

Lincoln University Dairy Farm - Farm Walk notes

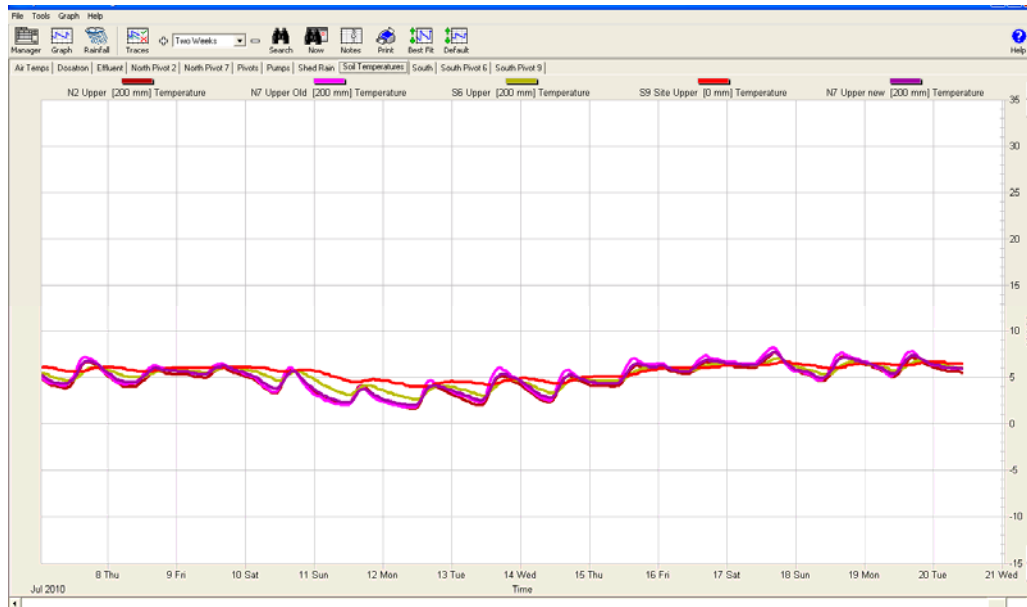
Tuesday, 20th July 2010

CRITICAL ISSUES FOR THE SHORT TERM

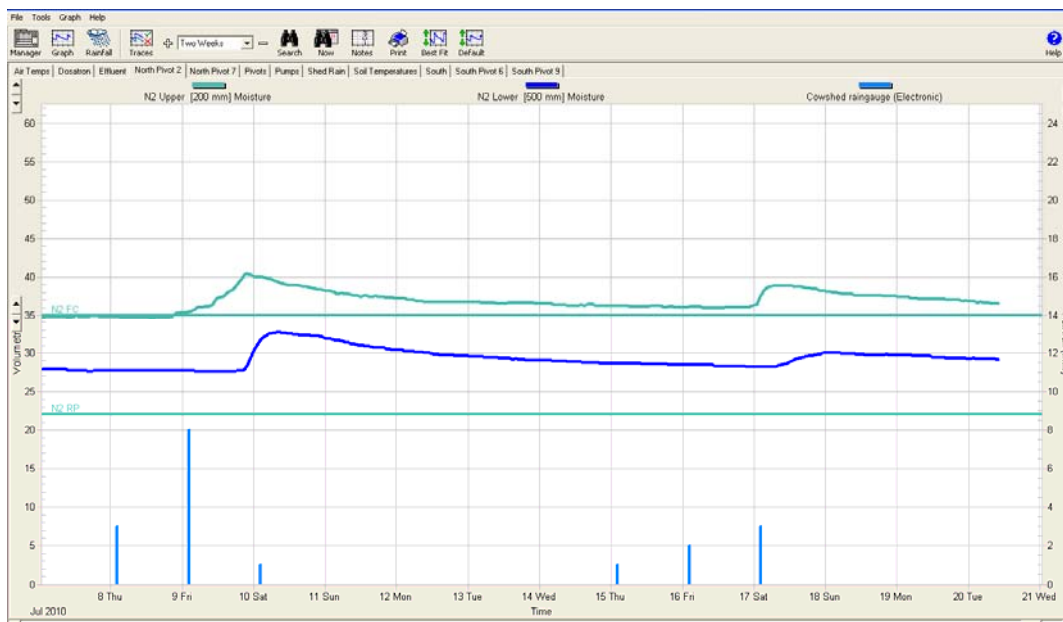
1. Dust with mag-oxide cows calving within the next 4 weeks
2. Closely observe heifers starting to calve
3. Monitor cows/heifers for any signs of mastitis
4. Monitor average pasture cover and track against budget
5. Keep grazing residuals to the desired 7 clicks on platform pastures
6. Avoid pasture damage by standing off if necessary

