

Lincoln University Dairy Farm - Farm Walk notes

Tuesday 18th March 2014

Critical issues for the short term

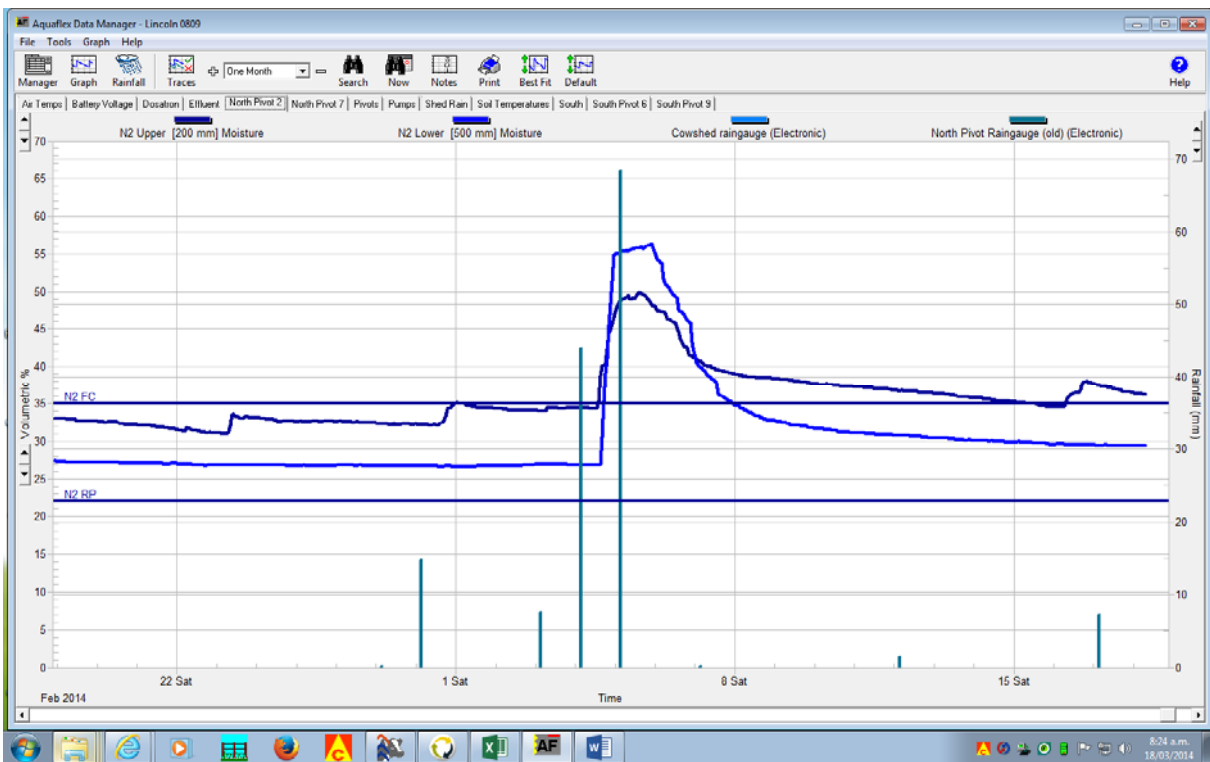
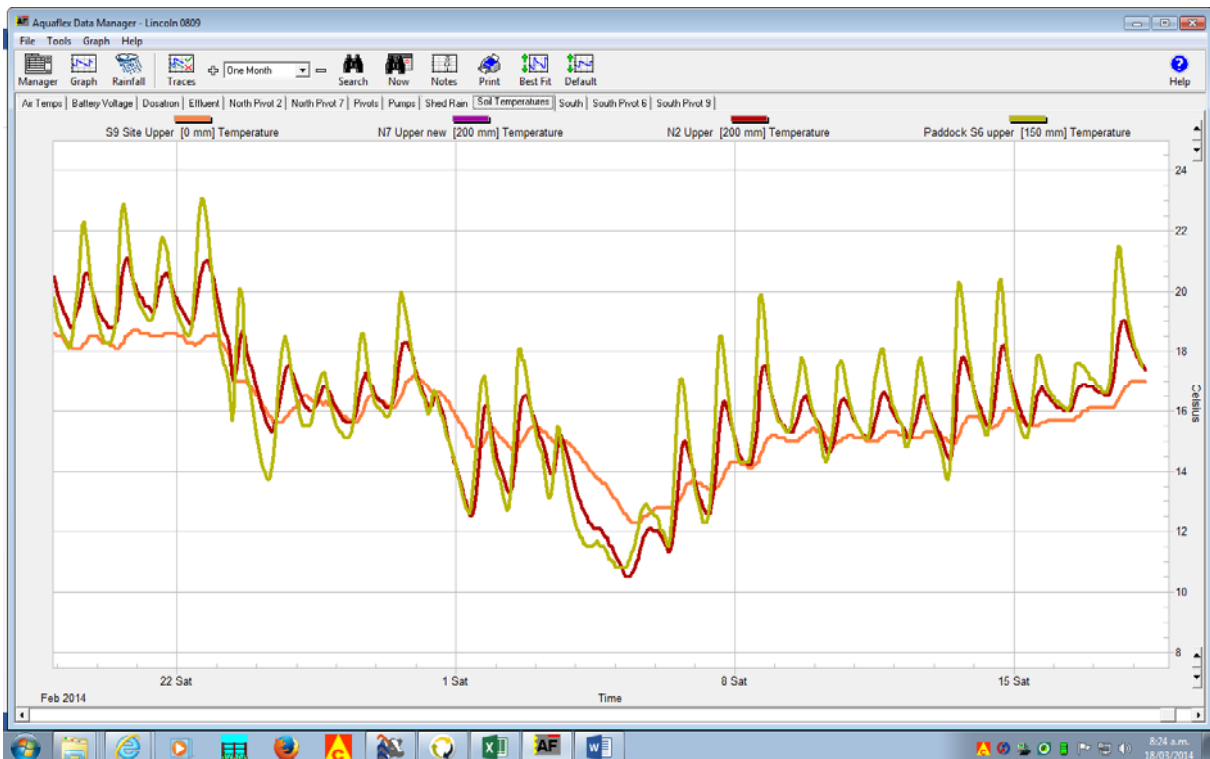
1. **Manage feed supply and pasture quality on the platform and respond quickly to changing growth rates.**
2. **Keeping all cows especially early calving light condition cows well fed to achieve required cow condition at calving.**
3. **Achieving target grazing residuals.**
4. **Getting autumn cow condition scoring done to make decisions on dry-off dates based on individual cow BCS and calving date.**

