

# Lincoln University Dairy Farm - Farm Walk notes

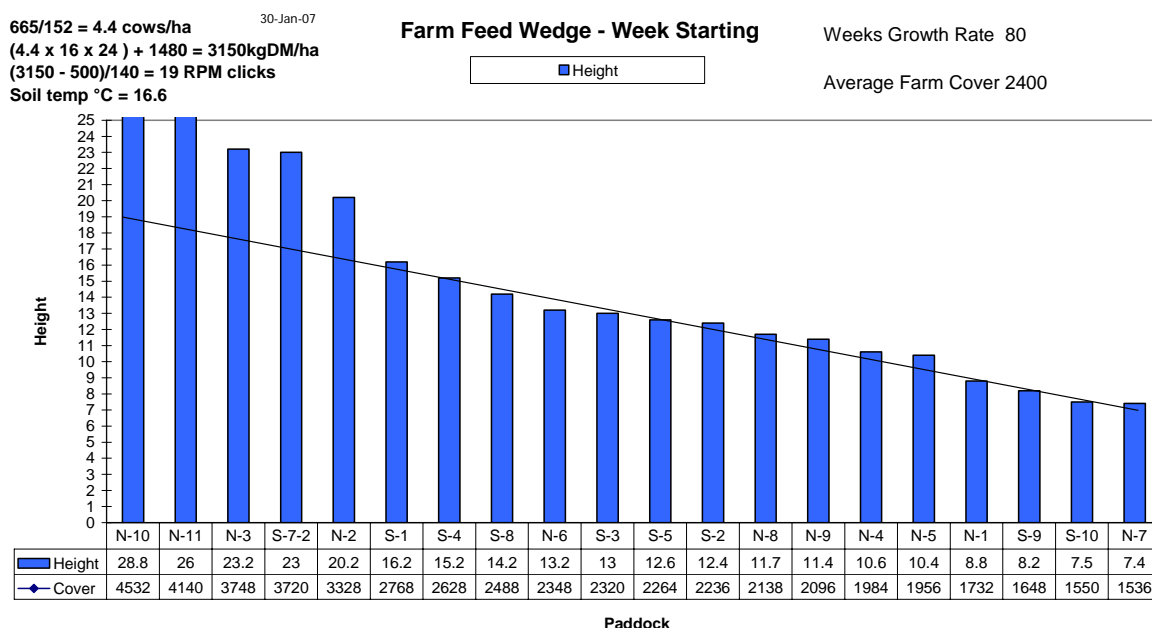
Tuesday 30<sup>th</sup> January 2007

## Critical issues for the short term

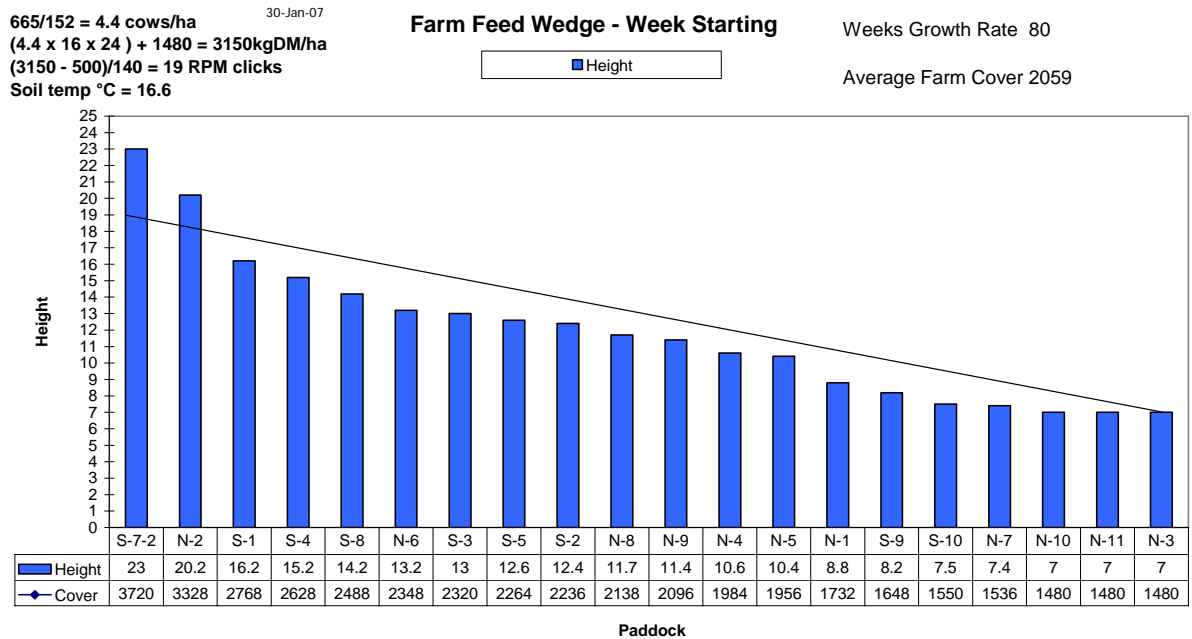
1. Closely monitor pasture growth over the next three to four days, with a view to dropping an additional paddock from the round if necessary (ie if growth is high).
2. Maintain round length at 22-24 days and offer cows 16 kg top quality pasture diet.

