

# Lincoln University Dairy Farm - Farm Walk notes

Tuesday, 30<sup>th</sup> October 2007

## Critical issues for the short term

1. Hold the rotation length at 20 plus days and the grazing residual at 7 “clicks”.

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

2. SOIL TEMP at 10am has risen from 12.6 °C. 14.1 °C. The weather forecast is for warm temperatures which we expect will leave soil temperatures near to the current level.
3. PASTURE GROWTH was 70 kg DM/ha (last week 51) on the milking platform reflecting the warmer temperatures during the week.
4. AVERAGE PASTURE COVER has risen slightly again from 2024 kg DM/ha to 2040 kg DM/ha. We have been holding to an average of 7.2 ha grazed per day or 1/22<sup>nd</sup> of the farm a day.
5. Last weeks wedge

SR = 680/161.5 = 4.21  
 (4.21 x 20 x 17.5) + 1480 = 2953  
 (2935 - 500)/140 = 17.4 clicks

#### Farm Feed Wedge - Week Starting

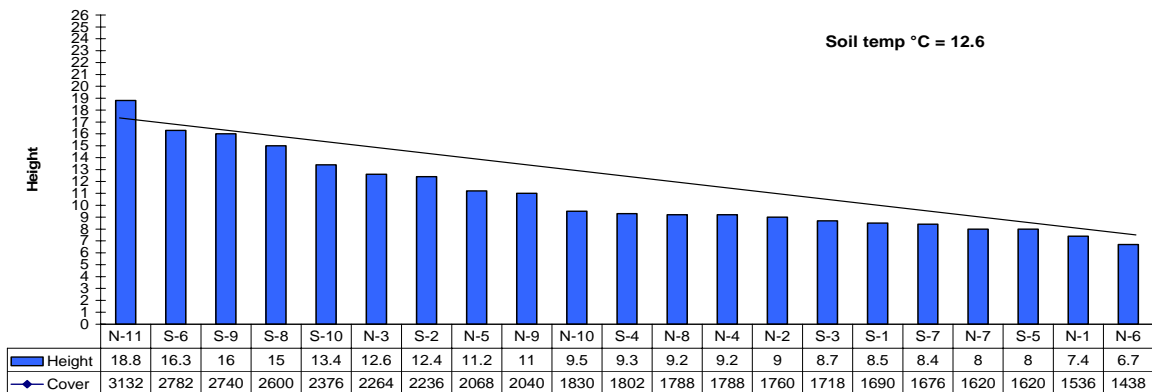
23-Oct-07



Weeks Growth Rate 51

Average Farm Cover 2024

Soil temp °C = 12.6



Paddock

6. This weeks wedge

SR = 680/161.5 = 4.21  
 (4.21 x 20 x 17.5) + 1480 = 2953  
 (2935 - 500)/140 = 17.4 clicks

