

# Lincoln University Dairy Farm - Farm Walk notes

Tuesday, 29<sup>th</sup> January 2008

## Critical issues for the short term

1. Maintain a rotation of between 20 and 22 days.
2. Keeping irrigation system going properly.
3. Maintain grazing residuals .

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

4. SOIL TEMP at 10am has continued to average 17.5<sup>0</sup>C.
5. PASTURE GROWTH was 94 kg DM/ha (last week 75) on the milking platform.
6. Average pasture cover 2264 kg DM/ha (last week 2164 kg DM/ha.)

#### Last week's pasture wedge

SR = 680/161.5= 4.21  
 (4.21 x 21 x 17) + 1480 = 2983  
 (2983 -500)/140 = 17.7 clicks

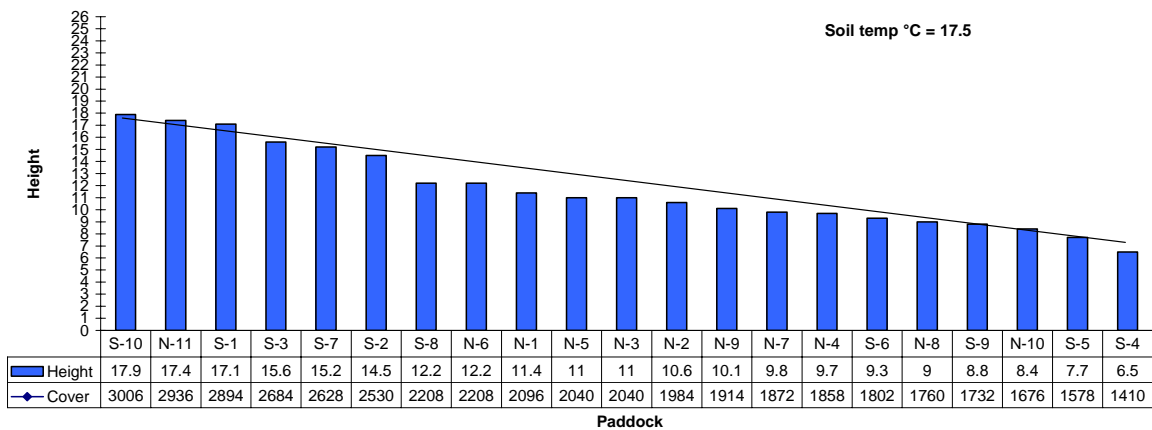
#### Farm Feed Wedge - Week Starting

Weeks Growth Rate 75

Average Farm Cover 2164

22-Jan-08

■ Height



7. Last week we made our decisions on pasture growth for week being higher than grazing demand , resulting in the apparent deficit disappearing.

SR = 680/161.5= 4.21  
 (4.21 x 21 x 17) + 1480 = 2983  
 (2983 -500)/140 = 17.7 clicks