Summary of Key Factors affecting Grazing Management & Animal Performance

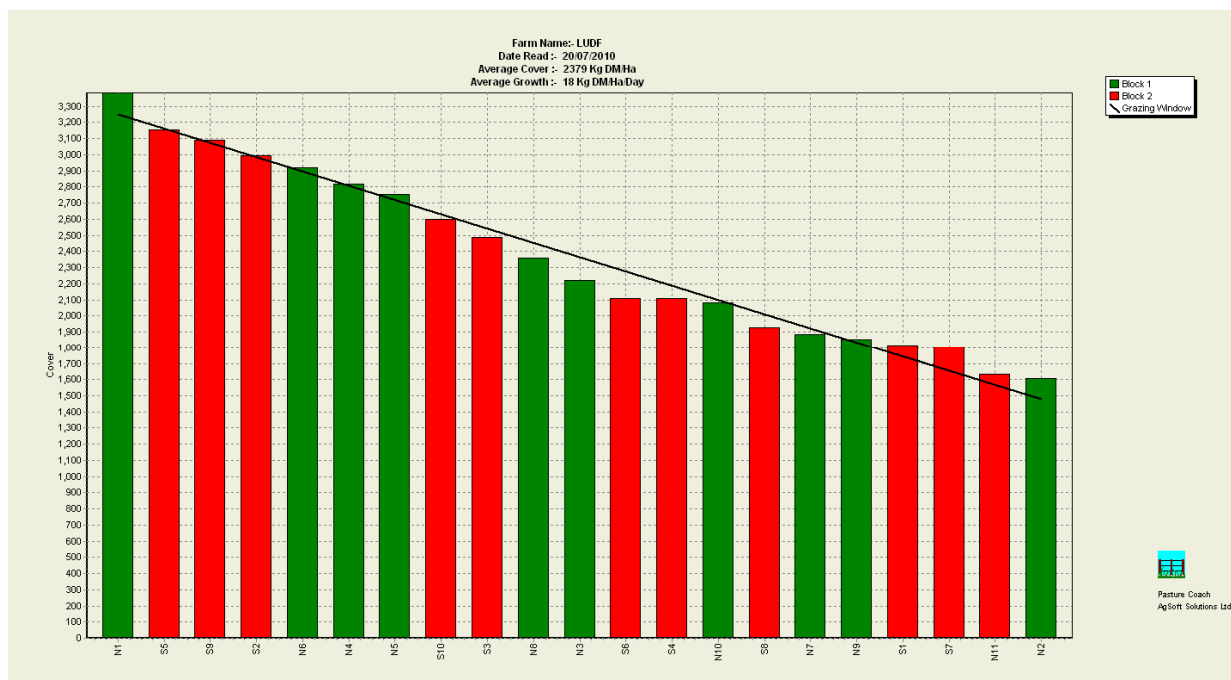
7. Soil temperature this week was 5.0°C, up from 3°C last week.



8. We had another 5.7 mm of rain last week. The wet parts (heavy soils) of the farm are still very wet and we can see yellow/brown patches where water has been sitting for a while. The top soil moisture line is still above field capacity.

