

# Lincoln University Dairy Farm - Farm Walk notes

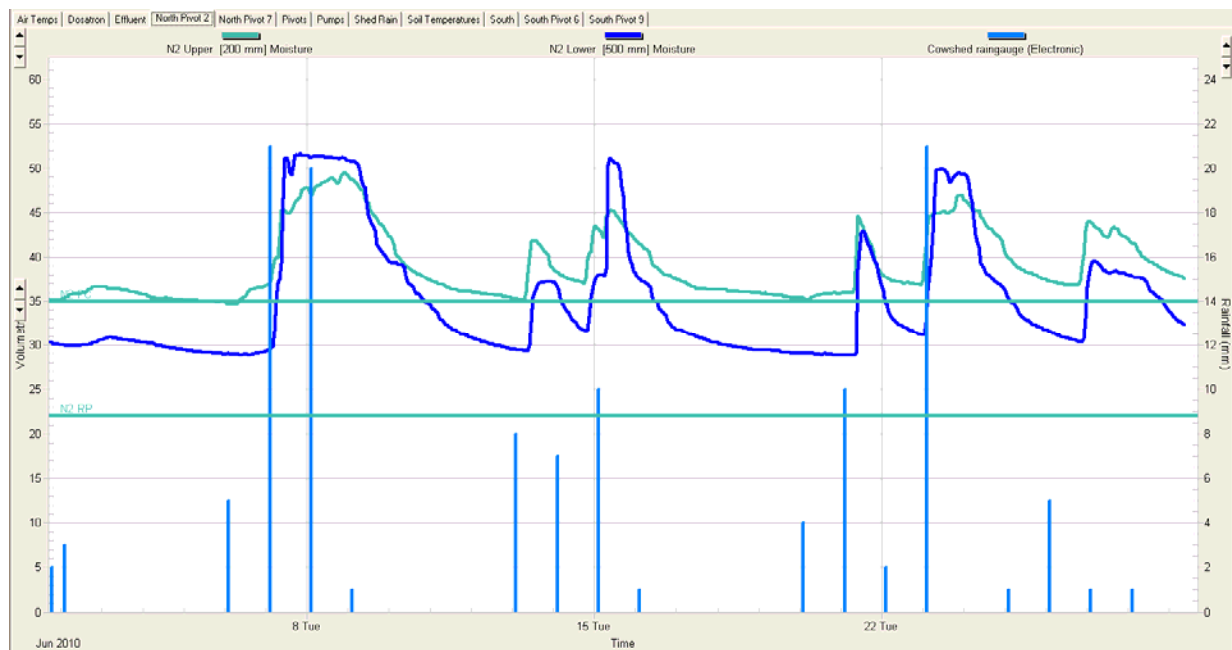
Tuesday, 29<sup>th</sup> June 2010

## 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

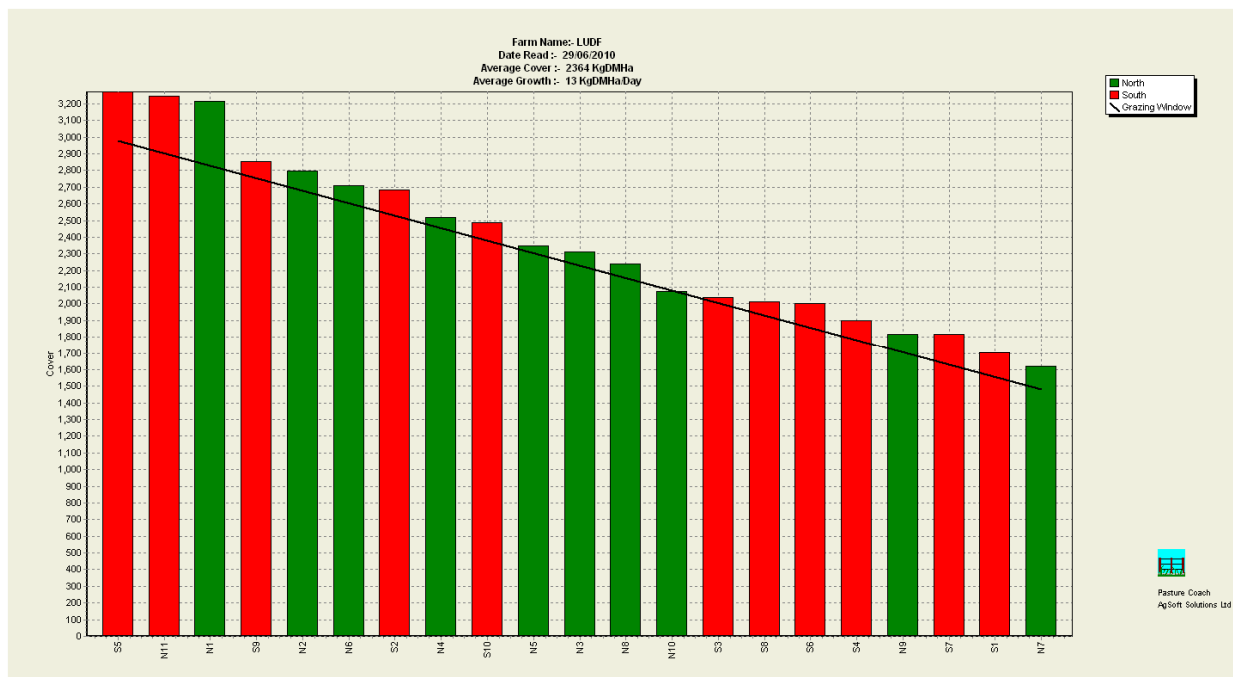
### Summary of Key Factors affecting Grazing Management & Animal Performance

