

# Lincoln University Dairy Farm - Farm Walk notes

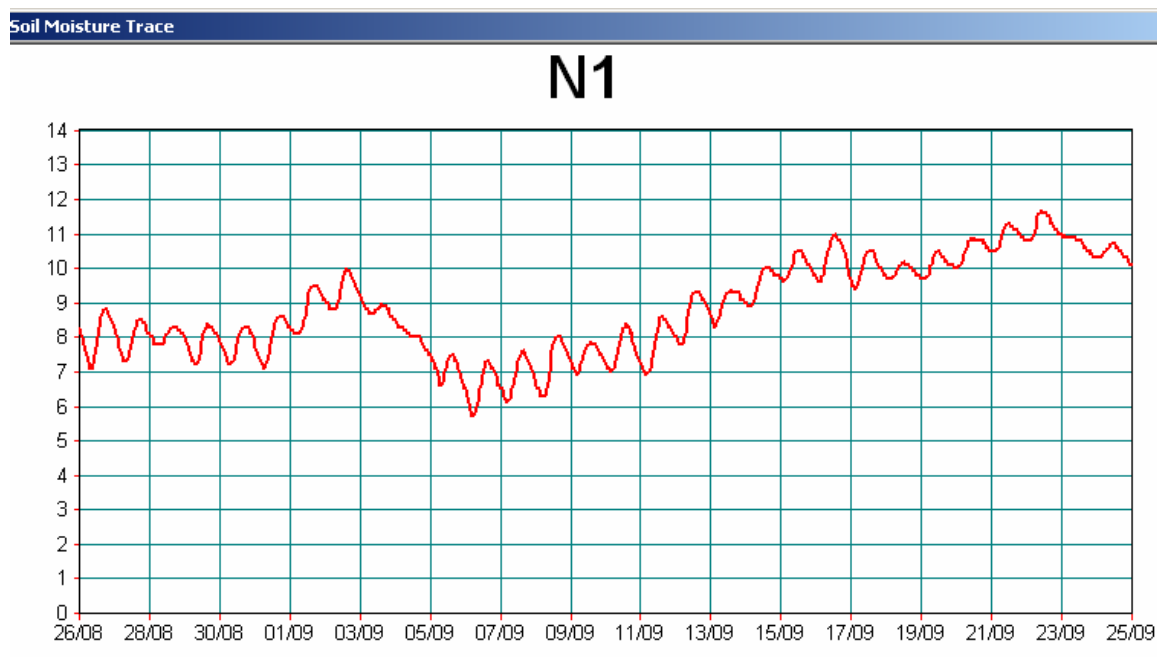
Tuesday, 25<sup>th</sup> Sept 2007

## Critical issues for the short term

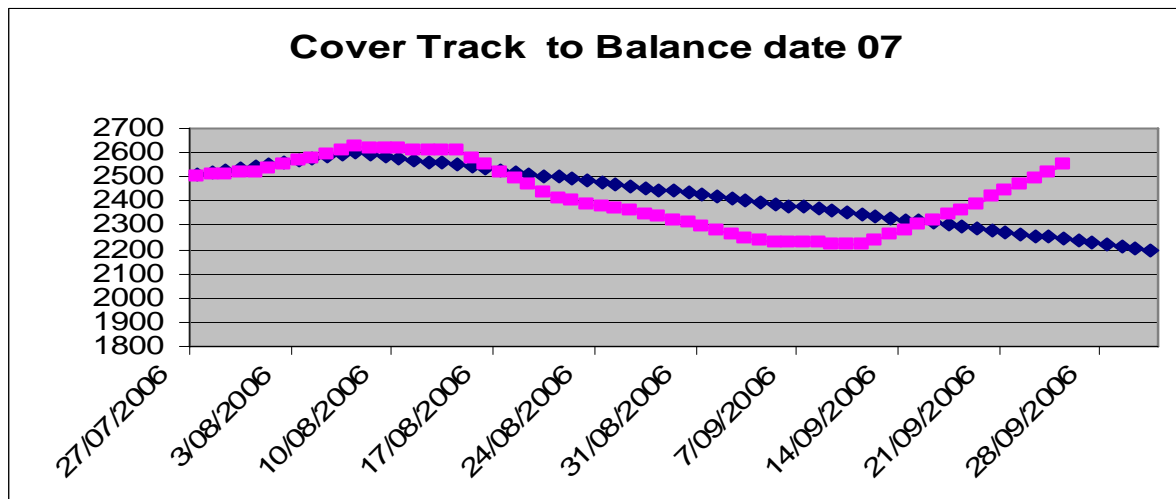
1. **Make sure all cows are getting MgO dusted and milkers also get lime flour.**
2. **Metri Check all calved cows.**
3. **Put any cows under Condition Score 4.0 onto OAD milking.**
4. **Tail paint cows four weeks before planned start of mating.**

### Summary of Key Factors affecting Grazing Management & Animal Performance

5. SOIL TEMPS at 10am have risen steadily from 9.5° C to 10.9 °C as warm weather has continued. Current cooler southerly conditions have held the rise but not dropped the temperature – yet. The following trace comes from the Aquaflex monitoring in N1.



6. PASTURE GROWTH was 82 kg DM/ha (last week 63) on the milking platform and with the weather forecast and current soil temperature it is very likely that pasture growth will continue above 70kgDM/ha/day.