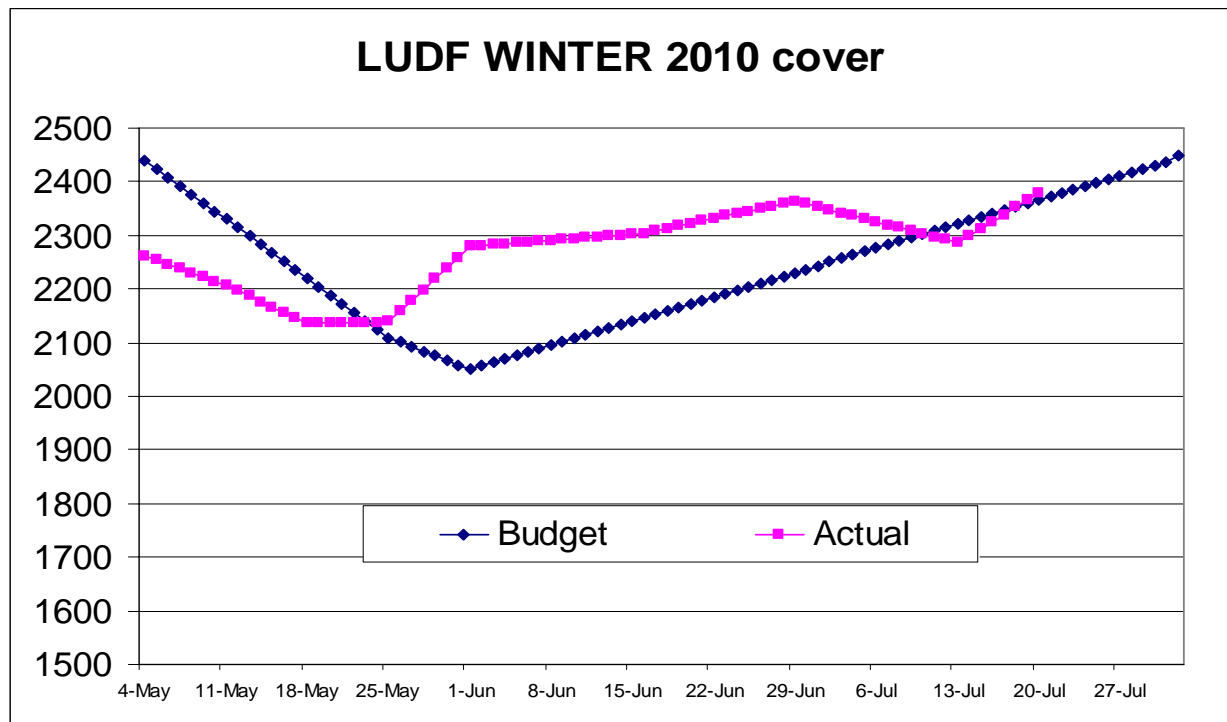


9. We only had 8 lame cows on the milking platform since the herd of 111 cows we had on the milking platform were moved off farm last Wednesday, we needed to do that to ensure we achieve our pasture cover target at the start of calving. So we only ate 0.8 ha of the milking platform last week.
10. We still have 5 wintering mobs as follows:
 - 111 mixed age – that were in the milking platform have gone away to Rape and Turnips 1 km away. They average 4.9 body condition score now.
 - 124 mixed age cows, early calvers. These cows finished the Kale and are now on grass. They are now 5 condition score.
 - 189 later calving Mixed Aged cows– Grazing at Hororata on kale and good quality cereal silage. They have gained condition steadily as well. There is a larger range in this mob 4.5 – 5.5. The average is currently 4.8. Because they are not calving after 25th of August we still have some time to put some condition on. We are not bringing any light cows home at this stage.
 - 95 Second Calvers at Dunsandel on good quality pasture come back in 9 days to the East Block.
 - 164 Rising two year first calvers are on Rape and Turnips and are starting to calve. We will bring all of them back to the milking platform for tagging and the springers will stay here. The ones that are not springing will go back to Rape & Turnips. The average BCS is 5.3.
11. It was particularly important that all the herds were being fed to achieve weight gain during June. We are happy with gain in body condition of all groups of cows, and most of the mobs have achieved the targets set.
12. Average Pasture cover this week was 2,379kg DM/ha, up from 2,286 kg DM/ha we had last week. Growth Rate last week was 18 kg DM/ha/day, up from the 7 kg DM/ha/day last week.
13. Feed Wedge today:



The target line in the wedge reflects the pre-grazing target of 3,252kg DM/ha and a post grazing of 1,480 kg DM/ha, this is the line that represents an average farm cover of 2,366kgDM/ha. This feed wedge has a small deficit of 300 kg DM.

14. The feed budget done for the remainder of the season has a target average pasture cover as shown in the graphic below. We are targeting a cover on the 1st of August of 2,450 kg DM/ha. This cover is what we need to feed the herd on grass without having to feed any supplements until the first grazing round finishes. After taking the cows off the milking platform last week the cover on the farm recovered and now we are back on track.



15. Key management decisions to think about this week:

- Although the cover on the farm has recovered we will maintain cows off farm to avoid damage on the wet areas.
- Bring lame cows home if necessary.
- Attending to any other illness in the cows.

16. We didn't have any new lame cows this week.

17. No mastitis has been located since drying off. The 164 heifers (R2) were teat sealed 3 weeks ago and the job went very well with no major challenges to men or beast.

18. No nitrogen fertiliser will be applied until early August.

19. The eco-n for the autumn was completed in mid May over the 159 effective ha. The second round was applied this week to all paddocks except N1 because it is longer than 3,000 kg DM/ha so it will be applied after it is grazed. Eco-n can be applied if we expect 10mm of rain and if the cover is less than 3000 kg DM /ha.

Next farm walk will be on **Tuesday, 27th July 2010, at 9.00 am.**

Farmers or their managers and staff are always welcome to walk with us. Please call to notify us of your intention and bring your plate meter. Phone SIDDC – 03 325 3629

Management Group

Peter Hancox (Farm Manager), George Reveley (for SIDDC), Virginia Serra (DairyNZ).