Herd Management

1. There are now 297 cows in the main herd and 234 in the small herd and 4 lame cows. This gives a total of 531 cows milking into the vat this morning. There are 4 treatment cows.
2. We have made some significant changes over the last 2 weeks to enable the milking platform to stay within its historical Nitrogen load this season and to comply with the intent of the (ECAN) Land and Water Regional Plan.
3. We have so far dried off 74 MT's and 9 culls. We have also put the small herd (234 earlier calving light BCS cows) onto OAD to ensure that they achieve their CS target at drying off and will achieve their CS targets at calving. Over the next week we will dry off a further 15 lower producing cows.
4. Feeding the remaining cows 18kgDM/cow/day requires a growth rate of 60kg DM/ha/day; the stocking rate will now be 3.3 cows/ha. The demand line in the feed wedge below is calculated on this basis. In essence LUDF is choosing to balance feed supply and demand by reducing demand, rather than increasing supply through importing more silage (with the subsequent additional N brought onto the platform). The whole herd has gained 3kg live weight in the past week. The monitor group of 347 early MA cows have gained 2kg, and the younger cows [2011 born] have also gained 2kg live weight. Note: the make up of these groups has changed over the week as cows were dried off.
5. We have had 2 new cases of mastitis and 4 new lameness cases this week.
6. Average bulk milk SCC was 180.
7. Average daily milk solids production per cow (all cows milked into the vat) is 1.53kgMS/cow, 0.04 kg/cow/day less than last week. Daily production per hectare was 5.08 kg MS/ha (vs 5.54kgMS/ha last week).

Growing Conditions

- 9 am average soil temperature was 16 degrees 2.5 degree warmer than last week.
8. The farm had 8.2 mm rain over the week.
 9. We have had no irrigation this week.
 10. Soil temperature and soil moisture graphs follow showing soil temperature over the last 4 weeks and impact of the rain.