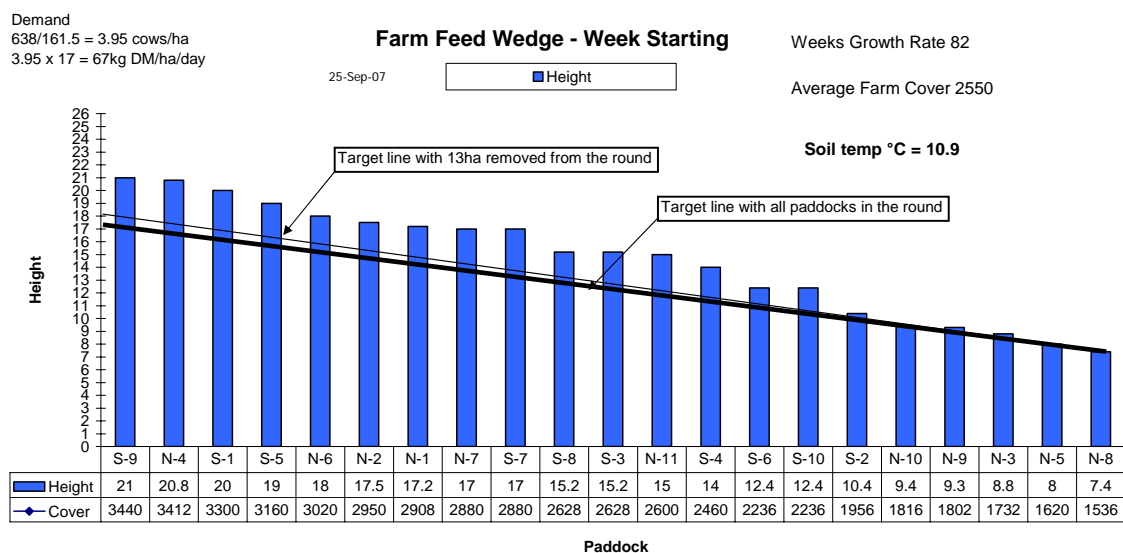


7. AVERAGE PASTURE COVER has risen from 2364 kg DM/ha to 2550 kg DM/ha and is well above our budgeted target for this week and this period – actions to deal with this will have to be taken, see points below.
8. We have 624 calved cows with 590 going into the vat.
9. For our First Round planner of 60 days starting 24 July includes the milking platform area plus the 18 ha East block.

Week	Date (start of week)	Milking cows (Avg)	Area grazed for week by milkers	Average Dry cows (home)	Area grazed for week by dry cows	Total area to be used for week	Actual area used for the week
1	24 Jul	157	2.2	118	1.7	3.9	3.9
2	31 Jul	267	4.5	493	4.1	8.6	7
3	7 Aug	377	9.3	383	5.9	14.2	16
4	14 Aug	457	14.6	288	5	19.6	21.4
5	21 Aug	517	17	218	3.8	23.5	23
6	28 Aug	567	19	163	2.9	25.2	24.3
7	04 Sept	607	24.7	118	2.1	30.7	23.03
8	11 Sept	632	30.4	86	1.5	31.9	19
9	18 Sept	657	38.3	61	1.1	39.4	39.25

10. This week the total area of pasture used by all mobs (drys and calved cows) was exactly that indicated in the first round planner. This season ending the second round on this date is a week later than ideal for this season.

11. This week's wedge.



12. This fortnight's excellent growth has filled in the expected deficit and has now generated a surplus. Shown as all the blue above the target lines.

13. The lower target line is the situation for the week with the entire farm dedicated to feeding the herd. The slightly higher line indicates the situation if 13ha was removed either as silage or for regassing. Based on current growth rate soil temperature and the weather forecast at least this much needs to be removed from the immediate feed supply.

14. The pasture allowance to the cows not yet calved is 10 kg and these cows continue to graze on the East Block.
15. We are continuing to lift the allocation to the calved cows from 16.6kg DM /cow /day last week to 17 for this coming week. This will be all grass.
16. Milk production has lifted to 1.96 kg MS/cow/day (1.83 last week with some silage) and has risen to 7.0kg MS/ha/day.
17. Somatic cell counts are averaging 185,000 (170,000 last week) with 2 new mastitis cases this week.
18. The herd was conditioned scored at the weekend and has an average of 4.4. Seventeen cows were assessed at score 4 and below and have been placed in a separate herd to be milked only once each day to allow them to gain weight and have a much better chance of a successful mating.
19. The herd was also tail painted on the 21<sup>st</sup>, 4 weeks before the planned start of mating. The herd will be checked and cows having shown heat will be recorded and have a different colour added. This will be done each week.
20. An application of 40 kg N/ha and Eco-n on the last 6 paddocks of the first round is being completed.
21. All the cows are getting Mg Oxide dusted on pasture at 100 gm/cow/day. This is in addition to Mg Cl going through the water supply at 60 gm/cow/day. The milkers are also getting 100 gm /cow/day of lime flour dusted onto the pasture.
22. Rapid growth and high quality of feed has led to us needing to use bloat prevention at full rates.
23. The heifer grazing block is now growing more than demand and all silage support to the rising one year olds has stopped. Surplus feed from the Heifer Block, East Block and the platform will fill the majority of the farms supplementary feed requirements.
24. The sacrifice paddocks on the East block and Heifer grazing blocks have been cultivated and have been sown in Bealey perennial ryegrass, this has now struck. The new grass undersown into the small areas of pugging on the milking platform on the 28<sup>th</sup> August have now emerged. Many of these areas have been heavy rolled during this week.
25. Mating dates and programmes have been confirmed. We have set the planned start of calving 5 days later at August 3<sup>rd</sup> for the mature herd, with the synchronised heifers calving 1 week earlier. This will better match feed demand and supply next Spring.

The next WEEKLY farm walk is on **TUESDAY, 25 September 2007 at 9.00am.**

### **Management Group**

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Peter Hancox (Farm Manager), George Reveley (for SIDDC), and Adrian van Bysterveldt (Dexcel).

