

Curtins Farm Walk Notes Tuesday 10-11-09

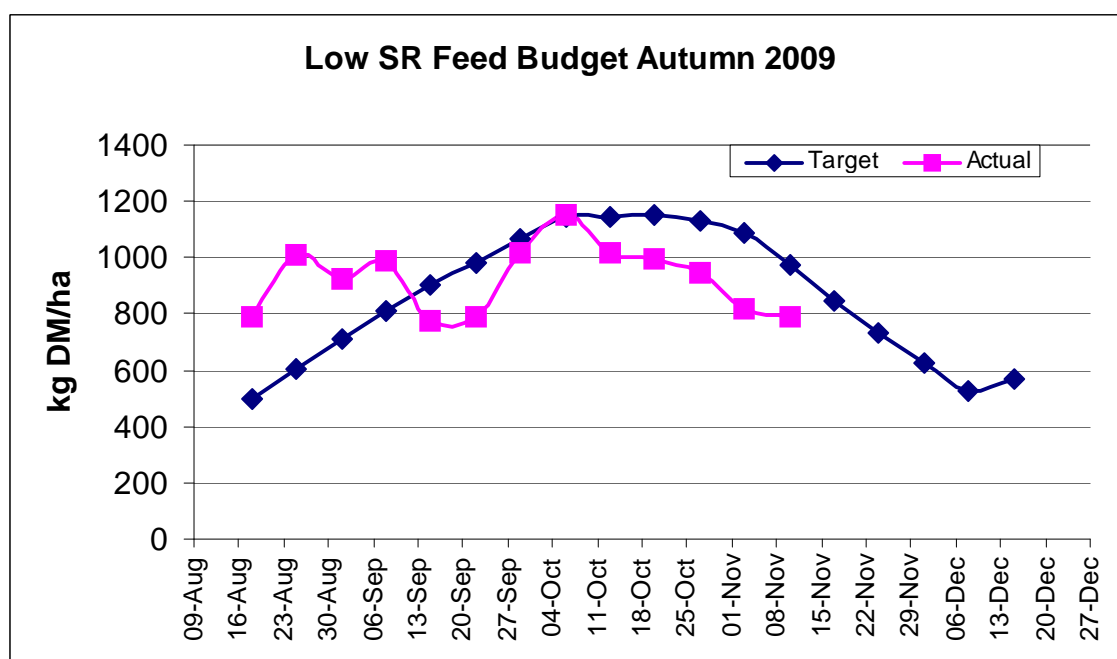
Low Stocking Rate Group (2.5 HF Cows/ha)

Critical Issues

- 1) Maintain post-grazing height at between 5 – 5.5cm
- 2) Maintain rotation length at 20 days
- 3) 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 (786kg vs 977kg). However, because we have dried off more cows than originally budgeted, the cover per cow figure is on target at 400kg/cow.
- 2) 4kgs of concentrate is being fed per cow.
- 3) 58% of the farmlet is grazed. We started closing on the 10th of October. Our target is to have 60% closed in the first 30 days or 15% per week. At 58% closed today we are just on target.
- 4) Cows are currently on 12-hour allocations and on/off grazing is being used when necessary to help avoid poaching.
- 5) Target rotation length is 20 days.

- 6) Pre-grazing yield is 1600kg
- 7) 22% of the herd is dried off so stocking rate is now 1.97cows/ha

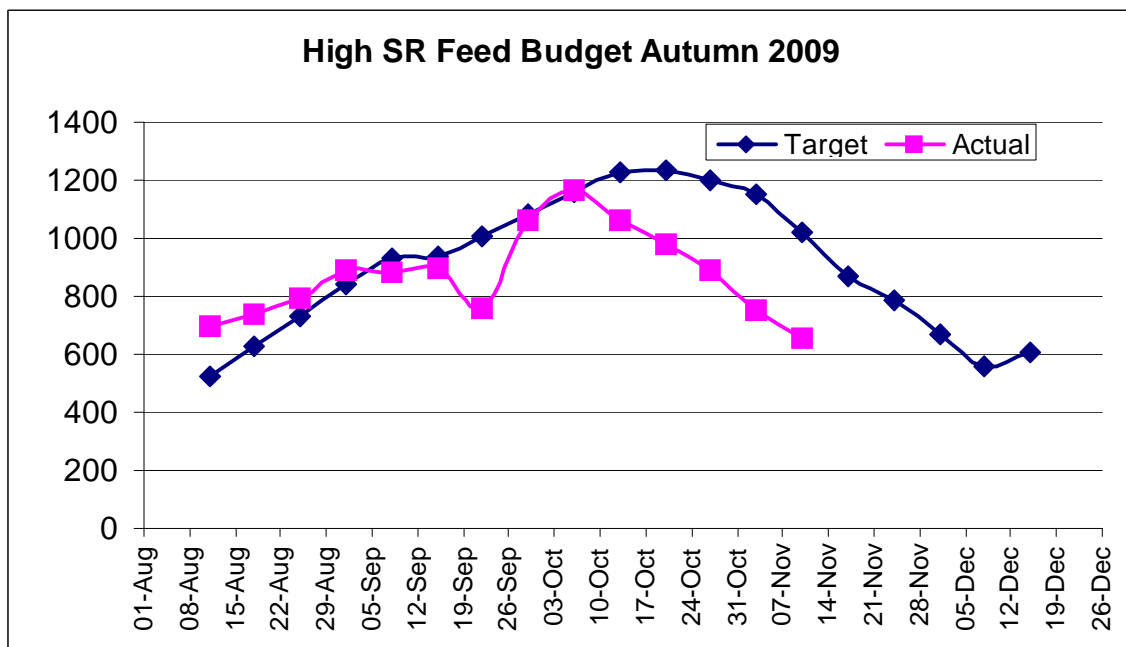
High Stocking Rate Group (3.3 HF Cows/ha)

Critical Issues

- 4) Maintain post-grazing height at between 3 and 3.5cm
- 5) Maintain rotation length at 20 days
- 6) Avoid poaching

Situation

Figure 2. Autumn Feed Budget



1. As can be seen in Figure we are below target in terms of farm cover (654kg vs 1021kg) but because we have more cows dried off than originally budgeted the cover per cow figure is on target at 327kg/cow.
2. Cows are on 4kg of concentrate and 61% of the farmlet is now closed, which is on target.
3. Pre-grazing yield is 1600kg
4. Target rotation length is currently 20 days.
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 8.58°C, last week 12.7°C.
2. Total rainfall for the week was 44.3mm.
3. Average weekly growth this week was 22kg/day, average for the previous 3 years was 22kg/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 12.3% on Monday morning.
6. 250kg N/ha have been spread this year.
7. Latest milk quality test results from the milk processor are; Fat 5.17%, Protein 4.17%, Lactose 4.58%, SCC 281k, TBC 15k, 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