

Lincoln University Dairy Farm - Farm Walk notes

Tuesday 29th May 2007

Critical issues for the short term

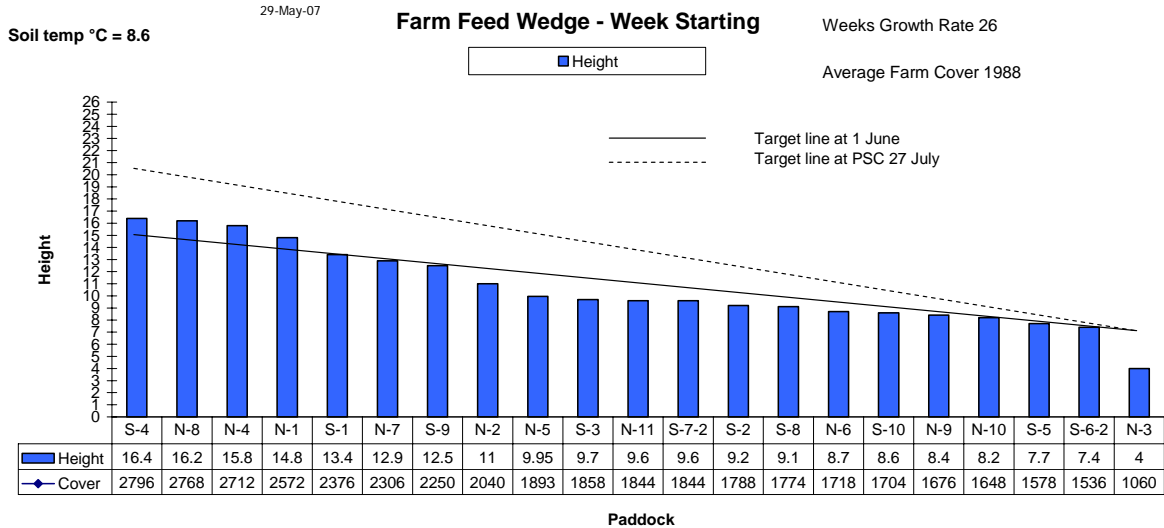
1. Make sure that any cows treated with dry cow therapy do not get sent to the works.
2. Dairy platform to reach 1st June target of between 2050 and 2100 kg DM.
3. Slow transition of dry cows onto Kale.

Summary of Key Factors affecting Grazing Management & Animal Performance
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4. SOIL TEMPS dropped to 8.6° C.
5. PASTURE GROWTH was 26 kg DM/ha (last week 20). This has surprised us given the fine sunny weather, relatively warm soil temperatures, and no apparent N deficit.
6. Is soil moisture limiting? We have no measurement of soil moisture deficit other than finding that electric fence standards are getting harder to push into the ground. On the other hand we have seen no evidence of wilting in the heat of the afternoon. Based on this we have no justification for irrigating though our gut instinct suggests otherwise.
7. AVERAGE PASTURE COVER has risen to 1,988 kg DM/ha from 1898 kg DM/ha a week ago as we have reduced demand by drying off the herd. Target cover for the end of May was to be above 2,050kg DM/ha.
8. MILK PRODUCTION has held at 1.2 kg MS/cow/day until they were dried off.
9. Last pickup was the 25th of May. LUDF had a total of 4 demerits for the season. These occurred in the first week and were due to freezing. Our total production for the season is 274,965 kg MS which is 1,703 /ha and 410 /cow. This is 3.9% behind last year.
10. Over this week we fed straw and grass and limited cow intake to a total of 8 kgs/cow /day for five days. The cows were dried on day two of this regime, treated with dry cow therapy and vaccinated for Leto. Udders have dried down quickly and there have been no clinical cases of mastitis found so far. The dry conditions will be helping this. All cows have also been sampled for DNA testing in preparation for Calf Trace.
11. All empty cows have been culled and the last of the late calving cows that have been sold will be leaving the property Thursday. Most other cows will have also left by weeks end.
12. Our early calving light condition cows that were dried off in early May have been grazing on a Cannon ryegrass seed pasture at a nearby cropping farm. They have been gaining condition score and now average over 4.5. Unfortunately we did not realise that the endophyte levels were very high and yesterday when shifting them back to the milking platform to DNA test, we found that some animals were badly affected by ryegrass staggers. This mob is now on Nil endophyte pasture and all the cows are recovering well. This is the first time that we have experienced this problem. This mob will be weighed later this week to confirm weight gain.