#### Farm Feed Wedge - Week Starting

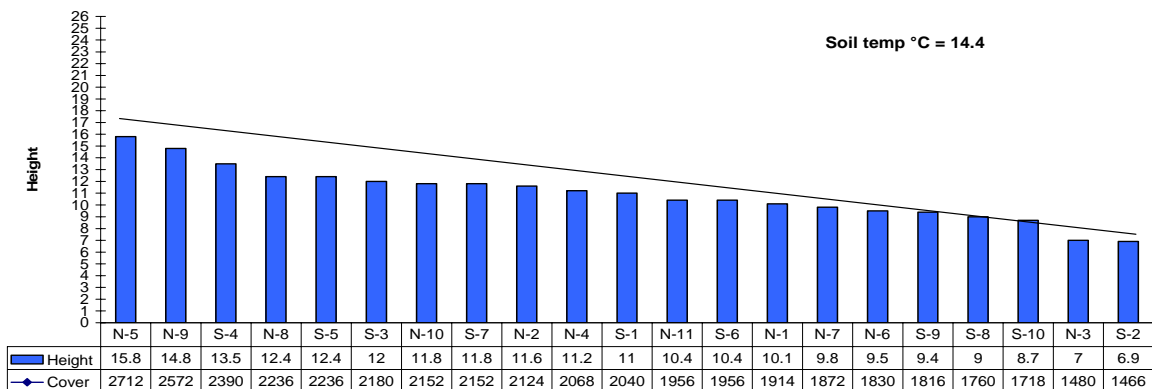
30-Oct-07



Weeks Growth Rate 70

Average Farm Cover 2040

Soil temp °C = 14.4



Paddock

7. This week's pasture wedge shows we have arrived at last weeks mid graph deficit. Slowing down the grazing round has helped but the growth rate of 70 is still below demand of 73. The target line on the wedge assumes that we stick to a 20 day round and a residual of 1480 or "7 clicks" and holding the allocation of pasture to 17.5 kgs DM.
8. The feed deficit represented by the gap between the paddock heights and the target line will be made up from silage and a day feed on the East Block. The encouraging thing this week is that the residuals have lifted back a height of "7 clicks" or 3.5cm of compressed height on the Rising Plate meter and that all the silage is being cleaned up by the cows.
9. Our management policy at this time of the year is to be farming right on the knife edge of supply. We do this because there are much bigger dollars to be lost from a lack of quality than from having a short term deficit. We do not choose to speed up the rotation because at a stocking rate of 4.2 cows /ha doing this means that we are betting on the growth rate for the next two to three weeks to increase to well above what we will require to fill the deficit at the current rotation length. At our 4.2 stocking rate on a 20 day round we require a 73 growth rate to match demand. Going to a 16 day round would mean that the growth rate would need to be 88 just to hold our cover and above this to allow us to again lengthen the round back to 20 days.
10. We have been feeding an average of 3.8 kg DM /cow/day grass silage this week to keep residuals between "6 and 7 clicks" (1340 kg DM/ha to 1480 kg DM/ha).
11. We will be re-grassing N11 on the milking platform once we are out of this current deficit.
12. Current pasture ME is holding at over 12.5 and even with the silage we are offering an intake of over 200 ME. This is enough ME for maintenance and to do about 2 kgs MS /cow/day. There are no seed heads visible in our pastures.
13. Milk production has held at 1.96 kg MS /cow/day and 8.1 kg MS /ha /day.
14. Somatic cell counts keep on fluctuating between 190,000 and 240,000 with only 1 new mastitis case found this week.
15. The light cows which were below C.S. 4.0 have been mated and have gone back into the TAD milking herd.
16. We are averaging 25 cows per day for the first 6 days. This should result in a 25% plus submission rate in the first week. In addition to this we have mated the 55 anoestrous cows which had been treated with a CIDR programme. This would lift the first week submission rate to 34%. The target is to achieve a 30% submission rate in each of the first three weeks.
17. While the weather is warm the cows are only getting Mg Cl through the water supply at 60 gm/cow/day.
18. Bloat oil is being added to the water supply at the maximum recommended rate.

19. We are monitoring cow live weight with the walk over weighing. The herd average has gained another 5 kgs which is consistent with the better feed supply during the week. We hope with the additions of silage we will be able to continue to see some live-weight gain continue during the week
20. More calves will be weaned off tomorrow and will join the other calves which are getting ad lib meal on pasture.
21. We are closely watching soil moisture levels and will start irrigating this week on all areas of the farm. Soil moisture levels are now dropping faster than they have done previously this season.
22. Surpluses on the runoffs are being made into silage as they occur and the new grass paddocks also on the runoffs are now ready for their first nip off as the plants do not pull out of the ground. The cover on these paddocks has just reached 1300 kgs DM/ha. This first nip is very important to get tillering to occur. They will then be sprayed for weeds.
23. After our farm walk and management meeting each Tuesday morning we then hold a full staff meeting after lunch to plan the work for the week. Last weeks work plan is reviewed and this week's non-routine jobs are prioritised (urgent / important) and assigned to specific staff. The weeks feed wedge and farm walk notes are made available to everyone for discussion.

The next WEEKLY farm walk is on **TUESDAY, 6th November 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 23<sup>th</sup> Oct 2007

## Critical issues for the short term

1. Make sure all cows are getting MgO dusted and through the inline dispenser and the milkers also get lime flour dusted.
2. Hold the rotation length at 20 days.