Lincoln University Dairy Farm - Farm Walk notes

Tuesday, 13th July 2010

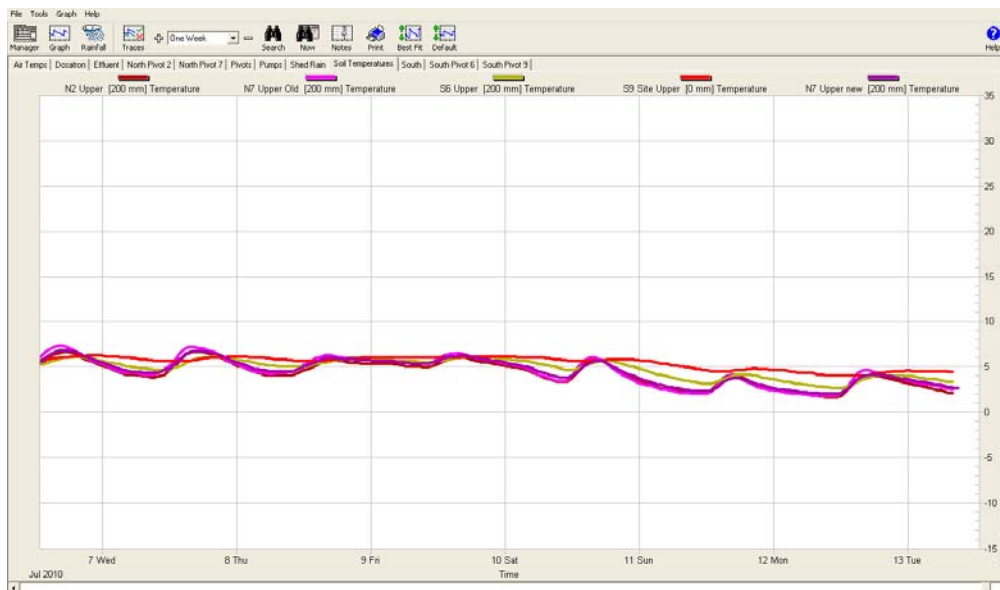
CRITICAL ISSUES FOR THE SHORT TERM

1. Monitor condition and make necessary changes to achieve the targets.
2. Observe feeding behaviour of cows.
3. Closely observe cows for any signs of mastitis
4. Monitor average pasture cover and track against Budget
5. Keep grazing residuals to the desired 7 clicks on platform pastures
6. Avoid pasture damage by standing off if necessary

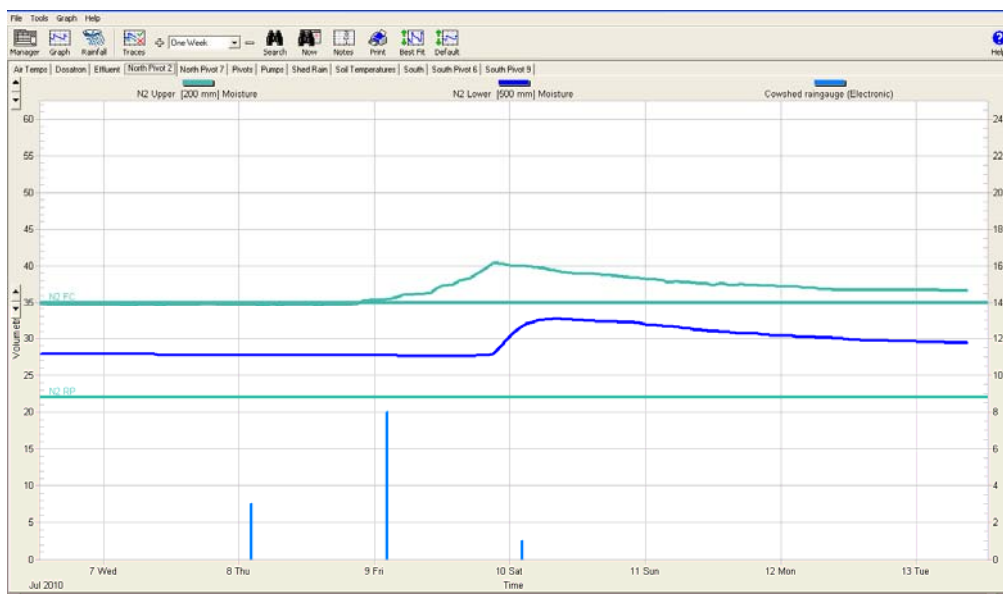
We are doing weekly farm walks from today.

Summary of Key Factors affecting Grazing Management & Animal Performance

7. Soil temperature this week was 3.0°C, lower than 4.5°C last week



8. We had another 12 mm of rain, which was enough to push the top soil moisture line above field capacity. This line was at field capacity for about 7 days until Friday last week then moved above field capacity. The 110 cows on the platform have been able to graze on the milking platform this week.