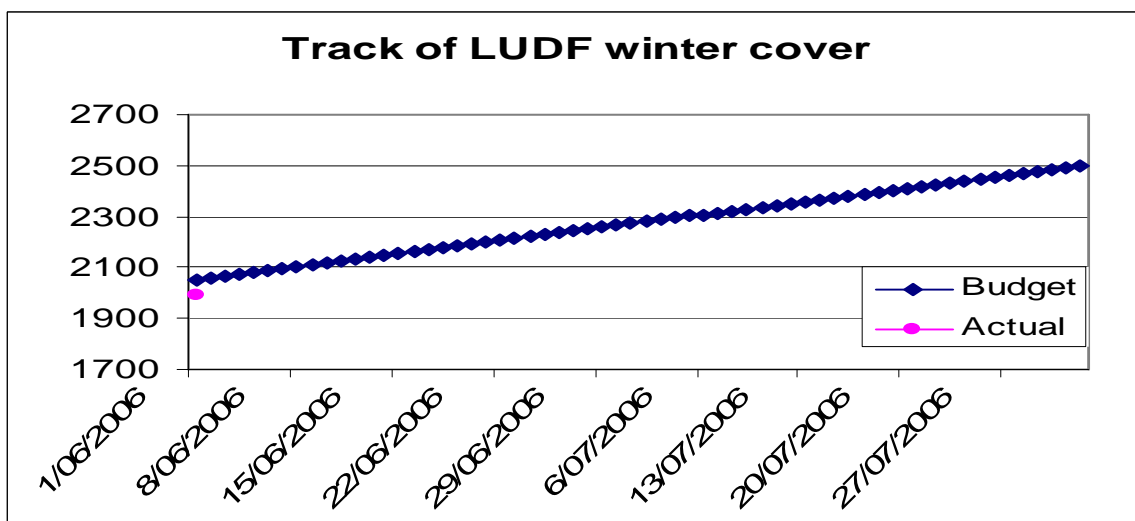
13. All our dry cow mobs will be getting Kale as part of their winter diet. We are transitioning this slowly into their diet by giving them limited but increasing access to the Kale for the first 7 days. The cows will be fed grass first and then Kale and are receiving Iodine in their water supply.