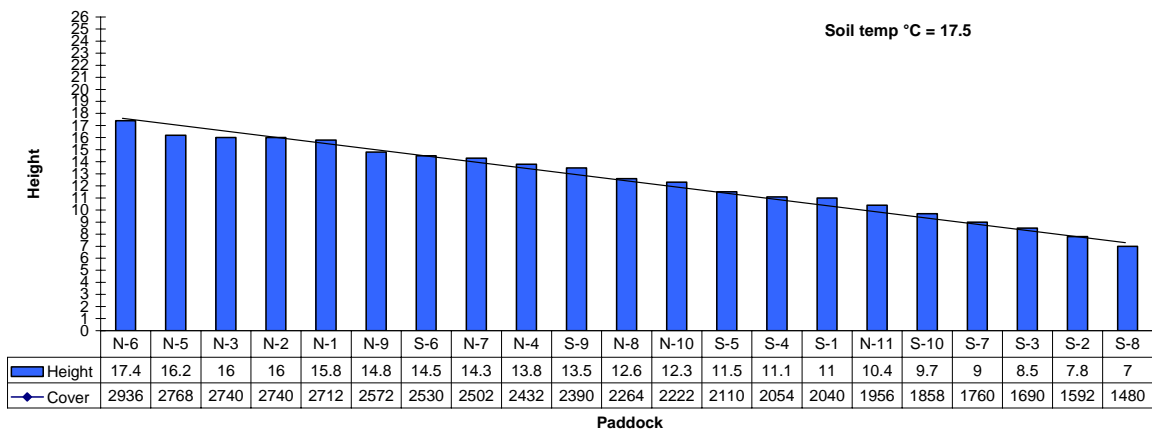
#### Farm Feed Wedge - Week Starting

Weeks Growth Rate 94

Average Farm Cover 2264

29-Jan-08

■ Height



8. The entire farm is back in the grazing round. The target line presumes the cows are eating 17 kg DM and will be on a 21 day round. This requires a pre-grazing cover of 2983.
9. The apparent deficit has disappeared and this week's wedge looks very good and we can continue to hold out rotation length without the use of silage. Growth rates over the next week could again average above demand and we again get into a surplus which we will use to slowly lengthen the round.
10. Soil moisture levels are good and the irrigation on the clay soils of the south block is keeping pace with evapo-transpiration, but soil moisture deficit on the free draining soils on the north block is still increasing. Even minor faults in the centre pivot sprinklers leading to reduced water volume or poor placement, is now becoming evident as dry zones on the farm. The areas covered by individual sprinklers and the K-line also have some moisture stressed areas in them.
11. Used an average of 8 ha per day, that is 1/20<sup>th</sup> of the farm each day with the cows.
12. Milk production has held this week to 1.57 kg ms /cow/day and 6.53 kg ms/ha /day, same as last week
13. The cows have put on 8 kg of weight over the last month (from daily walk over weighing).
14. Somatic cells have held at about 275,000 despite staff determinedly looking for mastitis and problem cows. It was also found that some three titters were being cupped.
15. Over the last week we have visited all our off farm suppliers of winter grazing to view the status of their pasture covers and crop yields and to assess the likelihood of the required feed targets being met by the 1 June. The continuing dry is putting increasing doubt on winter feed off dry land. As a result we are making sure we have other options.
16. The R1yr and R2yr replacements have been required to achieve at least the same consistent residuals as the milking herd. Most commonly the residuals have been between 5 and 7 "clicks" (between 1200 and 1480). Both these age groups continue to exceed growth rate targets.

The next WEEKLY farm walk is on Tuesday **5th February 2008 at 9.00am.**

**Farmers or their managers are always welcome to walk with us. Please call to notify us of your intention and bring your plate meter.**

### **Management Group**

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

The Next Focus day is on 21 February – look out for the flier.

# Lincoln University Dairy Farm - Farm Walk notes

Tuesday 22<sup>nd</sup> January 2008

## Critical issues for the short term

1. **Maintain a rotation of between 20 and 22 days.**
2. **Keeping irrigation system going properly.**
3. **Maintain grazing residuals**

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

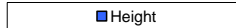
4. SOIL TEMP at 10am has continued to average 17.5<sup>0</sup>C.
5. PASTURE GROWTH was 75 kg DM/ha (last week 95) on the milking platform.
6. Average pasture cover 2164 kg DM/ha (last week 2277 kg DM/ha.)

### This week's pasture wedge

SR = 680/161.5= 4.21  
 (4.21 x 21 x 17) + 1480 = 2983  
 (2983 -500)/140 = 17.7 clicks

