

Farm Walk Notes

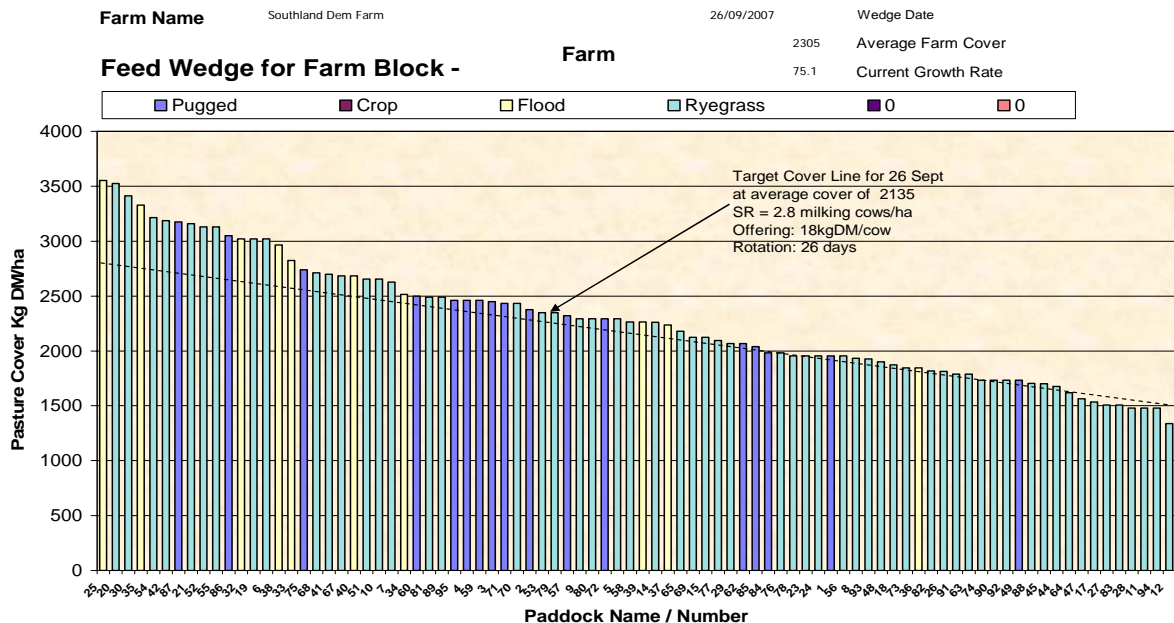
Wednesday, 26th September 2007

Critical issues for the short term

1. Identify and harvest surplus grass.
2. Close up silage stack.
3. Cultivate last winters crop paddocks for re-grassing.
4. Metri-check all calved cows and treat according to vets recommendation.

