Farm Walk Notes

Wednesday, 27th February 2008

Critical issues for the short term

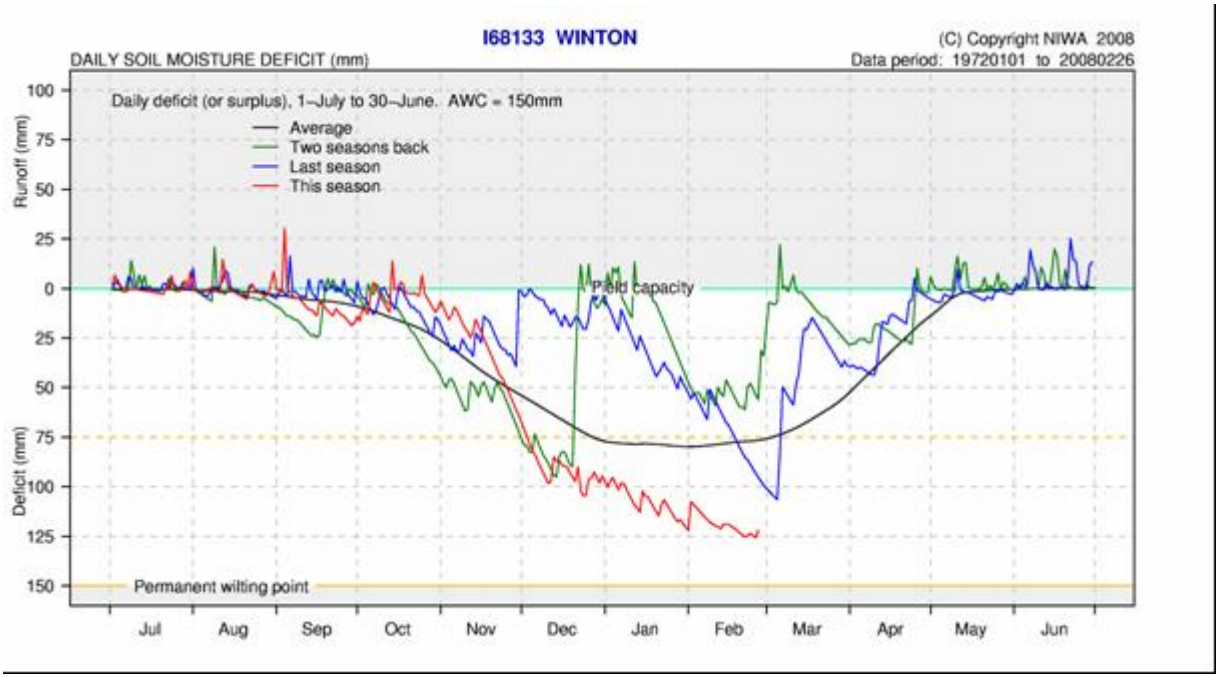
1. **Maintain rotation length.**
2. **Continuing dry conditions are severely affecting pasture growth rates – feeding of silage commenced.**

Summary of Key Factors affecting Grazing Management & Animal Performance

3. Soil temperatures have increased slightly from 14.0 degrees last week to 14.2 degrees this week.

4. This week growth is still well behind average at 11.0 kg DM / ha / day down slightly from 11.9 kg last week.

5. With 12 mm rain this past week, and 6 mm for the week before, the farm soils are in a continuing soil moisture deficit, with current evapotranspiration rates around 28 mm per week (4 mm per day).



The soil moisture deficit graph above has been updated since last week's graph and shows that the recent rain has barely altered the situation. The Winton graph is very similar to the one from Invercargill Airport. They both show (red line) that the area is in a prolonged soil moisture deficit and that it will take at least 60mm of rain to turn this around to lift soil moistures above the stress point line. In the previous two years (blue and green lines) the soil moisture deficit has got as low as it is currently but, for much shorter periods of time hence it was much less of a challenge to manage.

6. Despite definite "burn-off" on the dry knobs and free draining gravel-based areas of the farm, the farm is still holding up well and can still immediately respond if significant rain comes soon. However, overall pasture growth rates are continuing to drop well below average.

7. Average pasture cover has decreased again this week to 1839 kg DM / ha, down from 1926 kg DM / ha last week. This is because the growth rate is now significantly below demand of 42 kg DM/ha/day. With our current silage input, our pasture feed demand is 28 kg DM / ha / day.