7. Soil temperature this week was 6.5°C with a range of (5 °C to 7.5 °C today).
8. We had 31 mm rain over the last week with rain on 5 days. Soil moisture has been above Field Capacity again all week. When this occurs we run risk of doing damage to soils being grazed. The 110 cows on the platform have been stood off at night for two nights and completely removed to the East Block for 4 days this week because they were damaging soil and pasture. The graphic from Aquaflex below shows the extent to which the soil has been above Field capacity this June. Focus on the aqua coloured lines – the uppermost straight one of these indicates Field Capacity and the other aqua coloured line is the track of soil moisture in the topsoil. 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 appears to have been occurring on 12 days this month.

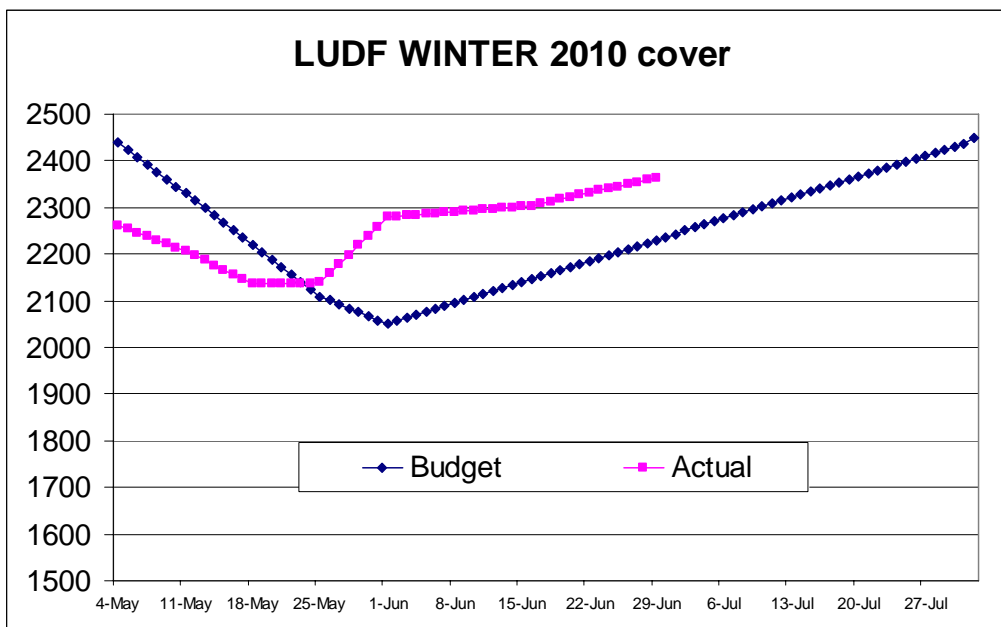


9. Pasture grazing residuals have been maintained at 7 rising plate meter “clicks”.
10. The cows on the platform grazed 2.7ha during the week. This was a grazing rotation of about 1/160<sup>th</sup> of the platform per day
11. We have 5 wintering mobs with the following plans:
  - 100 mixed age – Staying on the milking Platform on grass feed to 7 clicks in the plate meter and no supplement. These cows are lighter conditioned early calvers and will be taken off pasture for the night in very wet conditions. This herd was taken off for two nights and then completely removed from the platform. Weight gain in these cows is critical – what to do with surplus pasture is another question. They will be returned as soon as possible to the platform.

- 125 mixed age cows, early calvers at an average condition of 4.5 – Grazing nearby on grass initially, now on kale and some straw on a grass runoff paddock.
  - 192 later calving Mixed Aged cows– Grazing at Hororata on kale and good quality cereal silage.
  - 96 Second Calvers at Dunsandel on good quality pasture.
  - 164 Rising two year first calvers also on pasture. They will return to the platform at the end of June for 2 days to receive Teat Seal and be moved off-farm to pasture near Springston following that. They will return to begin calving from July 20<sup>th</sup>.
12. It is particularly important that all the herds are being fed to achieve weight gain during June. We are happy with feeding levels of all groups of cows.
  13. Pasture growth during the last two weeks has been 13 kg DM/ha. Average Pasture cover is 2,364 kg DM/ha.
  14. Demand from the cows on the platform is 8.3kgDM/ha/day.
  15. This weeks' feed wedge is showing a surplus of pasture above the target line. The target line in the wedge reflects the pre-grazing target of 2,980kg DM/ha and a post grazing of 1,480 kg DM/ha, this is the line that represents an average farm cover of 2,230kgDM/ha. The feed wedge has a surplus of 22 t DM. Two weeks ago the surplus was 25 t DM
  16. Feed wedge today



17. The feed budget done for the remainder of the winter has a target average pasture cover as shown in the graphic below. The graphic below shows the target line in blue with the actual in pink. We are targeting a cover on the 1<sup>st</sup> 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 in mid September. Average cover at the end of May was ahead of the target line. We deliberately grazed 125 additional cows on the platform early in June for 5 days to help bring it closer to the target line but this has not been enough and additional cows may be needed during July.



18. 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: Another cow at Hororata has become lame and we will bring her home during the week to enable the team to manage her.
- Attending to any other illness in the cows. One cow from the Springston herd was not grazing kale and has been brought back to graze pasture.
- 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 these residuals are achieved are the key tools we use to help monitor feeding levels.

