

# SDF Farm Walk Notes

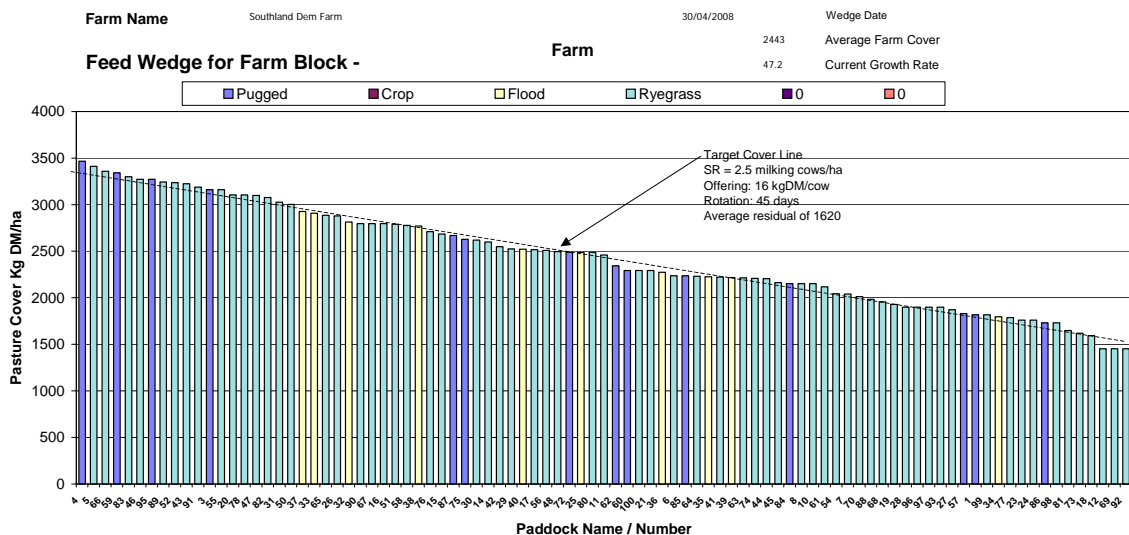
Wednesday, 30th April 2008

## Critical issues for the short term

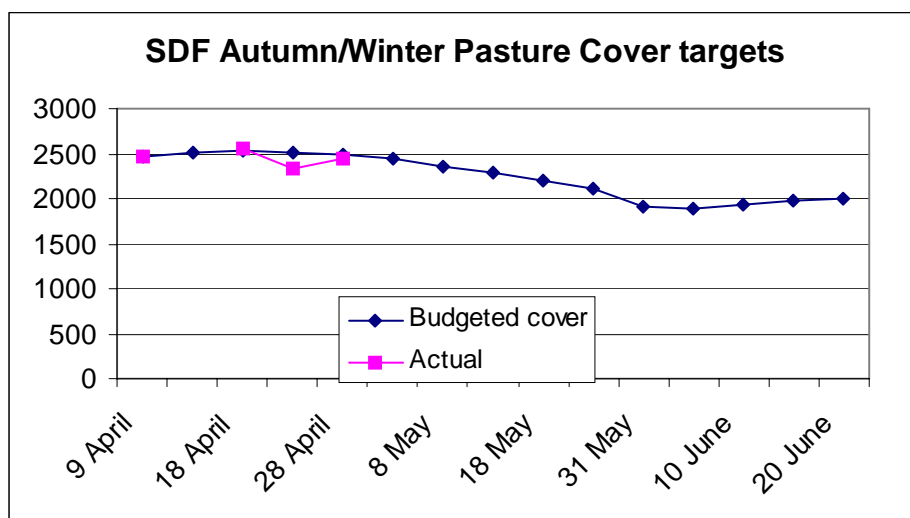
1. Draft herd into two mobs – “Fat” mob (>4.5 CS), “Light” mob (< 4.5 CS). Closely monitor cow condition score.
2. Concentrate on an autumn ‘cleaning out’ of pastures and achieving target residuals

