

Curtins Farm Walk Notes Tuesday 31-08-10

Low Stocking Rate Group (2.5 HF Cows/ha)

Critical Issues

- 1) Maintain post-grazing height at between 4.5 – 5cm
- 2) Achieve target autumn average farm cover.

Situation

Figure 1. Low Stocking Rate Feed Wedge

Moorepark Animal & Grassland Research and Innovation Centre		GrazePlan - Grass Measurement Report	
Group : TEAGASC RESEARCH FARMS		Date Produced 30-AUG-10	
Farm : Curtins Farm		Effect of stocking rate and calving date on animal performance	
Date : 30-AUG-10		Treatment : Low SR	
Rotation Length :	30	Farm Cover (kg DM/ha) :	501
Grass Allocation /cow (kg grass dry matter/LU	11.5	Farm Cover (kg DM/LU) :	199
Concentrate Fed (kg/cow) :	4	Current Monthly Fertilizer Rate (kg/ha) :	
Silage Fed (kg DM/cow) :	2.5	Stock Rate (LU/ha) :	2.52
N Application Rate (units/acre) :		Growth Rate :	33
N Application Rate (kg/ha) :		Farm Demand (kg DM/LU/day) ::	29
Residual Height :	5	Target pregrazing yield (kg DM/ha) :	868
Total Livestock :	23		

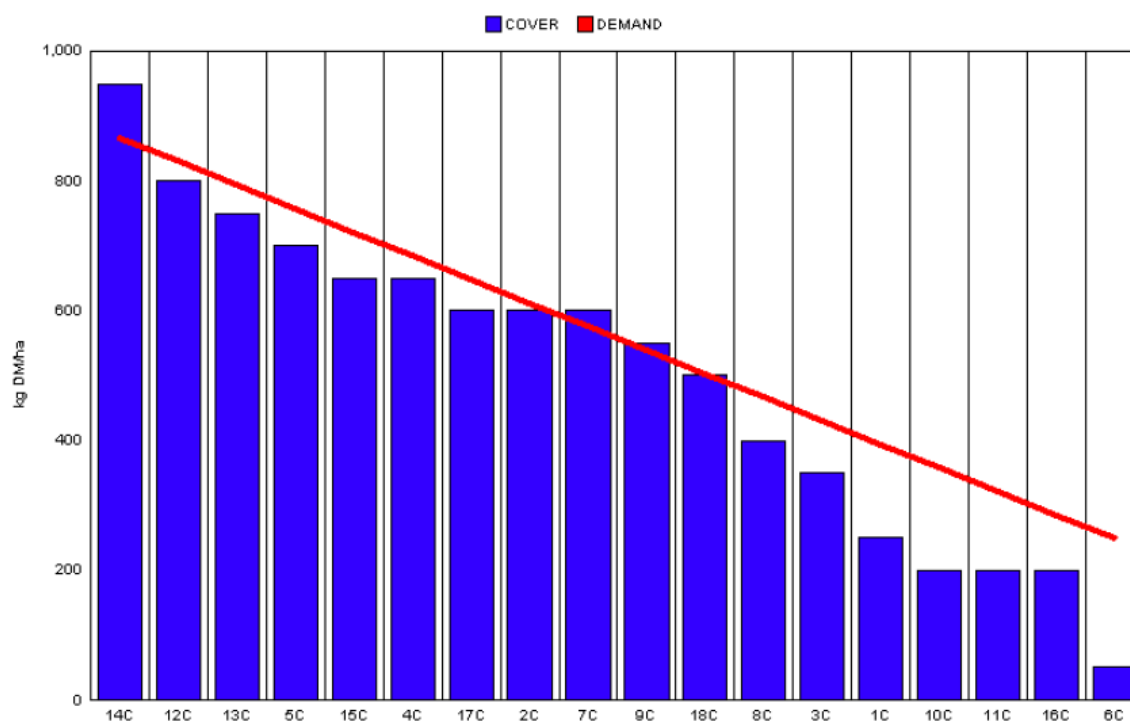
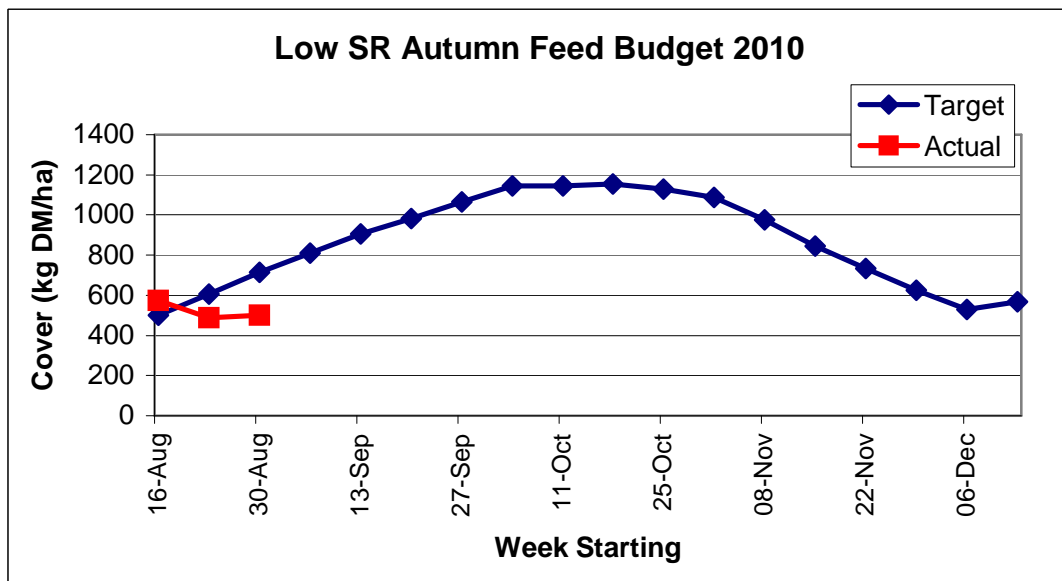