19. There was one new lame cow this week.

20. No mastitis has been located since drying off.

21. The final production for the year was 274,649 (1,726 kg MS/ha – 416 kg MS/cow)

22. No nitrogen fertiliser will be applied until early August. Average of 185kg N/ha over the whole effective 159ha

23. The eco-n for the autumn was completed in mid May over the 159 effective ha

Next farm walk will be on **Tuesday, 13th July 2010, at 9.00 am. Weekly farm walks will then resume.**

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, 22<sup>nd</sup> June 2010

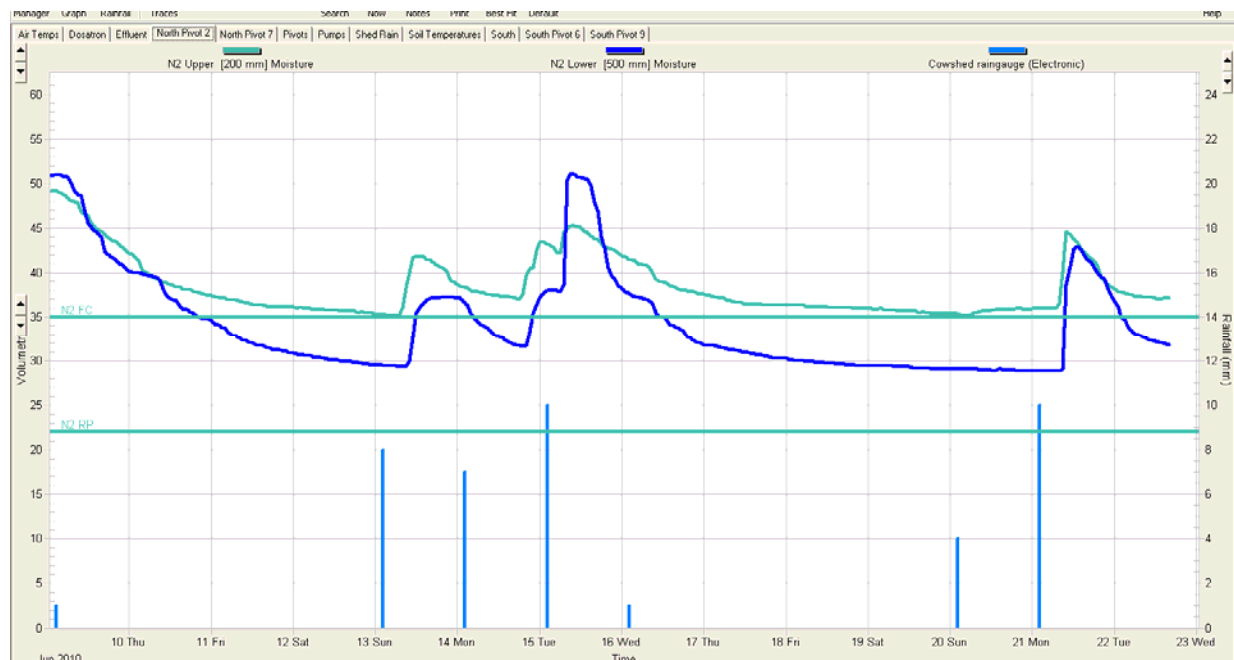
## CRITICAL ISSUES FOR THE SHORT TERM

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.

Management team did not walk the whole farm to establish average pasture cover this week but focused as we did a fortnight ago on visiting all herds in and off the farm to monitor health and change in condition.

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

7. Soil temperature this week was 6°C with a range of (4°C to 8°C today).
8. We had 15 mm rain over the last week with rain on 3 days, 14mm Sunday night and Monday morning. This raised soil moisture above Field Capacity again; at this point we run a risk of doing damage to soils being grazed. The 110 cows on the platform were on a very light soil in N7 at the time and did very little damage.