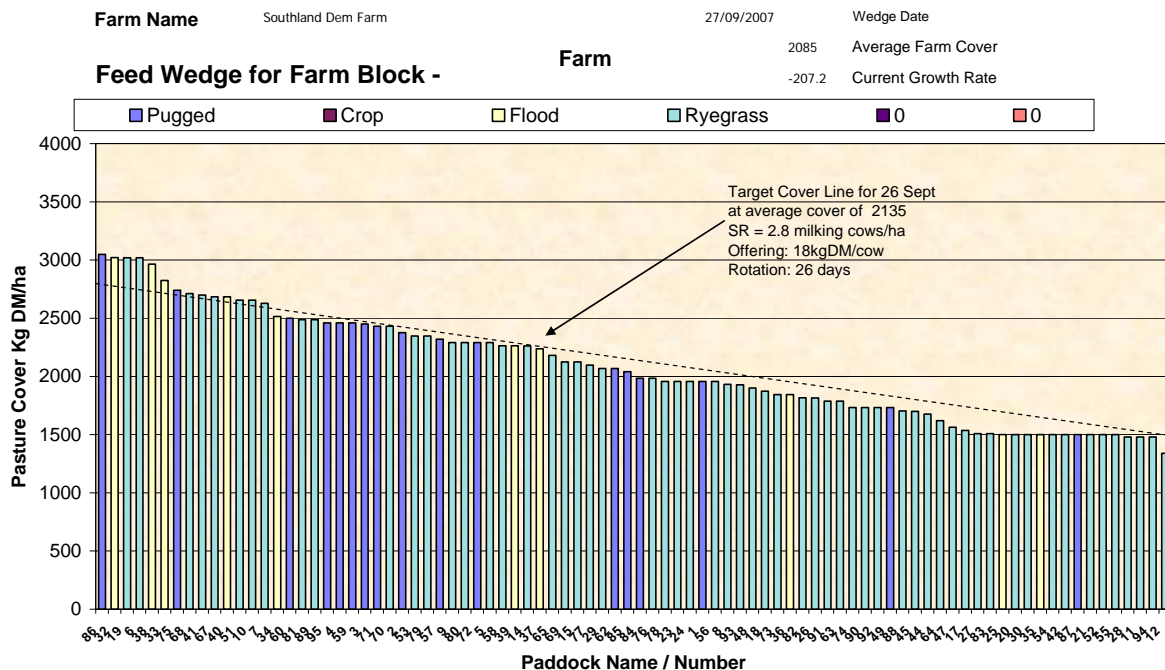
Summary of Key Factors affecting Grazing Management & Animal Performance
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5. Soil temperatures have risen to 10°C.
6. The pasture growth rate was 75 kgs DM /day (62 last week).
7. Average pasture cover has risen for the second week in a row and is now 2305 kg DM per ha (up from 2101 kg DM / ha last week) and is now 170 kgs DM /ha above our target cover for this week.
8. This weeks Pasture Wedge



9. The shape of the pasture wedge has changed drastically over the past week as a result of pasture growth exceeding demand. (budgeted growth was 42kg DM/ha/day (including N)).
10. We believe that the farm has reached balance date even though demand will increase as more cows calve and calved cow intakes lift. This is about 2 weeks earlier than planned and is simply the result of two weeks of exceptional growth rates. Growth rates can still be variable and so we have decided to target a 26 day rotation at present. This rotation length provides us with a buffer of cover if growth rates again fall below demand.

11. We are targeting to offer cows 18kg DM/cow/day which means that we require a pre-grazing cover of 2800kgDM/ha and average cover of 2140kgDM/ha. We now have enough grass to do this without silage.
12. The current surplus available above 1480kgDM/ha amounts to 55t DM. By cutting this immediately we will drop our average cover to 2080kgDM/ha which is 50kgDM below our current target. If we get the growth rates of 55kgDM/ha/day (10 a day above demand) for the next week our cover will again lift back to our cover back to target. This seems very likely given the weather forecast for the next week.
13. The challenge now is to decide how much of the current surplus we can harvest as genuine surplus. This decision is much easier when the farm policy is to remove surpluses as light crops so that these paddocks immediately return to the grazing round.
14. One way to work this out is to use the Pasture wedge. In the following Pasture wedge we have assumed that all the paddocks currently over 3050 kg DM/ha are harvested leaving a residual of 1500 kg DM /ha. This amounts to 32ha or 12% of the farm.
15. Pasture wedge after surplus paddocks harvested.



16. This wedge indicates that the farm will still be in a good feed position and if the growth rate for the next week is 55 (10 above demand) then the small deficit will again disappear. Last week the growth rate was 75 and even though the weather over the last two days has not been the best soil temperatures are still holding at 10°C.

17. We will put 23 kg N/ha following the cows and also following harvesting of the silage paddocks. We are doing this despite the fact that we do not have a deficit so that we can take the opportunity of harvest surpluses now when we have a low stocking rate and before pasture area is taken out for crop. Early season silage tends to be the highest quality silage.
18. Milk production has lifted from 1.81MS/cow/day last week to 1.93MS/cow/day and 4.7MS/ha/day.
19. Pugged areas have not yet had short rotation ryegrass seed applied. We will be under sowing and rolling with a Cambridge roller where appropriate. These areas will also be targeted for aeration.