Figure 2. Low Stocking Rate Autumn Budget



- 1) Farm cover is 501kg/ha or 199kg/cow, which is almost the same as last weeks figure. As can be seen in Figure 2, we are well below target in terms of average farm cover for this time of year.
- 2) The target average farm cover for this week is 713kg/ha while we are at 501kg/ha. The reason we are not building cover is that growth rates are too low – 33kg for last week. Average growth rates for this week over the last 3 years were 68kg/day. Soil moisture deficits and resultant nitrogen stress are contributory factors to the reduction in growth, along with ground frosts at night under clear skies.
- 3) It is proving extremely difficult to build covers under such conditions. However, we are achieving our desired rotation lengths – 30 days for this week or grazing 0.31ha/day [farmlet size (9.16ha) / 30 days]. We are achieving this by feeding 4kg of concentrate (3-way mix of barley, citrus and gluten @ 14%CP) along with 2.5kg of silage per day.
- 4) This will reduce demand to 29kg for the coming week.
- 5) The silage is fed out in the paddock underneath the dividing wire.
- 6) Total dry matter intakes are estimated to be 18kg/day.

High Stocking Rate Group (3.3 HF Cows/ha)

Critical Issues

1. Maintain post-grazing height at 3.5cm
2. Achieve target autumn average farm cover.

Situation

Figure 3. High Stocking Rate Feed Wedge

Moorepark Animal & Grassland Research and Innovation Centre		GrazePlan - Grass Measurement Report	
Group : TEAGASC RESEARCH FARMS		Date Produced	30-AUG-10
Farm : Curtins Farm		Effect of stocking rate and calving date on animal performance	
Date : 30-AUG-10		Treatment :	High SR

Rotation Length :	30	Farm Cover (kg DM/ha) :	600
Grass Allocation /cow (kg grass dry matter/LU)	9.5	Farm Cover (kg DM/LU) :	182
Concentrate Fed (kg/cow) :	4	Current Monthly Fertilizer Rate (kg/ha) :	
Silage Fed (kg DM/cow) :	2.5	Stock Rate (LU/ha) :	3.30
N Application Rate (units/acre) :		Growth Rate :	41
N Application Rate (kg/ha) :		Farm Demand (kg DM/LU/day) ::	31
Residual Height :	3.5	Target pregrazing yield (kg DM/ha) :	939
Total Livestock :	23		