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

3. SOIL TEMPS have dropped slightly to 16.6 °C.
4. Clover growth remains very strong, the pastures generally look excellent.
5. PASTURE GROWTH over the last week has averaged 80 kg DM/ha (last week 100).
6. AVERAGE PASTURE COVER has dropped by 138kgs DM/ha to 2400 kgs DM/ha, despite growth being above feed demand of 70. This reflects the removal of paddocks for silage, and some pre and post mowing being done to ensure pasture quality is maintained.
7. The area “used” last week was 53ha. With one paddock being regressed (just sown) we have 151.7ha available. We grazed 39ha with the milkers and another 14ha was silage paddocks taken. The total area used equated to a 20 day ROTATION.
8. Pasture DRY MATTER% has been lower than normal. We have taken additional samples, results not back yet, but we suspect they are still significantly lower than the normal 18 to 19 % for January. This could be restricting intake and therefore affecting milk production. Fibre levels are still good at 40%.
9. MILK PRODUCTION is holding at 1.51kgs MS/cow/day and 6.2 kgs MS/ha. Production to date is now 1.3% behind last season
10. The PASTURE FEED WEDGE is changing in response to management. Below is the CURRENT Feed Wedge calculated after today’s walk. See Next page.

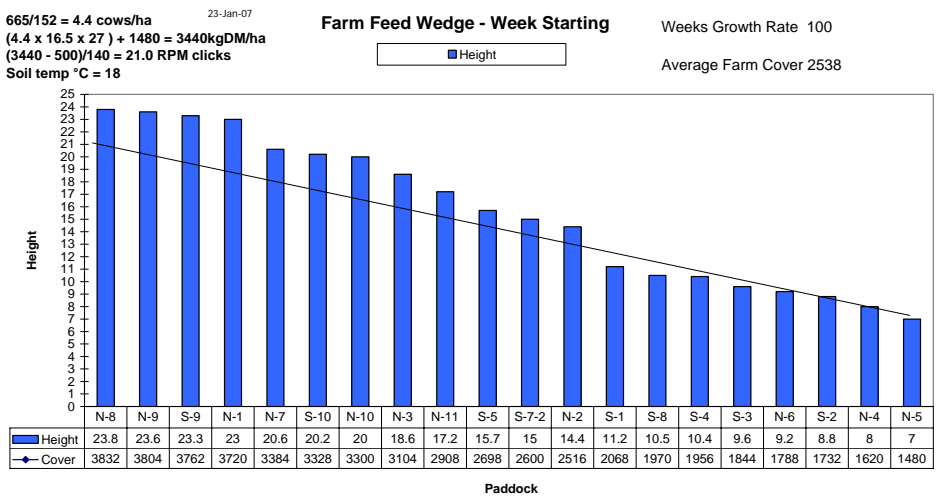


11. The PASTURE FEED WEDGE below reflects today's farm walk with CHANGES - ie if we take another 3 paddocks out for silage. The two longer paddocks left in are required to ensure we do not drop into a feed-hole if pasture growth is below our demand of 70 kgDM/ha per day. Paddock S-7 is new grass, so we are reluctant to take that for silage – it is excellent feed, better to go down the cows' throat.