14. This weeks Pasture Feed Wedge was



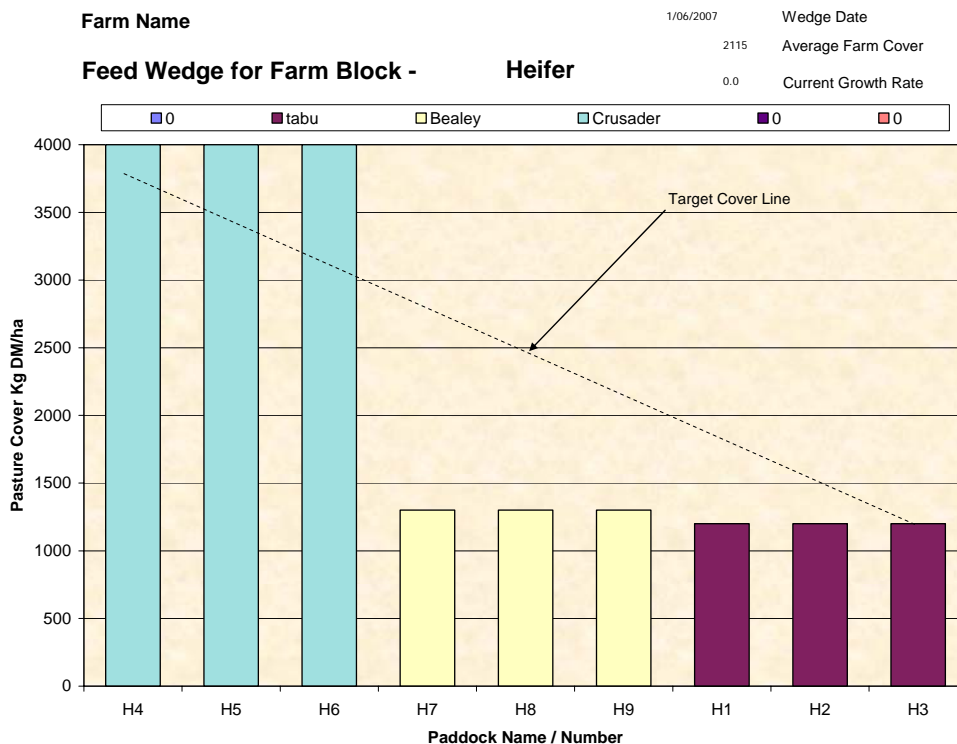
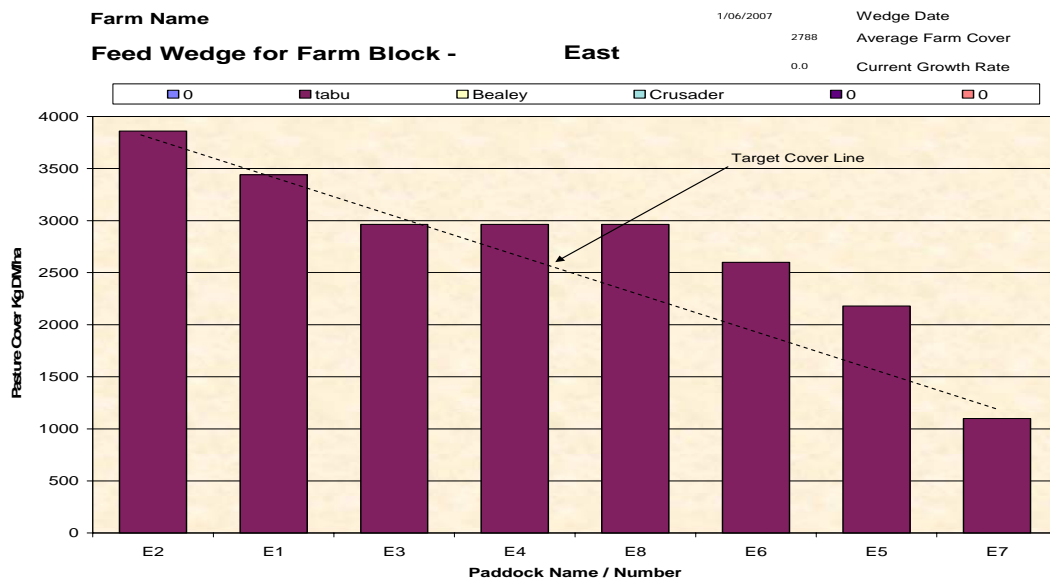
15. The Target line and average cover are close to our 1st June target (solid target line). The dashed target line is the one for the Planned Start of Calving which is the 27th July.

16. The R2yr heifers will come to the milking platform in about 10 days. Our feed budgets, which are based on average growth rate over June and July, indicate that even with our 160 R2yr heifers on the milking platform over the winter we should reach the target average cover required at the PSC.



17. From now on it is very important to monitor how average pasture cover is tracking on the milking platform and updated every week. Some cows will be on farm to keep this pasture cover in the shape of a wedge.

18. The R2 yr heifers are in condition score 5.5 and will only need to be allocated 6 - 8 kgs above residual. They are the first group to calve and so being on the milking platform means that they can be put through the shed to get used to a rotary cowshed as well as being teat sprayed several times a week.
19. Autumn application of eco-n is complete.
20. The fine weather is allowing us to get onto a lot of the end of season maintenance like re-surfacing the races, cleaning drains, filling in the holes in the pivot wheel tracks and fixing the underpass exit.
21. From now on we are also going to do regular monitoring of pasture covers and the shape of the wedge on our two support blocks. The 18ha East Block and the 33 ha Heifer Block.



22. The target cover lines represent the budgeted average pasture cover for 1st June. The East is well ahead of target so there are currently stock grazing the longest paddock. The new Heifer block is well behind because 2/3 of the block was only sown into pasture in April and is just coming up to its first nip-off this week. Our average target cover on our runoff blocks for 1st June was 2500 kg DM /ha. The actual average cover is 2352 so we are just over 8t of feed behind target. To cover this gap we have been sourcing additional grazing for our R1yr heifers from other graziers.