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

3. SOIL TEMP at 10am has risen to 12.6 °C. but has been down to 9.4 °C during the week  
The weather forecast is for warm temperatures which we expect will leave soil temperatures near to the current level.
4. PASTURE GROWTH was 51 kg DM/ha (last week 76) on the milking platform reflecting the cold temperatures during the week. If soil temperatures hold the growth rate should return to above 70kgDM/ha/day during this week.
5. AVERAGE PASTURE COVER has dropped from 2200 kg DM/ha to 2024 kg DM/ha. We have been holding to an average of 8.32 ha grazed per or 1/19.5<sup>th</sup> of the farm a day.

SR = 680/161.5 = 4.21  
(4.21 x 20 x 17.5) + 1480 = 2953  
(2935 - 500)/140 = 17.4 clicks

#### Farm Feed Wedge - Week Starting

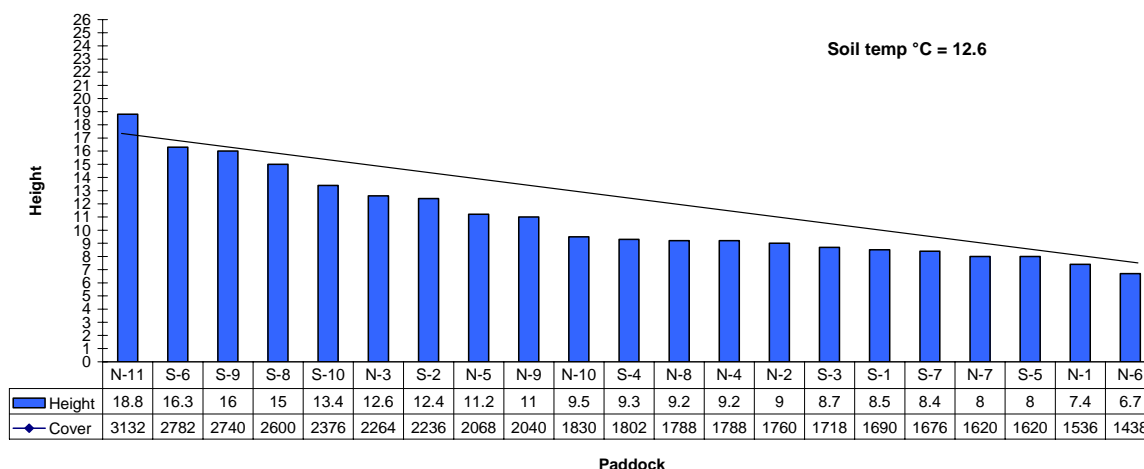
Weeks Growth Rate 51

23-Oct-07

■ Height

Average Farm Cover 2024

Soil temp °C = 12.6



6. This week's pasture wedge shows that the slow growth rate for the week has presented us with a feed shortage from tomorrow. The target line on the wedge assumes that we stick to a 20 day round and a residual of 1480 or "7 clicks" and holding the allocation of pasture to 17.5 kgs DM. The feed deficit represented by the gap between the paddock heights and the target line will be made up from silage and a day feed on the East Block.
7. Our management policy at this time of the year is to be farming right on the knife edge of supply. We do this because there are much bigger dollars to be lost from a lack of quality than from having a short term deficit. These deficits can occur when we have a particularly cold snap. We manage this by holding the rotation length and putting in sufficient high quality silage for the grazing residual to remain in the 6 to 7 "clicks" range. We do not choose to speed up the rotation because at a stocking rate of 4.2 cows/ha doing this means that we are betting on the growth rate for the next two to three weeks to increase to well above what we will require to fill the deficit at the current

rotation length. This may be a useful strategy at a low stocking rate but not at a high stocking rate. At our 4.2 stocking rate on a 20 day round we require a 73 growth rate to match demand. Going to a 16 day round would mean that the growth rate would need to be 88 just to hold our cover and above this to allow us to again lengthen the round back to 20 days.