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

3. Soil temperatures have increased slightly from 9.4 degrees last week to 10.4 degrees C this week. This increase has had a significant positive impact on pasture growth rates.
4. The rainfall over the last week measured 8.1mm. Overall soil moisture levels are still below average. However, with the rains over the last couple of weeks and the cooling air temperatures, evapo-transpiration rates would be decreasing which will start to translate into a reduction in the soil moisture deficit.
5. Average pasture cover has increased this week to 2443 kg DM / ha, down from 2550 kg DM / ha last week. Pasture growth rate increase this week to 47.2 kg DM / ha /day, up from last weeks growth rate of 20.7 kg DM /ha /day. This increase has created a surplus situation of around 7 kg DM/ha /day given our feed demand of around 40 kg DM / ha / day.
6. This week’s pasture feed wedge:



7. Cows are going into high pre-grazing covers (> 3300 kg DM / ha). Cows have been struggling to leave acceptable residuals in some paddocks (8 clicks – 1620 kg DM / ha). There are some paddocks that had high pre-grazing covers where 10 –20% clumps are being left. The reducing stocking rate, resulting from drying off cows and sending away culls, has made it more difficult to achieve our target residuals and therefore we will be tightening upon grazing management at each grazing session. The wet, windy conditions have not helped, however at this stage soil conditions are still dry under foot.
8. The top of the target line on the pasture wedge is based on a stocking rate of 2.5 cows/ha x rotation length of 45 days x nominal allocation of 16 kg DM plus a residual of 1620 kg DM/ha. This translates to a pre-grazing cover of 3420 kg DM/ha. The feed wedge indicates an almost perfect match to the target cover line.
9. We applied urea at a rate of 80 kg / ha to the new short rotation ryegrass paddocks this week now that they have had their first grazing. We do not plan to use any further urea this season – the total amount used equates to 172 kg N / ha on the milking platform.
10. Milk solids production of 1.32 kg MS/cow day is up on last weeks' production of around 1.27 kg MS/cow/day. Per hectare production essentially remains at the same level as last week at 3.3 kg MS /ha/day.
11. The graph comparing budgeted average pasture cover as predicted by the autumn feed budget with actuals is shown below:



12. The above graph indicates that our APC is back on track with where we have budgeted it to be. This puts the farm in a good position and provides us with a range of options should the weather change significantly during May. This is the major advantage of running on a slower round length in autumn with a higher targeted APC.
13. An average of 5.45 ha has been grazed per day for the past week, i.e. 50 days round speed. The target round length this week is 1/45<sup>th</sup> of the farm per day which equates to just over 6 ha per day.
14. The weather for the rest of this week is forecast to be showery and cold. This will result in lower soil temperatures, which will mean decreasing pasture growth rates.

15. The first applications of eco-N were done last Thursday and this will be continued over the coming weeks until the whole farm is covered, except for 26ha of trial paddocks. The trial paddocks will be sprayed half with eco-N and half will be left unsprayed to enable us to monitor eco-N responses through next season.
16. The cow condition has been assessed during the farm walk and it is estimated that approximately 10% of the herd is below CS 4.3, with average remaining at 4.6, the level assessed by our vet one week ago. The cows will be drafted into a heavy and light mob this week, with early calvers less than CS 4.3 being targeted for dry off within the next 10 days.
17. With existing feed covers right on feed budget forecast, our intention is still to milk as many cows as practicable for as long as possible through May.

The next WEEKLY farm walk is on **Wednesday 7th May**. On behalf of the **Management Group** David Newport (Farm Manager), Alex Hunter (Consultant), Adrian van Bysterveldt, Chris Crossley (DairyNZ), Brad Houghton (Herd Manager).