The next WEEKLY farm walk is on **Wednesday, 3rd October 2007, at 9.00am**

Management Group

David Newport, (Farm Manager), Alex Hunter (Consultant for Trust), Peter Macfarlane and Adrian van Bysterveldt (Dexcel), Brad Houghton (Herd Manager).

Farm Walk Notes

Wednesday, 19th September 2007

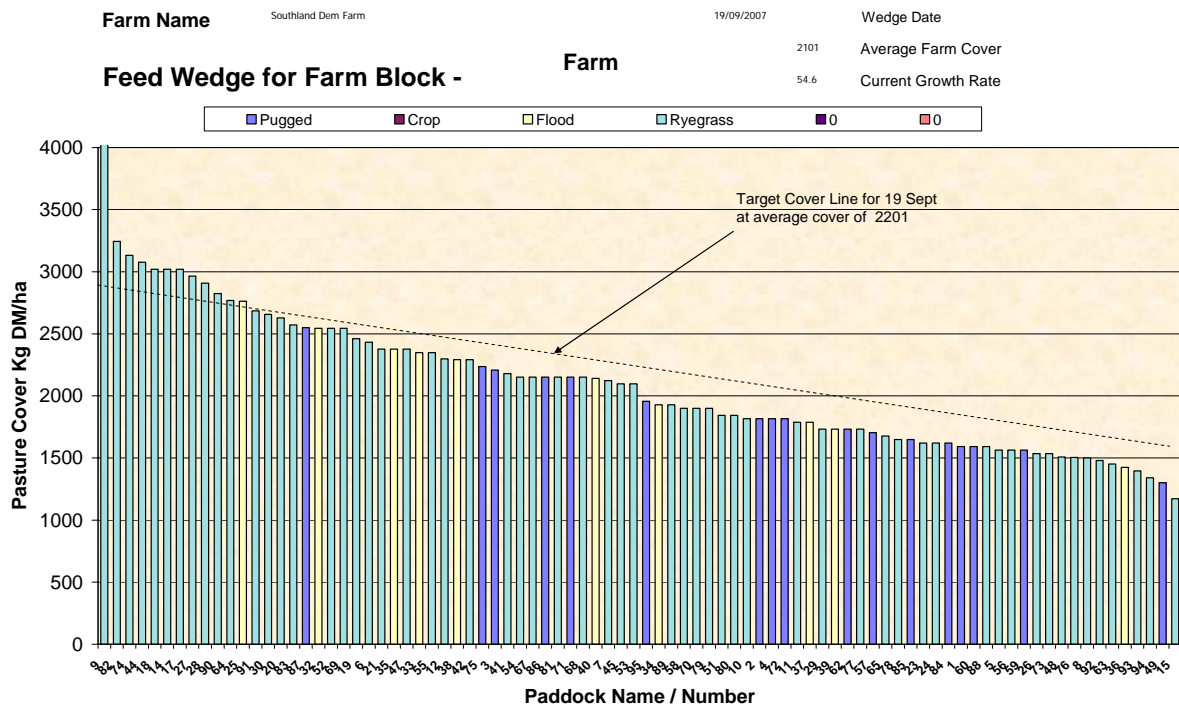
Critical issues for the short term

1. Do not speed the grazing rotation faster than set out in the First Round Planner which finishes during this week (a few days earlier than planned).
2. Target consistent feeding of milkers through consistent feed allocation.
3. Continue to allocate 50% supplement to dry cows on flowering chow crop.
4. Continue with Nitrogen following grazing.
5. Spread short rotation ryegrass seed over pugged sections of farm