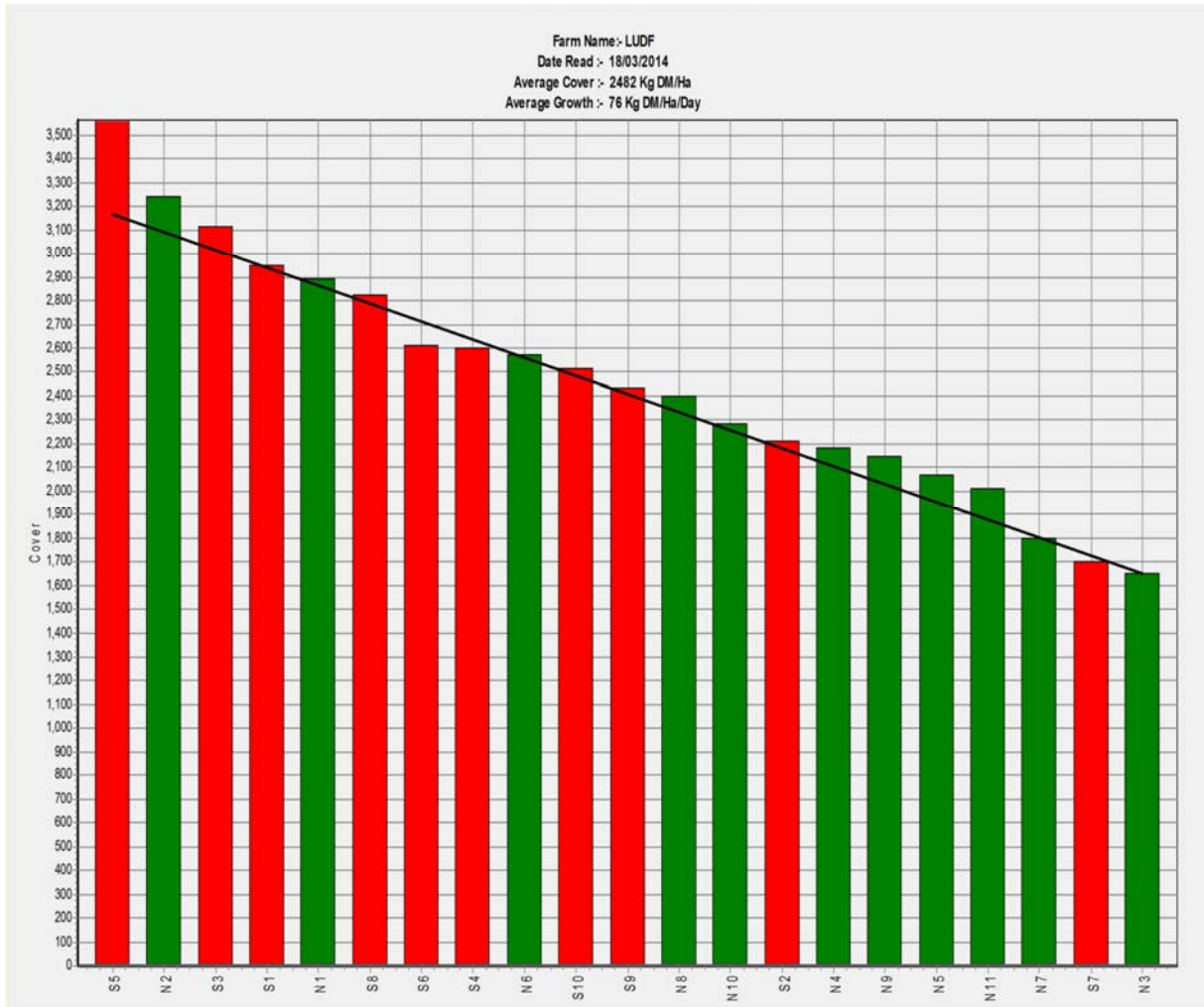


Pasture Production and Management

11. This weeks measured average pasture cover is 2482 kgDM/ha up 48kg DM/ha, from last week. Our estimated average daily pasture growth rate for the last week has been 76 kg DM/ha.
12. This week we have a predicted surplus of 9 T DM. The round length has increased by 2 days over the week to 23 days. No silage has been fed this week. With what is looking like a cooler than average autumn setting in we will look to push the round out and hold it above 24 days this week.
13. We have applied nitrogen [urea] to 37 ha of recently grazed pastures at 25kg N/ha.