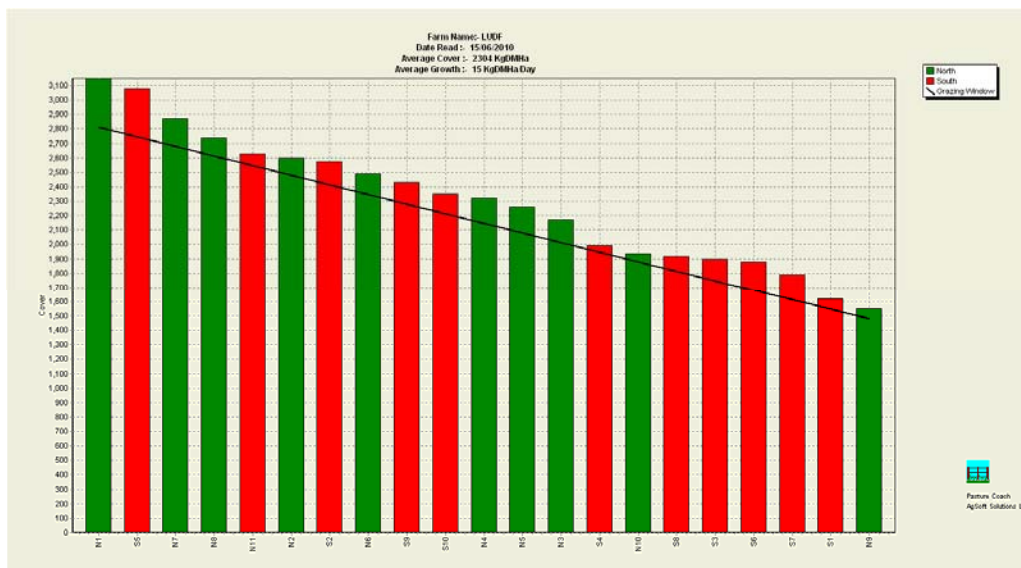


9. Pasture grazing residuals have been maintained at 7 rising plate meter “clicks”.
10. Plans for the 5 wintering mobs follow:
  - 100 mixed ages – Staying on the milking platform on grass feed to 7 clicks in the plate meter and no supplement. These cows are lighter conditioned early calvers. They will be taken off pasture for the night in very wet conditions, not needed during this week.
  - 125 mixed age cows, early calvers at an average condition of 4.5 – grazing nearby on grass initially but now on kale and some straw.
  - 192 later calving Mixed Aged cows– grazing at Hororata on kale and good quality cereal silage.
  - 96 Second Calvers at Dunsandel on good quality pasture.
  - 164 Rising two year first calvers also on pasture. They will return to the platform at the end of June for 2 days to receive Teat Seal and be moved off farm to pasture near Springston following that.

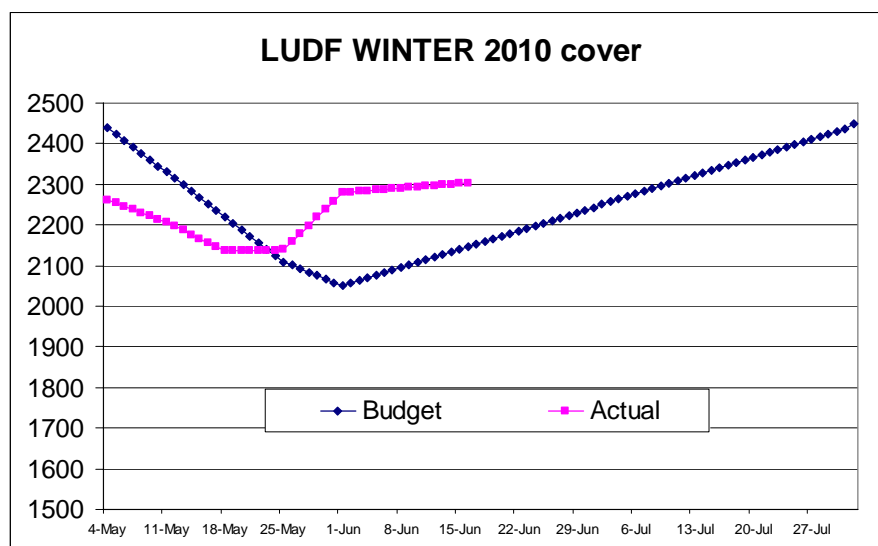
- Today the management team went to check all the mobs, in particular to check that the people caring for the cows had not missed seeing a mastitis case or were tolerating a lameness that needed treatment. It is particularly important that all the herds are being fed to achieve weight gain during June. We were very happy with the feeding level of all groups of cows but did find a lame cow that needed attention.

Last weeks feed wedge showed a surplus of pasture above the target line. The target line in the wedge reflects the pre-grazing target of 2,814kg DM/ha and a post grazing of 1,480 kg DM/ha, this is the line that represents an average farm cover of 2,147kgDM/ha. The feed wedge has a surplus of 25 t DM.

- The conditions for growth are good for winter with another small gain in average cover. Demand from the cows on the platform is 8.3kgDM/ha/day and growth is estimated at 12kgDM/ha/day. We will verify this next week and begin to adjust July grazing plans if average cover is too far above the target line.



- The feed budget done for the remainder of the winter has a target average pasture cover as shown in the graphic below. The graphic below shows the target line in blue with the actual in pink. We are targeting a cover on the 1<sup>st</sup> 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 in mid September. Average Cover at the end of May was ahead of the target line. We deliberately grazed 125 additional cows on the platform early in June for 5 days to help bring it closer to the target line but this has not been enough and additional cows may be needed during July.



14. Area grazed this week was 7ha = 1/159<sup>th</sup> of the farm or a 159 day grazing round.
15. 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 and 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: Another cow at Hororata has become lame and we will bring her home during the week to enable the team to manage her.
  - 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 is achieved are the key tools we use to help monitor feeding levels.
16. There was one new lame cow this week.
17. No mastitis has been located since drying off.
18. The final production for the year was 274,649 (1,726 kg MS/ha – 416 kg MS/cow).
19. No nitrogen fertiliser will be applied until early August. 225 kg per ha used for the season on the non effluent area of the farm. Average of 185kg N/ha over the whole effective 159ha
20. The eco-n for the autumn was completed in mid May over the 159 effective ha

Next farm walk will be on **Tuesday, 29th June 2010, at 9.00 am, and then Tuesday 13<sup>th</sup> of July before weekly farm walks are resumed after that date.**