8. The 30ha of grass that was sprayed out end January/beginning February have all been second-sprayed ready for direct drilling into Delish and Ohau short-rotation ryegrasses at a sowing rate of 30 kg / ha this next week.

9. There is a total of 244.6 ha of pasture available in the rotation.

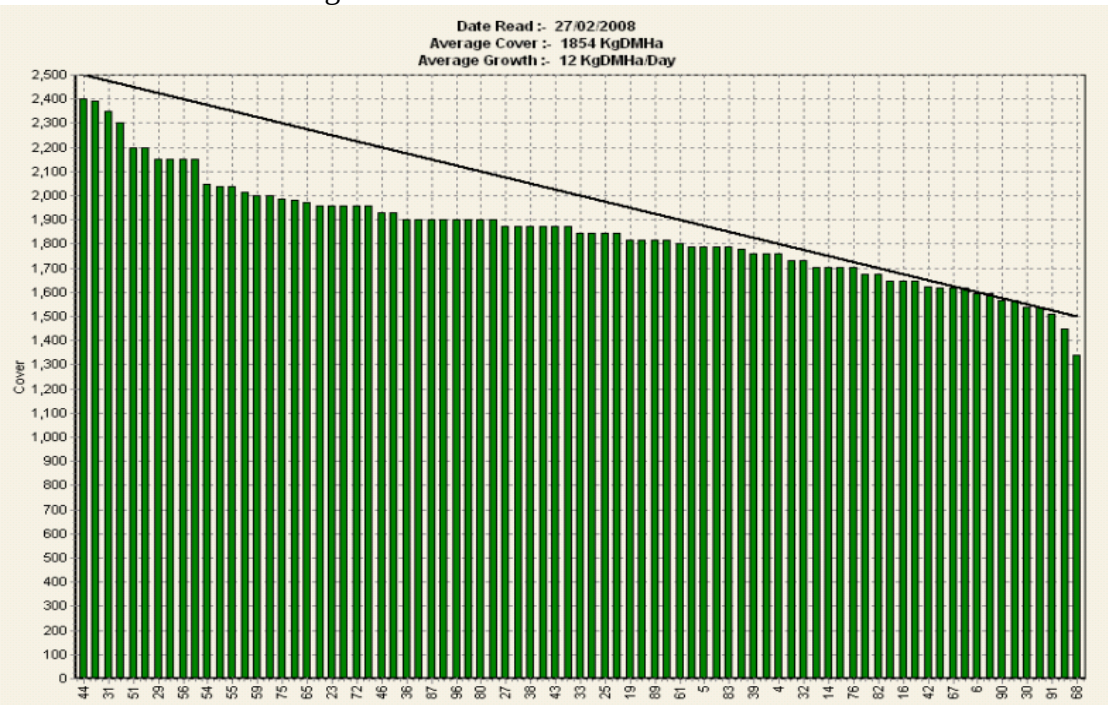
10. An average of 9.2 ha has been grazed per day for the past week. This is 1/ 28th of farm's pasture area available per day.

11. Milk solids production is around 1.42 kg MS/cow/day (1.57 kg last week). Per hectare production is now 3.9 kg MS /ha/day.

12. The top of the target line on the pasture wedge below is based on a stocking rate of 2.8 cows/ha x rotation length of 28 days x nominal allocation of 15 kg DM plus a residual of 1500 kg DM/ha. This residual level is an average of the readings produced by the rising plate meter in current dry conditions utilising the x140+500 formula, the formula that has been used consistently through the season.

13. In hot dry conditions, pastures often increase in Dry Matter % (up to 20% is common) as the measured growth slows down. Currently grass samples from the farm are between 25 – 30% DM. As the Dry Matter % increases there is effectively more pasture above the grazing residual than it seems. To take this into account we have again reduced the apparent allocation to the cows from 16 kg DM /cow/day last week to 15 kg DM /cow/day. This is used in the calculation above to work out the pre-grazing target.

14. This weeks Pasture Wedge:



15. With the current dry conditions, and assuming a 25 day rotation for the coming week, a pasture deficit is evident right across the wedge.