8. We have been feeding an average of 0.36 kg DM /cow/day grass silage this week to keep residuals above “6 clicks” (1340 kg DM/ha). Note: Last weeks wedge had a number of paddocks above the line which helped avoid using much silage during the week.
9. Current pasture ME is holding at over 12.5 and even with the silage we are offering an intake of over 200 ME. This is enough ME for maintenance and to do about 2 kgs MS /cow/day.
10. Milk production dropped to 1.9 kg MS /cow/day early in the week but has risen to 1.96kg MS/cow/day for the second half of the week 8.1 kg MS /ha /day.
11. Somatic cell counts keep on fluctuating between 170,000 and 222,000 an average of 204,000 with 2 new mastitis cases this week (4 last week).
12. We have had 2 new lame cows this week and have only 3 in the sick/OAD mob. This is very low rate of lameness. Our pasture and silage NDF % continues to be in the range between 30 and 37 and we are NOT feeding straw. These NDF levels would be considered low to marginal by many nutritionists but we are not seeing any of the health problems like lameness that they would suggest should be occurring.
13. The light cows (below condition score 4.0) - 22 continue to be milked OAD. Of these 17 have cycled and 5 have required Cidrs. These cows will have to be mated and over a condition score of 4.2 before they go back into the TAD milking herd.
14. During the last week 173 cows have been in heat (24.7/day). To get 90% mated in 21 days we will need to mate 29 cows per day during mating.
15. The 55 anoestrous cows have been treated with a CIDR programme. These had the CIDR removed yesterday and they will be mated on the first day of mating next Thursday the 25<sup>th</sup>.
16. There are now only 7 cows not yet calved. These are the last of our surplus cows. Having these extra cows has allowed us to cull some undesirable cows out of the herd.
17. An application of 20 kg N/ha is continuing to be applied to grazed paddocks and to any cut for silage. It will also be applied up to 5 days before grazing.
18. 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. In spite of this 2 cows needed treatment for a lack of magnesium, both these cows had been in heat.
19. Bloat oil is being added to the water supply at the maximum recommended rate.
20. We are monitoring cow live weight with the walk over weighing. The herd average has gained 11 kgs which is consistent with the better feed supply during the week. We hope with the additions of silage we will be able to continue to see some live-weight gain continue during the week

21. Second PG jab of the synchrony program for the 170 R2yr heifers occurred last Tuesday and 144 were mated to heats detected with the aid of tail paint. Fourteen bulls were put with the heifers after AB mating on the 3<sup>rd</sup> day.
22. We weaned off milk 128 of the oldest calves last Wednesday. These calves were treated with a 10gm copper bullet and drenched for worms and deliced. Target weight for weaning these earliest calves is 75 kgs and must be over 8 weeks old. These cross bred calves have been on pasture since they were two weeks old and will continue to get adlib meal until they weigh 100 kgs.
23. We are closely watching soil moisture levels and will be starting irrigating this week on the areas that gun, lateral or K-line irrigation have a longer return interval.
24. After our farm walk and management meeting each Tuesday morning we then hold a full staff meeting after lunch to plan the work for the week. Last weeks work plan is reviewed and this week's non-routine jobs are prioritised (urgent / important) and assigned to specific staff. The weeks feed wedge and farm walk notes are made available to everyone for discussion.

The next WEEKLY farm walk is on **TUESDAY 30th October 2007 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 16<sup>th</sup> Oct 2007