The next WEEKLY farm walk is on **TUESDAY, 6th June 2007 starting 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

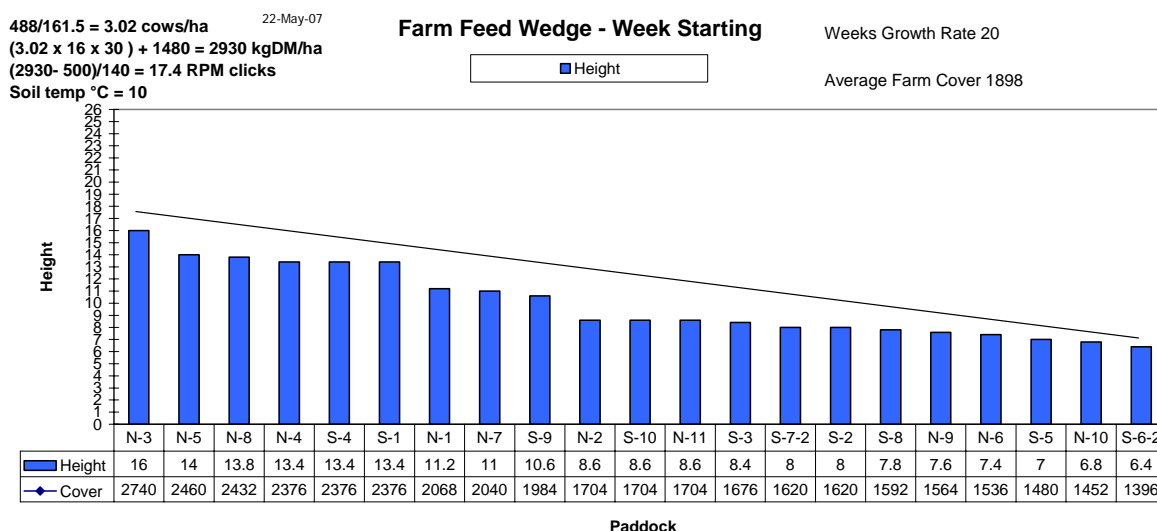
Tuesday, 22nd May 2007

Critical issues for the short term

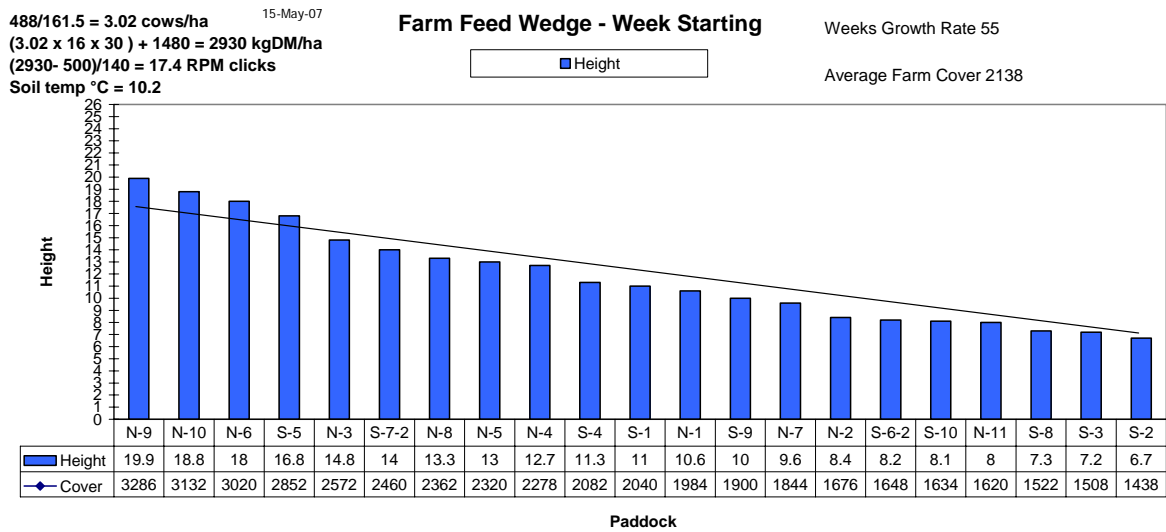
1. Dry off cows when farm average cover and silage available dictate.
2. Maintain a rotation length a minimum of 30 days and residuals at 7 “clicks”.
3. Somatic cell count levels.