16. We have had 6 mm of rainfall in the last 24 hours, and with the promise of more according to the long-range forecast for the next week, we have decided to carry on with existing cow numbers (and dry no more off) and carry on with a high level of silage input (5 kg DM per cow per day).

17. A review of the autumn / spring feed budget indicates that we have the ability to feed at least 120,000 kg DM in silage between now and dry-off. The stack now contains just over 300,000 kg DM from silage left from last season and silage made on and off farm this season.

18. With the warm conditions, and predicted rain forecast this week, we are expecting a growth rate of around 30 kg DM / ha /day for the week which would match our current pasture demand. We therefore expect the average pasture cover to hold over the next week.

19. We will still retain our dry spell contingency plans to utilise if necessary. There are three options. The first - reduce demand by getting rid of definite culls, which are not suitable to sell as budget cows. Options of cows to be dried off – poor producers, lame cows, early-calving and thin 2 year olds. We have not dried. Empty cows will be identified at the next P.D. in the first week of March, which will be obvious candidates to cull.

20. The second option is to increase feed by feeding silage. Silage formed around third of cow daily intakes this week. A total of 24,000 kg DM in silage was fed out this week.

21. The third option is to reduce allocation and change milking frequency – to 16-hour milking or Once-A-Day milking. At this stage we will not carry this out, but if we do not receive more rain as forecast, we may still have to consider it.

The next WEEKLY farm walk is on **Wednesday 5th March**.

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

Farm Walk Notes

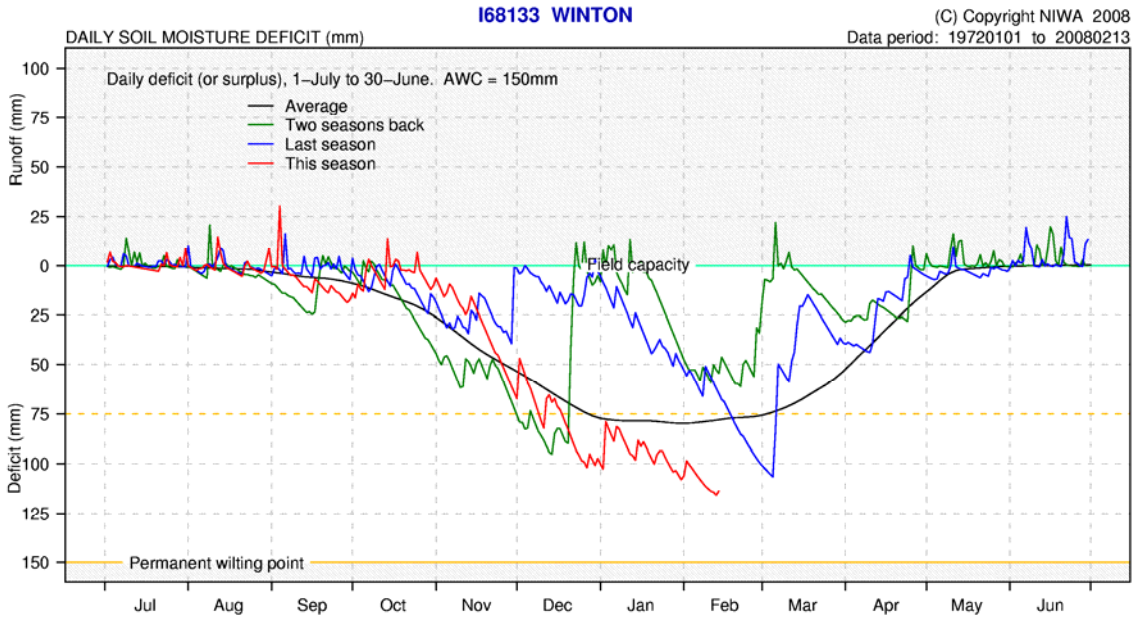
Wednesday, 20th February 2008

Critical issues for the short term

1. **Maintain rotation length**
2. **Continuing dry conditions are now severely affecting pasture growth rates – some cows dried off and feeding of silage commenced**

Summary of Key Factors affecting Grazing Management & Animal Performance

3. Soil temperatures have decreased from 16.4 degrees last week to 14 degrees this week.
4. This week growth has decreased further to 11.9 kg DM / ha / day from 20.6 kg last week.
5. With only 6 mm rain this past week, and 1.8 mm for this week, the farm soils are in a continuing soil moisture deficit, with current evapotranspiration rates around 28 mm per week (4 mm per day).