# SDF Farm Walk Notes

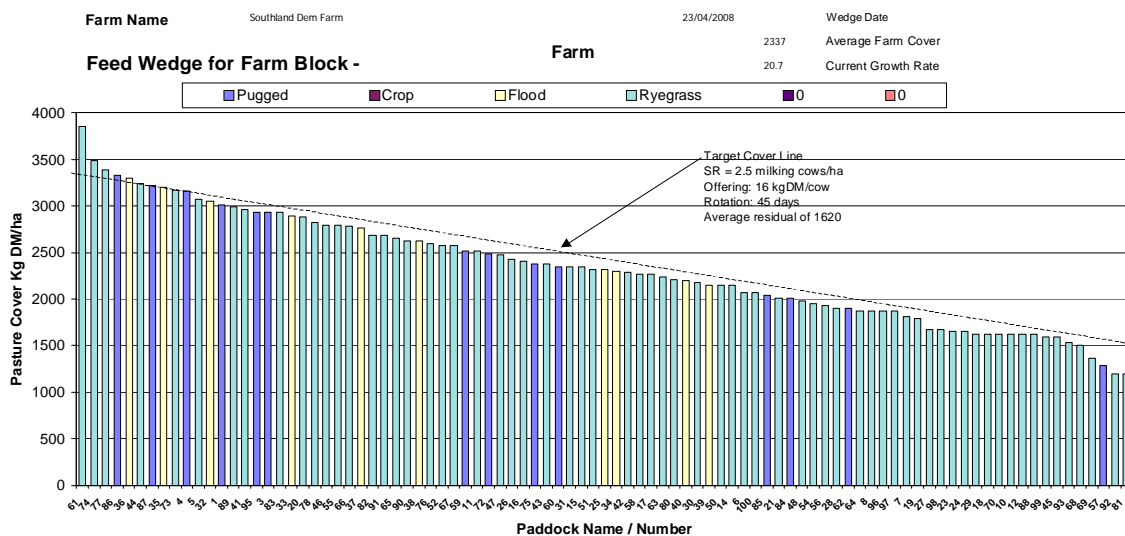
Wednesday, 23rd April 2008

## Critical issues for the short term

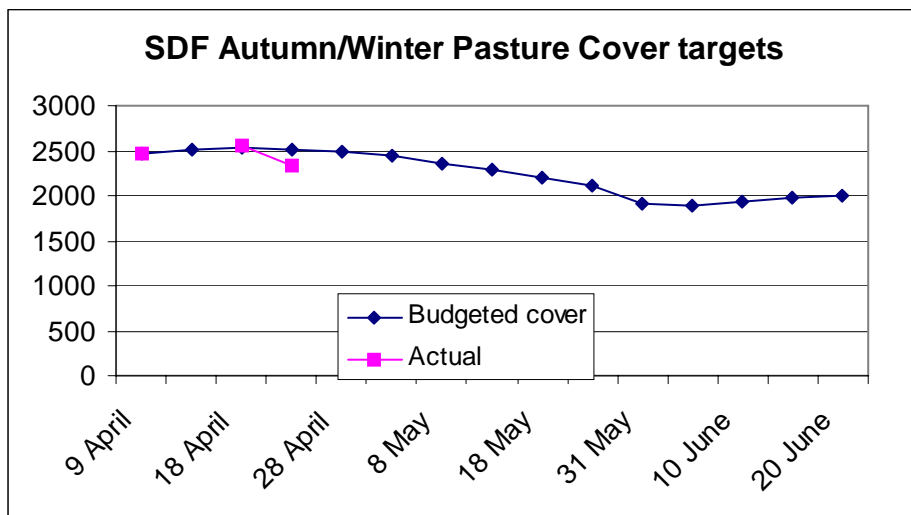
1. **Maintain rotation length in excess of 40 days.**
2. **Closely monitor cow condition score.**
3. **Apply N to short rotation pastures recently grazed.**

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

4. Soil temperatures have dropped significantly from 12.5 degrees last week to 9.4 degrees C this week. This has resulted in a marked slow down in growth rate.
5. The rainfall over the last week measured 28.5mm. Some hail fell during the storms over the weekend that resulted in some damage to the crop on the farm. The damage was restricted to leaf damage and is not expected to affect the potential crop yield to any significant degree. Despite the rain, overall soil moisture levels are still below average.
6. Average pasture cover has decreased this week to 2337 kg DM / ha, down from 2550 kg DM / ha last week. This week's growth rate of 20.7 kg DM / ha /day is down on last weeks growth of 54.6 kg DM /ha /day. This decrease would be directly related to the cold temperatures experienced over the last week. We also believe that the strong south-westerly winds have blown pastures flat, which has affected plate meter readings especially on higher cover paddocks.
7. Our pasture feed demand is around the 40 kg DM / ha / day mark.
8. This week's pasture feed wedge:



9. Cows are going into high pre-grazing covers (> 3300 kg DM / ha). Cows are leaving acceptable residuals in most paddocks (8 clicks – 1620 kg DM / ha). There are some paddocks that had high pre-grazing covers where 10 –20% clumps are being left. The wet, windy conditions have not helped, however at this stage soil conditions are still dry under foot.
10. The top of the target line on the pasture wedge is based on a stocking rate of 2.5 cows/ha x rotation length of 45 days x nominal allocation of 16 kg DM plus a residual of 1620 kg DM/ha. This translates to a pre-grazing cover of 3420 kg DM/ha. The feed wedge indicates several paddocks above the budget cover line at the top-end of the wedge although there are paddocks that have fallen below the budget cover line throughout the wedge. However, there are still many of these paddocks that have received Urea to boost their growth so this could assist to correct this deficit if weather conditions improve.
11. We will apply urea at a rate of 80 kg / ha to the new short rotation ryegrass paddocks this week now that they have had their first grazing.
12. Milk solids production of 1.27 kg MS/cow day is down on last weeks' production of around 1.35 kg MS/cow/day – this is assumed to be weather related. Per hectare production has dropped to 3.2 kg MS /ha/day.
13. The graph comparing budgeted average pasture cover as predicted by the autumn feed budget with actuals is shown below:



14. We are not too concerned with the drop below budget as depicted here, as we believe that our pasture walk plate meter readings may have been affected by the strong south-westerly winds. It will be interesting to review this next week.
15. An average of 8.21 ha has been grazed per day for the past week due to speeding up the round to graze the low-cover new short-rotation paddocks for their first grazing. Our forecast for next week is back to fewer than 6 ha per day, which will mean that we are grazing around 1/45<sup>th</sup> of the farm per day.
16. The weather forecast for the rest of this week is looking slightly more settled. It will be interesting to see how these conditions affect the situation by next week's farm walk.
17. We are planning to commence the autumn application of eco-N on the farm this week.

The next WEEKLY farm walk is on **Wednesday 30th April**. On behalf of the **Management Group** David Newport (Farm Manager), Alex Hunter (Consultant), Adrian van Bysterveldt, Chris Crossley (DairyNZ), Brad Houghton (Herd Manager).

# SDF Farm Walk Notes

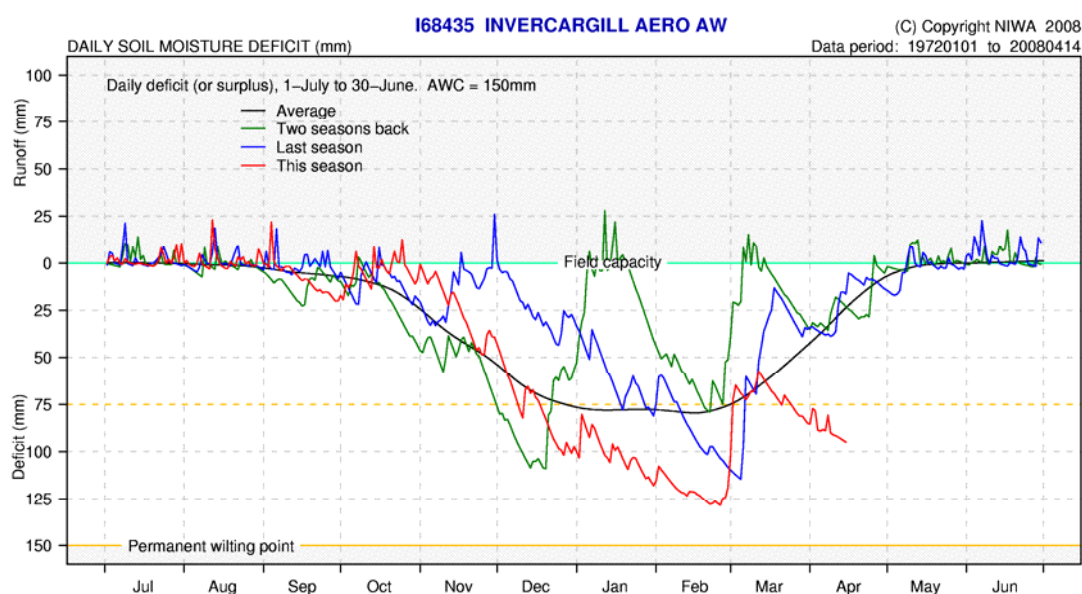
Wednesday, 16th April 2008

## Critical issues for the short term

1. Do the first grazing of the new short rotation ryegrass paddocks.
2. Maintaining the shape of the feed wedge by concentrating on grazing residuals
3. Stop applying N.