Summary of Key Factors affecting Grazing Management & Animal Performance

4. SOIL TEMPS holding at 10.0 ° C.
5. PASTURE GROWTH has been calculated at 20 kg DM/ha (last week 55). The average over the last three weeks is 33 which is below the long term average for May.
6. AVERAGE PASTURE COVER has fallen dramatically to 1,898 kg DM/ha from 2,138kg DM/ha a week ago. Target cover for the end of May was to be above 2,050kg DM/ha.
7. This change has led to a decision to begin immediately to dry off all remaining in milk cows. Last pickup will be the 24th of May. Yes, we are disappointed that the end of the lactation is 7 days shorter than we had hoped for.
8. Over the week we fed an average of 12 bales of silage a day. This is 6.5 kgs DM/cow/day. We continued to hit target residuals and the result was that we allocated an average of 1/32 of the farm a day for this week. The previous week we allocated an average of 1/36 of the farm a day.
9. MILK PRODUCTION has held at 1.2 kg MS/cow/day. Production per ha 3.63 kg MS/ha 488 cows in milk
10. Production for the season will be just over 274,500kg MS, 410kg MS/cow and 1700kg MS/ha.
11. This weeks Pasture Feed Wedge was



Compared to last week (below) where there was enough pasture to meet demand this wedge can not support further milk production.



12. The Target line is now well above supply. Growth has slowed to lower than average and pasture cover is below the dry off target by 250kg DM/ha. The low pasture production is not able to be interpreted just from soil and daily temperature. The pattern of N use this autumn and high pre-grazing DM in March and April are also likely to be contributing to the lower regrowth being experienced.
13. The work done identifying cows with high SCC and drying them off has been well done with the average of 230,000 being maintained again this week
14. The last N fertilizer occurred on the 4 April to bring us to our total annual of 200 kgs.
15. Autumn application of eco-n continues to be applied each week following the cows and is now finished.
16. The continuing incidence of new lame cows is of concern. The source of this problem has been identified to the entrances to the underpass and cowshed. Some remedial work will be done over the winter.
17. The feed shortfall on the platform will put some pressure on winter feed supplies off-farm. A likely strategy will be to have less cows on the platform in the early part of the winter until the average cover reaches the target.

The next WEEKLY farm walk is on **TUESDAY, 29th May 2007 starting 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

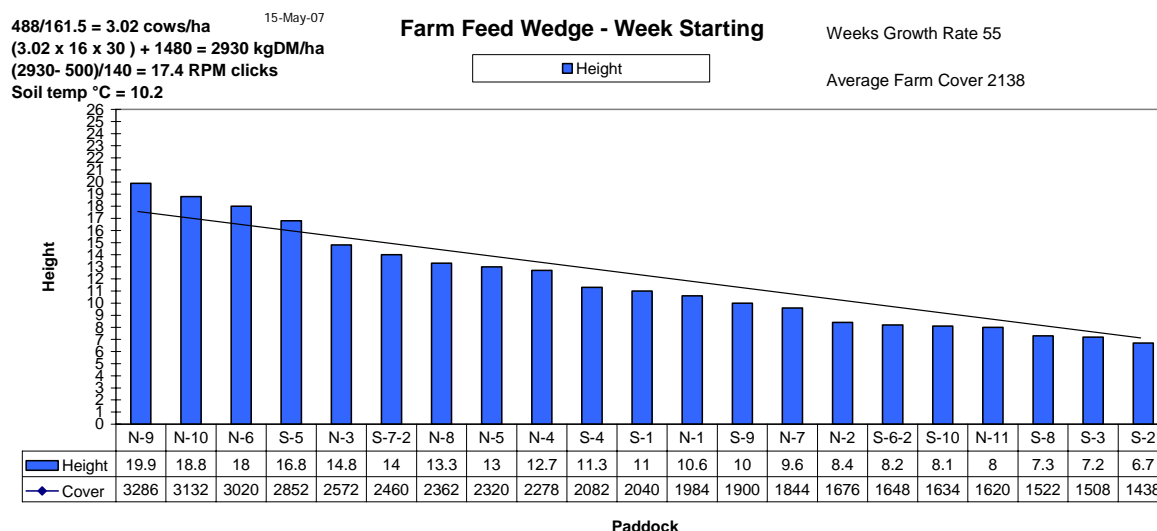
Tuesday 15th May 2007

Critical issues for the short term

1. Maintain a rotation length at a minimum of 30 days and residuals at 7 “clicks”.
2. Somatic cell count levels.
3. Dry off cows to meet condition score requirements, and if lame.
4. Feed supplement to fill pasture deficit.