The soil moisture deficit graph above is very similar to the one from Invercargil Airport. They both show (red line) that the area is in a prolonged soil moisture deficit and that it will take at least 60mm of rain to turn this around to lift soil moistures above the stress point line. In the previous two years (blue and green lines) the soil moisture deficit has got as low as it is currently but, for much shorter periods of time hence it was much less of a challenge to manage.

6. Despite definite "burn-off" on the dry knobs and freer draining, gravel-based areas of some parts of the farm, the farm is holding up well and will immediately respond if significant rain comes soon. However, overall pasture growth rates are continuing to drop well below average.
7. Average pasture cover has decreased this week to 1926 kg DM / ha, down from 2086 kg DM / ha last week. This is because the growth rate is now significantly below demand of 42.4 kg DM/ha/day.

8. The 30ha of grass that was sprayed out end January/beginning February have all been grazed off ready for the second spray and then direct drilling next week. We now have a total of 244.6 ha of pasture available as a result of all of the new pasture paddocks (last winter's crop) now in the grazing rotation but all paddocks (30 ha) earmarked for autumn re-grassing with a short-rotation ryegrass now out of the grazing rotation.

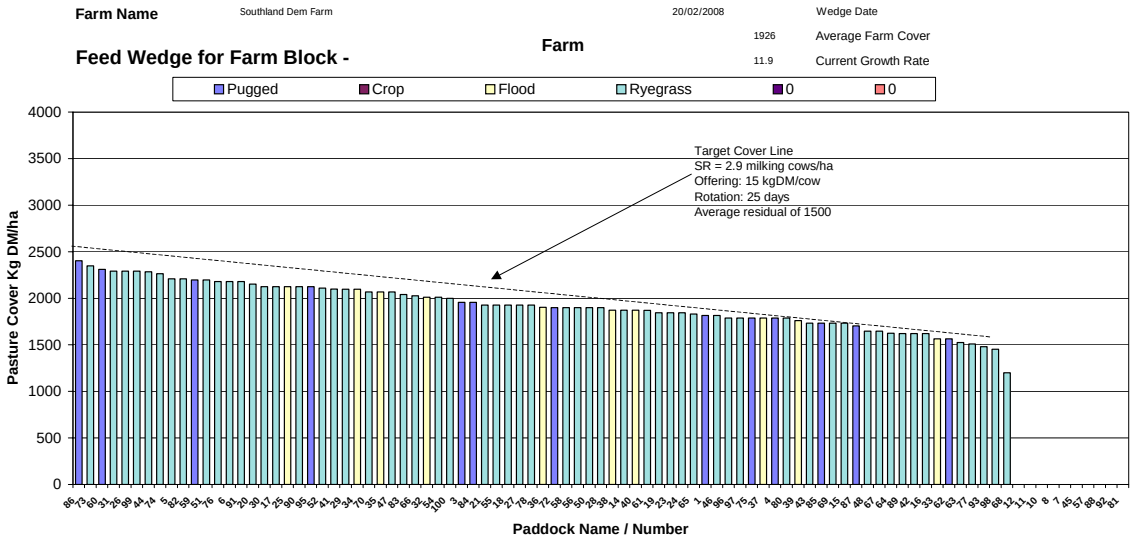
9. An average of 10.8 ha has been grazed per day for the past week. This is 1/ 24th of farm's pasture area available per day.

10. Milk solids production is around 1.57 kg MS/cow/day (1.51 kg last week). Per hectare production is 4.17 kg MS /ha/day.

11. The top of the target line on the pasture wedge below is based on a stocking rate of 2.9 cows/ha x rotation length of 25 days x nominal allocation of 15 kg DM plus a residual of 1500 kg DM/ha. This residual level is an average of the readings produced by the rising plate meter in current dry conditions utilising the x140+500 formula, the formula that has been used consistently through the season.