# Lincoln University Dairy Farm - Farm Walk notes

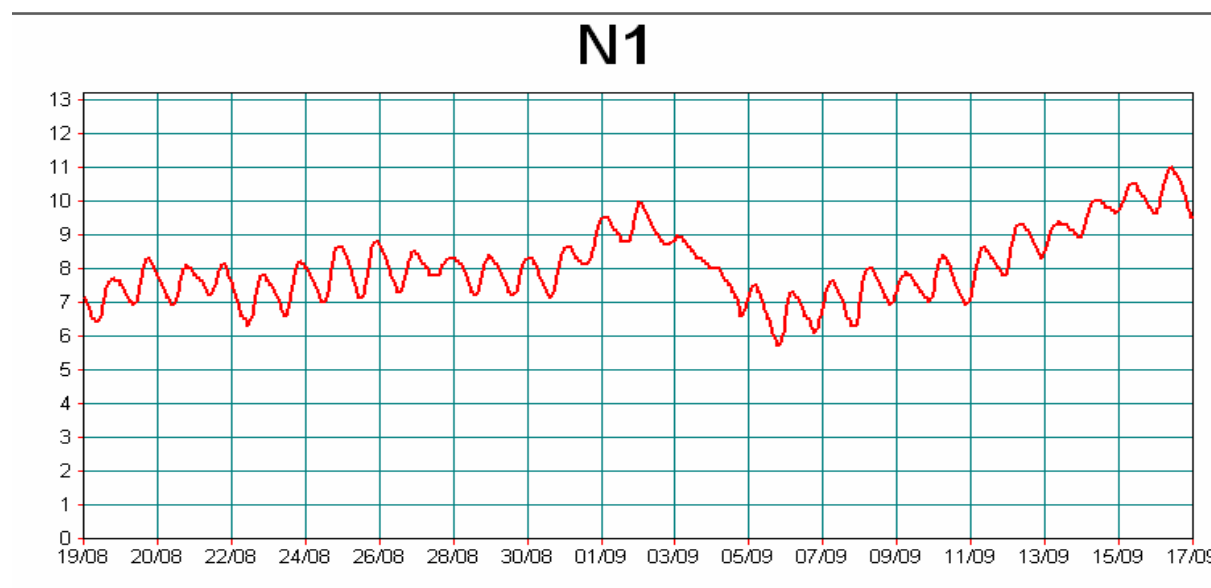
Tuesday, 18<sup>th</sup> September 2007

## Critical issues for the short term

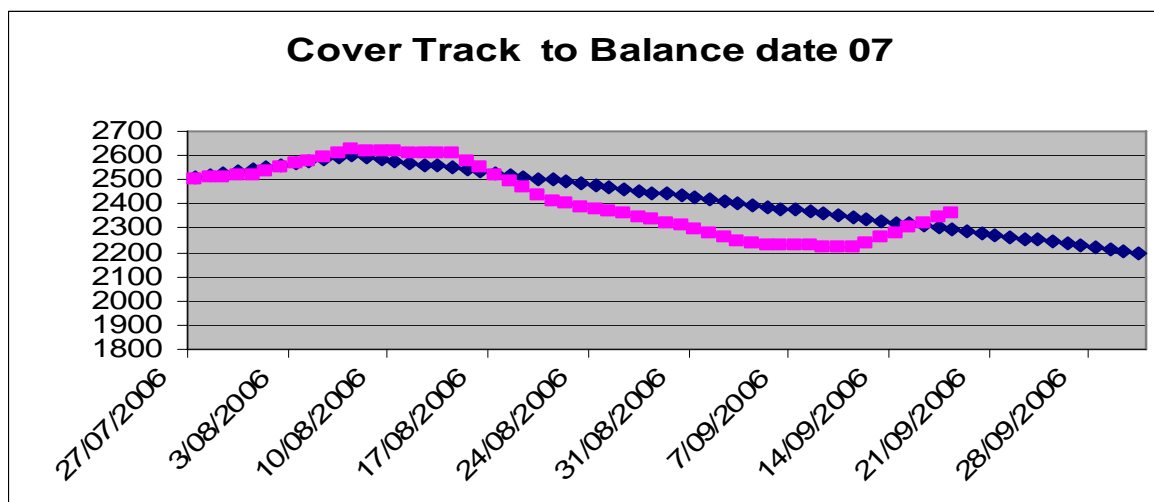
1. **Make sure all cows are getting MgO dusted and milkers also get lime flour.**
2. **Metri Check all calved cows.**
3. **Put any cows under Condition Score 4.0 onto OAD milking.**
4. **Tail paint cows four weeks before planned start of mating.**

### Summary of Key Factors affecting Grazing Management & Animal Performance

5. SOIL TEMPS at 10am have risen steadily from 7 °C to 9.5 °C since the last of the frosts. The following trace comes from the Aquaflex monitoring in N1.



6. PASTURE GROWTH was 63 kg DM/ha (last week 37) on the milking platform and with the weather forecast and current soil temperature it is very likely that this will continue.



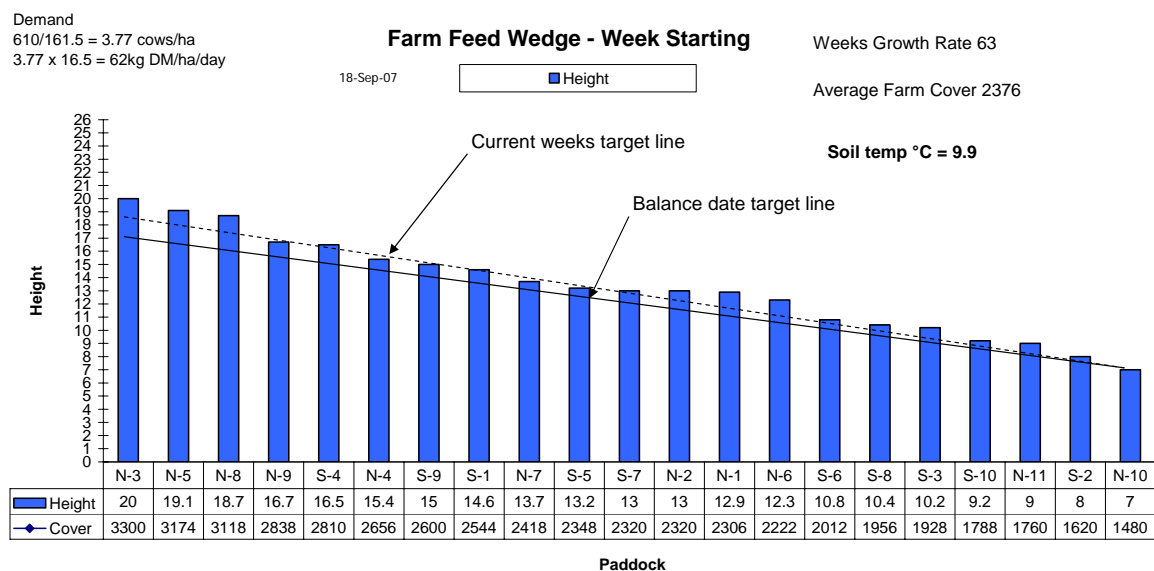
7. AVERAGE PASTURE COVER has risen from 2221 kg DM/ha to 2364 kg DM/ha and is now above our budgeted target for this week.