9. Pasture grazing residuals have been maintained at 7“clicks” on the rising plate meter.
10. The cows on the platform grazed 6.3 ha during the week (0.9 ha/day). This was a grazing rotation of about 1/177th of the platform per day.
11. We still have 5 wintering mobs as follows:
 - 111 mixed age – Staying on the milking platform on grass - fed to 7 clicks in the plate meter and no supplement. These cows were lighter conditioned early calvers and are taken off pasture for the night in very wet conditions. This herd was in the paddock all week and there was no need to stand them off. They average 4.9 body condition score now.
 - 124 mixed age cows, early calvers - Grazing nearby on grass initially but now on kale and some straw on a grass runoff paddock. They are now 5 condition score.
 - 189 later calving Mixed Aged cows– Grazing at Hororata on kale and good quality cereal silage. They have gained condition steadily as well. There is a larger range in this mob 4.5 – 5.5. The average is currently 4.8. Because they are not calving until after 25th of August we still have time to put some condition on. We are not bringing any light cows home at this stage.
 - 95 Second Calvers at Dunsandel on good quality pasture. Average Body Condition score 5.
 - 164 Rising two year first calvers also on pasture. These heifers were teat sealed 10 days ago and are now off-farm on pasture near Springston. The average BCS is 5.3. They will return to the milking platform as they spring, they begin calving from the 24th of July.
12. It was particularly important that all the herds were being fed to achieve weight gain during June. We are happy with gain in body condition in all groups of cows, most of the mobs achieving the targets set. From now on most groups of cows will not be putting any more condition since they will be calving within 4 weeks.
13. The table below presents a summary of the feeding requirements of cows pre-calving in Megajoules of Metabolizable Energy (MJME) and in Kg DM at 11 MJME/kg DM. These numbers show the main factors affecting the requirements of cows and heifers such as,
 - kg LW of the cows,
 - weeks to calving,
 - quality of the feed, and
 - also the target condition score gain we are expecting from the herd.

Daily Requirements in MJME/day – Maintenance and Pregnancy (includes 6% wastage)

Weeks to calving	8 wks		4 wks		2 wks	
	MJME	Kg DM	MJME	Kg DM	MJME	Kg DM
Cows (480 kg LW)	78	7.1	95	8.6	107	9.7
Heifers(400 kg LW)	69	6.3	84	7.6	94	8.5

Kg DM is at 11 MJME/kg DM

(Source Feed Information Sheet DairyNZ)

Requirement Condition Score Gain – ½ BCS unit (Source Feed Information Sheet DairyNZ)

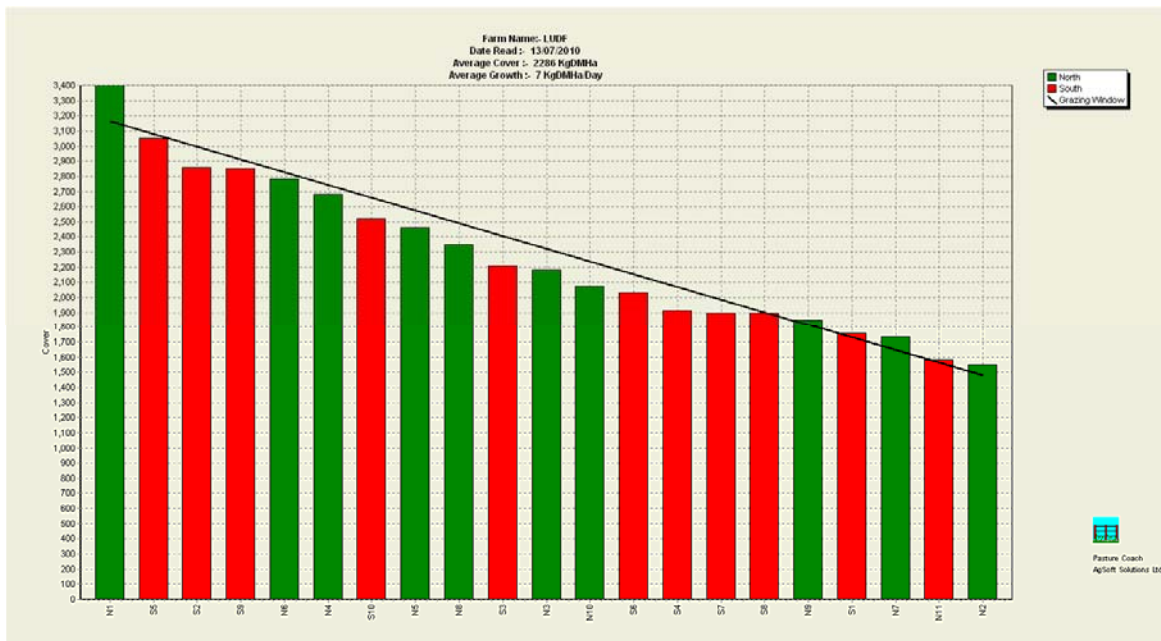
Total kg DM required	Pasture 11 MJME /kg DM
Cows (480 kg LW)	118 (3.9 kg DM over 30 days)
Heifers(400 kg LW)	110 (3.7 kg DM over 30 days)

For example cows like the LUDF herd in June needed 7.1 + 3.9kg DM = 11 Kg DM/day assuming only 6% waste. Our plans typically used estimates to achieve 12kg DM/cow/day.