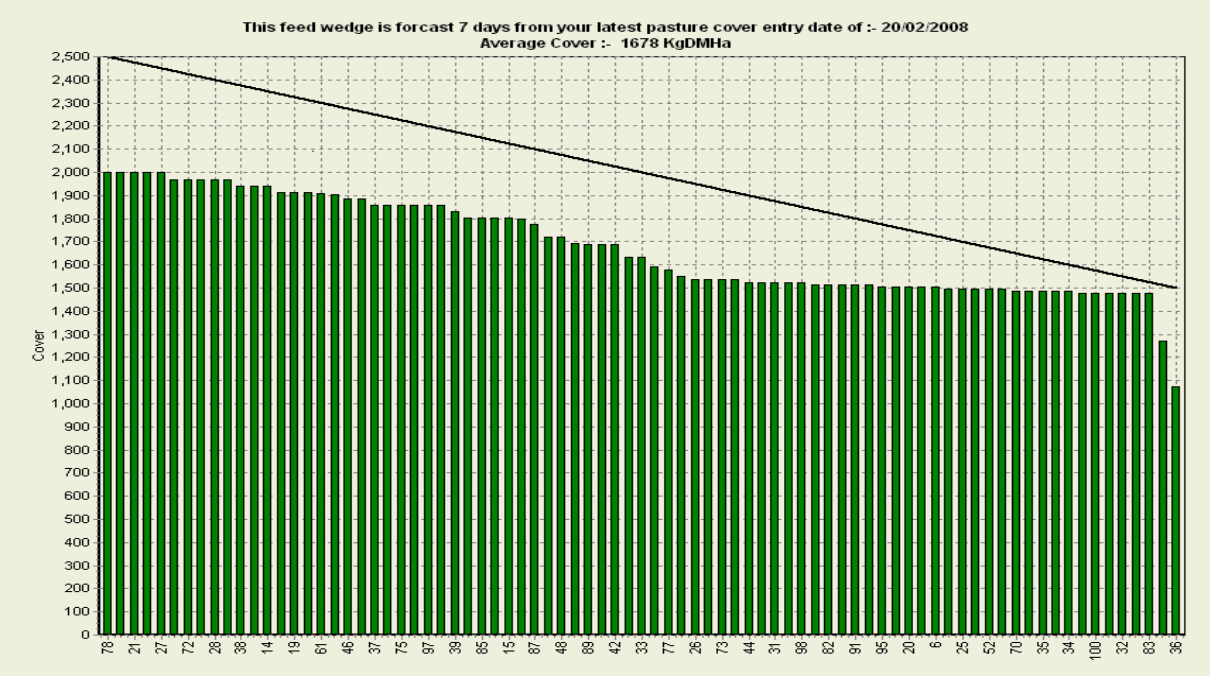
12. In hot dry conditions, pastures often increase in Dry Matter % (up to 20% is common) as the measured growth slows down. As the Dry Matter % increases there is effectively more pasture above the grazing residual than it seems. To take this into account we have again reduced the apparent allocation to the cows from 16 kg DM /cow/day last week to 15 kg DM /cow/day. This is used in the calculation above to work out the pre-grazing target.

13. This weeks Pasture Wedge



14. With the current dry conditions, and assuming a 25 day rotation for the coming week, a pasture deficit is now appearing right across the wedge.

15. It is clear that due to the feed deficit appearing in the wedge, and the expectation that pasture growth rates will continue to be well below demand until we receive significant rain, that we will require to put in place some of our dry-spell contingency plans.



16. The pasture wedge above is a prediction of what our wedge will look like if we only have a growth rate of 10 kg DM/ha/day for the next week. Our current demand is 31 kg DM/day. As well as our average pasture cover dropping by 140 kgs our longest paddocks will only be about 2000 kg DM/ha which means that on our current area per day their would only be 7 kg DM/cow/day of pasture and the rest would have to be made up of silage.

17. Our contingency plans now include three options: The first option is to reduce demand by getting rid of definite culls, which are not suitable to sell as budget cows. Options of cows to be dried off – poor producers, lame cows, early-calving and thin 2 year olds. We have dried off 14 cows identified in this category this week and removed from the milking platform. Empty cows will be identified at the next P.D. in the first week of March, which will be obvious candidates to cull.

18. The second option is to increase feed by feeding silage. Silage was fed-out for the last 4 days of this week and so we were able to maintain intakes at 16 kg/DM/cow/day.