8. We have 599 calved cows with 567 going into the vat.
9. For our First Round planner of 60 days starting 24 July includes the milking platform area plus the 18 ha East block.

Week	Date (start of week)	Milking cows (Avg)	Area grazed for week by milkers	Average Dry cows (home)	Area grazed for week by dry cows	Total area to be used for week	Actual area used for the week
1	24 Jul	157	2.2	118	1.7	3.9	3.9
2	31 Jul	267	4.5	493	4.1	8.6	7
3	7 Aug	377	9.3	383	5.9	14.2	16
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9	18 Sept	657	38.3	61	1.1	39.4	

10. This week the total area of pasture used by all mobs (drys and calved cows) was much less than indicated in the first round planner. This was because the paddocks left to graze in the first round had very high covers. This is also despite reducing the silage from over 3 kgs DM/cow to 2.5 kgs DM/cow as the quality of the silage has reduced and residuals have lifted to 7 “clicks”.
11. This coming week we will have to hold the total area used by cows to less than 39 ha without silage.

12. This weeks wedge



13. The feed wedge has evened out and is close to target. This week’s excellent growth has filled in the expected deficit because we held to a long first round by using silage. Soil conditions were firm and paddocks are re-growing rapidly with growth rates similar to paddocks mid round.

14. The top target line is what the wedge needed to be this week for us not to have to top up with silage. This line changes every week to match the average farm cover calculated in the feed budget. The lower line represents the line in one week time.
15. We will be adding the calculation for the target line onto the pasture wedge in two weeks time.
16. The pasture allowance to the cows not yet calved is still restricted back to 5 kgs grass plus up to 5 kgs of silage and these cows are now grazing on the East Block.
17. We are continuing to lift the allocation to the calved cows from 16.1kg DM /cow /day last week to 16.6 for this coming week. This will be all grass.
18. Milk production has held at 1.83 kg MS/cow/day and has risen to 5.98kg MS/ha/day. Production levels are not as good on a mix of grass and silage as they would be with grass only. The difference is about 8 ME or 0.15 kg MS/cow.
19. Somatic cell counts are averaging 170,000 (140,000 last week) with two new mastitis cases this week.
20. We will follow the grazing cows with an application of 40 kg N/ha on the last 6 paddocks of the first round.
21. All the cows are getting Mg Oxide dusted on pasture at 100 gm/cow/day. This is in addition to Mg Cl going through the water supply at 60 gm/cow/day. The milkers are also getting 100 gm /cow/day of lime flour dusted onto the pasture.
22. The heifer grazing block is now growing close to demand but average cover is still lower than required so silage is still being fed to the R1 heifers. We will need to find more grazing locally or continue to supplement with baleage.
23. The sacrifice paddocks on the East block and Heifer grazing blocks have been cultivated and have been sown in Bealy perennial ryegrass. The new grass undersown into the small areas of pugging on the milking platform on the 28<sup>th</sup> August have now emerged.
24. Mating dates and programmes being confirmed during this next week. Very likely that we will set planned start of calving 5 days later at August 3<sup>rd</sup> for the mature herd with the synchronised heifers calving 1 week earlier.

The next WEEKLY farm walk is on **TUESDAY 25 September 2007 at 9.00am.**

### **Management Group**

Peter Hancox (Farm Manager), George Reveley (for SIDDC), and Adrian van Bysterveldt (Dexcel).