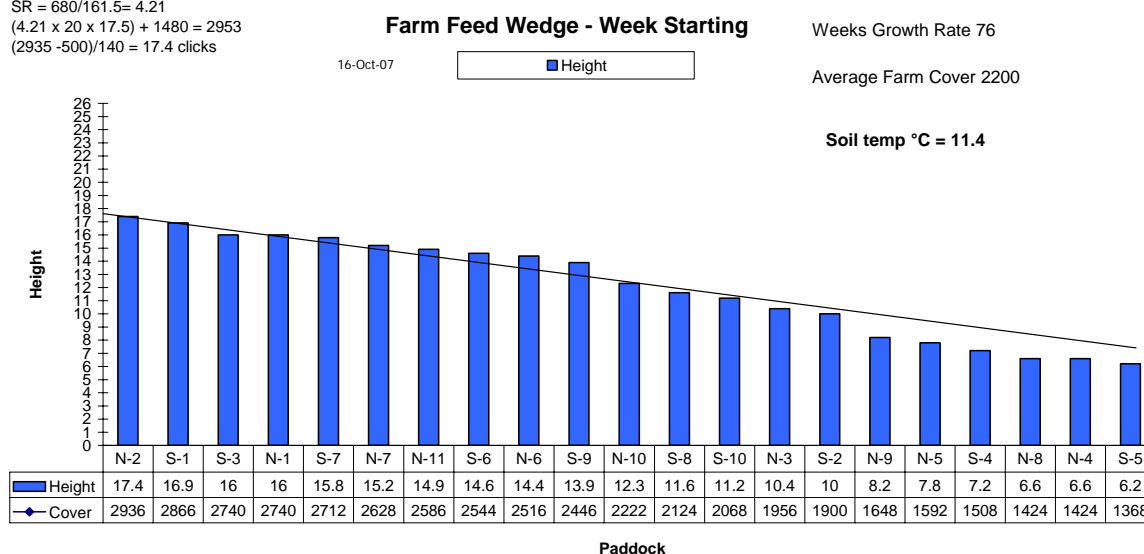
## Critical issues for the short term

1. Make sure all cows are getting MgO dusted and through the inline dispenser and the milkers also get lime flour dusted.
2. Hold the rotation length at 20 days.

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

3. SOIL TEMPS at 10am are holding at about 11.4 °C. The weather forecast is for average temperatures and more rain which we expect will leave soil temperatures near to the current level.
4. PASTURE GROWTH was 76 kg DM/ha (last week 82) on the milking platform. If soil temperatures hold this growth rate should continue above 70kgDM/ha/day.
5. AVERAGE PASTURE COVER has risen from 2143 kg DM/ha to 2200 kg DM/ha. We have been holding to an average of 8.1 ha grazed per or 1/20<sup>th</sup> of the farm a day.

SR = 680/161.5= 4.21  
 (4.21 x 20 x 17.5) + 1480 = 2953  
 (2935 -500)/140 = 17.4 clicks



6. This week's pasture wedge shows that the slight deficit from last week has almost disappeared. The only reminder of this is the 6 paddocks at the lower end of the wedge which were grazed to lower than "7 clicks" residual. The target line on the wedge assumes that we stick to a 20 day round and a residual of 1480 or "7 clicks" and holding the allocation of pasture to 17.5 kgs DM.
7. We have been feeding an average of 4.8 kg DM ;/cow grass silage this week to keep residuals above "6 clicks" (1340 kg DM/ha). This was higher than we thought we were feeding. We had assumed the baleage would be 55 DM % but the test result late this week came back as 70%. In fact the results show that this line of supplement was to dry to ensile so by accident it was probably a good thing that we are feeding it out.

8. This week we will progressively reduce the silage. Current pasture ME is holding at over 12.5 and even with the silage we are offering an intake of over 200 ME. This is enough ME for maintenance and to do about 2 kgs MS /cow/day.
9. Milk production has had a slight decrease down to 1.9 kg MS/cow/day (1.98 last week) and has held at 7.6 kg MS/ha/day.
10. Somatic cell counts keep on fluctuating between 170,000 and 204,000 with 4 new mastitis cases this week (4 last week).
11. We have had 2 lame cows this week.
12. Three more light cows (below condition score 4.0) were added to the 22 identified last week and put into a separate mob and milked OAD. Of these 17 have cycled and 5 have required Cidrs. These cows will have to be mated and over a condition score of 4.2 before they go back into the TAD milking herd. We have done this in previous years and these cows have quickly gained weight and have cycled prior to mating.
13. The 592 cows (87% of the herd) which have been calved more than 30 days were tail painted four weeks ago. Seventy five cows had not had an observed heat in the last 24 days so they were checked by the vet and of these 55 cows were anoestrus and had a Cidr inserted. This compares with 117 cows needing a Cidr at the same time last year.
14. There are now only 7 cows not yet calved. These are the last of our surplus cows which previously were to be sold.
15. An application of 20 kg N/ha is continuing to be applied to grazed paddocks and to any cut for silage. It will also be applied up to 5 days before grazing.
16. 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.
17. Bloat oil is being added to the water supply at the maximum recommended rate.
18. We are monitoring cow live weight with the walk over weighing. The herd average has dropped 4 kgs which is consistent with the tighter feed supply over the last week. With the higher pasture covers we expect to see this turn around again before mating starts.
19. Second PG jab of the synchrony program for the 170 R2yr heifers occurred today and mating starts in two days time. They will be mated to observed heats for three days and then 14 bulls will join them on that third day.
20. We will be weaning the oldest calves tomorrow. These calves will get a 10gm copper bullet and drenched for worms and deliced. Target weight for weaning these earliest calves is 75 kgs and must be over 8 weeks old. These cross bred calves have been on pasture since they were two weeks old and will continue to get adlib meal until they weigh 100 kgs.