Summary of Key Factors affecting Grazing Management & Animal Performance

5. SOIL TEMPS holding at 10.2° C.
6. PASTURE GROWTH has been calculated at 55 kg DM/ha (last week 27). The average over the last two weeks is 41 which is close to the long term average for May.
7. AVERAGE PASTURE COVER has risen from 2023 kg DM/ha to 2138.
8. Over the week we fed an average of 12 bales of silage a day. This is 5.4 kgs DM/cow/day. We continued to hit target residuals and the result was that we allocated an average of 1/36 of the farm a day for this week. The previous week we allocated an average of 1/30 of the farm a day.
9. MILK PRODUCTION has dropped to 1.15 kg MS/cow/day to the 10 May and have since risen to an average of 1.22 kg MS/cow/day (last week 1.20 kg MS/cow/day). Production per ha has dropped to 3.56 kg MS/ha (4.21 kg MS/ha last week) as a result of drying off another 20 cows this week (10 were high SCC and the other 10 were lame).
10. This weeks Pasture Feed Wedge was



11. The Target line has dropped slightly because the cow numbers on farm have reduced. The continued good growth and longer rotation length has resulted in the size of the deficit to have been greatly reduced.

12. Currently soil conditions are firm so we have decided to continue to feed out 12 bales of silage (two wagon loads) and based on the feed wedge this will result in a lengthening of the round. The longer round will give us the option that if/when we get rain we can reduce the silage and increase the area. This should reduce the risk of pugging and mean that we will still have an average rotation length of over 30 days and hit our target average farm cover of between 2100 and 2200 at 1 June.
13. Last week in response to a rise in SCC most of the herd was Rapid Mastitis Tested and 10 cows have been identified with significant levels of somatic cells. These are mostly cows that were identified with high cell counts at the previous herd test. These 10 will be dried off and treated with Dry Cow Therapy. The SCC has dropped back to about 220,000.
14. The last N fertilizer occurred on the 4 April to bring us to our total annual of 200 kgs.
15. Autumn application of Eco-n continues to be applied each week following the cows.
16. The continuing incidence of new lame cows is of concern. The source of this problem has been identified to the entrances to the underpass and cowshed. Some remedial work will be done over the winter.
17. Feed levels on all of the wintering blocks has again been measured and checked against the target covers in our winter budgets. All of these three blocks are well on target to reach or exceed the 1 June target cover.