#### Farm Feed Wedge - Week Starting

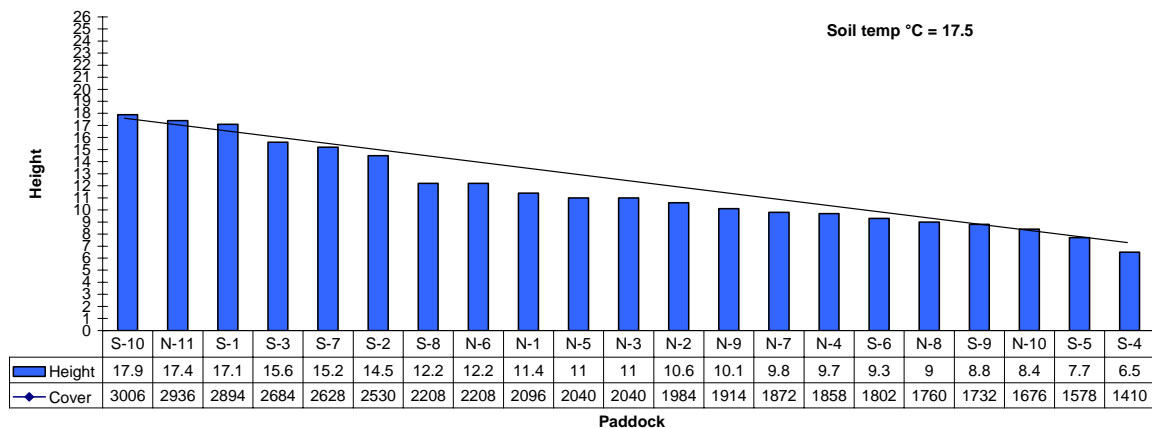
22-Jan-08



Weeks Growth Rate 75

Average Farm Cover 2164

Soil temp °C = 17.5



7. The entire farm is back in the grazing round. The target line presumes the cows are eating 17 kg DM and will be on a 21 day round. This requires a pre-grazing cover of 2983.
8. The small amount of silage we removed last week has set up the pasture wedge on the farm nicely. The apparent deficit in about 6 days away in the centre of the wedge should not be as big a problem as it looks. If growth rates over this next week average over 90 a day then this deficit will no longer be there.
9. Soil moisture levels are good and the irrigation on the clay soils of the south block is keeping pace with evapo-transpiration but soil moisture deficit on the free draining soils on the north block is increasing. The areas covered by individual sprinklers and the K-line also have some moisture stressed areas in them.
10. Used an average of 7.7 ha per day that is 1/21<sup>st</sup> of the farm each day with the cows. We also took out another 5.8 ha for silage so the actually used an average of 1/19<sup>th</sup> of the farm a day.

11. Milk production has fallen a little this week to 1.57 kg ms /cow/day (last week 1.64) and 6.53 kg ms/ha /day (6.8).
12. Somatic cells have slowly risen to just under 300,000 and our routine udder monitoring is picking up about three new mastitis case a week
13. A pregnancy scan has confirmed that we have 71% of the cows in-calf in the first 6 weeks of mating. The herd will again be tail painted and weekly we will record the numbers of the cows that have had their tail paint removed. The bulls will be remaining out for another 4 weeks.

The next WEEKLY farm walk is on Tuesday **29th January 2008 at 9.00am.**

### **Management Group**

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

The Next Focus day is on 21 February – look out for the flier.

# Lincoln University Dairy Farm - Farm Walk notes

Tuesday 15<sup>th</sup> January 2008

## Critical issues for the short term

1. **Maintain a rotation of between 20 and 22 days.**
2. **Keeping irrigation system going properly.**
3. **Maintain grazing residuals.**
4. **Record all bull matings.**

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

5. SOIL TEMP at 10am has averaged 17.5<sup>0</sup>C (last week 17.5).
6. PASTURE GROWTH was 95 kg DM/ha (last week 85) on the milking platform.
7. Average pasture cover 2277 kg DM/ha (last week 2206 kg DM/ha.)

#### This week's wedge

SR = 680/161.5= 4.21  
 (4.21 x 21 x 17) + 1480 = 2983  
 (2983 -500)/140 = 17.7 clicks