The next WEEKLY farm walk is on **TUESDAY 23 October 2007 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, 9<sup>th</sup> October 2007

## Critical issues for the short term

1. Make sure all cows are getting MgO dusted and through the inline dispenser and the milkers also get lime flour dusted.
2. Hold the rotation length at 20 days.

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

3. SOIL TEMPS at 10am rose to 11 °C before dropping again to 10.5 °C. The weather forecast is for average temperatures and more rain which we expect will leave soil temperatures near to the current level.
4. PASTURE GROWTH was 82 kg DM/ha (last week 86) on the milking platform. If soil temperatures hold this growth rate should continue above 70kgDM/ha/day.
5. AVERAGE PASTURE COVER has dropped from 2385 kg DM/ha to 2143 kg DM/ha as a result of making another 15.4 ha of silage and having the R2yr replacements back onto the milking platform (these have eaten a further 3.4ha). This means that an average of 9 ha/ day was grazed (including silage harvested) or 1/18<sup>th</sup> of the farm a day.

SR = 680/161.5 = 4.21  
 (4.21 x 20 x 17.5) + 1480 = 2953  
 (2935 - 500)/140 = 17.4 clicks

#### Farm Feed Wedge - Week Starting

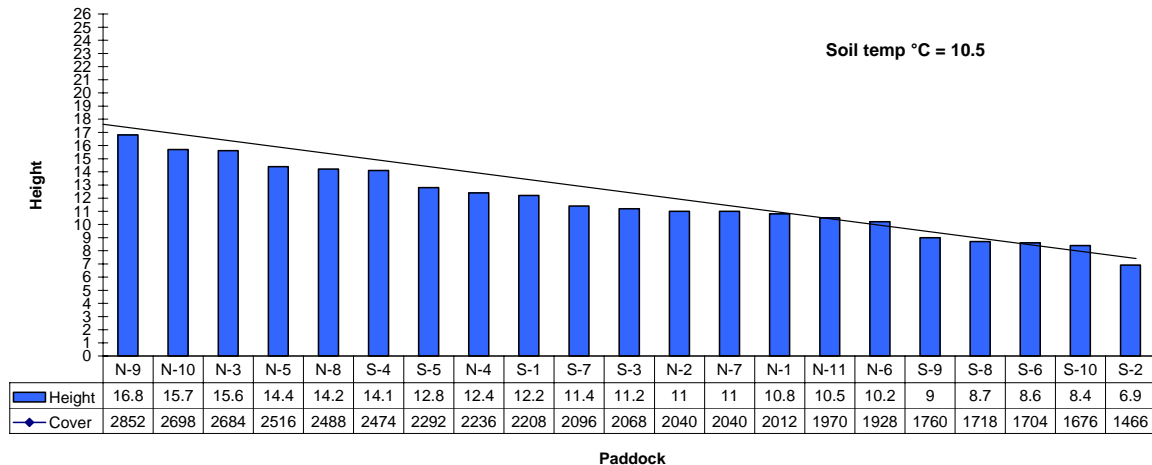
Weeks Growth Rate 82

9-Oct-07

■ Height

Average Farm Cover 2143

Soil temp °C = 10.5



6. This week's pasture wedge shows that we are in a slight deficit. This assumes that we stick to a 20 day round and a residual of 1480 or "7 clicks" and holding the allocation of pasture to 17.5 kgs DM. There has been a burst of newly calved cows entering the herd this week. These cows only require 12 kg DM/day and we are allocating 17. The extra 5 kg DM will allow the other cows to still lift their intakes even though the herd allocation has stayed the same.
7. The current pasture ME is 12.5 and so with an allocation of 17.5 kg DM/cow we are offering an intake of 212 ME. This is enough ME for maintenance and to do about 2 kgs MS /cow/day.