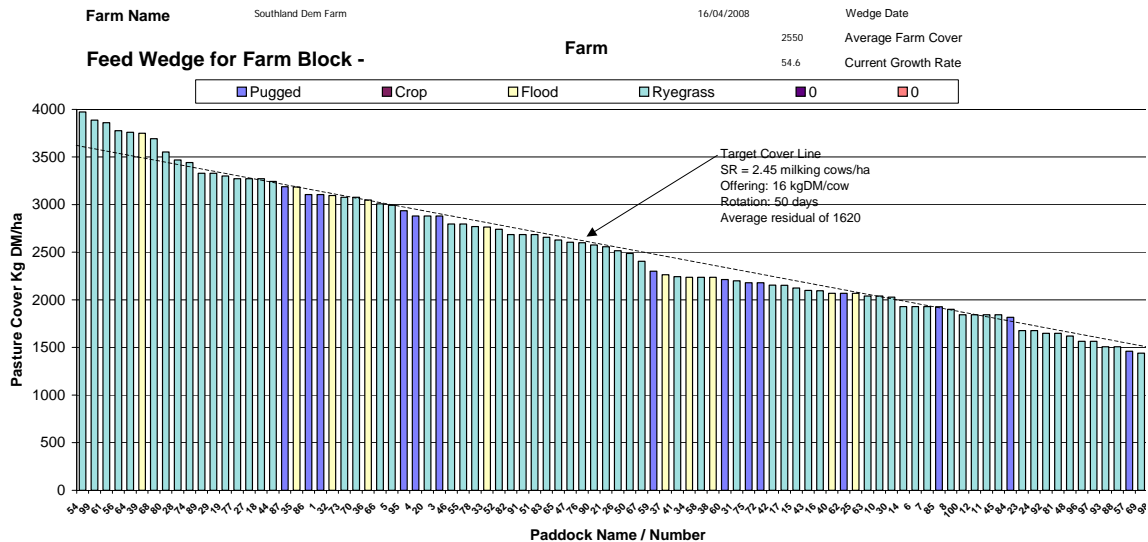
### Summary of Key Factors affecting Grazing Management & Animal Performance

4. Soil temperatures have increased to an average of 12.5 degrees this week up from 11.0 degrees last week.
5. Only 1.5 mm of rain was measured this last week, which has not affected pasture growth rates significantly. However, we note from the graph below that the soil moisture deficit at the Invercargill airport is beginning to again drop above the “stress line” (75 mm soil moisture deficit). We expect this to start reducing pasture growth rates. However, we believe that the heavy morning dews that we are currently experiencing are alleviating most of the negative effects of this.



6. Average pasture cover has increased this week to 2550 kg DM / ha, up from 2466 kg DM / ha last week. This week's growth rate of 54.6 kg DM / ha /day is down on last weeks growth of 65.7 kg DM /ha /day, probably a reflection of lower soil moisture levels. Our pasture feed demand is around the 39 kg DM / ha / day mark. The current level of pasture growth is much higher than would be expected in the autumn.

7. This week's pasture feed wedge:



8. Pasture residuals in a couple of the paddocks grazed this week are higher than desirable, and on some paddocks (mainly those dominant in “carpet grass” species) we are struggling to graze below a residual of 8 clicks (1620 kg DM / ha), yet we are concentrating on trying to get this right. Cows are going into high pre-grazing covers (> 3600 kg DM / ha) and this is compounding the problem. Cows are leaving 10 –20% clumps in some paddocks, where 0% is the target. There is room for us to improve our residual management.
9. The top of the target line on the pasture wedge above has been revised and is based on a stocking rate of 2.45 cows/ha x rotation length of 50 days x nominal allocation of 16 kg DM plus a residual of 1620 kg DM/ha. This translates to a pre-grazing cover of 3580 kg DM/ha. The feed wedge indicates several paddocks above the budget cover line at the top-end of the wedge with a small number of paddocks falling below the budget cover line mid-way through the wedge. However, these paddocks have received Urea to boost their growth so this should assist to correct this deficit.
10. We have an even feed wedge situation, and our current average pasture cover is above that forecast in the autumn feed budget, so we have decided to discontinue the application of urea at this stage. We will still apply urea to the new short rotation ryegrass paddocks following their first grazing.
11. Milk solids production of 1.35 kg MS/cow day was slightly up on last weeks' production of around 1.32 kg MS/cow/day. Per hectare production is still 3.65 kg MS /ha/day.
12. A revision of the autumn feed budget indicates that as a result of carrying high pasture covers now, we can milk the current number of cows through to the end of May (which is the objective) without feeding any more supplement and still achieve our target average pasture cover of 1900 kg DM/ha at the end of May. In the farm walk notes for the rest of the season we will graph our actual farm cover against the predicted covers in this budget.