19. The third option is to reduce allocation and change milking frequency – to 16-hour milking or Once-A-Day milking. At this stage we will not carry this out, but if no rain arrives prior to our next farm walk, we will have to seriously consider it.

20. 27 ha of bought-in silage has been harvested and added to our silage stack last week. DM samples and truck weights of harvested grass have been collated, and a total of 105,000 kg was brought-in. This feed will prove to be extremely valuable, given the situation we are currently facing.

The next WEEKLY farm walk is on **Wednesday 20th February**.

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

Farm Walk Notes

Wednesday, 13th February 2008

Critical issues for the short term

1. **Maintain rotation length – do not speed up.**
2. **Continuing dry conditions are affecting pasture growth rates – feeding silage and drying off will have to be actioned.**

Summary of Key Factors affecting Grazing Management & Animal Performance

3. Soil temperatures have increased from 14.7 degrees last week to 16.4 degrees this week.

4. This week growth has decreased to 20.6 kg DM / ha / day from 34.6 kg last week.

5. With only 1.8 mm rain this past week, the farm soils are in a continuing soil moisture deficit, with current evapotranspiration rates around 28 mm per week (4 mm per day). We are now experiencing definite "burn-off" on the dry knobs and freer draining, gravel-based areas of some parts of the farm, and overall growth rates are beginning to drop well below average.

6. Average pasture cover has decreased this week to 2086 kg DM / ha, down from 2196 kg DM / ha last week. This is because the growth rate is now significantly below demand of 49.3 kg DM/ha/day.

7. The 30ha of grass that was sprayed out end January/beginning February have all been grazed off ready for the second spray in about 2 weeks time. We now have a total of 244.6 ha of pasture available as a result of all of the new pasture paddocks (last winter's crop) now in the grazing rotation but all paddocks (30 ha) earmarked for autumn re-grassing with a short-rotation ryegrass now out of the grazing rotation.

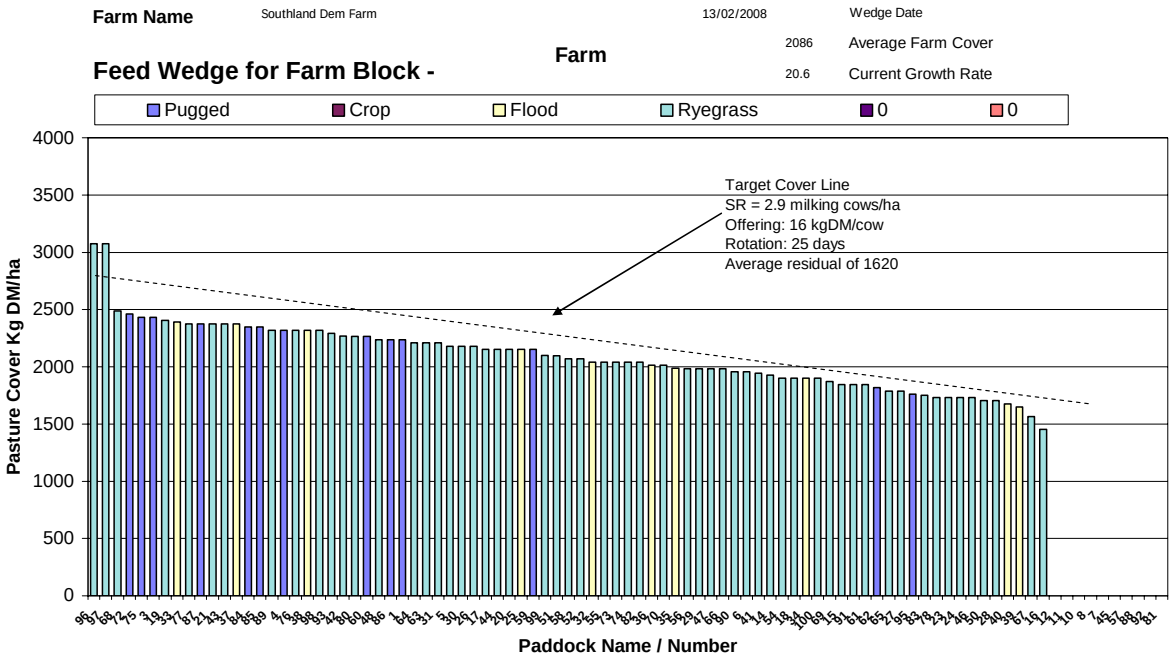
8. An average of 10 ha has been grazed per day for the past week. This is 1/25th of farm's pasture area available per day.