Summary of Key Factors affecting Grazing Management & Animal Performance
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6. Have applied Ammo 31 to another 40 ha at 33 kg N/ha. Total area now done = 215 ha. Remaining area not applied in 1st round to be completed this week.
7. We will apply short rotation ryegrass seed (prill-coated) on pugged paddocks. We will be monitoring growth rates of pugged paddocks vs. unpugged paddocks to calculate the impact of damage caused in the Spring as a result of no specific stand-off facility. For this past week pugged paddock growth rates were 35kgDM/ha, approximately 20kg DM/ha/day below unpugged paddocks.
8. Last of the cows to calve will be brought in with any cows still to bag up to be pregnancy tested to confirm still in calf. Any cows not in calf will be marked to be sold due to high cow prices rather than being culled to works.
9. Herd SSC is continuing to come down, and milk grading as a whole is excellent. Herd mastitis has improved with better, drier weather.
10. We have budgeted to be on a 24 day rotation on the 10th of October which is the date that we expect growth to meet demand (Balance date). We will average a 31 day round this week allocating 120msq/milker and 50msq/springer. We will slowly increase the rotation speed from 31 to a 26 day rotation. At a SR of 2.9 cows/ha and budgeted intakes of 19 kg Dm/cow this will mean pregrazing cover targets of 2900 and average covers of 2175. We have chosen this target and rotation length so that we have a buffer in case of colder weather and a resulting drop in pasture growth rates. This will enable us to effectively be able to eat into our cover and speed up the rotation if required in order to meet the cows' requirements on pasture. This higher cover will also be a buffer when we take paddocks out for crop, and the resulting increase in rotation length that will result from this.
11. With an increase in pasture allocation and lower supplement input this week, cows have lifted production to 1.81/cow/day and we expect them to lift further as they will be offered 17.5kgDM/cow of pasture per day during this next week. We plan on using 7.3ha for milkers per day @ 120m², pre-grazing average 2900kgDM/ha, grazing to 1450 = 17.4kgDM/cow offered. We also plan to use a total of 4.7 ha for the week for colostrums, lames and sick mob. Springers will use 1.75ha this week. Planned pre-grazing covers of 3500 kg DM per ha grazing to 1350 kg DM /ha means they will be offered 10.75 kg DM/cow/day. Expected average round speed for the week is 31 days.

12. As a result of the team noticing a large drop in milk production when cows go to the South side of the farm, and pasture agronomist, Wayne Nichol, identifying a lack of ryegrass and high proportion of undesirable species in this area of the farm, we have taken two pasture samples for analysis, one from the North and one from the South sides to investigate any differences in pasture nutritional value due to the perceived differences in sward content..



13. Average pasture cover has recorded a lift to 2101 kg DM per ha (from 2028kg DM / ha last week) with an impressive daily growth rate of 55 kg DM / ha /day. This has improved our deficit situation, but we are still 100kg DM/ha below our cover target - however we have enough silage to fill this deficit until balance date.

14. The bottom ¾ of the wedge is below target but has improved on last week. We have N in the system on most of the grazed paddocks, so are expecting good growth with soil temperatures increasing to 9.6 degrees average for the week. We are hoping that this will lift covers of the second round paddocks up to the target cover line over the next two weeks.

15. The first herd test for the season will be carried out on Thursday night / Friday morning.

The next WEEKLY farm walk is on Wednesday, **26th September 2007 at 9.00am**

Management Group

David Newport, (Farm Manager), Alex Hunter (Consultant for Trust), Peter Macfarlane and Adrian van Bysterveldt (Dexcel), Brad Houghton (Herd Manager).