# Lincoln University Dairy Farm - Farm Walk notes

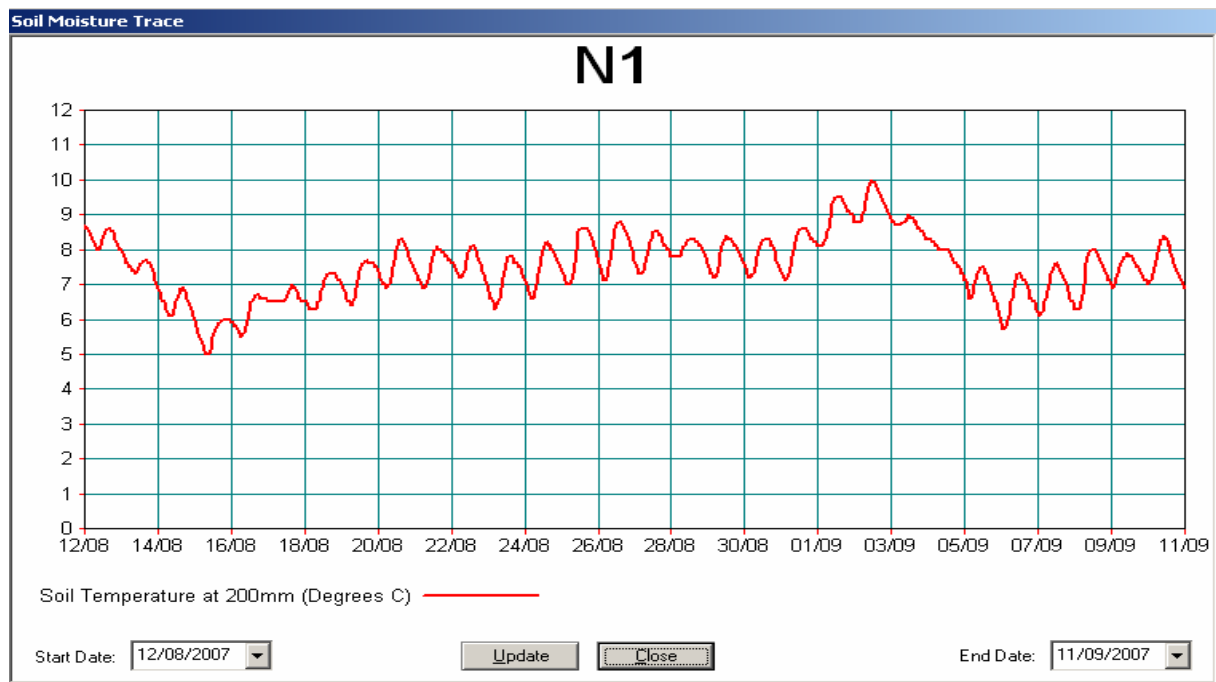
Tuesday 11<sup>th</sup> Sept 2007

## Critical issues for the short term

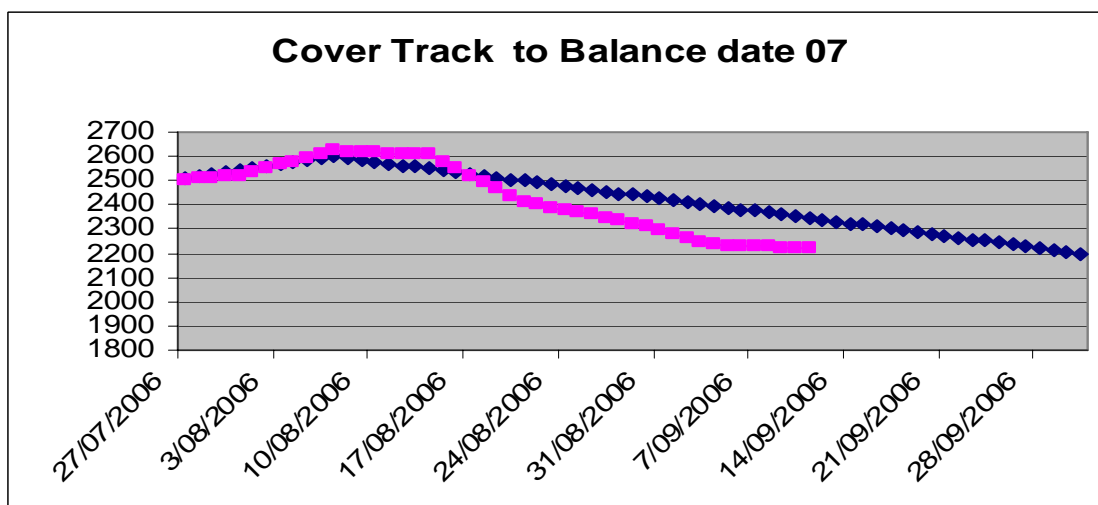
1. Back fence mobs on grass including animals on runoffs.
2. Make sure all cows are getting MgO dusted and milkers also get lime flour.
3. Stick to First Round Planner.

### Summary of Key Factors affecting Grazing Management & Animal Performance

4. SOIL TEMPS at 10am have risen to 7° C. The following trace comes from the Aquaflex monitoring in N1. The dip in soil temperatures in mid August coincides with our biggest drop in average farm cover.



5. PASTURE GROWTH was 37 kg DM/ha (last week 36) on the milking platform.



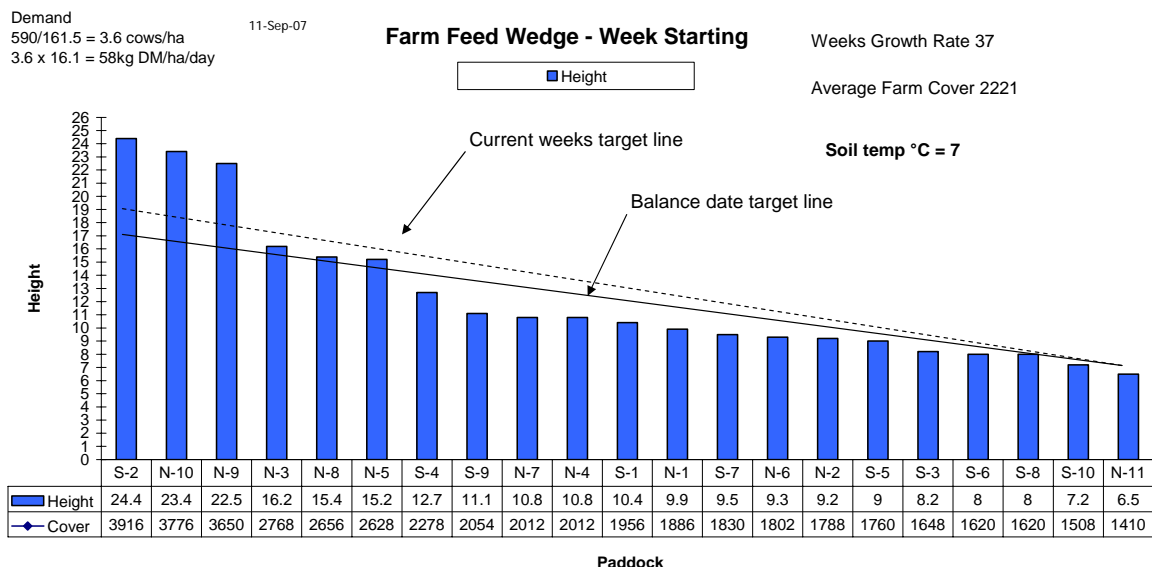
6. AVERAGE PASTURE COVER has dropped from 2235 kg DM/ha to 2221 kg DM/ha.