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**

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

# Lincoln University Dairy Farm - Farm Walk notes

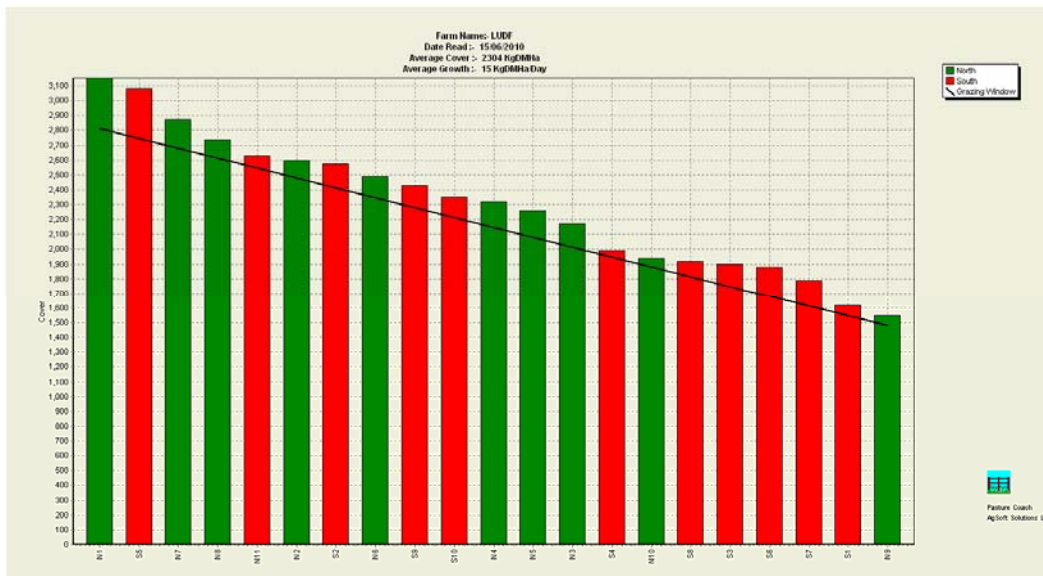
Tuesday, 15<sup>th</sup> June 2010

## CRITICAL ISSUES FOR THE SHORT TERM

1. Monitor condition and make necessary changes to achieve targets.
2. Observe feeding behaviour of cows. Correct allocation is mandatory to achieve targets.
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.
6. Avoid pasture damage.

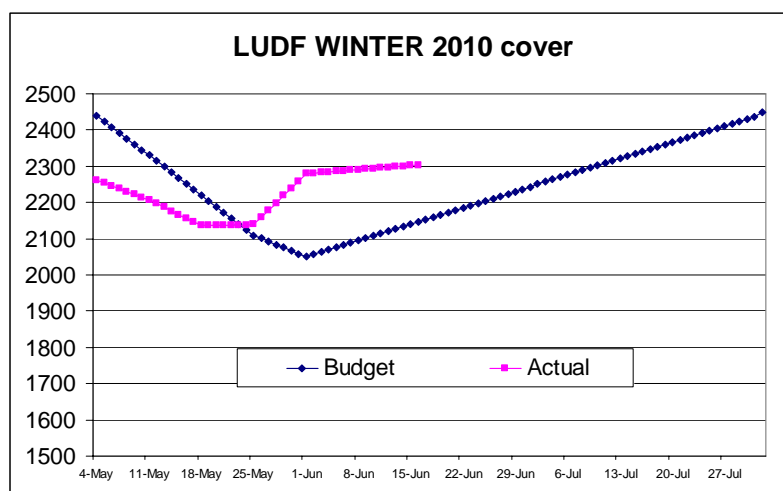
### Summary of Key Factors affecting Grazing Management & Animal Performance

7. SOIL MOISTURE and rainfall measurements unavailable this week, a problem with aquaflex.
8. PASTURE GROWTH this week was 15kg DM/ha, lower than the 28 kg DM/ha grown two weeks ago. Average Pasture Cover this week increased to 2,304kg/DM/ha from 2279kg/DM/ha last week. Pasture grazing residuals have been maintained at 7 rising plate meter “clicks”.
9. The whole herd was dried off on Wednesday 26<sup>th</sup> of May. Cows were blanket dry cow treated and teat sealed as they were dried off.
10. We have 5 wintering mobs with the following plans:
  - 100 mixed age - Staying on the milking Platform on grass feed to 7 clicks on the plate meter and no supplement. These cows are lighter conditioned early calvers and will be taken off pasture for the night in very wet conditions, as occurred 2 nights during the week.
  - 125 mixed age cows, early calvers at an average condition of 4.5 - Grazing nearby on grass and some straw for most of June and then on Kale.
  - 192 later calving Mixed Aged cows - Grazing at Hororata on kale and good quality cereal silage.
  - 96 Second Calvers - at Dunsandel on irrigated good quality pasture.
  - 164 Rising two year first calvers - also on pasture. To return to the platform at the end of June for 2 days to receive Teat Seal and be moved off-farm to pasture in Springston following that.
11. The management team checked all the mobs last week, in particular to check that people caring for the cows had not missed seeing a mastitis case or were tolerating a lameness that needed treatment. Also of concern in the ongoing wet conditions is the level of feeding as it is particularly important that all the herds are being fed to achieve weight gain during June. One mob of concern was where a grazer had allowed too much focus on feeding for the agreed number of days when there was not as much feed available as anticipated. Ways to improve the situation were discussed with the grazer and when revisited later in the week the feeding level was much improved.
12. This weeks Feed Wedge



The target line in the wedge reflects the pre-grazing target of 2,814kg DM/ha and a post grazing of 1,480 kg DM/ha, this is the line that represents an average farm cover of 2,147kgDM/ha. The feed wedge has a surplus of 25 t DM.