Southland Demonstration Farm Walk Notes

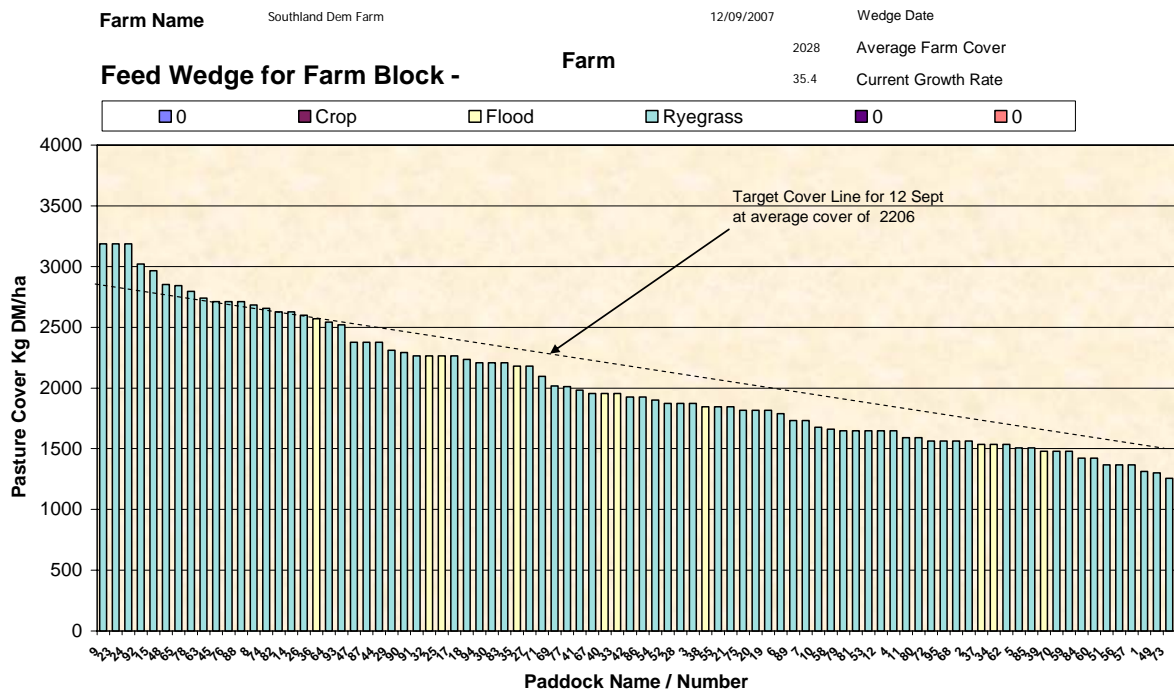
Wednesday, 12th September 2007

Critical issues for the short term

1. Do not speed the grazing rotation faster than set out in the First Round Planner.
2. Lift allocation to the milkers following plan.
3. Reduce dry cow intake of flowering chow to less than 50%.
4. Continue with Nitrogen following each grazing.
5. Start checking at risk cows for retained membranes and uterine infection.

Summary of Key Factors affecting Grazing Management & Animal Performance

6. Farm walk this week indicates that the farm grew above average growth rates, with a weekly growth rate of 35 kg DM per ha per day (29kgDM/ha budgeted).



7. Average pasture cover is now 2028 kg DM per ha (2022kg DM / ha last week). It is encouraging that the average pasture cover has not dropped over the last week. It is still 178kg DM/ha below our cover target, however we have enough silage to fill this deficit until balance date.
8. The top quarter of the wedge is still autumn-saved, first-round grass, and these paddocks are sitting at covers close to target. The remainder of the wedge is below target and reflects the cold spring. We have N in the system on most of the grazed paddocks, so are expecting good growth with soil temperatures sitting at about 8 degrees average for the week. We are hoping that this will lift covers of the second round paddocks up to the target cover line.