13. The temptation to harvest any of the top paddocks above the budget cover line for supplement has been discussed by the team but rejected. Any surplus pasture can be utilised through May by milking longer, and as a last resort, bringing replacement heifers home from May grazing earlier.
14. An average of 5.3 ha has been grazed per day for the past week. This week we are looking to speed the round up due to the low-cover new short-rotation paddocks getting their first grazing that will increase the amount of area grazed per day.
15. The weather forecast for the rest of this week is looking unsettled, with a colder, southerly blast. It will be interesting to see how these conditions affect the situation by next week's farm walk.
16. We are planning to commence the autumn application of eco-n on the farm within the next week.

The next WEEKLY farm walk is on **Wednesday 23rd April**.

On behalf of the **Management Group** David Newport (Farm Manager), Alex Hunter (Consultant), Adrian van Bysterveldt, Chris Crossley (DairyNZ), Brad Houghton (Herd Manager).

# SDF Farm Walk Notes

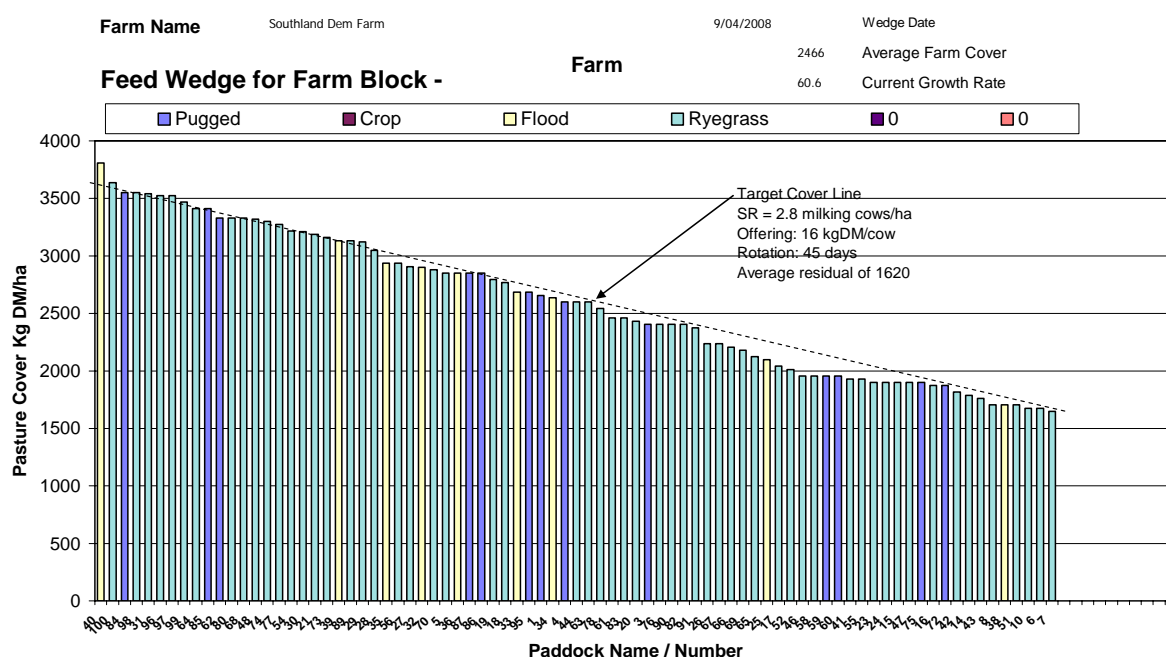
Wednesday, 9th April 2008

## Critical issues for the short term

1. Aim for rotation length of 1/45<sup>th</sup> of the farm a day.
2. Maintaining the shape of the feed wedge by concentrating on grazing residuals and continue to apply N behind the cows.