In July cows already at target condition and two weeks from calving require 9.7 kg DM/cow/day. In normal field conditions for us we will offer mobs like that 11kgDM/cow/day.

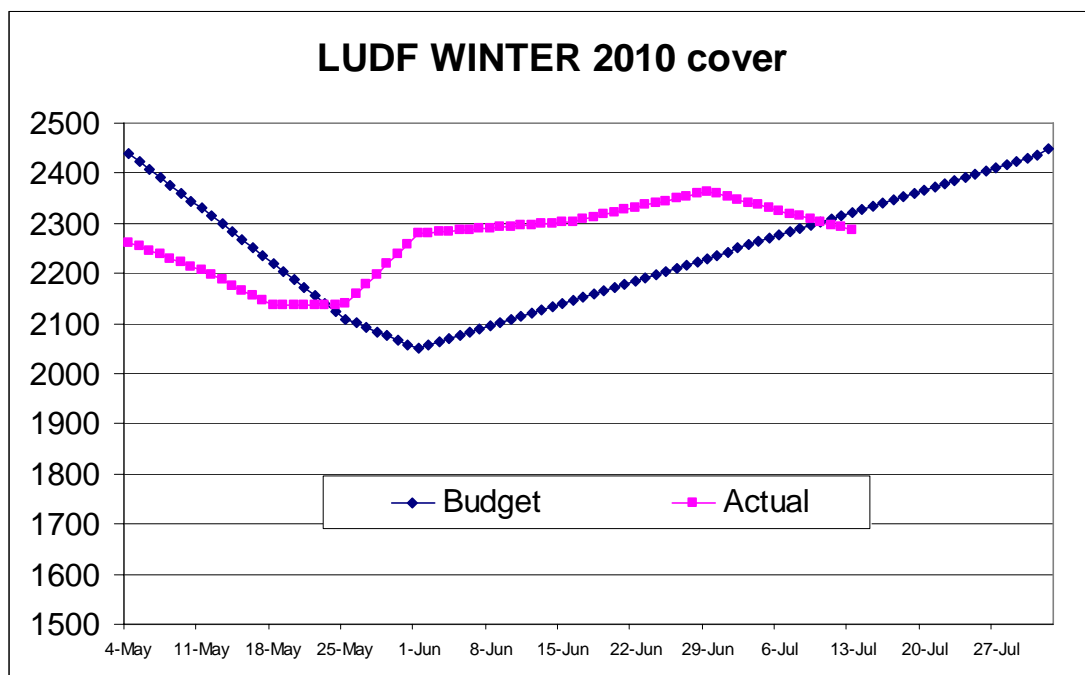
14. Average Pasture cover last week was 2,286 kg DM/ha, lower than 2,364 kg DM/ha we had last week. Growth Rate last week was 7 kg DM/ha/day.

15. Feed Wedge today:



The target line in the wedge reflects the pre-grazing target of 3,162kg DM/ha and a post grazing of 1,480 kg DM/ha, this is the line that represents an average farm cover of 2,321kgDM/ha. This feed wedge has a deficit of 8.8 t DM

16. The feed budget done for the remainder of the season has a target average pasture cover as shown in the graphic below. We are targeting a cover on the 1st of August of 2,450 kg DM/ha. This cover is what we need to feed the herd on grass without having to feed any supplements until the first grazing round finishes. With the cover we lost this week our cover line is below target and we need to take actions to come back on track. We lost cover this week because we didn't grow enough to cover cows' demand (7vs 8 kg DM/ha/day) and also we lost some cover mainly due to losing plants in the wet conditions.



17. Demand from the cows on the platform is 8.4kgDM/ha/day and to get to the target cover we want next Tuesday we need to grow 11 kg DM/ha/day (cover today = 2,286 kg DM/ha, target next week = 2,366 kg DM). To be able to maintain the cows in the milking platform and increase the average cover to the target, we need to grow 19.4 kg DM/ha /day which is unlikely with this cold days we are having. It is clear that we need to remove the cows from the milking platform because achieving the target cover in the milking platform is non-negotiable.
18. Key management decisions to think about this week:
 - Getting the average pasture cover on the farm back to the target line: We will take the cows from the milking platform to a nearby crop of Kale and Rape.
 - Bring lame cows home if necessary.
 - Attending to any other illness in the cows.
19. We didn't have any new lame cows this week.
20. No mastitis has been located since drying off. The 164 heifers (R2) were teat sealed 10 days ago and the job went very well with no major challenges to men or beast.
21. No nitrogen fertiliser will be applied until early August.