9. Due to the forecasted feed deficit coming up we will not speed up, but will continue to allocate area and add in supplement according to the first round grazing planner.
10. Over the past week the milkers have been split into a group of younger and light cows (174) and a group of better condition cows (343). The farm team is happy with the condition of the light mob estimating their condition at BCS of 4.2, with only 15 very light cows. The better conditioned main herd has an estimated BCS of 4.8.
11. We are still targeting the longest paddocks to be grazed first, so the two herds do not have a specific allocated area.
12. The light herd has been leaving residuals of over 8 “clicks” 1650kgDM/ha this week, so silage has been cut out of the diet and they are on all grass. Removing the silage from their allocation and making up the full amount with better quality grass is resulting in a lift in energy intakes. This residual is higher than target, but we are happy to leave residuals of up to 1650 with the lighter mob this round, and use the main mob to graze it to targets residual of 1500kgDM/ha (7 clicks) next grazing. We will be recording any paddocks with residuals above 1600 so that the main herd grazes it next round.
13. The main herd has been grazing to 1300kgDM/ha on average, and is still getting silage at an average of 3.5kgDM/cow/day. We have started feeding out older silage from an area of the stack. This has a lot of seed head and has a higher DM content than that fed to date, but cows are still consuming it well.
14. Milk production has lifted to 1.7MS/cow/day and 3.5 kg MS/ha.
15. The remaining Chow is starting to go to flower. With the risk of SMC0 poisoning we will be diluting the dry cow diet with 50% supplements. We have about 2 weeks until we finish the crop.
16. The herd will be herd tested next week, Thursday, which will help identify the high somatic cell count cows.
17. We have been selecting possible paddocks for next winter crops. In the absence of annual individual paddock growth data, Wayne Nichol (Wrightson Seeds) has identified paddocks with a lack of ryegrass and high proportion of undesirable species in the sward. Some of these paddocks have less than 30% ryegrass.
18. No N (Ammo 31) went on last week. The plan is for the remainder of the farm that has not had N to be applied this week. Some paddocks are still too wet.
19. Prill-coated Maverick Gold (short-rotation ryegrass) seed will be spun over 40ha that was pugged this spring. This 40ha is made up of small amounts in many paddocks.
20. Two hundred and ten fully recorded calves have been reared, including heifers from heifers. This is already our 25% quota of replacements with 1 weeks AB mating to come. Friesian bull calves have been sold up till now. Beef crosses will be sold and the rest bobbied. Non-recorded heifer calves have also been sold.
21. Calves are being fed OAD with 5 litres for first 4 weeks and 4 litres thereafter. Calves are being given ad-lib straw and muesli for the first 2 weeks followed by 20% protein pellets.

22. All heifer calves will be DNA tested this week. We have had a 2% death rate in calves reared. Virkon disinfectant is being sprayed weekly in the pens.
23. We have had 4 cow deaths this week, one from twisted uterus, bad calving heifer, 'hardware disease' and one unknown. Another 5 cows that have been dried off and 3 others that are not performing (6 slips, 2 expected Johnes), and we will look toward getting them off the milking platform.
24. Herd was tailpainted for pre-mating heats this Tuesday.

The next WEEKLY farm walk is on Wednesday **19th September 2007 9.00am**

Management Group

David Newport, (Farm Manager), Alex Hunter (Consultant for Trust), Peter Macfarlane and Adrian van Bysterveldt (Dexcel), Brad Houghton (Herd Manager).