#### Farm Feed Wedge - Week Starting

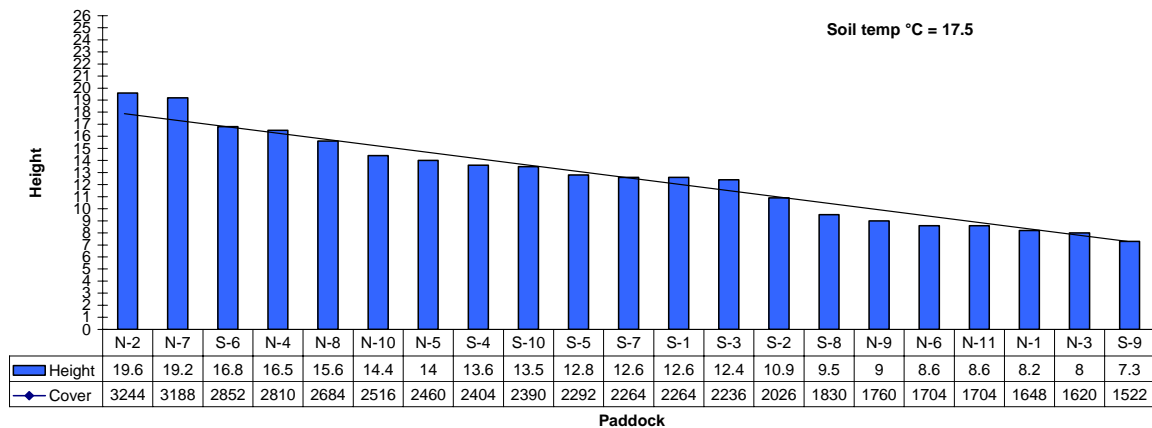
Weeks Growth Rate 95

15-Jan-08

■ Height

Average Farm Cover 2277

Soil temp °C = 17.5



8. The entire farm is back in the grazing round. The target line presumes the cows are eating 17 kg DM and will be on a 21 day round. This requires a pre-grazing cover of 2970.
9. The four longest paddocks were measured again on the weekend and the decision was made to cut the effluent area of N9 immediately for silage. The effluent area of N7 will also be made into silage as soon as possible. This will remove the surplus we now have and help remove some of the Potassium that has been building in the soil of the effluent area in these paddocks.
10. Our preferred option is to only take out one paddock for silage at a time on the milking platform (two under extreme situations). Whenever we have removed more paddocks that this we end up in a deficit in a weeks time. During times of rapid growth this means than we need to monitor covers more frequently than weekly. We anticipate that we will need to make another paddock into silage in a weeks time and will be monitoring paddock covers during the week in case we need to make this decision before next Tuesday.

11. Soil moisture levels are very good but the areas covered by individual sprinklers and the K-line have some moisture stressed areas in them. The prospect is for another hot week. The target is a third of the way between field capacity and stress level. This leaves enough room for rain events to still not reach field capacity but also means that if the pivot breaks down we are not immediately in crisis.
12. Used and average of 7.7ha per day that is 1/21<sup>st</sup> of the farm each day 21 day round
13. Milk production has risen a little this week to 1.64 kg ms /cow/day (last week 1.58) and 6.8 kg ms/ha /day (6.62).
14. A pregnancy scan has confirmed that we have 71% of the cows in-calf in the first 6 weeks of mating. The team are doing their best to record all cows mated by the bulls.
15. The cows are getting Mg Cl through the water supply at 50 gm/cow/day and we hope to remove it altogether from late January. Bloat oil is being added to the water supply at the maximum recommended rate.
16. The calves have been drenched for worms and mobbed into a single group,

The next WEEKLY farm walk is on Tuesday **22<sup>nd</sup> January 2008 at 9.00am.**

### **Management Group**

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

**The Next Focus day is on 21 February – look out for the flier.**

# Lincoln University Dairy Farm - Farm Walk notes

Tuesday, 8<sup>th</sup> January 2008

## Critical issues for the short term

1. **Maintain a rotation of between 20 and 22 days.**
2. **Keeping irrigation system going properly.**
3. **Maintain grazing residuals**
4. **Record all bull matings**

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

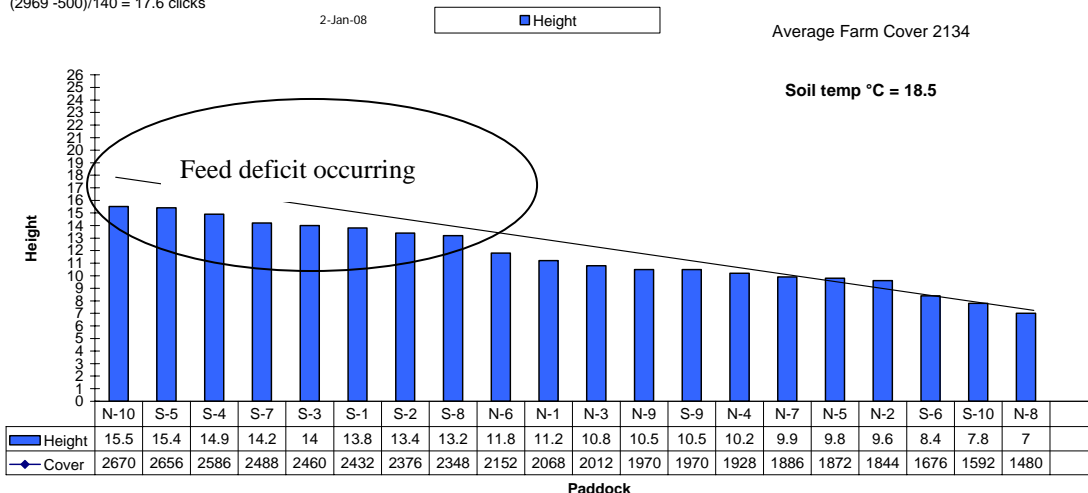
5. SOIL TEMP at 10am has averaged 17.5<sup>0</sup>C (last week 18.0).
6. PASTURE GROWTH was 85 kg DM/ha (last week 74) on the milking platform.
7. AVERAGE PASTURE COVER 2206 kg DM/ha (last week 2134 kg DM/ha.) A rise from last week and puts the wedge almost into an ideal position.
8. Last weeks wedge.