The eco-n for the autumn was completed in mid May over the 159 effective ha. The second round will be applied mostly in one application in late July.

Next farm walk will be on **Tuesday, 20th July 2010, at 9.00 am.**

Farmers or their managers and staff are always welcome to walk with us. Please call to notify us of your intention and bring your plate meter. Phone SIDDC – 03 325 3629

Management Group

Peter Hancox (Farm Manager), George Reveley (for SIDDC), Virginia Serra (DairyNZ).

Lincoln University Dairy Farm - Farm Walk notes

Tuesday, 6th July 2010

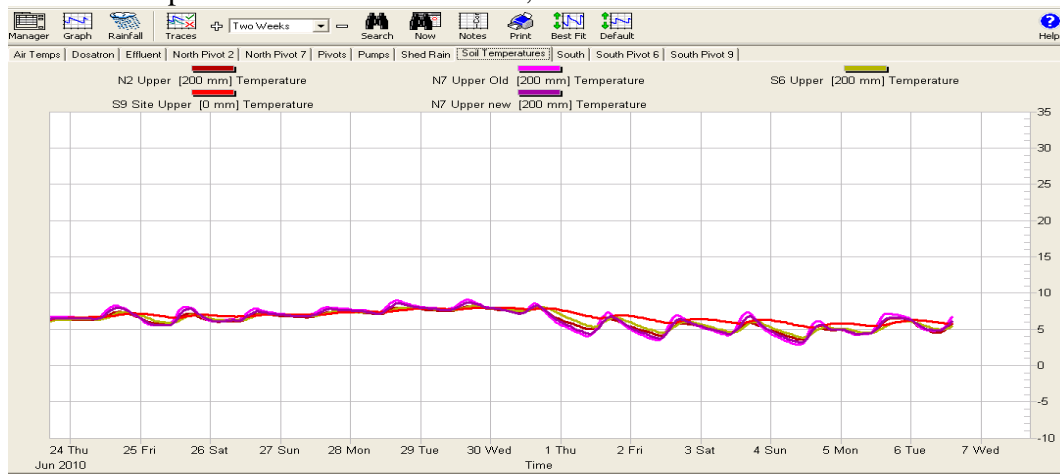
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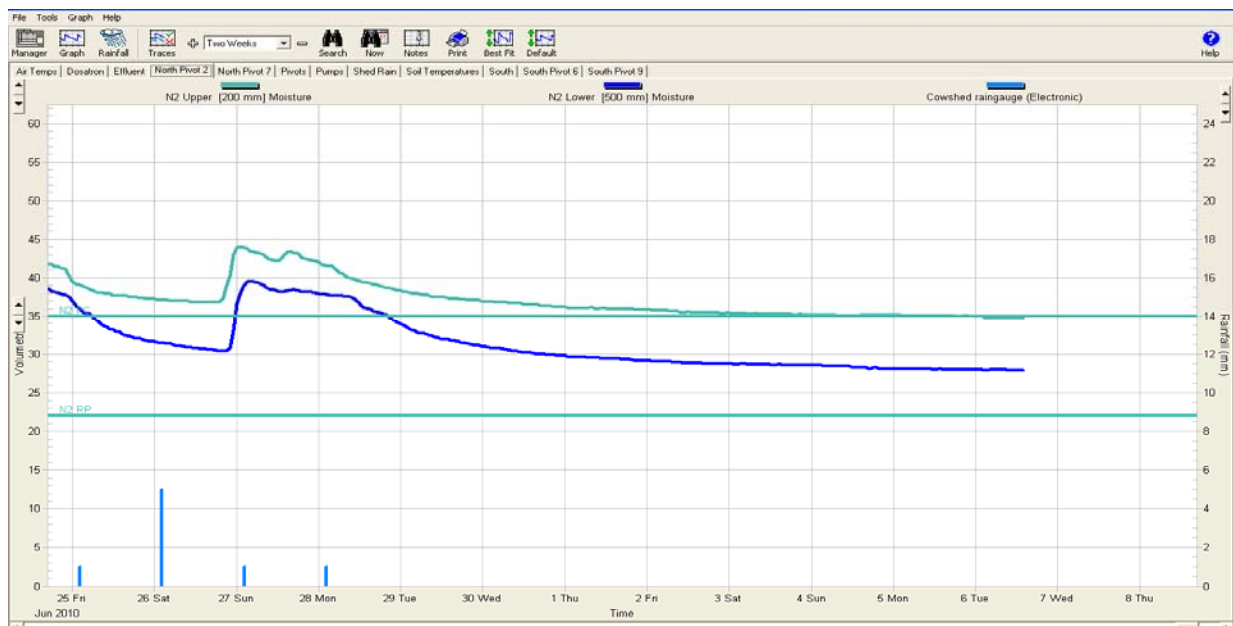
The management team focused today on monitoring all the wintering herds and did not do a farm walk to estimate average farm cover.