Farm Walk Notes

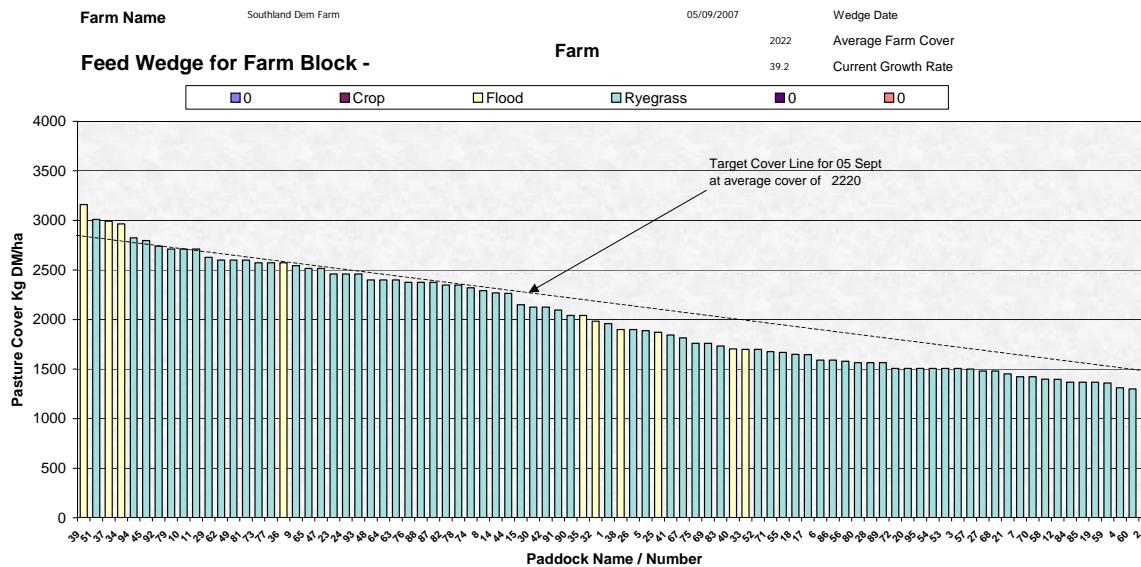
Wednesday 5th September 2007

Critical issues for the short term

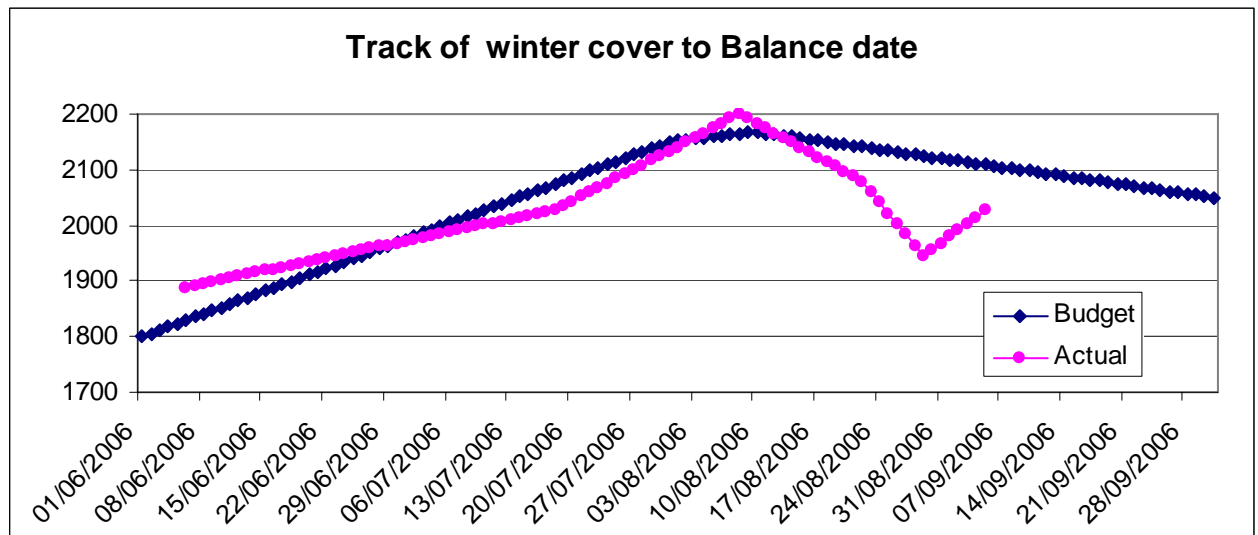
1. Do not speed the grazing rotation faster than set out in the First Round Planner.
2. Stand dry cows off on races, waste areas and crop paddocks and milkers on the dairy yard.
3. Split herd into 2, with younger and lighter in one herd. (needed for cows to fit into yard).
4. Allocate remaining crop according to feed plan.
5. Continue with Nitrogen following grazing.
6. Identify paddocks to be put into winter crop.