SR = 680/155.5= 4.38  
 (4.38 x 20 x 17) + 1480 = 2969  
 (2969 -500)/140 = 17.6 clicks

#### Farm Feed Wedge - Week Starting

Weeks Growth Rate 74

Average Farm Cover 2134



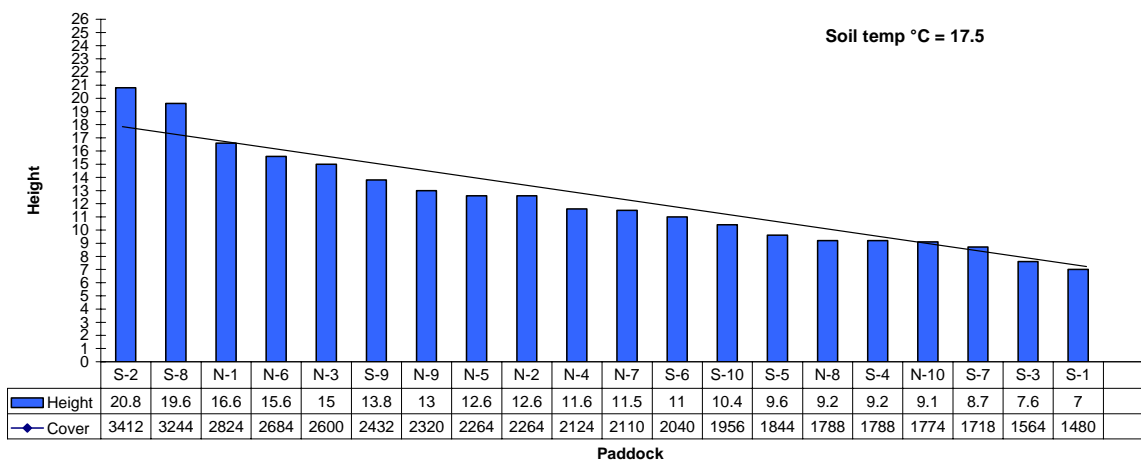
#### This week's wedge

SR = 680/155.5= 4.38  
 (4.38 x 20 x 17) + 1480 = 2969  
 (2969 -500)/140 = 17.6 clicks