9. Milk solids production is around 1.51 kg MS/cow/day (1.53 kg last week). Per hectare production is 4.18 kg MS /ha/day.

10. The top of the target line on the pasture wedge below is based on a stocking rate of 2.9 cows/ha x rotation length of 25 days x nominal allocation of 16 kg DM plus a residual of 1620 kg DM/ha. The lower end of the target line is at 1620. This residual level is an average of the readings produced by the rising plate meter in current dry conditions utilising the x140+500 formula, the formula that has been used consistently through the season.

11. In hot dry conditions, pastures often increase in Dry Matter % (up to 20% is common) as the measured growth slows down. As the Dry Matter % increases there is effectively more pasture above the grazing residual than it seems. To take this into account we have reduced the apparent allocation to the cows to 16 kg DM /cow/day. This is used in the calculation above to work out the pre-grazing target.

12. This weeks Pasture Wedge



13. With the current dry conditions, and assuming a 25 day rotation for the coming week (we intend not to go any faster than this), a pasture deficit is appearing right across the wedge, although there are still 2 paddocks above the target line at the top end of the wedge.

14. It is clear that due to the feed deficit appearing in the wedge, and the expectation that pasture growth rates will continue to be well below demand until we receive significant rain, that we will require to put in place some of our dry-spell contingency plans.

15. Our contingency plans include two options: The first option is to reduce demand by getting rid of definite culls, which are not suitable to sell as budget cows. We have dried off 30 cows identified in this category this week and removed from the milking platform.

16. The second option is to increase feed by starting to feed silage. No silage was fed-out this last week as we were able to maintain intakes at 16 kg/DM/cow /day. However, it is expected that we will have to supplement feed intake with up to 4 kg DM /cow per day in the coming week after the two paddocks at the top end of the wedge (that are above the pre-grazing cover target line), have been grazed.

17. 20 ha of bought-in silage has been harvested in the last couple of days. DM samples and truck weights of harvested grass are still being collated, but this bought-in feed will prove to be extremely valuable as bolstering autumn supplement reserves.

18. We are continuing to monitor the winter crops for signs of Diamond Back moth and aphids. On inspection and monitoring last week there were minimal increases in insect activity apart from one paddock which will be reviewed during the coming week at which time decision will be made on whether to spray or not.

19. The vet scanned the herd on 7th February (Bull came out on 31st January). It was established that 521 cows had held in-calf to AB, which is a 71.5%-8 week in-calf rate. The remainder of the cows will be scanned in 5 weeks time.

The next WEEKLY farm walk is on **Wednesday 20th February**.

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

Farm Walk Notes

Wednesday, 6th February 2008

Critical issues for the short term

1. **Maintain rotation length.**
2. **Continuing dry conditions are affecting pasture growth rates – feeding silage and culling some cows are now firmly on the agenda.**

Summary of Key Factors affecting Grazing Management & Animal Performance

3. Soil temperatures have dropped slightly from 15.5 degrees last week to 14.7 degrees this week.

4. This week growth has decreased to 34.6 kg DM / ha / day from 55.1 kg last week.

5. Despite 15.3 mm of rainfall this week, the farm soils are in a continuing soil moisture deficit, with current evapotranspiration rates around 28 mm per week (4 mm per day). We are also now experiencing "burn-off" on the dry knobs and freer draining, gravel-based areas of some parts of the farm.

6. Average pasture cover has decreased this week to 2196 kg DM / ha, down from 2277 kg DM / ha last week. This is because the growth rate is now quickly falling below demand.

7. We now have a total of 244.6 ha of pasture available as a result of all of the new pasture paddocks (last winter's crop) now in the grazing rotation but all paddocks (30 ha) earmarked for autumn re-grassing with a short-rotation ryegrass now sprayed out.