8. Milk production is holding at 1.98 kg MS/cow/day (2.01 last week) and has risen to 7.58 kg MS/ha/day.
9. Somatic cell counts keep on fluctuating between 170,000 and 190,000 with 4 new mastitis cases this week (6 last week).
10. We have had another 4 lame cows this week. Three of the four were cows that had been lame some time last season. So far this season only two heifers have been lame.
11. Three more light cows (below condition score 4.0) were added to the 19 identified last week and put into a separate mob and milked OAD. We have done this in previous years and these cows have quickly gained weight and have cycled prior to mating.
12. Tail paint was checked yesterday and 256 cows had cycled in the first 10 days and another 159 have cycled this week.
13. There are now only 17 cows not yet calved (this includes 15 surplus cows which previously were to be sold) are cleaning up the paddocks on the East block where this years calves are grazing. They are getting about 10 kg and are holding a condition score of over 5.0.
14. An application of 20 kg N/ha is continuing to be applied to grazed paddocks and to any cut for silage. It will also be applied up to 5 days before grazing.
15. 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.
16. Bloat oil is being added to the water supply at the maximum recommended rate.
17. We are monitoring cow live weight with the walk over weighing. The herd average shows a slow but consistent upward trend. The early calving young monitor group weights are also continuing to gain weight and the light cows that have been put onto OAD have turned around and have held their weight for the first time.
18. 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.
19. The bulls to tail over the R2yr heifers after AB and the herd after AB have been inspected and marked ready for collection. These bulls are all Letpo vaccinated, EBL, Tb and BVD clear.
20. Next Focus day is on Thursday 11 October starting at 10.15 on the dairy farm

The next WEEKLY farm walk is on **TUESDAY, 16 October 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

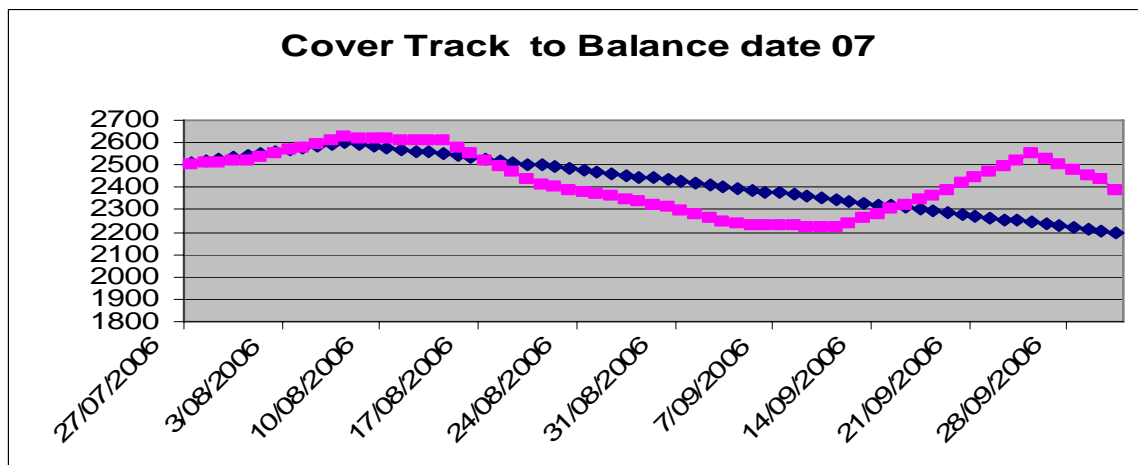
Tuesday, 2<sup>nd</sup> Oct 2007

## Critical issues for the short term

1. Make sure all cows are getting MgO dusted and milkers also get lime flour.
2. Put any cows under Condition Score 4.0 onto OAD milking.
3. Organise the tail end bulls – Check for Lepto vaccination, must be clear of TB & BVD & EBL, and physically sound.
4. Check all irrigation equipment.

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

5. SOIL TEMPS at 10am have held steady at 10.5 °C, as warm weather has continued.
6. PASTURE GROWTH was 86 kg DM/ha (last week 82) on the milking platform. The weather forecast continues to be warm except for Wednesday so it is very likely that pasture growth will continue above 70kgDM/ha/day.



7. AVERAGE PASTURE COVER has dropped from 2550 kg DM/ha to 2385 kg DM/ha as a result of making 11.4 ha of silage and bringing the R2yr replacements back onto the milking platform (these have eaten a further 4ha).