13. The feed budget done for the remainder of the season has a target average pasture cover as shown in the graphic below, the target line in blue with the actual in pink, targeting a cover on the 1<sup>st</sup> of August of 2,450 kg DM/ha. This cover is needed to feed the herd on grass without having to feed any supplements until the first grazing round finishes. Average cover at the end of May was ahead of the target line. 125 additional cows were grazed on the platform for 5 days early in June to bring it closer to the target line.



14. Area grazed this week was 5.7ha = 1/199<sup>th</sup> of the farm or a 199 day grazing round.
15. Key management decisions to think about this week:
- Avoiding pasture damage on the milking platform: the main challenge while the wet conditions continue. This may require the cows to stand in the cow yard or on a race with silage for a few nights until the soil returns to field capacity.
  - Managing the feed wedge: actual cover is moving in the right direction towards the target line. The long paddocks we had two weeks ago have been eaten to residuals of 7 clicks. The paddocks in the middle of the wedge are being monitored to avoid ending up with too much cover at calving. We will not make any changes this week.
  - Bringing lame cows home if necessary: a couple of cows grazing at Hororata became lame and were brought home during the week.
  - Achieving the condition targets depends mainly on the feed the cows get during June and the very wet conditions are affecting this. The post grazing residual and the time when the residuals are achieved are the key tools used to monitor feeding levels.
16. There were 2 new lame cows this week.
17. No mastitis has been located since drying off.
18. The final production for the year was 274,649 (1,726 kg MS/ha – 416 kg MS/cow).
19. No nitrogen fertiliser will be applied until early August. 225 kg per ha used for the season on the non effluent area of the farm. Average of 185kg N/ha over the whole effective 159ha
20. The eco-n for the autumn was completed in mid May over the 159 effective ha

Next farm walks will be on **Tuesday, 29th June 2010, at 9.00 am and Tuesday 13<sup>th</sup> of July. Farm walks will then resume on a weekly basis.**

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, 8<sup>th</sup> June 2010

## CRITICAL ISSUES FOR THE SHORT TERM

1. Monitor condition and make necessary changes to achieve the targets.
2. Observe feeding behaviour of cows. Correct allocation is mandatory to achieve targets.
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.
6. Avoiding pasture damage.

The management team did not walk the milking platform this week, instead spending the time checking the herds thoroughly at their various winter grazing locations.

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

7. Soil temperature this week was 7°C lower than the 8.9°C we had the previous week.
8. We had another 43 mm of rain over the last week that we didn't need.
9. SOIL MOISTURE was at field capacity and had stopped draining before the recent rain. The graphic shows soil moisture rising well above field capacity to saturation again over the last two days.



10. The whole herd was dried off on Wednesday 26<sup>th</sup> of May. Cows were blanket dry cow treated and teat sealed as they were dried off.
11. All the cows were sorted into their winter Mobs. We have 5 mobs with the following plans:
  - 100 mixed age – Staying on the milking Platform on grass feed to 7 clicks in the plate meter and no supplement. These cows are lighter conditioned early calvers. At present these cows have to be taken off pasture for the night and supplemented with pasture silage due to wet conditions – not ideal but we do not expect it to be a long period of on-off grazing.
  - 125 mixed age cows, early calvers at an average condition of 4.5 – Grazing nearby on grass and some straw for most of June and then Kale.

- 192 later calving Mixed Aged cows– Grazing at Hororata on kale and good quality cereal silage.
  - 96 Second Calvers at Dunsandel on good quality pasture.
  - 164 Rising two year first calvers also on pasture. They will return to the platform at the end of June for 2 days to receive Teat Seal and be moved off-farm to pasture in Springston following that.
12. The management team visited all the mobs today, in particular to check that the people caring for the cows had not missed seeing a mastitis case or were tolerating any lameness that needed treatment. Also of concern in the ongoing wet conditions is the level of feeding. It is particularly important that all the herds are being fed to achieve weight gain during June. We are happy with all but one group of cows. The mob of concern is where a grazier has allowed too much focus on feeding for the agreed number of days. In reality there has not been as much feed available as anticipated at this site - we would rather have the cows finish early than come home on time but below the targeted body condition score 5 for all animals.
13. 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. We will keep the cows out of paddocks as much as necessary to avoid excessive damage. This will require the cows to stand in the cow yard and in the races with silage for a few days until the soil returns to field capacity.
  - Managing the feed wedge: The average was a bit higher last week than the target and 3 paddocks had higher covers than what we would like (S1, N9 and N1). Last week we brought the mob of cows grazing close by back for 5 days and had 225 cows on the milking platform for that period of time. This will help to put cover closer to the target.
  - Bringing lame cows home: A couple of cows in Hororata have become lame and we are planning to bring them home in the coming days.
  - Achieving the condition targets depends mainly on the feed the cows get during June. Very wet conditions are affecting this. Grazing residuals on crop and pasture remain a key tool to help monitor feeding levels.
14. There were 3 new lame cows this week.
15. No mastitis has been located since dry off.
16. One grass fed cow died suddenly during the week. The cause of death is unknown.
17. The final production for the year was 274,649 (1,726 kg MS/ha – 416 kg MS/cow).
18. No nitrogen fertiliser will be applied until early August. 225 kg per ha used for the season on the non effluent area of the farm. Average of 185kg N/ha over the whole effective 159ha.
19. Eco-n application for the autumn was completed in mid May over the 159 effective ha.