#### Farm Feed Wedge - Week Starting

Weeks Growth Rate 85

Average Farm Cover 2206



9. The target line is based on a pre-grazing cover of 2970 which presumes the cows are eating 17 kg DM and being on a 20 day round.
10. The grazing rotation used 6.9ha per day that is 1/22.4<sup>th</sup> of the farm each day 22.4 day round.
11. The graphic shows that as a result of pasture growth for 2 weeks being above demand (74kg DM/ha/day), that the deficit has disappeared and silage feeding to fill the gap can stop.
12. Our aim three weeks ago was to lower the pre-grazing cover to below 3000 kg DM where we know from experience that pasture quality is higher. This has been achieved but is under threat again from excess pasture supply S2 and S8 (see graphic above) are both above 3,000kgDM/ha but the paddocks following are below the target line. Both these paddocks have some seed head evident in them. If growth continues strongly during the week at least half a paddock will be cut for silage later this week.
13. Soil moisture levels are very good but the areas covered by individual sprinklers and the K-line have some moisture stressed areas in them. The prospect is for another hot week. The target is a third of the way between field capacity and stress level. This leaves enough room for rain events to still not reach field capacity but also means that if the pivot breaks down we are not immediately in crisis.
14. Milk production has fallen a little this week to 1.58 kg MS/cow/day (last week 1.61) and 6.62 kg/MS/ha /day (6.64)
15. Somatic cell counts have been fluctuating between 198,000 and 260,000 (Target below 200,000). Two fresh cases have been treated this week. Ongoing vigilance is required to locate clinical cases.
16. Lameness often rises in the herd during this period of the year. This year unfortunately is no exception – currently 8 cows are in the “lame mob”. Some of this lameness is directly attributable to the bulls now running with the herd.
17. The team are doing their best to record all cows mated by the bulls.
18. Live weight of the herd over the last fortnight has shown a gain of about 5kg/cow.
19. The cows are getting Mg Cl through the water supply at 50 gm/cow/day and we hope to remove it altogether from late January. Bloat oil is being added to the water supply at the maximum recommended rate.
20. Paddock N11 was regrassed December 12<sup>th</sup>. The seed strike has been excellent and it is growing well. It will be nipped off probably by calves during this week. It has 1400kg DM/ha on it and when pulled (to simulate grazing) pasture rips off and plants remain firmly held in the soil. It will need a weed control spray soon after the grazing.

The next WEEKLY farm walk is on Tuesday, **15th January 2008 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

Wednesday, 2<sup>nd</sup> January 2008

## Critical issues for the short term

1. Maintain a rotation of between 20 and 22 days.
2. Keeping irrigation system going properly.
3. Maintain post grazing residuals during a short period of silage feeding

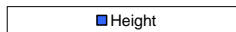
### Summary of Key Factors affecting Grazing Management & Animal Performance

4. SOIL TEMP at 10am has averaged 18<sup>0</sup>C (last week 15.5).
5. PASTURE GROWTH was 74 kg DM/ha (last week 62) on the milking platform.
6. AVERAGE PASTURE COVER 2134 kg DM/ha. A rise from last week but below optimal.
7. Last weeks wedge.

SR = 680/155.5 = 4.38  
 (4.38 x 20 x 17) + 1480 = 2969  
 (2969 - 500)/140 = 17.6 clicks

#### Farm Feed Wedge - Week Starting

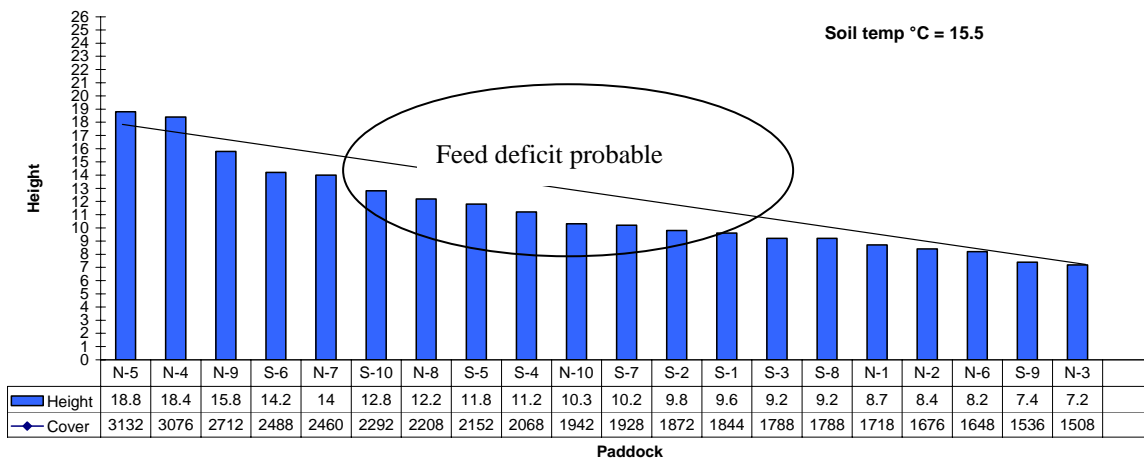
26-Dec-07



Weeks Growth Rate 62

Average Farm Cover 2097

Soil temp °C = 15.5

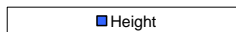


#### 8. This week's wedge

SR = 680/155.5 = 4.38  
 (4.38 x 20 x 17) + 1480 = 2969  
 (2969 - 500)/140 = 17.6 clicks