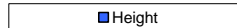
SR = 640/161.5 = 3.96  
 (3.96 x 21 x 17.5) + 1480 = 2935  
 (2935 - 500)/140 = 17.4 clicks

#### Farm Feed Wedge - Week Starting

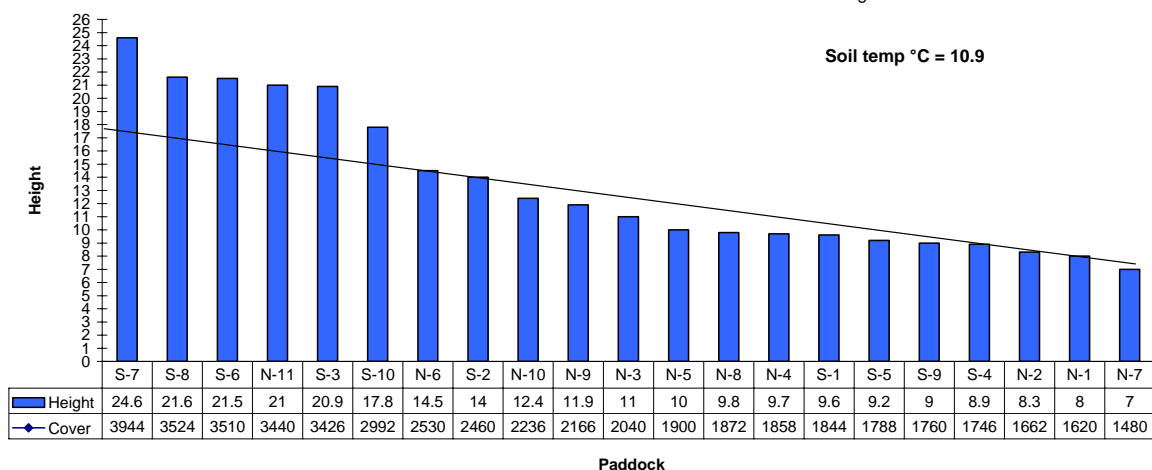
Weeks Growth Rate 86

Average Farm Cover 2385

2-Oct-07



Soil temp °C = 10.9



Paddock

8. This week's pasture wedge shows that we still have a surplus of about 24t. Paddocks S7 & S6 are very dense pastures and are not very tall but have reached canopy closure. The height of pasture is too short to make silage without large losses in the paddock. These two paddocks will be grazed by the cows. Paddock S8 will also be grazed by the cows because there is a very wide range of covers on this paddock as a result of it being the last paddock on the milking platform that was grazed by the springers.
9. Paddocks N11 and S3 will be made into silage once North West winds return later this week. The grass in the back half of N6 (3.3ha) will be grazed by the R2yr heifers and then they will return to their heifer grazing block.
10. We are continuing to lift the allocation to the calved cows from 17kg DM /cow /day last week to 17.5 for this coming week. This continues to be grass only. Our demand on the milking platform (replacements not included) is 69 kgs DM/day. We expect growth rates to meet or exceed this for the next week.
11. Milk production has lifted to 2.01 kg MS/cow/day (1.96 last week) and has risen to 7.41 kg MS/ha/day.
12. Somatic cell counts are averaging 170,000 (185,000 last week) with 6 new mastitis cases this week. After our recent herd test we identified the high somatic cell count cows in Pro-Track with alerts so that we can regularly check for clinical mastitis. One more lame cow this week.
13. All calved cows have been Metri-checked and 25 cows had some level of infection. Some of the infected cows had only recently calved or had a slight infection. Eight of the cows were treated. None of these cows had any external visual display of infection.
14. Two more light cows (below condition score 4.0) were added to the 17 identified last week and put into a separate mob and milked OAD. We have done this in previous years and these cows have quickly gained weight and have cycled prior to mating.
15. Tail paint was checked yesterday and 256 cows had cycled in the first 10 days.
16. The 50 cows not yet calved (this includes 15 surplus cows which previously were to be sold) are cleaning up the paddocks on the East block where this years calves are grazing. They are getting about 10 kg and are holding a condition score of over 5.0.
17. An application of 20 kg N/ha will be applied following the cows (and up to 5 days before).
18. 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.
19. Bloat oil is being added to the water supply at maximum recommended rate.
20. The last of this year replacement calves (9 weeks of AI) are now out in the paddocks. The youngest calves get 5 litres of milk /day but this steps down after a few weeks to 3 litres. The oldest calves which are about a week away from weaning are only getting 2 litres of milk a day and are consuming up to 2 kgs of meal a day.

21. 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, 9 October 2007 at 9.00am.**

### **Management Group**

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