(The calculations above the top left of the wedge are to calculate the pre-grazing cover. The first line calculates the actual stocking rate on the milking area. The second line (Stocking Rate x intake x rotation length) + target residual = pre – grazing target. The third line converts this to height (in compressed half centimetre)).

12. The feed wedge below is last week's one, for comparison. In hindsight, we might have been better to be more aggressive with the surplus, and remove further paddocks for surplus.



13. What we are trying to do, in response to the challenging pasture growth (high) being experienced at present, is to get to the stage where we are going into pregrazing covers of 3000 to 3150 kgDM/ha, rather than the higher covers of recent weeks. Our focus is to produce milk, not silage, so these adjustments are necessary at this stage.

14. Other points to note at this stage – we will work on these and report next week
- Our feed allocation of 16 kg DM might still be too high, given the milksolids output of 1.5 kg/cow/day
  - Milker liveweight has increased slightly (483 kg to 497 kg for the monitor group) but we think that cow condition is showing a greater RANGE than before. We will check the status of those lower condition animals.
  - Mating results / update – we have a full preg test scheduled for later this week
  - The undersowing of one of the paddocks with the Italian ryegrass (Tabu) appears to have worked very well
15. We have fielded an enquiry through an email regarding our long covers, yet still good ME's. Part of our response is reprinted here, as we recognise that others of you out there are facing the same challenges as us.

*How can LUDF have pre grazing target of 3440 kgdm and still feed quality grass to the cows on a 27 day rotation round?*

The key to having quality grass is ensuring that the pastures have been grazed to the target residual of 1480 kg DM (7 clicks) throughout the season and that the development of seed head and dead material has been minimised.

Two paddocks at LUDF sampled on 17 January had the following analysis  
N6 – 22.2 clicks, 3600 kg DM, 12.1 ME, 13.7% DM, 36.7% NDF and 21.2% CP  
S8 – 24.7 clicks, 3950 kg DM, 11.7 ME, 14.7% DM, 40% NDF and 23.5% CP

The other factor contributing to the high quality of the feed in these paddocks is the high proportion of leaf and the clover content. The paddocks are currently very dense with a lot of clover present.

It is also important to note that while the area allocated was for a 27 day rotation (5.7ha) with paddocks out for silage the grazing interval for the period was actually reduced to between 20 and 23 days.

The farm starting moving towards a 30 day rotation in early January based on previous years growth rates and the need to start pushing cover in front of the cows for February. In previous seasons this decision had been left too late making it difficult to push out the round once growth slowed in February. However the growth experienced during the middle 2 weeks of January was more representative of that normally seen in November (ie 100 kg DM/day) and far in excess of demand. Because of this, even with removing paddocks for silage, the pre-grazing covers were getting too high, so this week we have speed up the round to 22-24 days. This reduces our target pre-grazing cover to 3150 kg DM/ha. The impact of this decision will be closely monitored over the next few days. *[Management Team]*

The next WEEKLY farm walk is on **TUESDAY 6<sup>th</sup> February 2007 10.00am.** *(Yes, Waitangi Day, shows how keen/committed/strange we are)*

