun-15	16-Jun-15	23-Jun-15	30-Jun-15	14-Jul-15
Farm grazing ha (available to milkers)	160	160	160	160	160
Dry Cows on farm / East blk /Jackies/other	104/0/0/474	104/0/0/474	24/0/80/474	24/0/80/474	0/9/95/474
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	0	0	0	0
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)	0	0	0	0	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	0	0	0	0
Milking twice a day into vat	0	0	0	0	0
Milking once a day into vat	0	0	0	0	0
Small herd	0	0	0	0	0
Main Herd	0	0	0	0	0
MS/cow/day (Actual kg / Cows into vat only)	0.00	0.00	0.00	0.00	0.00
MS/cow to date (total kgs / Peak Cows	0	0	0	0	0
MS/ha/day (total kgs / ha used)	0.0	0.0	0.0	0.0	0.00
Herd Average Cond'n Score	0.00	0.00	0.00	0.00	0.00
Monitor group LW kg WOW early MA calvers	0	0	0	0	0
Soil Temp Avg Aquaflex	6.8	6.4	5.0	3.6	4.0
Growth Rate (kgDM/ha/day)	0	14	0	1	-2
Plate meter height - ave half-cms	0.0	12.0	0.0	11.3	10.7
Ave Pasture Cover (x140 + 500)	0	2183	0	2076	1993
Surplus/[deficit] on feed wedge- tonnes	0	[14.7]	0	[50.5]	0
Pre Grazing cover (ave for week)	2900	3000	3020	3050	0
Post Grazing cover (ave for week)	1500	1500	1500	1500	0
Highest pregrazing cover	2900	3000	3020	3050	0
Area grazed / day (ave for week)	1.14	1.06	0.09	0.26	0.00
Grazing Interval	140	151	1778	615	0
Milkers Offered/grazed kg DM pasture	0.0	0.0	0.0	0.0	0.0
Estimated intake pasture MJME	0	0	0	0	0
Milkers offered kg DM Grass silage	0	0	0	0	0
Silage MJME/cow offered	0	0	0	0	0
Estimated intake Silage MJME	0	0	0	0	0
Estimated total intake MJME	0	0	0	0	0
Target MJME Offered/eaten (includes 6% waste)	0	0	0	0	0
Pasture ME (pre grazing sample)	0.0	0.0	0.0	0.0	0.0
Pasture % Protein	0.0	0.0	0.0	0.0	0.0
Pasture % DM - Concern below 16%	0.0	0.0	0.0	0.0	0.0
Pasture % NDF Concern < 33	0.0	0.0	0.0	0.0	0.0
Mowed pre or post grazing YTD	0	0			
Total area mowed YTD	0	0			
Supplements fed to date kg per cow (560 peak)	0.0	0.0	0.0	0.0	0.0
Supplements Made Kg DM / ha cumulative	0	0	0	0	0
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)	21	8.9	39.8	9.4	29
Aquaflex topsoil rel. to fill point target 60 - 80%	60-80	60-80	100-100	90-100	0

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, Natalia Benquet, Charlotte Westwood.