

Curtins Farm Walk Notes Tuesday 24-11-09

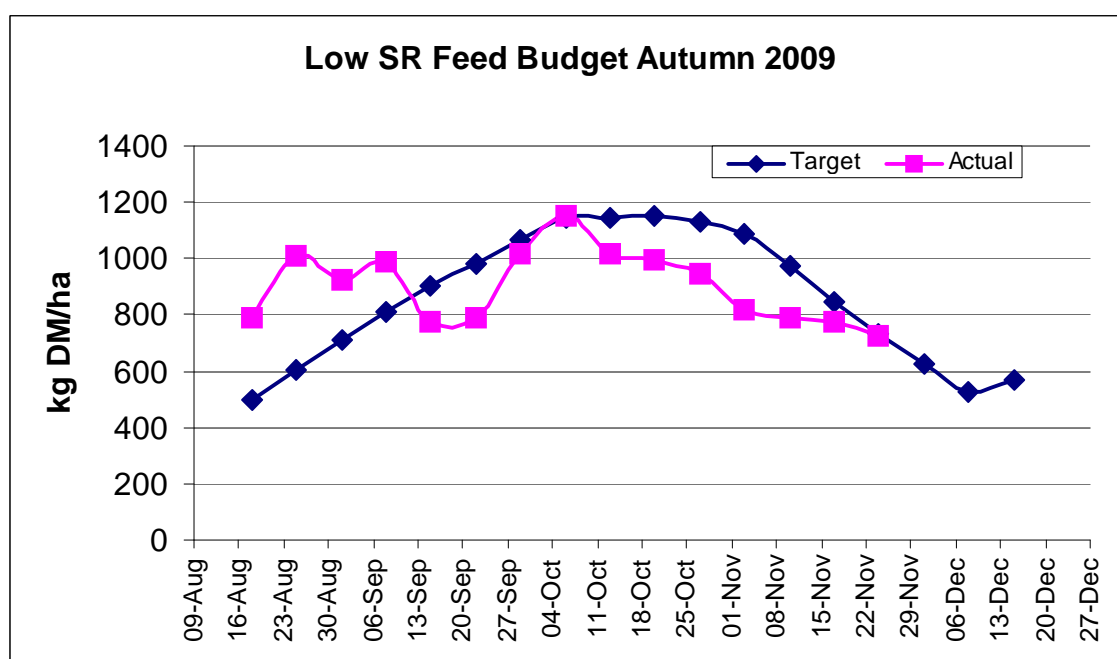
Low Stocking Rate Group (2.5 HF Cows/ha)

Critical Issues

- 1) Maintain post-grazing height at between 5 – 5.5cm
- 2) Avoid poaching

Situation

Figure 1. Autumn Feed Budget



- 1) As can be seen in figure 1, we are exactly on target in terms of farm cover (727kg/ha).
- 2) We have two high covers left to graze, paddocks 10 and 12 have a cover of 1800 and 2000 respectively. When these paddocks are grazed, farm cover will drop to 548kg/ha, which is our closing target.
- 3) Cows are currently grazing paddock 10 but we will be unable to graze block 12 as it is too wet. This paddock was reseeded in the spring with Bealy and is more prone to poaching. Therefore, we have decided that we will house the cows once paddock 10 is grazed and go back out to graze paddock 12 when conditions improve, with dry cows if necessary.
- 4) The important thing at the moment is to minimise damage. We are confident that we will get to graze it at some stage in the next few weeks.
- 5) Concentrate supplementation is at 2kg.
- 6) 86% of the farmlet is grazed.

- 7) Cows are currently on 12-hour allocations and on/off grazing is being used to help avoid poaching.
- 8) Pre-grazing yield is 1800kg.
- 9) 22% of the herd is dried off so stocking rate is now 1.97cows/ha

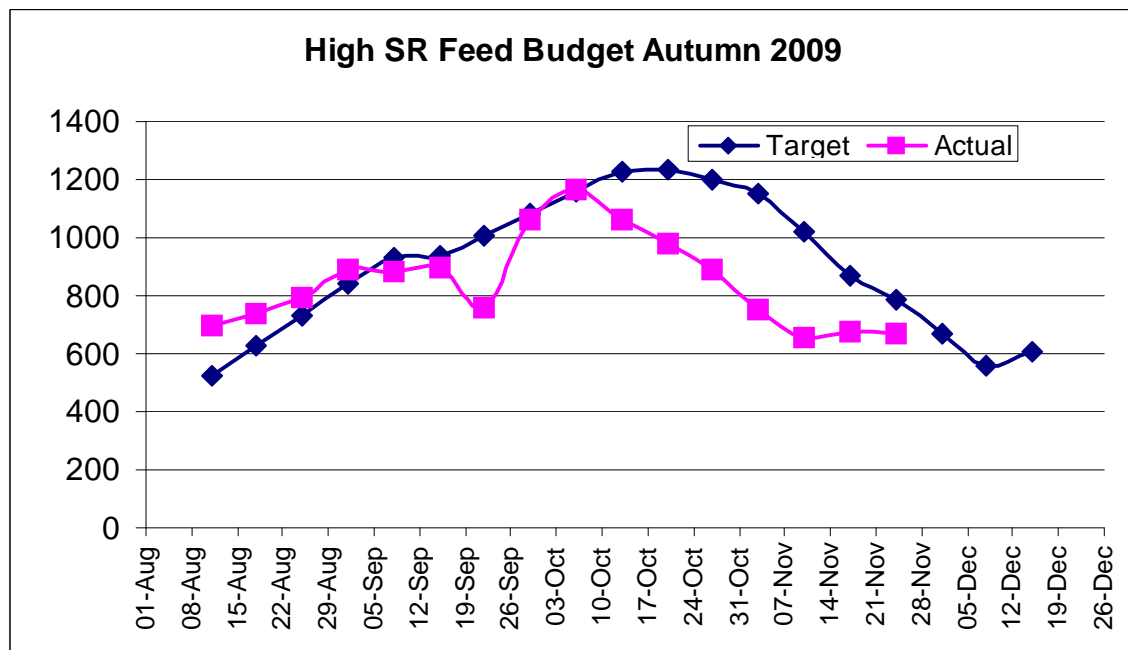
High Stocking Rate Group (3.3 HF Cows/ha)