### **Management Group**

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

# Lincoln University Dairy Farm - Farm Walk notes

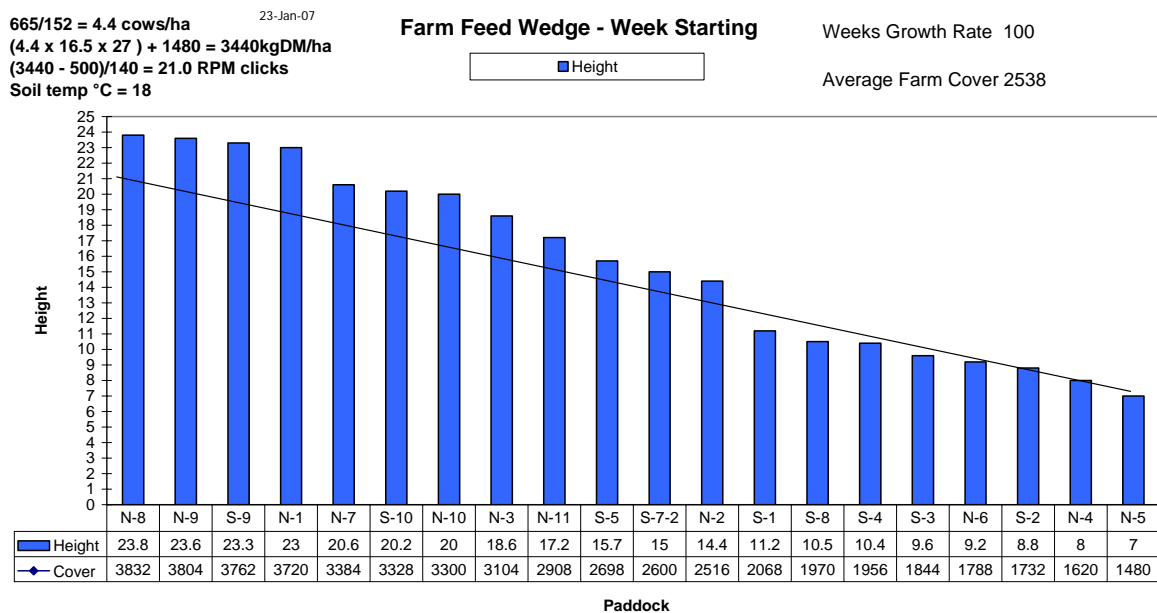
Tuesday 23<sup>rd</sup> January 2007

## Critical issues for the short term

1. Closely monitor pasture growth over the next three to four days, and if current growth continues we will need to take out more paddocks for silage.
2. Maintain round length at 27 days and offer cows 16.5 kg top quality pasture diet.
3. Cultivate and re-grass S6.
4. Monitor pests in recently under sown Tabu (Paddock S4).

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

5. SOIL TEMPS have remained around 18° C.
6. Visually there appears to be more clover on this week's farm walk than we have seen all season.
7. PASTURE GROWTH over the last week has averaged 100 kg DM/ha (last week 105).
8. AVERAGE PASTURE COVER has risen by 84 kg DM/ha to 2538 kg DM/ha. Area was allocated for a 27 day rotation this week (5.7ha/per day), however with one paddock (7ha) removed for silage, this reduced grazing interval down to 22.5 days.
9. Dry matter is 5% lower than normal for this time of the year; typically January dry matter has measured approximately 18 to 19%, currently 13.1%! This could be restricting intake and therefore affecting milk production. Fibre levels are at an ideal level at 40% and are not impacting on animal health or performance. Cows are still grazing comfortably to 7 clicks on the RPM.
10. MILK PRODUCTION has dropped 9% in the past week from 1.64kgs MS/cow/day to 1.5kgs MS/cow/day and 6.53 kgs MS/ha. Production to date is now 1% down on last season. We expect a lift in production again as dry matter levels improve and pre-grazing levels reduce, because pasture quality is still high at 11.9ME.
11. The PASTURE FEED WEDGE is showing that we have several paddocks of grass longer than that required to maintain a 27 day rotation, and with most paddocks above the target line we have identified two more paddocks as surplus, N-8 and N-9 will be taken for silage as soon as possible.



*(The calculations above the top left of the wedge are to calculate the pre-grazing cover. The first line calculates the actual stocking rate on the milking area. The second line (Stocking Rate x intake x rotation length) + target residual = pre – grazing target. The third line converts this to height (in compressed half centimetre)).*

12. Another farm walk will be done later this week and an additional paddock may be removed for baleage if required.
13. Paddock S6 has been cultivated and is now back in permanent pasture.
14. It is only seven days since the under-sowing of S-4(Tabu) this has struck and is well out of the ground.