Next farm walk will be on **Tuesday, 15th June 2010, at 9.00 am. Then on Tuesdays 29<sup>th</sup> June and 13<sup>th</sup> of July. Weekly walks will resume after that date.**

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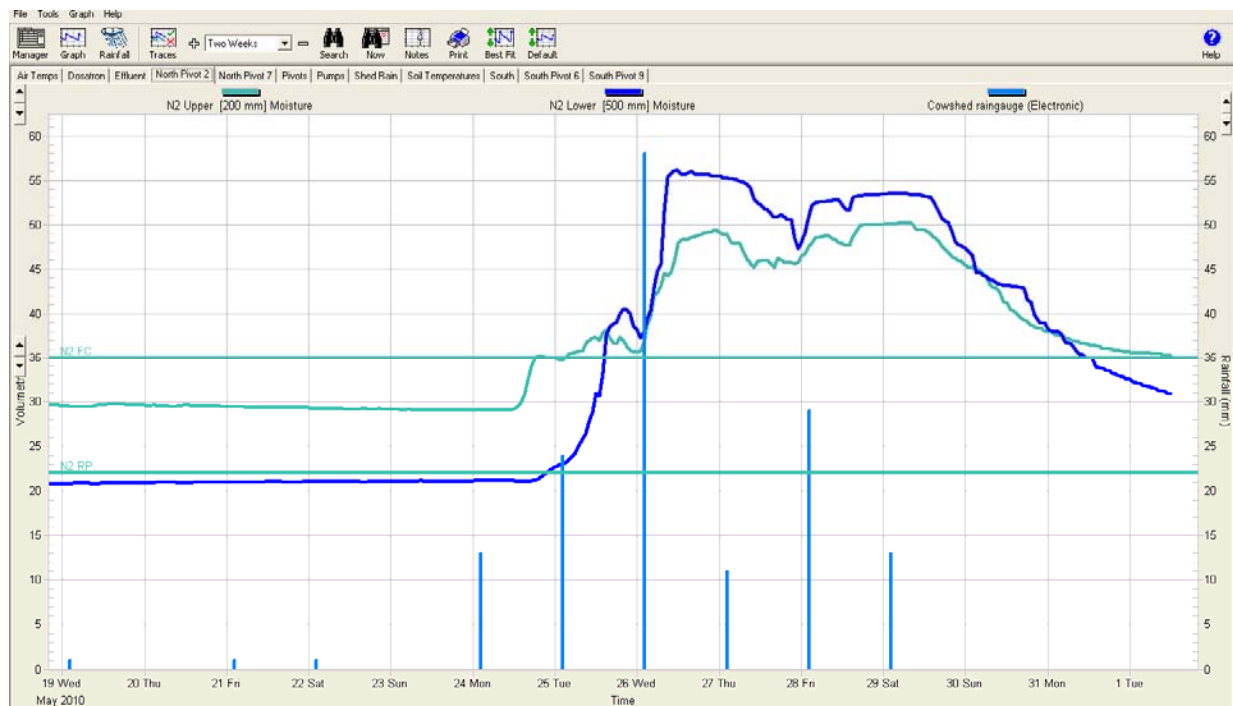
Tuesday, 1<sup>st</sup> June 2010

## CRITICAL ISSUES FOR THE SHORT TERM

1. Monitor cow condition for cows on milking platform and at graziers and make changes as necessary to achieve the targets
2. Closely observe cows for any signs of mastitis
3. Monitor average pasture cover and track against Budget
4. Keep grazing residuals to the desired 7 clicks
5. Avoid pasture damage

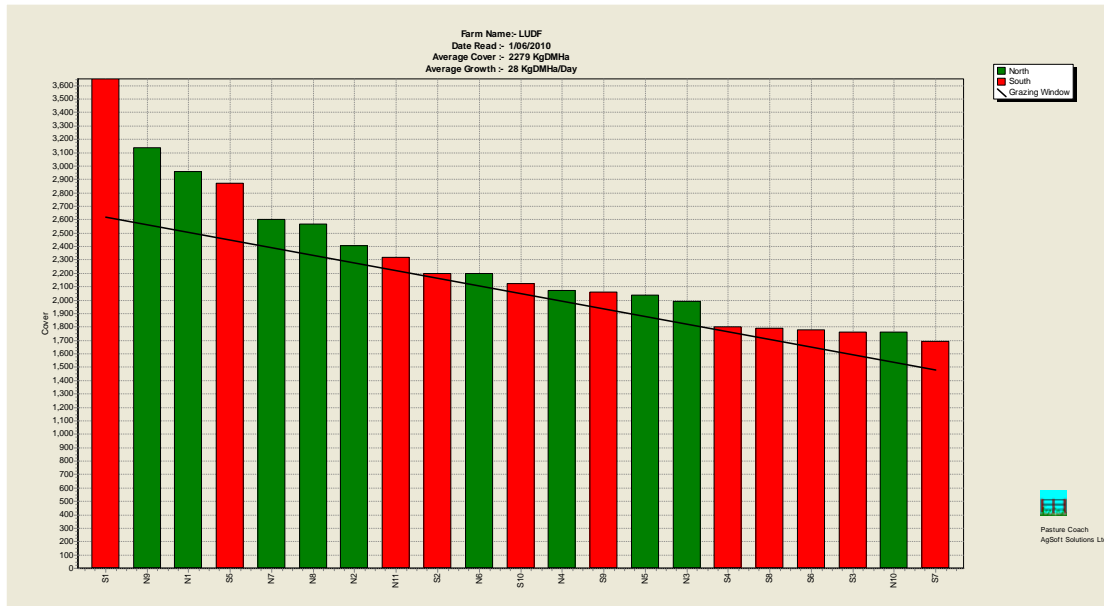
### Summary of Key Factors affecting Grazing Management & Animal Performance

6. Average soil temperature this week was 8.9°C, ranging from 11°C to 7.5°C today).
7. 135 mm rain over the last week with rain on 5 days, with close to 60 mm on Wednesday. SOIL MOISTURE has now reached full point but is draining well. The graphic shows soil moisture rising well above field capacity to saturation. A lot of water will drain through the soil this week.