#### Farm Feed Wedge - Week Starting

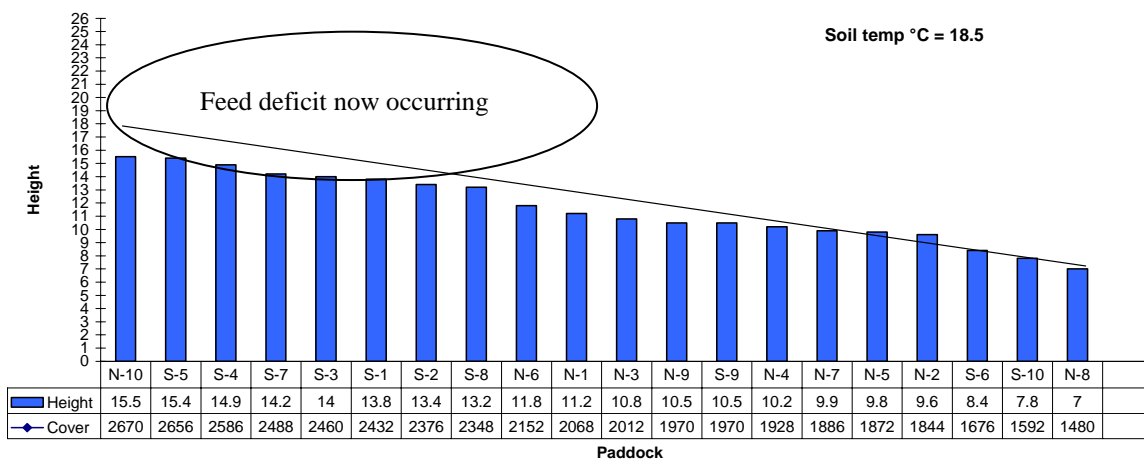
2-Jan-08



Weeks Growth Rate 74

Average Farm Cover 2134

Soil temp °C = 18.5



9. The target line is based on a pre-grazing cover of 2970 which presumes the cows are eating 17 kg DM and being on a 20 day round.
10. The graphic shows that as a result of pasture growth a fortnight ago (62kgDM/ha/day) being below demand (74kg DM/ha/day) a deficit in supply has occurred.
11. Pasture growth this week is about equal to demand. Pasture cover has risen but silage has been fed as well.
12. Our aim three weeks ago was to lower the pre-grazing cover to below 3000 kg DM where we know from experience that pasture quality is higher. This has been achieved but for the next 10 days or so some silage will need to be fed out to meet cow demand. Currently 3.5 to 4 kg of Silage DM/cow are needed to fill the deficit. This is being supplied by baleage – (our normal system)
13. Soil moisture levels are very good but the areas covered by individual sprinklers and the K-line have some moisture stressed areas in them. The prospect is for another hot week. The target is a third of the way between field capacity and stress level. This leaves enough room for rain events to still not reach field capacity but also means that if the pivot breaks down we are not immediately in crisis.
14. The action of taking out silage 2<sup>1</sup>/<sub>2</sub> paddocks in Mid December has put high quality feed in front of the herd and arrested the decline in milk production.
15. Milk production has held this week 1.61 kg MS /cow/day and 6.74 /ha /day
16. Somatic cell counts have been fluctuating between 210,000 and 250,000 ( Target below 200,000. With more normal work patterns ahead (holidays finished) the herd will have all quarters stripped before milking to locate the cows with mastitis. One fresh case has been treated this week.
17. Lameness often rises in the herd during this period of the year. This year unfortunately is no exception – currently 10 cows are in the “lame mob”. Some of this lameness is directly attributable to the bulls now running with the herd.
18. The team are doing their best to record all cows mated by the bulls.
19. Liveweight of the herd over the last fortnight is about static.
20. The cows are getting Mg Cl through the water supply at 100 gm/cow/day with Bloat oil being added to the water supply at the maximum recommended rate.
21. More paddocks of surplus have again appeared on the Heifer Block. This will be made into silage this week.
22. Paddock N11 was regressed December 12<sup>th</sup>. The seed strike has been excellent and it is growing well.

The next WEEKLY farm walk is on Tuesday, **8th January 2008 at 9.00am.**

### **Management Group**

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