The next WEEKLY farm walk is on **TUESDAY 30<sup>th</sup> January 2007 at 10.00am.**

### **Management Group**

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

# Lincoln University Dairy Farm - Farm Walk notes

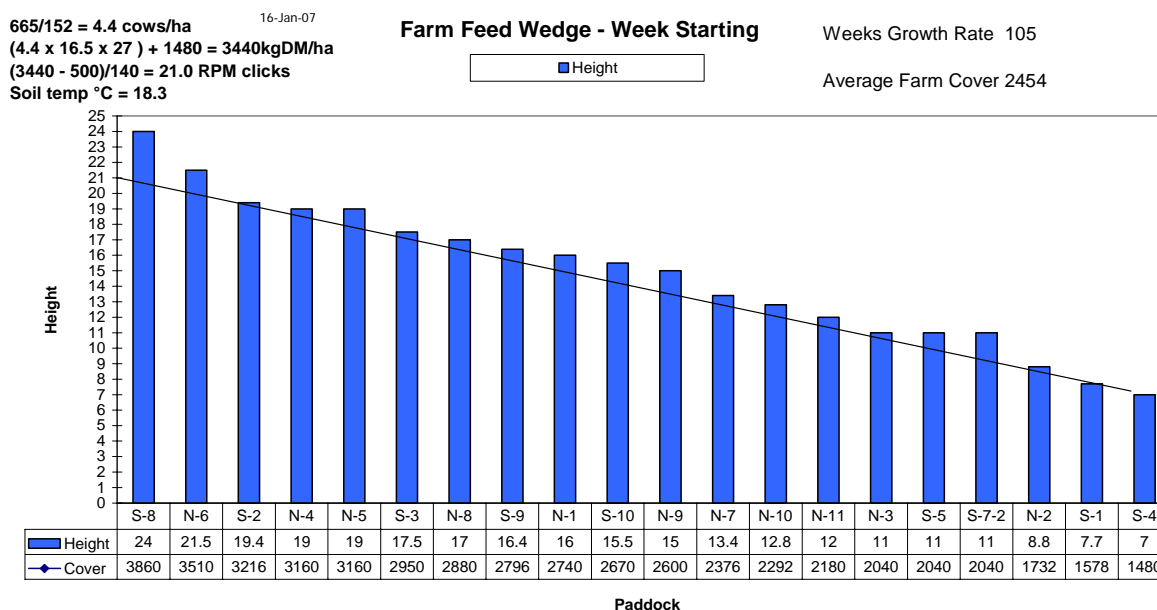
Tuesday, 16<sup>th</sup> January 2007

## Critical issues for the short term

1. Maintain round length at 27 days and offer cows 16.5 kg top quality pasture diet.
2. Cultivate and re-grass S6.

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

3. SOIL TEMPS have risen again to 18.3 °C.
4. PASTURE GROWTH over the last week has averaged 105 kg DM/ha (last week 68).
5. AVERAGE PASTURE COVER has risen by 199 kgs DM/ha to 2454 kgs DM/ha and a rotation length of 27 days was achieved for the week. This was helped by taking a days grazing off the East Block; this has been recorded as supplements.
6. MILK PRODUCTION has dropped slightly to 1.65kgs MS/cow/day and 6.7 kgs MS/ha. Production to date is less than 0.6% down on last season and the deficit is reducing as we are now ahead on a daily basis.
7. The PASTURE FEED WEDGE is showing that we have several paddocks of grass longer than that required to maintain a 27 day rotation and with most paddocks above the target line we have identified S-8 as surplus, this will be taken for silage.



(The calculations above the top left of the wedge are to calculate the pre-grazing cover. The first line calculates the actual stocking rate on the milking area. The second line (Stocking Rate x intake x rotation length) + target residual = pre – grazing target. The third line converts this to height (in compressed half centimetre)).

8. Taking silage off S-8 will be the first surplus made on the milking platform this season.
9. Paddock S6 was sprayed out on the 12<sup>th</sup> January and will be cultivated and back in permanent pasture by the 19<sup>th</sup> January.