7. We have 542 calved cows with 511 going into the vat (average for the week).
8. For our First Round planner of 60 days starting 24 July includes the milking platform area plus the 18 ha East block.

Week	Date (start of week)	Milking cows (Avg)	Area grazed for week by milkers	Average Dry cows (home)	Area grazed for week by dry cows	Total area to be used for week	Actual area used for the week
1	24 Jul	157	2.2	118	1.7	3.9	3.9
2	31 Jul	267	4.5	493	4.1	8.6	7
3	7 Aug	377	9.3	383	5.9	14.2	16
4	14 Aug	457	14.6	288	5	19.6	21.4
5	21 Aug	517	17	218	3.8	23.5	23
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7	04 Sept	607	24.7	118	2.1	30.7	23.03
8	11 Sept	632	30.4	86	1.5	31.9	
9	18 Sept	657	38.3	61	1.1	39.4	

9. This week the total area of pasture used by all mobs (drys and calved cows) was 23 ha which was less than the previous week at 25.2 ha, an average of 3.3 ha/day or 1/54<sup>th</sup> of the farm / day. The 7 hectare saved this week (without lowering residuals) effectively lengthens the first round by about 2 days (that man deserves a dozen beer!).
10. This coming week we will have to hold the total area used by cows to less than 31.9 ha plus silage or the looming feed deficit in one week will get worse.
11. The drop in cover is as a result of our feed demand increasing faster than our growth rate. This was expected and so we have a bank of built up pasture that we eat into. However, the difference between demand for next week which is 58 (on the milking platform) and expected growth of 45 will mean that with our current cover we will continue to need to put in silage to avoid the average farm cover becoming too low at balance day.

12. This weeks wedge



13. The feed wedge shows that we have sufficient long paddocks for the next week. These paddocks have higher covers than target which will allow us to lift pasture to the milkers and yet stick to our total hectares for the week. These paddocks are still green at the base and will re-grow well.
14. The top target line is what the wedge needed to be this week for us not to have to top up with silage. This line changes every week to match the average farm cover calculated in the feed budget. The lower line represents the line in two weeks time. There are still sufficient paddocks below this target line to suggest that we still do not have enough pasture available to fully feed the herd without silage.
15. We will be adding the calculation for the target line onto the pasture wedge in two weeks time.
16. The pasture allowance to the cows not yet calved is still restricted back to 5 kgs grass plus up to 5 kgs of silage and these cows are now grazing on the East Block.
17. We are continuing to lift the allocation to the calved cows from 15.3kg DM /cow /day last week to 16.1 for this coming week. On average this will be made up of 13 kg DM of grass plus 3.1 kg silage /cow/day and will be reviewed later in the week.
18. Milk production was 1.83 kg MS/cow/day and 5.57kg MS/ha/day (up from 1.8 and 5.09 kg MS /ha/day. Production levels are not as good on a mix of grass and silage as they would be with grass only. The difference is about 8 ME or 0.15 kg MS/cow.
19. Somatic cell counts are averaging 140,000 with only one new mastitis case this week.
20. We will follow the grazing cows with an application of 40 kg N/ha on paddocks as they are finished.
21. The last few paddocks will get their final EcoN application this will also be applied closely following the cows.
22. All the cows are getting Mg Oxide dusted on pasture at 100 gm/cow/day. This is in addition to Mg Cl going through the water supply at 60 gm/cow/day. The milkers are also getting 100 gm /cow/day of lime flour dusted onto the pasture.
23. The heifer grazing block is still behind where it needs to be to support the R1yr heifers. We will need to find more grazing locally or supplement with baleage.
24. The sacrifice paddocks on the East block and Heifer grazing blocks has been cultivated and are being sown in Bealy perennial ryegrass today.
25. Mating dates and programmes being confirmed during this next week Very likely that we will set planned start of calving 5 days later at August 3<sup>rd</sup> for the mature herd with the synchronised heifers calving 1 week earlier.

The next WEEKLY farm walk is on **TUESDAY, 18 September 2007 at 9.00 a.m.**

### **Management Group**

Peter Hancox (Farm Manager), George Reveley (for SIDDC), and Adrian van Bysterveldt (Dexcel).

# Lincoln University Dairy Farm - Farm Walk notes

Tuesday 4<sup>th</sup> September 2007

## Critical issues for the short term

1. **Back fence mobs on grass including animals on runoffs.**
2. **Make sure all cows are getting MgO dusted and milkers also get lime flour.**
3. **Stick to First Round Planner.**

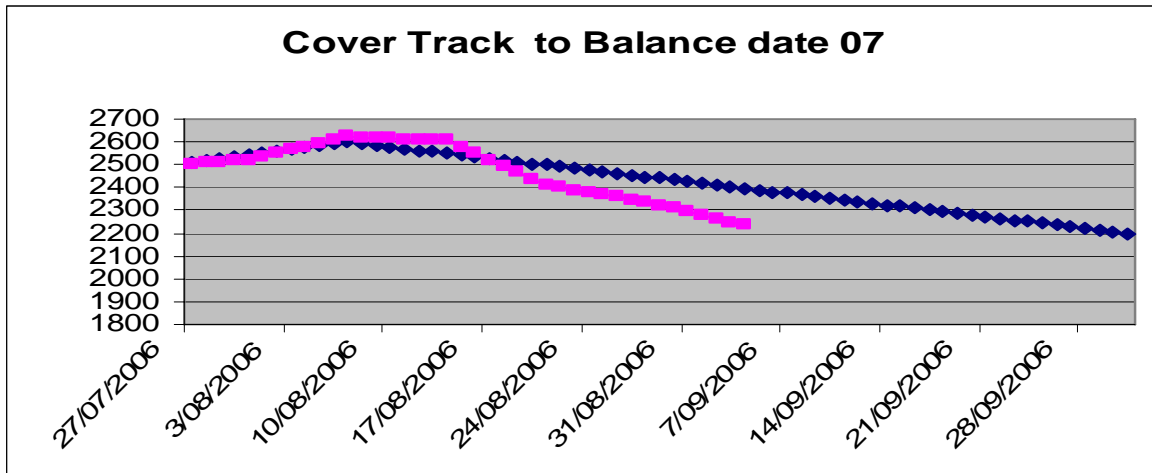
### Summary of Key Factors affecting Grazing Management & Animal Performance

