

Curtins Farm Walk Notes Tuesday 17-11-09

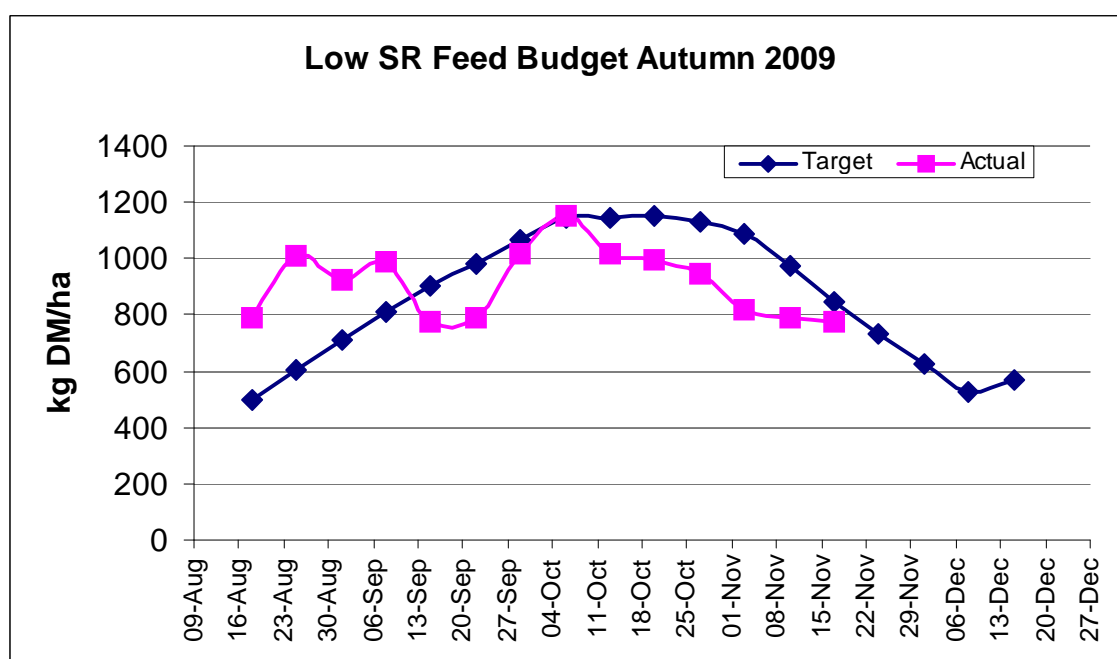
Low Stocking Rate Group (2.5 HF Cows/ha)

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 below target in terms of farm cover (773kg vs 844kg). However, because we have dried off more cows than originally budgeted, the cover per cow figure is above target at 393kg/cow, target is 338kg.
- 2) This is an increase on last weeks figure because the cows were housed for 24 hours last week and growth was higher than budgeted at 23kg/day (14kg in budget)
- 3) Concentrate supplementation has been reduced from 4kg to 2kg.
- 4) 64% of the farmlet is grazed.
- 5) Cows are currently on 12-hour allocations and on/off grazing is being used when necessary to help avoid poaching.
- 6) Pre-grazing yield is 1575kg.
- 7) 22% of the herd is dried off so stocking rate is now 1.97cows/ha

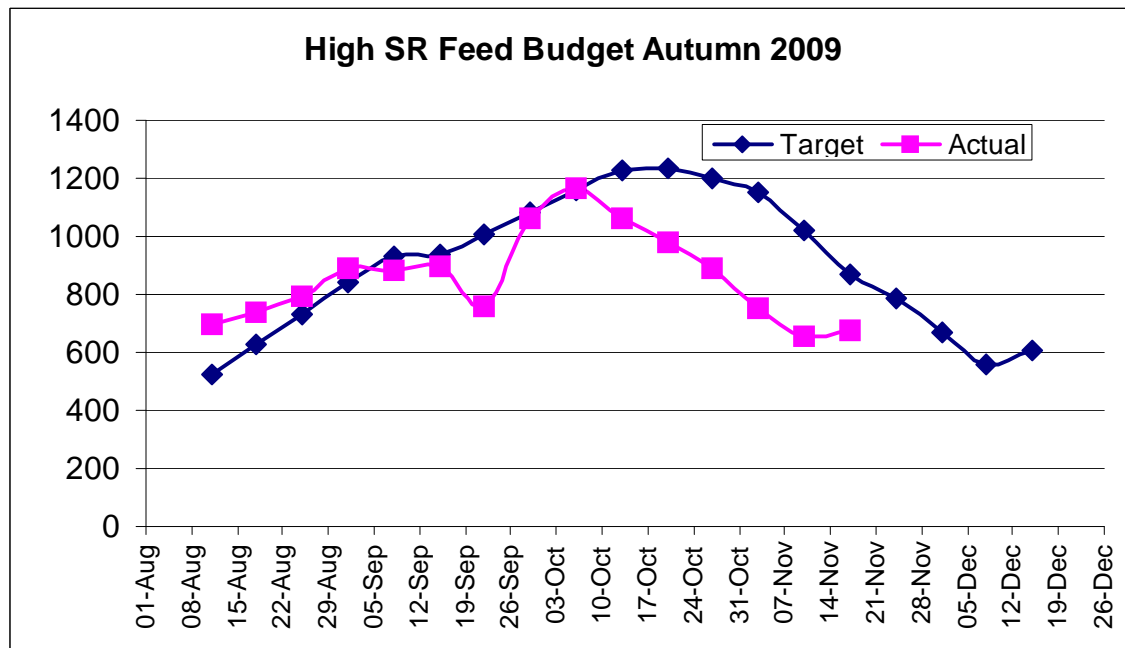
High Stocking Rate Group (3.3 HF Cows/ha)

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 below target in terms of farm cover (674kg vs 872kg) but because we have more cows dried off than originally budgeted the cover per cow figure is above target at 337kg, target was 266kg/cow.
2. The fact that these cows were fed indoors for 36hours during heavy rainfall last week plus the fact that growth rates were higher than expected explains why the farm cover increased.
3. Cows are now on 2kg of concentrate and 72% of the farmlet is now closed.
4. Pre-grazing yield is 1450kg
5. 39% of the herd is now dried off so stocking rate is now 2cows/ha
6. We estimate that there is about 12 days grazing ahead of the cows.

Whole Farm Situation

1. Average soil temperature for the past week was 7.34°C, last week 8.58°C.
2. Total rainfall for the week was 70.7mm.

3. Average weekly growth this week was 23kg/day, average for the previous 3 years was 15kg/day.
4. Cows are dried off based on pregnancy diagnosis and condition score. Most of the empty cows have been sold. Later, cows will be dried off based on calving date but that is not an issue yet, we target 10 weeks dry for 1st lactation and 8 weeks for everything else.
5. Dry matters were 13.1% 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. 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