10. The under-sowing of S-4 (Tabu) has been completed. This was under sown with Tabu on January 15<sup>th</sup> at 15kg /ha.
11. A full herd PD was carried out on Thursday 11<sup>th</sup>. In calf rate to six weeks was 69.3%. This compares to 70.3% last season. Next herd PD 1<sup>st</sup> February (nine weeks).

The next WEEKLY farm walk is on **TUESDAY 23<sup>rd</sup> January 2007 10.00am.**

**Management Group**

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

# Lincoln University Dairy Farm - Farm Walk notes

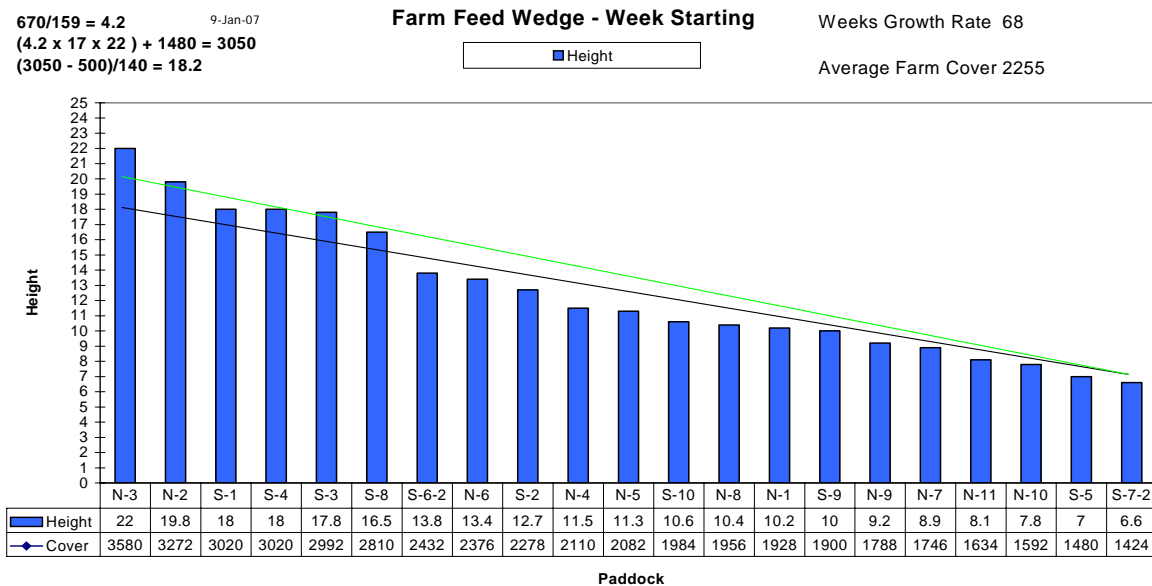
Tuesday 9<sup>th</sup> January 2007

## Critical issues for the short term

1. Extend rotation and offer cows 17kg top quality pasture diet.
2. Cultivate and re-grass S6.

Summary of Key Factors affecting Grazing Management & Animal Performance
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3. SOIL TEMPS have risen again to 17.3° C.
4. PASTURE GROWTH over the last week has averaged 68 kg DM/ha (last week 77).
5. AVERAGE PASTURE COVER has risen by 10 kgs DM/ha to 2255 kgs DM/ha and a rotation length of 22 days was achieved for the week. No supplements were fed.
6. MILK PRODUCTION has lifted slightly to 1.67kgs MS/cow/day and 7.0 kgs MS/ha. Production to date is now under 0.6% down on last season and the deficit is reducing as we are now ahead on a daily basis.
7. The PASTURE FEED WEDGE is showing that we have several paddocks of grass longer than that required to maintain a 22 day rotation and for the next week can maintain a 25 day rotation (green target line) with out the need for supplements.



(The calculations above the top left of the wedge are to calculate the pre-grazing cover. The first line calculates the actual stocking rate on the milking area. The second line (Stocking Rate x intake x rotation length) + target residual = pre – grazing target. The third line converts this to height (in compressed half centimetre)).