Critical Issues

- 3) **Maintain post-grazing height at between 3 and 3.5cm**
- 4) **Avoid poaching**

Situation

Figure 2. Autumn Feed Budget



1. As can be seen in Figure we are slightly below target in terms of farm cover (672kg vs 783kg.)
2. Our target closing farm cover is 562kg, this will be achieved when cows finish grazing their current paddock and the next highest cover which is in paddock 12. However, like the Low Stocking Rate, this paddock is prone to poaching and so we will house the cows until grazing conditions improve.
3. Cows are now on 2kg of concentrate and 90% of the farmlet is now closed.
4. Pre-grazing yield is 1750kg
5. 39% of the herd is now dried off so stocking rate is now 2cows/ha

Whole Farm Situation

1. Average soil temperature for the past week was 9.51°C, last week 7.34°C.
2. Total rainfall for the week was 85.5mm.
3. Average weekly growth this week was 20kg/day, average for the previous 3 years was 12.4kg/day.
4. Cows are dried off based on calving date, we target 10 weeks dry for 1st lactation and 8 weeks for everything else.
5. Dry matters were 12% on Monday morning.
6. 250kg N/ha have been spread this year.
7. Latest milk quality test results from the milk processor are; Fat 4.95%, Protein 4.08%, Lactose 4.6%, SCC 183k, TBC 19k, Thermoduric 2600, Sediment A.
8. Next farm walk will be on the 21st of December.
9. Critical Short-term Actions:
 - a. Cows are currently on 12-hour allocations.
 - b. Maintain post-grazing height at desired level.

Curtins Farm Systems Fertility Performance 2009

The current farm system comparison study at Curtins Farm encompasses three alternative stocking rate treatments. The three stocking rates compared are Low (2.51 cows per hectare), Medium (2.92 cows per hectare) and High (3.28 cows per hectare) stocking rates for Irish dairy farms post milk quotas. The objective of the study is to quantify the impact of stocking density within systems of production based on grazed grass with minimal external feed supplementation. The target grazing intensity, in terms of post-grazing residual sward height for the low, medium and high stocking rate treatments was 5.5, 4.5 and less than 3.5cm, respectively over the season. Each group was managed separately and received a common level of concentrate supplementation. Early season grass growth in 2009 was below expectation and resulted in increased grazing severity for all treatments. Average post grazing residual height was 3.6, 3.4 and 3.3cm for the low medium and high stocking rates, respectively during rotation 1, while total feed allocation per cow per day was 14.0, 12.5 and 12.1 kg DM, respectively.

Table 1 below, outlines the influence of stocking rate treatment on reproductive performance during the 2009 breeding season. Breeding commenced on April 20th and finished on July 20th (13 weeks). Cows were bred to artificial insemination after morning milking using tail paint to aid heat

detection. As evidenced from the Table 1, stocking rate had no significant effect on any of the reproductive variables measured. Reproductive performance and in particular pregnancy rate to 1st service and after 42 days of breeding across all groups was poor in comparison with target levels. While not significantly reduced, the poorer reproductive performance of the medium and high stocking rate treatments is consistent with their increased grazing intensity, reduced feed allowance and lower body condition score at AI when compared to the low stocking rate group. The provisional results indicate that the challenge for higher stocking rate systems will be to increase feed allocation in early lactation to achieve acceptable levels of reproductive performance while avoiding higher residual grazing height and pasture wastage.

Table 1. The Effect of Stocking Rate on Reproductive Performance

Stocking rate	Low	Medium	High	Significance
Calving date	22/02/09	24/02/09	21/02/09	NS
Submission rate (%)	87	74	80	NS
CSI (days)	77	80	82	NS
Preg to 1 st Serve (%)	48	37	44	NS
42 day in-calf rate (%)	65	57	54	NS
In-calf rate* (%)	80	74	78	NS
CCI (days)	94	105	104	NS

*13 week breeding season