4. SOIL TEMPS at 10am have been around 9° C all week.
5. PASTURE GROWTH was 36 kg DM/ha (last week 21) on the milking platform.
6. We have 512 calved cows with 445 going into the vat (average for the week). Calving has slowed dramatically this week.
7. Milk production was 1.8 kg MS/cow/day (up from 1.74) and 5.09 kg MS /ha/day. Production levels are not as good on a mix of grass and silage as they would be with grass only. The difference is about 8 ME or 0.15 kg MS/cow.
8. There have been nine new mastitis cases this week so the treatment mob is now below 14 cows. Cows are coming in with mastitis and clearing their infections very well.
9. For our First Round planner of 60 days starting 24 July includes the milking platform area plus the 18 ha East block.

Week	Date (start of week)	Milking cows (Avg)	Area grazed for week by milkers	Average Dry cows (home)	Area grazed for week by dry cows	Total area to be used for week	Actual area used for the week
1	24 Jul	157	2.2	118	1.7	3.9	3.9
2	31 Jul	267	4.5	493	4.1	8.6	7
3	7 Aug	377	9.3	383	5.9	14.2	16
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8	11 Sept	632	30.4	86	1.5	31.9	
9	18 Sept	657	38.3	61	1.1	39.4	

10. This week the total area of pasture used by all mobs (drys and calved cows) was 25.2 ha, an average of 3.47 ha/day or 1/52<sup>th</sup> of the farm /day. The 0.9 of a hectare saved this week will feed the non-calved cows for 2 days (that man deserves a beer!).
11. This coming week we will have to hold the total area used by cows to less than 30.7 ha plus silage or the looming feed deficit in less than two weeks will get much worse.

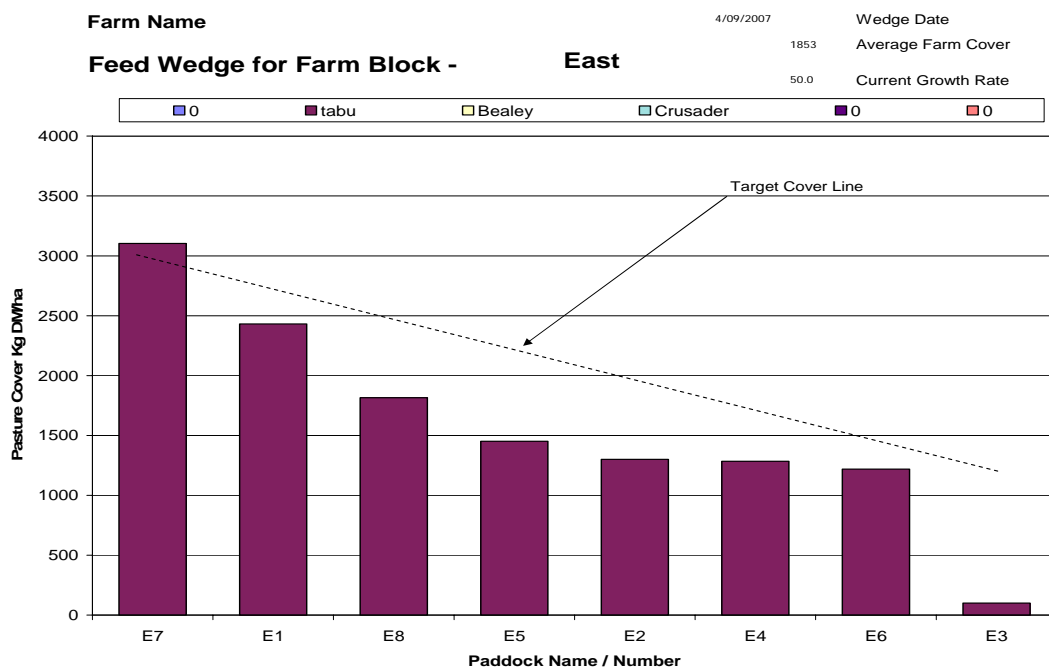
12. AVERAGE PASTURE COVER has dropped from 2337 kg DM/ha to 2235 kg DM/ha.



13. The drop in cover is as a result of our feed demand increasing faster than our growth rate. This is what is expected and so we have a bank of built up pasture that we eat into. However, the difference between demand (on the milking platform) and growth has been greater than budgeted because of the non-calved cows also being on the platform.

14. In three days time the non-calved cows will go back to the East Block which will drop the demand on the milking platform by about 12 kgs DM/ha/day (depending on how many cows calve).