8. Another small crop of surplus grass on the East block is now ready for either baling or grazing. We have decided to graze this with the cows and lengthen the round by another day.

9. Paddock S6 will be sprayed with Glycophosphate this week and grazed in 5 days. Cultivation will include ploughing and surface contouring. Our target is to get the paddock re-sown by the 15 January.
  
10. The spring under-sowing in Paddock S5 (Tabu) is now showing up very strongly and has improved the pasture production in this paddock. As a result of this success we will be under-sowing the other remaining Tabu paddock later this week after it is grazed.
  
11. A full herd PD is scheduled for Thursday. Results reported next week.

The next WEEKLY farm walk is on **TUESDAY 16<sup>th</sup> January 2007 10.00am.**

**Management Group**

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Peter Hancox (Farm Manager) Peter Gaul (for SIDDC) and Adrian van Bysterveldt (Dexcel)

# Lincoln University Dairy Farm - Farm Walk notes

Tuesday 2<sup>nd</sup> January 2007

## Critical issues for the short term

1. Keep rotation out to 21 days plus, and offer cows 17kg top quality pasture diet.

Summary of Key Factors affecting Grazing Management & Animal Performance
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2. SOIL TEMPS remain lower than average – four warm days followed by three cold days - holding at 16° C, down to 14° C this morning.
3. PASTURE GROWTH over the last week has averaged 77 kg DM/ha (last week 61). We had another 40mm rain last week, bringing December’s total to 142 mm. We noticed a distinct “greening up” of the pastures following the four warmer growing days – signs of things to come perhaps.
4. AVERAGE PASTURE COVER has risen by 165 kgs DM/ha to 2245 kgs DM/ha.
5. We have continued to feed high quality BALEAGE at an average of 2.0 kgs DM/cow, to bring ROTATION LENGTH back out to 21 days. Once again, the wet conditions meant on some days we offered the cows less silage and more area, to avoid or minimise any pasture damage. We are determined to keep rotation length at no less than 21 days.
6. MILK PRODUCTION has dropped slightly to 1.64 kgs MS/cow/day and 6.74 kgs MS/ha. Production to date is now under 1% down on last season and improving.
7. The PASTURE FEED WEDGE has returned to good shape. The long paddock is our renovated pasture, and is still too wet to graze, so we will continue to be patient and trust that the weather will improve sufficiently for us to graze without damaging it.

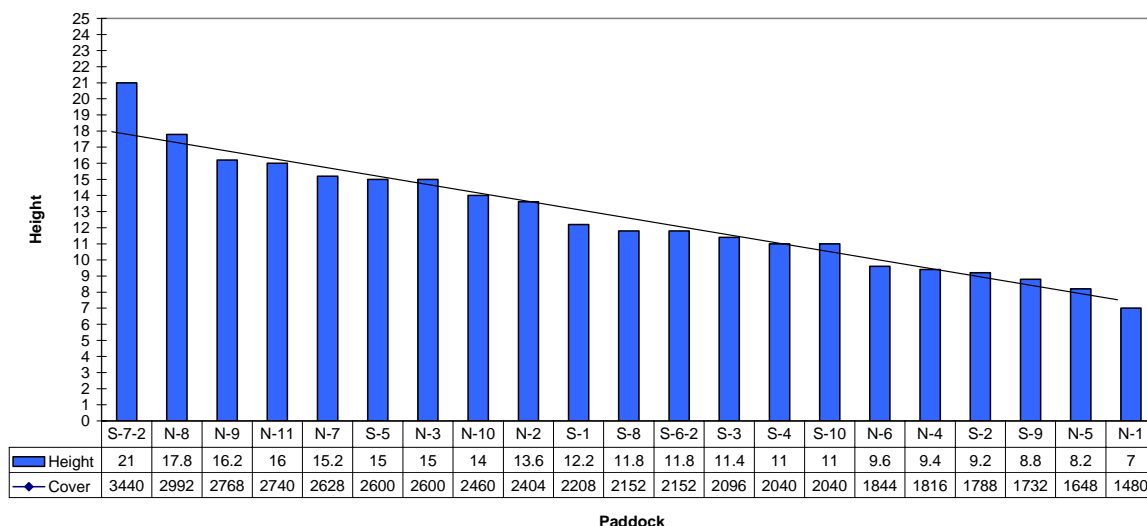
670/159 = 4.2      02-Jan-07  
 (4.2 x 17 x 21) + 1480 = 2999  
 (2999 - 500)/140 = 17.9