The next WEEKLY farm walk is on **TUESDAY 22nd May 2007 9.00am.**

Management Group

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

Lincoln University Dairy Farm - Farm Walk notes

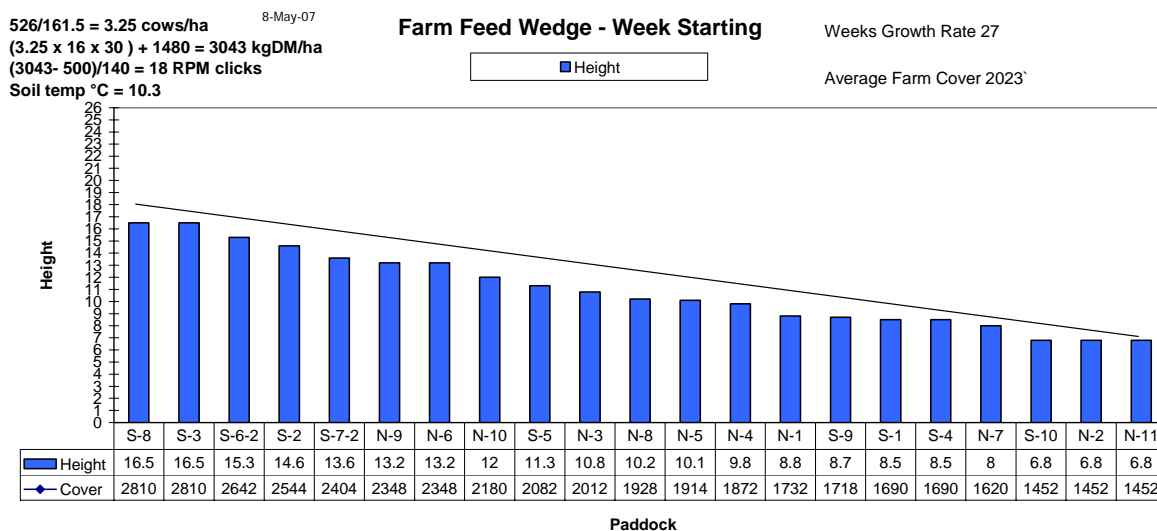
Tuesday 8th May 2007

Critical issues for the short term

1. Maintain a rotation length of 30 days and residuals at 7 “clicks”.
2. Monitor cow condition and somatic cell count levels.
3. Drying cows off because of high somatic cell counts.
4. Feed supplement to match demand to supply.

Summary of Key Factors affecting Grazing Management & Animal Performance

5. SOIL TEMPS have dropped to 10.3 °C.
6. PASTURE GROWTH has been calculated at 27 kg DM/ha (last week 60). In last weeks notes we commented that we were surprised by the high number but the average of 43 for the fortnight matched the situation. This week the reduction in growth rate reflects the cold and wet conditions of last week. Soil temperature has declined 2°C over the week.
7. AVERAGE PASTURE COVER has dropped from 2261 kg DM/ha to 2023. We allocated an average of 1/30 of the farm a day for this week and commenced feeding baled silage on the 4th of May. 3t DM was fed during the week.
8. MILK PRODUCTION has dropped to 1.20 kg MS/cow/day (last week 1.24 kg MS/cow/day) in spite of many of the dried off cows being young cows. Production per ha has dropped to 4.21 kg MS/ha (4.64 kg MS/ha last week) as a result of drying off 93 cows.
9. This weeks Pasture Feed Wedge was



10. The Target line remains the same as last week but it now sits above the pasture supply. It is planned to fill this deficit with baled silage and maintain the rotation length at 30 days.
11. 88 of the 93 cows that were dried off last week have left the farm and are grazing pasture on a nearby farm. Five of the lame cows were too lame to travel and will stay on the milking platform.

12. During last week there was a dramatic rise in the bulk SCC during 3 days of rain. Most of the herd was Rapid Mastitis Tested and 10 cows have been identified with significant levels of somatic cells. These are mostly cows that were identified with high cell counts at the previous herd test. These 10 will be dried off and treated with Dry Cow Therapy. We have another herd test on the 10 May which will highlight some additional high somatic cell count cows that we may consider drying off as well. Other than these we do not plan to dry off any more cows until the end of the month.
13. The last N fertilizer occurred on the 4 April to bring us to our total annual of 200 kgs.
14. Autumn application of Eco-n continues to be applied each week following the cows.
15. The bulk somatic cell count rose to 312,000 on the 5th of May. The drying off of 10 high somatic cell count cows this week and further drying off of high somatic cell count cows identified at this week's herd test should drop the bulk count to a safe level.
16. The wet weather and poor condition of the lane at the underpass has resulted in 12 cows being pulled out lame and milked once a day.