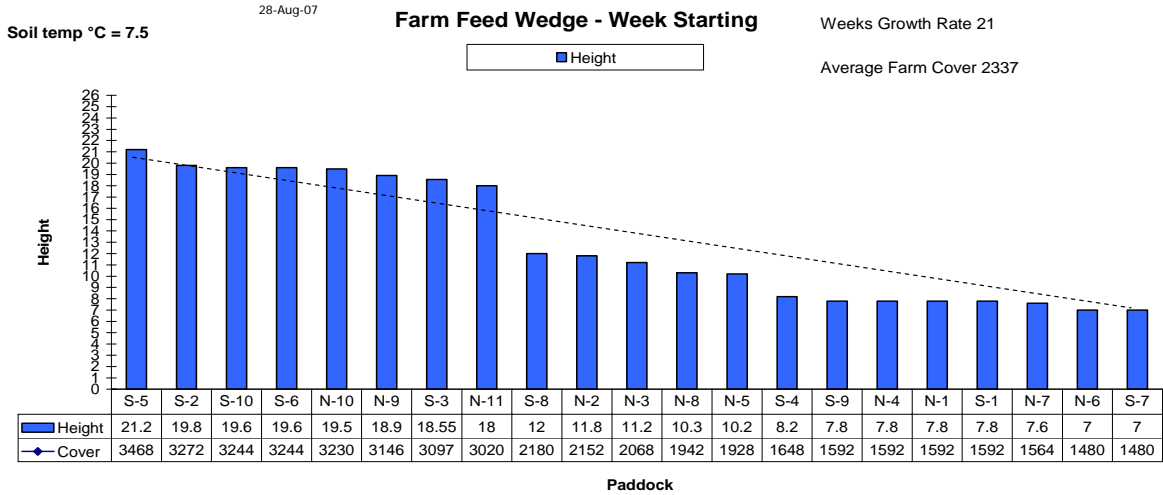
15. The target line on the East Block is where the cover on this block should be to be currently able to have the dry/springer cows grazing here. This block is mostly winter active Tabu and it is growing at 50 kgs dm/ha/day.



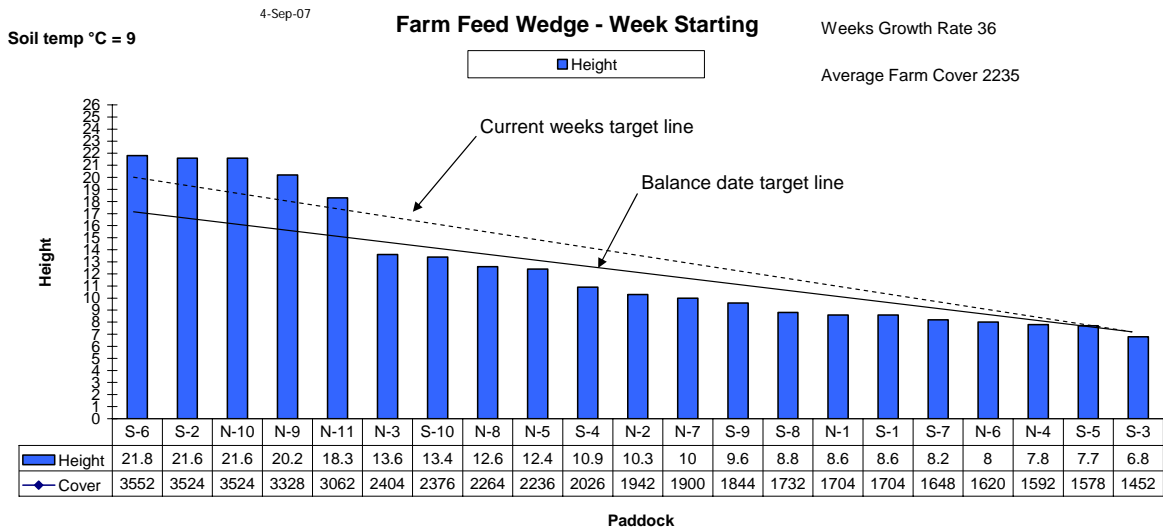
16. The pasture allowance to the cows not yet calved was restricted back to 5 kgs grass plus up to 5 kgs of silage. This will continue again this week

17. We are lifting the allocation to the calved cows from 15kg DM /cow /day last week to 15.3 for this coming week. On average this will be made up of 12 kg DM of grass plus 3.3 kg silage /cow/day and will be reviewed later in the week.

Last weeks wedge



18. This weeks wedge



19. The feed wedge shows that we have sufficient long paddocks for the next two weeks. These paddocks have higher covers than target which will allow us to lift pasture to the milkers and yet stick to our total hectares for the week. These paddocks are still green at the base and will re-grow well.

20. The solid target line is what the wedge needs to look line in 4 weeks time. There are still sufficient paddocks below this target line to suggest that we still do not have enough feed available.

21. We have reduced from 5 mobs to 3 mobs and paddocks S8, N2, N11 and S10 are partly grazed. The paddocks above the target line are allowing us to keep to our first round planner.

22. The colostrum cows will continue to be milked OAD as do any lame cows (2) and also the mastitis cows (8).

23. Somatic cell counts are averaging 140,000.
24. We will follow the grazing cows with an application of 40 kg N/ha on paddocks as they are finished.
25. Eco-n will also be applied closely following the cows.
26. Two hundred heifer replacement calves have been disbudded and tissue samples taken for DNA analysis. They are now on sheltered pasture on the East block and are being monitored by security. The paddock is well sheltered from the south and each group also has a further wind shelter made of straw bales. These calves will continue to be fed OAD with milk and have ad lib meal.
27. All the cows are getting Mg Oxide dusted on pasture at 100 gm/cow/day. This is in addition to Mg Cl going through the water supply at 60 gm/cow/day. The milkers are also getting 100 gm /cow/day of lime flour dusted onto the pasture.
28. The heifer grazing block is still behind where it needs to be to support the R1yr heifers. We will need to find more grazing locally or supplement with baleage.
29. The sacrifice paddock on the East block has been cultivated and is being sown in Bealey perennial ryegrass today. The sacrifice paddock on the Heifer Grazing block has been sprayed with Roundup and will be cultivated and then re-grassed with Bealey. We have also undersown some pugging patches (2 ha) on the milking platform.

The next WEEKLY farm walk is on **TUESDAY 11th September 2007 at 9.00am.**

### **Management Group**

Peter Hancox (Farm Manager), George Reveley (for SIDDC), and Adrian van Bysterveldt (Dexcel).