Summary of Key Factors affecting Grazing Management & Animal Performance

7. Farm walk this week indicates that the farm had an above average growth rate at 40kg/DM/ha per day (25kgDM/ha budgeted).
8. Average pasture cover has been recorded at 2026 kg DM per ha (from 1944kg DM / ha last week). This is still 194kg DM/ha below our cover target, however, we have enough silage to fill this deficit until balance date.



9. The feed wedge above is close to the target cover line at the top half of the wedge, but below the target cover line at the bottom half of the feed wedge. This indicates that we are facing a feed deficit once the top-end paddocks have been grazed, and our plan to combat this is to apply N to these paddocks. 9 tonnes of Ammo 31 (31% N) has been applied this week.



10. The graph tracking actual average pasture cover against budget (see above) indicates that the farm is now approximately 194 kg DM / ha behind the target average cover of 2220 where we would not have to feed silage.
11. One third of the farm received Ammo 31 at 100kg/ha directly before the rain arrived on Monday, which was perfect timing. The area that has not received any N so far this season, which is 77ha, will also receive 100kg Ammo 31/ha (31kgN/ha, 14kgS/ha). Long range weather forecast is looking good, so expect to put it on this week – 10 days by ground application.
12. With the better conditions earlier in the week, we have been able to keep to the area allocated in the budget to be grazed this week (first week we have been able to achieve this). We have grazed a total of 35ha with the milkers and colostrum cows, springers / dry cows. This is despite having an average of 546 calved cows available compared to 514 budgeted. This has increased our feed demand faster than planned.
13. We are giving the milking cows a new break every 12 hours, lifting grazing residuals to 1400 kg/DM/ha.
14. Current production is 1.5 kg MS/cow/day and 3.2 kg MS/ha/day.
15. The pasture area left ungrazed on the farm now is 126 ha, compared to 150 budgeted to be left. This could result in us completing the first round a few days earlier than originally planned. However, if the improved growth rates continue and pasture cover lifts we may be able to get back on track.
16. Our feed allocation for this week is targeting a lift in intake to 14.4 kg DM/milker/day, is 90 m² of grass per cow available as per first round grazing planner. A total of 42.2 ha this week (if soil conditions allow). Pre-grazing covers average 2850 kg DM/ha for the week, which means the milkers will have 12.6 kg DM/cow available in pasture above 1450 kg DM/ ha residuals. We will reduce intake of silage for milkers from 4 to 3 kg DM /milker/day of high quality silage, assuming some wastage at feeding out.
17. The springers will be getting 58 m² which, assuming pre-grazing covers of 2850kg DM / ha and grazing down to 1200 kg DM per ha residuals (subject to soil conditions) is 9.6 kg DM offered in pasture. We will provide silage if needed and when stood off. On average we expect 85 springers /day on pasture for the week, so we are expecting to utilise an area for the springers of 3.45 ha for the week.

18. Ground conditions were drying up nicely, but heavy rain (35mm) on Monday afternoon and Tuesday night has resulted in soils again being very wet. The team is still working very hard to limit pasture damage. Cows are stood off on any suitable area available when necessary. This has been done once with milkers for 4 hours between milkings.
19. The small pugged areas in paddocks not to be cropped will be fixed by spinning on short rotation, or Italian ryegrass at between 12 & 20kg seed/ha (coated seed to add weight) depending on level of damage. This will be done with the trailed spreader currently being used for Mag Oxide.
20. During the last month several paddocks have been identified as having a compacted soil structure which is resulting in ponding after rain. These paddocks will be aerated as soon as soil conditions allow.

The next WEEKLY farm walk is on **Wednesday, 12th September 2007 at 9.00am**

Management Group

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