Feeding Management

14. We have fed no silage this week.
15. 7.83 Ha has been pre mowed this week .This was our latest new grass paddock and this was mown to control weeds.
16. This week's wedge is printed below



Herd Management and Mating

17. The herd was body condition scored 10 days ago, average was 4.3 and 10% were below BCS 4.0 these are not as good as we would like. We had expected the average BCS to have started to trend upwards. We have already put low BCS, early calving cows in the small herd to assist with their body condition and will continue to monitor cows as ensure consistency of feeding towards BCS targets later in the season. We note that we have more low BCS cows so will be monitoring and acting on feeding thin cows intensively.
18. Data sheet

LUDF Weekly report	25-Feb-14	4-Mar-14	11-Mar-14	18-Mar-14
Farm grazing ha (available to milkers)	160	160	160	160
Dry Cows on farm / East blk /Jackies/other	0/0/0	0/0/0	0/0/0	0/0/0
Culls (Includes culls put down & empties)	0	0	67	17
Culls total to date	24	24	91	108
Deaths (Includes cows put down)	0	0	0	1

Deaths total to date	4	4	4	5
Calved Cows available (Peak Number 630...)	622	622	555	537
Treatment / Sick mob total	1	1	2	4
Mastitis clinical treatment	1	1	2	2
Mastitis clinical YTD (tgt below 64 yr end)	61	62	64	66
Bulk milk SCC (tgt Avg below 150)	152	162	226	180
Lame new cases	1	4	5	4
Lame ytd	99	103	108	112
Lame days YTD (Tgt below 1000 yr end)	573	601	636	664
Other/Colostrum	0/0	0/0	0/0	0/0
Milking twice a day into vat	621	621	323	297
Milking once a day into vat	0	0	241	234
Small herd	237	237	236	234
Main Herd	384	384	323	297
MS/cow/day (Actual kg / Cows into vat only)	1.72	1.65	1.57	1.53
MS/cow to date (total kgs / Peak Cows 632)	355	366	376	385
MS/ha/day (total kgs / ha used)	6.66	6.40	5.54	5.08
Herd Average Cond'n Score	0.00	0.00	4.30	0.00
Monitor group LW kg WOW 347 early MA calvers	477	481	474*	476
Soil Temp Avg Aquaflex	17.3	14.5	13.5	16.0
Growth Rate (kgDM/ha/day)	62	59	76	76
Plate meter height - ave half-cms	14.1	13.5	13.8	14.2
Ave Pasture Cover (x140 + 500)	2470	2389	2434	2482
Surplus/[defict] on feed wedge- tonnes	10.4	6	1	9
Pre Grazing cover (ave for week)	3329	3277	3037	3113
Post Grazing cover (ave for week)	1700	1650	1700	1700
Highest pregrazing cover	3500	3410	3370	3418
Area grazed / day (ave for week)	7.60	6.72	7.68	6.90
Grazing Interval	21	24	21	23
Milkers Offered/grazed kg DM pasture	15.0	18.2	18.2	18.8
Estimated intake pasture MJME	183	222	222	218
Milkers offered kg DM Grass silage	0	0	0	0
Silage MJME/cow offered	11	11	11	11
Estimated intake Silage MJME	0	0	0	0
Estimated total intake MJME	183	222	222	218
Target total MJME Offered/eaten (includes 6% waste)	0	0	0	0
Pasture ME (pre grazing sample)	0.0	11.4	0.0	11.6
Pasture % Protein	0.0	23.1	0.0	23.2
Pasture % DM - Concern below 16%	0.0	17.0	0.0	15.1
Pasture % NDF Concern < 33	0.0	44.9	0.0	45.6
Mowed pre or post grazing YTD	0.0	0.0	0.0	0.0
Total area mowed YTD	367.7	367.7	367.7	367.7
Supplements fed to date kg per cow (630 peak)	506.8	506.8	506.8	506.8
Supplements Made Kg DM / ha cumulative	0	0	0	0
Units N applied/ha and % of farm	25units/26%	25units/21%	25units/30%	25units/23%
Kgs N to Date (whole farm)	207	212	217	222
Rainfall (mm)	22.4	21.8	77.6	8.2
Aquaflex topsoil relative to fill point target 60 - 80%	70-90	80-100	90-100	80-90

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.

Management Group

Peter Hancox (Farm Manager), Steve Lee (DairyNZ).