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

3. Soil temperatures have decreased to an average of 11.0 degrees this week down from 11.5 degrees last week.
4. Only 4.8 mm of rain was measured this last week, which did not seem to affect pasture growth rates significantly.
5. Average pasture cover has decreased this week to 2466 kg DM / ha, down from 2539 kg DM / ha last week. However, the 20 ha of short-rotation ryegrass paddocks has now been included in the farm walk for the first time, having the effect of dropping average pasture cover, yet increasing area available in pasture from 244 ha to 274 ha. This week's growth rate of 60.6 kg DM / ha /day is a little down on last weeks growth of 64.4 kg DM /ha /day, a reflection of the declining soil temperatures and lower soil moisture. Our pasture feed demand is still around the 45 kg DM / ha / day mark.
6. This week's pasture feed wedge:



7. Pasture residuals in a couple of paddocks grazed this week (including one by the main road!) are higher than desirable, and on some paddocks (mainly those dominant in “carpet grass” species) we are struggling to graze below a residual of 8 clicks (1620 kg DM / ha), yet we are concentrating on trying to get this right. Cows are going into high pre-grazing covers (> 3500 kg DM / ha) and this is compounding the problem.
8. Milk solids production of 1.32 kg MS/cow day was slightly down on last weeks’ production of around 1.34 kg MS/cow/day. Per hectare production is still 3.6 kg MS /ha/day.
9. The increase in daily feed allocation last week from 15 kg DM per cow per day to 16 kg DM per cow per day has reduced the rate of decline in production to 2% per day from 6% on a daily basis last week. The top of the target line on the pasture wedge above has therefore been revised and is based on a stocking rate of 2.8 cows/ha x rotation length of 45 days x nominal allocation of 16 kg DM plus a residual of 1620 kg DM/ha. This translates to a pre-grazing cover of 3636 kg DM/ha. The feed wedge fits well with the target line at this pre-grazing cover although there is a series of paddocks at the lower end of the wedge that are below the line. However, these paddocks have only recently been grazed and are currently receiving Urea to boost their growth.
10. An average of 5.9 ha has been grazed per day for the past week. This week we are looking to graze 1/45<sup>th</sup> of the farm per day which when taking into account the additional newly re-grassed paddocks will give us an area of 6.1 ha available per day.
11. With pasture growth rates being reasonably steady at just above 60 kg DM/ha/day and the weather forecast for the rest of this week predicting stable conditions, it is anticipated that growth rates will remain above 55 kg DM/ha/day for the next week. This will allow us to comfortably maintain the round at a minimum of 45 days.
12. The Urea to be applied will be done so behind the cows at a rate of 80 kg urea/ha.
13. The 30ha of new re-grassed paddocks that was drilled four weeks ago have reached on average a cover of 1350 kg DM/ha and we will be looking to graze these just before the end of this month should the growth continue at current rates. No N will be applied to these paddocks until after the first grazing as sufficient N was applied in the form of DAP at establishment.
14. We are currently carrying high covers and so have re-worked the autumn feed budget using these covers and the expected growth rates for the rest of April and May. This indicates that if we continue to milk the current number of cows through to the end of May (which is the objective), and apply a further 15 t Urea (27 kg N /ha) but feed no more supplement, then the predicted APC at the end of May is 1925 kg DM / ha. As a result of this review, the temptation to harvest the top two paddocks for supplement has been discussed by the team but rejected at this stage.
15. The AgriQuality annual dairy inspection was carried out this last week and the report indicates an A classification in all areas.

The next WEEKLY farm walk is on **Wednesday 16th April**.

On behalf of the **Management Group** David Newport (Farm Manager), Alex Hunter (Consultant), Adrian van Bysterveldt, Chris Crossley (DairyNZ), Brad Houghton (Herd Manager).