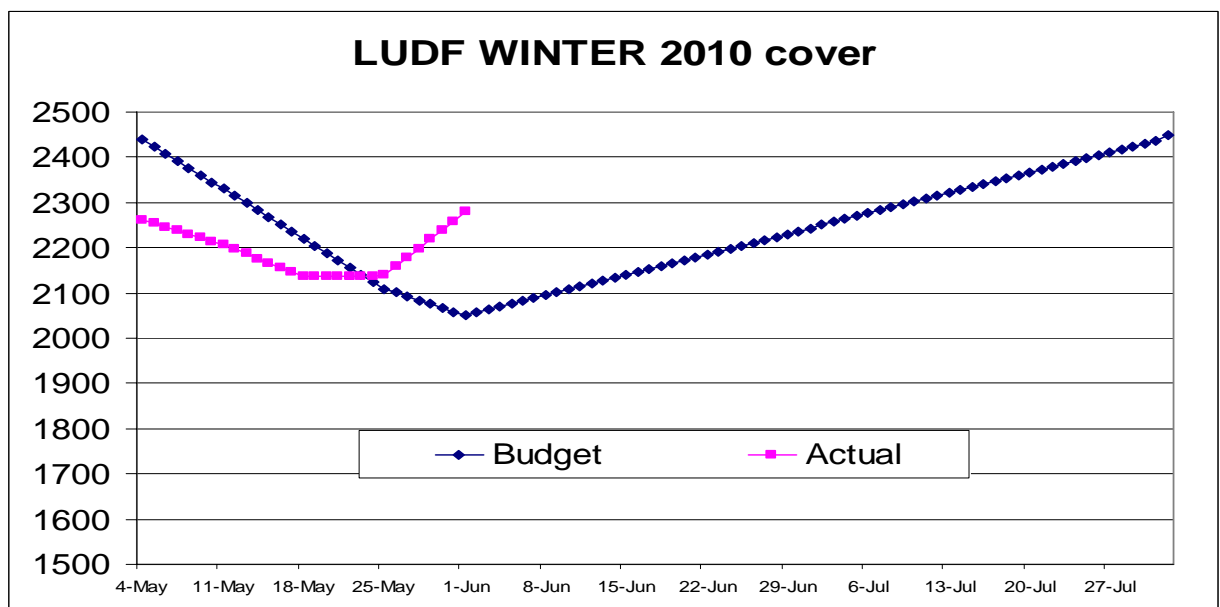
8. PASTURE GROWTH this week was 28kg DM/ha lower than the 34 kg DM/ha grown last week. Average Pasture Cover this week increased to 2279 kg/DM/ha from 2139kg/DM/ha last week. Pasture grazing residuals have been maintained at 7 rising plate meter “clicks”.
9. The whole herd was dried off on Wednesday, 26<sup>th</sup> May. Cows were blanket dry cow treated and teat sealed as they were dried off.
10. All the cows were sorted into 5 winter mobs as follows:
  - a. 100 mixed age – Staying on the milking Platform on grass feed to 7 clicks on plate meter with no supplement. These cows are light condition early calvers.
  - b. 125 mixed age cows early calvers at an average condition of 4.5 – Grazing nearby on grass for most of June and then on Kale.

- c. 192 later calving Mixed Aged cows – Grazing at Hororata on kale, good quality cereal silage and a little bit of grass.
  - d. 96 Second Calvers at Dunsandel on irrigated good quality pasture.
  - e. 164 Rising two year first calvers also on pasture. They will return to the platform at the end of June for 2 days to receive Teat Seal and be moved off-farm to pasture in Springston.
11. No nitrogen fertiliser will be applied until early August. 225 kg per ha used for the season on the non effluent area of the farm. Average of 185kg N/ha over the whole effective 159ha.
12. Feed Wedge Today



The target line in the wedge reflects the pre-grazing target of 2620kg DM/ha and a post grazing of 1,480 kg DM/ha, this is the line that represents an average farm cover of 2050kgDM/ha. The feed wedge has a surplus of 36 t DM.

13. The feed budget 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 1<sup>st</sup> 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.



14. Key management decisions to think about this week:

- Managing the feed wedge: The cover is a bit higher than the target and 3 paddocks have covers higher than what we would like. This situation occurred because the cows were standing off paddocks and eating silage during the wet weather last week. This could become a problem later in the winter or in early spring. The mob of cows grazing close by will be brought back for a few days in order to manage the feed wedge.
- Managing the cows on the milking platform: These cows will be offered enough grass to achieve the condition target gains feeding them all grass, and will be given 12 hour breaks while the ground condition remain wet.

15. The final production for the year was 274,649 (1,726 kg MS/ha – 416 kg MS/cow)

16. Eco-n application for the autumn was completed in mid May over the 159 effective ha.

Next farm walk will be on **Tuesday, 15th June 2010, at 9.00 am. Then Tuesdays 29<sup>th</sup> June and 13<sup>th</sup> July after which weekly farm walks will be resumed.**

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