The next WEEKLY farm walk is on **TUESDAY 15th April 2007 9.00am.**

Management Group

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

Lincoln University Dairy Farm - Farm Walk notes

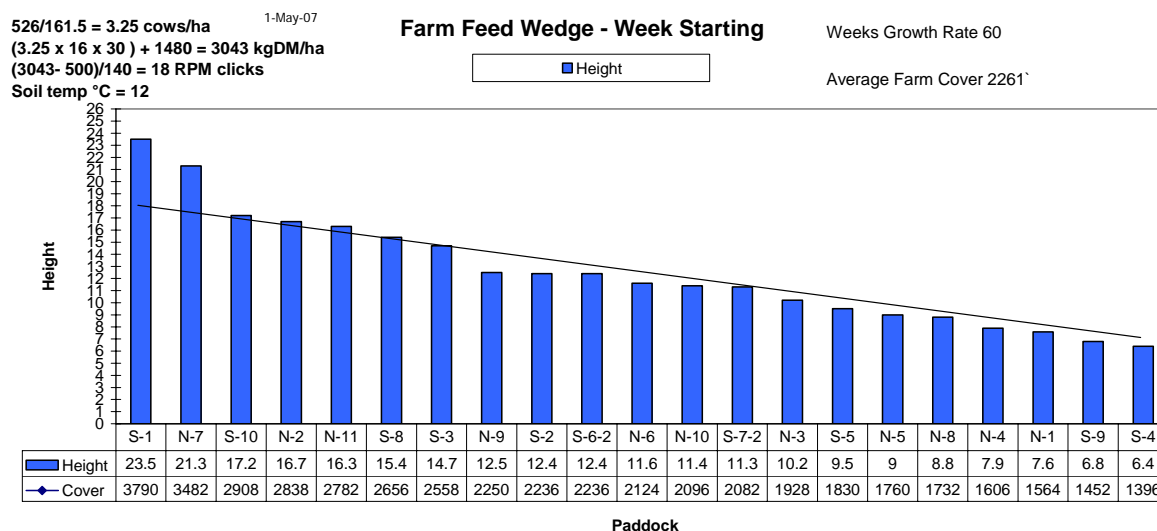
Tuesday 1st May 2007

Critical issues for the short term

1. Maintain a rotation length of above 30 days and residuals at 7 “clicks”.
2. Monitor cow condition and somatic cell count levels.
3. Drying cows off because of condition score.
4. Reduce feed demand to match supply.

Summary of Key Factors affecting Grazing Management & Animal Performance

5. SOIL TEMPS have held to 12° C.
6. PASTURE GROWTH has been calculated at 60 kg DM/ha (last week 26). In last weeks notes we commented that we were surprised by the low number of 26. This week higher than expected figure confirms that last weeks growth rate was underestimated. The average for the last two weeks was the same as the 5 year average for April on LUDF which is 42.
7. AVERAGE PASTURE COVER has dropped from 2356 kg DM/ha to 2261. We allocated an average of 1/37 of the farm a day for this week and did not feed out any supplements.
8. MILK PRODUCTION has dropped to 1.24 kg MS/cow/day (last week 1.27 kg MS/cow/day) and 4.64 kg MS/ha (4.78 kg MS/ha last week).
9. This weeks Pasture Feed Wedge was



10. The Target line has been dropped to reflect a reduction in cow numbers by 84 on the milking platform to 526 and a reduction in rotation length to 30 days.

11. We have dried off 93 cows. These include:
 - 50 cows which needed to be dried off immediately because of condition score requirements.
 - a further 22 thin late calving cows which were due to be dried off on the 19 May to reduce feed demand to anticipated feed supply.

- 21 cows currently in the lame mob have been dried off to simplify management and to further balance feed demand and supply.

The cows to be dried off on condition score are mostly early calving cows. We have dried off mature cows with a current condition score below 4.0, and below 4.5 for Rising 3yr olds. The calving Condition Score target is 5.0 for mature cows and 5.5 for Rising 3yr old cows. Nine of the lame cows are too lame to travel and will stay on the milking platform.

12. The graph shows that we will be able to feed the reduced herd at an average rotation length of 30 days without silage for the next week.
13. We have another herd test on the 10 May which might highlight some very high somatic cell count cows that we may consider drying off as well. Other than these we do not plan to dry off any more cows until the end of the month.
14. If we were to begin feeding silage in a weeks time we have enough silage for the remaining 526 cows to feed them up to 5 kgs DM/cow/day.
15. Pre-grazing pasture ME continues to hold at above 12 despite the high pre-grazing covers. This is driven by consistently achieving the target post grazing residual of 7 “clicks”.
16. The last N fertilizer occurred on the 4 April to bring us to our total annual of 200 kgs.
17. The bulk somatic cell count is holding at about was an average of 245,000.

**Next Focus Day - 3 May 10.15am to 1.15 lunch sponsored by Ravensdown.
Focus on Herd health, Reproduction and Nutrient Management**

The next WEEKLY farm walk is on **TUESDAY 8th April 2007 9.00am.**

Management Group

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