Summary of Key Factors affecting Grazing Management & Animal Performance

7. Soil temperature this week was 4.5°C, lower than 6.5°C last week



8. We didn't have rain this week but the farm is still wet. Soil moisture has dropped a bit but it is still around Field Capacity. The heavy blue line represents the soil moisture in the subsoil. When this sub soil line is above the field capacity line water will be draining through the soil. This line has been below Field Capacity this week which is good to see. The 110 cows on the platform have been able to graze on the milking platform this week.



9. Pasture grazing residuals have been maintained at 7 rising plate meter “clicks”.
10. The cows on the platform grazed 6.3 ha during the week (0.9 ha/day). This was a grazing rotation of about 1/177th of the platform per day
11. We have 5 wintering mobs with the following plans:
 - 111 mixed age – Staying on the milking Platform on grass, fed to 7 clicks with the plate meter and no supplement. These cows were lighter conditioned early calvers. These will be taken off pasture for the night in very wet conditions. This herd was off the platform two days on East Block during the week. They average 4.8 body condition score now.
 - 124 early calving mixed age cows. Grazing nearby, initially on grass but now on kale and some straw on a grass runoff paddock. They are now 4.9 condition score.
 - 189 later calving Mixed Aged cows– Grazing at Hororata on kale and good quality cereal silage. They have gained condition steadily as well. There is a larger range in this mob 4.5 – 5.5 The average is currently 4.8
 - 95 Second Calvers at Dunsandel on good quality pasture. Average Body Condition score 4.9
 - 164 Rising two year first calvers also on pasture. These returned to the platform last Thursday for 2 days to receive Teat Seal and were moved off-farm to pasture near Springston following that. BCS 5.3 They will return to begin calving from July 20th
12. It was particularly important that all the herds were being fed to achieve weight gain during June. We are happy with the gain in body condition in all groups of cows.
13. The table below presents a summary of the feeding requirements of cows pre-calving in Megajoules of Metabolizable Energy (MJME) and in kg DM at 11 MJME/kg DM. These numbers show the main factors affecting the requirements of cows and heifers such as,
 - kg LWT of the cows,
 - weeks to calving,
 - quality of the feed and
 - also the target condition score gain we are expecting from the herd.

Daily Requirements in MJME/day – Maintenance and Pregnancy (includes 6% wastage)

Weeks to calving	8 wks		4 wks		2 wks	
	MJME	Kg DM	MJME	Kg DM	MJME	Kg DM
Cows (480 kg LW)	78	7.1	95	8.6	107	9.7
Heifers(400 kg LW)	69	6.3	84	7.6	94	8.5

Kg DM is at 11 MJME/kg DM

Additional Requirement (kgDM) to gain ½ Condition Score

Total kg DM reqd	Pasture 11 MJME /kg DM
Cows (480 kg LW)	118 kgDM (3.9 kg DM over 30 days)
Heifers(400 kg LW)	110kgDM (3.7 kg DM over 30 days)

For example cows like the LUDF herd in June needed 7.1 + 3.9kg DM = 11 Kg DM/day assuming only 6% waste. Our plans typically used estimates to achieve 12kg DM/cow/day.

In July cows already at target condition and two weeks from calving require 9.7 kg DM/cow/day. In normal field conditions for us we will offer mobs like that 11kgDM/cow/day

14. Average Pasture cover last week was 2,364 kg DM/ha.
15. Demand from the cows on the platform is 8.3kgDM/ha/day we expect that average growth to be greater than this (say 12) and average pasture cover increasing by about 28kgDM/ha for the week.
16. Key management decisions to think about this week:
 - Avoiding Pasture Damage on the Milking Platform: This will be the main challenge while the wet conditions remain. This will require the cows to stand in the cow yard or on a race with silage if necessary for any nights when the soil is significantly above field capacity.
 - Managing the feed wedge: Actual cover is ahead of the target. We need to be taking note of the shape of the wedge perhaps needing to graze a paddock in the middle to keep the shape close to the line.
 - Bring lame cows home if necessary
 - Attending to any other illness in the cows.
 - Achieving the condition targets depends mainly on the feed the cows get during June. Very wet conditions have affected this a little. The post grazing residual and the time when this residuals are achieved are the key tools we use to help monitor feeding levels.
17. We didn't have any new lame cows this week
18. No mastitis has been located since drying off. The 164 heifers (R2) were teat sealed last Thursday and the job went very well with no major challenges to staff or heifers.
19. No nitrogen fertiliser will be applied until early August.
20. The eco-n for the autumn was completed in mid May over the 159 effective ha. Most of the second round will be applied in one application in late July.

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