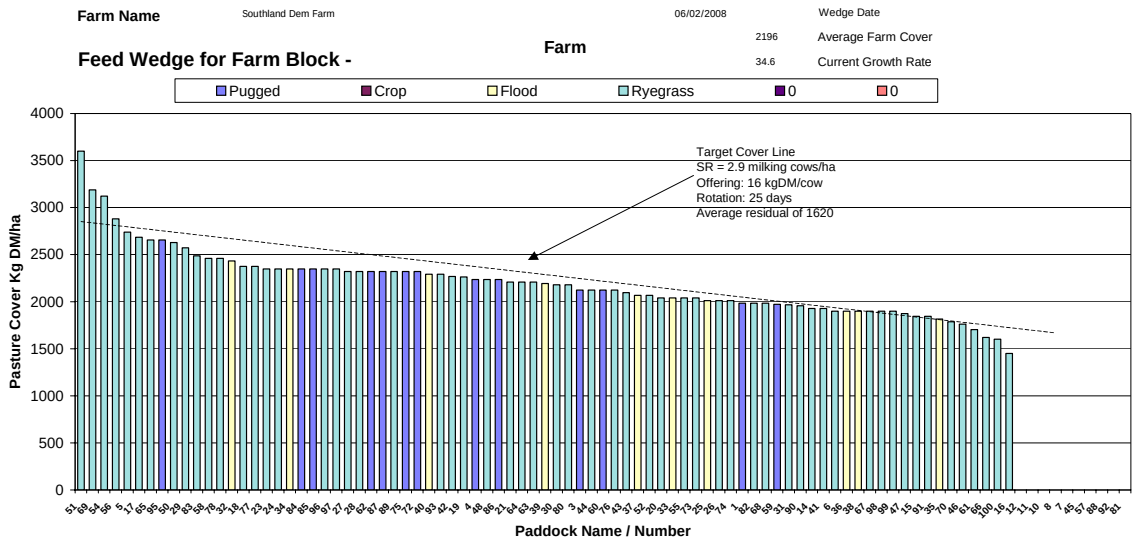
8. An average of 9 ha has been grazed per day for the past week. This is 1/ 29th of last week's farm pasture area available per day.

9. Milk solids production is around 1.53 kg MS/cow/day (1.6 kg last week). Per hectare production is 4.3 kg MS /ha/day.

10. The top of the target line on the pasture wedge below is based on a stocking rate of 2.9 cows/ha x rotation length of 25 days x nominal allocation of 16 kg DM plus a residual of 1620 kg DM/ha. The lower end of the target line is at 1620. This residual level is lower than the average that has been achieved lately, but is an average of the readings produced by the rising plate meter in current dry conditions utilising the x140+500 formula, the formula that has been used consistently through the season.

11. In hot dry conditions, pastures often increase in Dry Matter % (up to 20% is common) as the measured growth slows down. As the Dry Matter % increases there is effectively more pasture above the grazing residual than it seems. To take this into account we have reduced the apparent allocation to the cows to 16 kg DM /cow/day. This is used in the calculation above to work out the pre-grazing target.

12. This weeks Pasture Wedge



13. With the current dry conditions, and assuming a 25 day rotation for the coming week (we intend not to go any faster than this), a pasture deficit is appearing right across the wedge, although there are still 4 paddocks above the target line at the top end of the wedge.

14. We will be able to allocate less than 1/25th of the farm a day at the start of the week. It is clear though that due to the feed deficit appearing in the wedge, and the expectation that pasture growth rates will continue to be below demand until we receive significant rain.

15. As mentioned in last week's notes, we have been discussing our options if dry conditions persist. The first option is to reduce demand by getting rid of definite culls, which are not suitable to sell as budget cows. We expect to dry–off 30 cows identified in this category immediately and cull and/or remove from the milking platform. After this we will increase feed by starting to feed silage.

16. The crops of winter crop (6.4 ha Kale and 15.6 ha Swedes) sown down in winter crop two weeks before Christmas are continuing to look good although we are continuing to monitor them for signs of Diamond Back moth and aphids.

17. The vet will be carrying out the first scan of the herd tomorrow (7 days after the bull came out of the herd, and 6 weeks after the end of AB) to ascertain cows in calf to AB.

The next WEEKLY farm walk is on **Wednesday, 13th February**.
On behalf of the **Management Group** David Newport (Farm Manager), Alex Hunter (Consultant), Adrian van Bysterveldt, Chris Crossley (DairyNZ), Brad Houghton (Herd Manager).