# SDF Farm Walk Notes

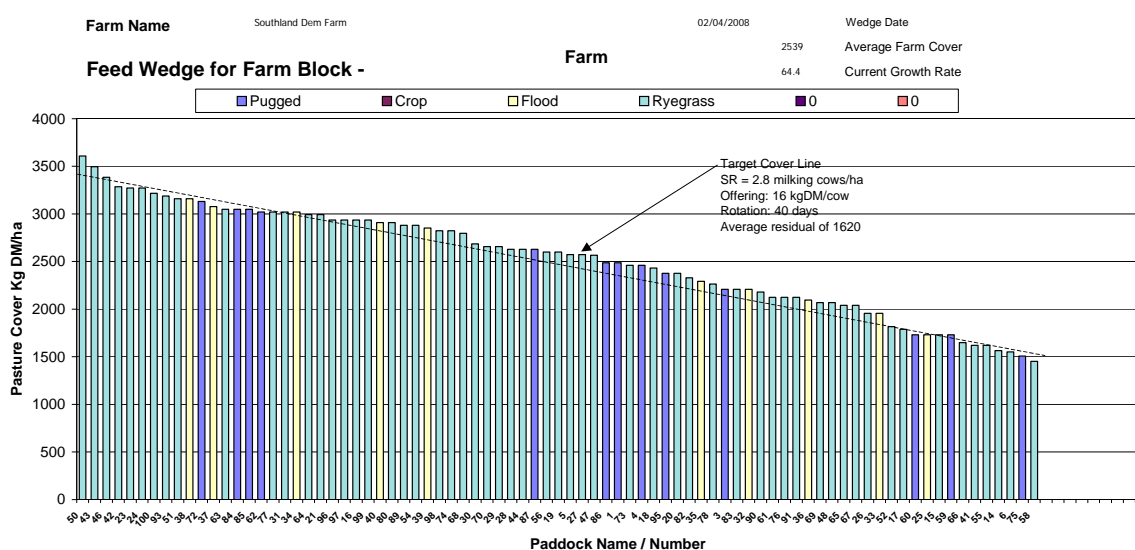
Wednesday, 2<sup>nd</sup> April 2008

## Critical issues for the short term

1. Aim for rotation length at 1/40<sup>th</sup> of the farm a day with plan to extend rotation as feed wedge allows us to.
2. With current feed wedge still looking almost perfect, the silage stack is now closed and not expected to be opened up again this season.
3. Continue to apply N behind the cows.

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

4. Soil temperatures have decreased to an average of 11.5 degrees this week from 12.3 degrees last week.
5. 18.6 mm of rain this week has been very useful and has assisted to bolster pasture growth rates.
6. Average pasture cover has increased this week to 2539 kg DM / ha, up from 2383 kg DM / ha last week. This week's growth rate of 64.4 kg DM / ha /day is slightly up on last weeks growth of 61.1 kg DM /ha /day. Our pasture feed demand was around 45 kg DM / ha / day.
7. Milk solids production is around 1.34 kg MS/cow/day (1.42 kg last week). Per hectare production is now 3.6 kg MS /ha/day.
8. This week's pasture feed wedge:



9. Per cow production has declined by 6% on a daily basis over this week, and we have decided to boost nominal feed allocations from 15 kg DM per cow per day to 16 kg DM per cow per day. The top of the target line on the pasture wedge above has therefore been revised and is based on a stocking rate of 2.8 cows/ha x rotation length of 40 days x nominal allocation of 16 kg DM plus a residual of 1620 kg DM/ha. On this basis, the pasture wedge is almost perfect.
10. An average of 6.0 ha has been grazed per day for the past week. This is 1/40<sup>th</sup> of farm's pasture area available per day.
11. Our plan is to continue to extend the rotation length as the feed wedge allows us to do so. With the expectation that pasture growth rates will be above demand again this coming week, we are expecting pre-grazing covers to continue to rise. We have taken pasture samples from paddocks in front of the cows (with pre-grazing covers of around 3400 kg DM per ha) to monitor any changes in the ME levels in pasture, as pre-grazing covers rise.
12. No silage has been fed this week, and there is about 145t DM of silage left in the stack. Our feed budget has 100t of silage available for the spring (as insurance), which currently leaves about 45t of silage surplus to this. We do not think we will require to feed any more silage this season.
13. We continue to apply Urea behind the cows. 3 tonnes of urea was applied at a rate of 100 kg / ha (46 kg N / ha) this week. There is a good amount of fertiliser N now in the system (21t of urea – 38 kg N / ha - has been applied to the farm since rain at the end of February). This N in the system is definitely assisting with building covers / extending the rotation length due to boosted pasture growth rates.
14. The 30ha of new re-grassed paddocks that was drilled four weeks ago with Delish and Ohau short-rotation / long-rotation ryegrasses is establishing well and we expect this to be grazeable towards the end of the month. With the introduction of this area into the round, we will automatically extend rotation length further.
15. Inspection of our winter crop paddocks indicate that the threat from Aphid and Cabbage White butterfly caterpillar infestations has disappeared since we sprayed the crops with systemic insecticides by helicopter last week to control the problem.

The next WEEKLY farm walk is on **Wednesday 9th April**.

On behalf of the **Management Group** David Newport (Farm Manager), Alex Hunter (Consultant), Adrian van Bysterveldt, Chris Crossley (DairyNZ), Brad Houghton (Herd Manager).