### Farm Feed Wedge - Week Starting

Weeks Growth Rate 77

■ Height

Average Farm Cover 2245



The calculations above the top left of the wedge are to calculate the pre-grazing cover. The first line calculates the actual stocking rate on the milking area. The second line (Stocking Rate x intake x rotation length) + target residual = pre – grazing target. The third line converts this to height (in compressed half centimetres).

8. Our wedge this week suggests we can drop the small amount of baleage, and return to feeding just pasture.

Last week's feed wedge.

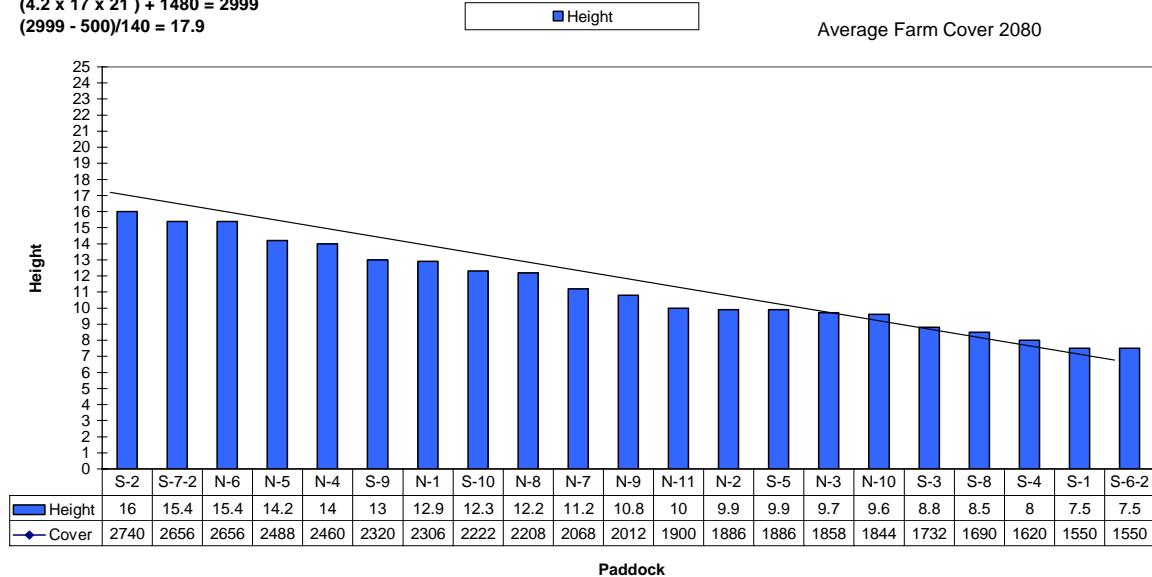
670/159 = 4.2  
 (4.2 x 17 x 21) + 1480 = 2999  
 (2999 - 500)/140 = 17.9

26-Dec-06

**Farm Feed Wedge - Week Starting**

Weeks Growth Rate 61

Average Farm Cover 2080



9. With regard to NITROGEN, we will suspend applications, in the hope that warmer weather will/must (??) eventually return. On the nil-effluent area (133ha), we have applied 139 units/ha so far this season, and we prefer to retain options for using some autumn nitrogen. We have a self-imposed limit of 200 units N. On the effluent area (28ha) we apply NO artificial nitrogen.

10. Mating has eased off – we have 9 bulls working in two teams swapped every day (one day on, one day off), but 3 bulls are currently lame.

The next WEEKLY farm walk is on **TUESDAY 9<sup>th</sup> January 2007 10.00am.**

**Management Group**

Peter Hancox (Farm Manager) Peter Gaul (for SIDDC) and Adrian van Bysterveldt (Dexcel)