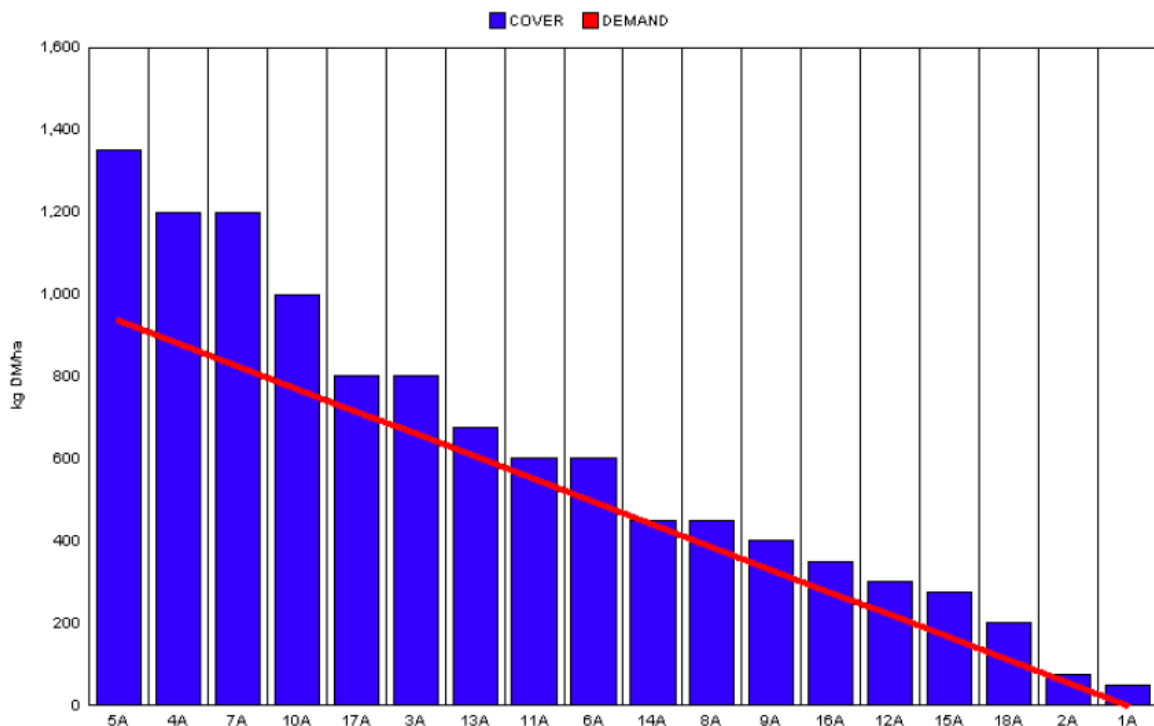
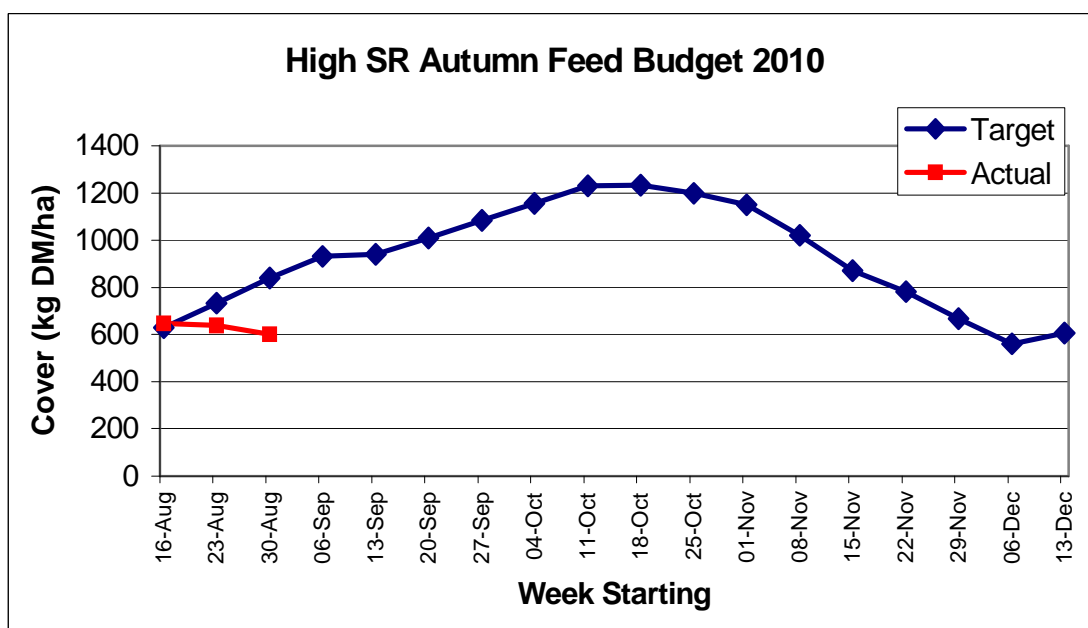


Figure 4. High Stocking Rate Autumn Budget



1. Farm cover is 600kg/ha (182/cow), which is a reduction on last weeks figure. As can be seen in Figure 4, we are considerably behind target in terms of average farm cover (838 vs 600kg). For this reason we are feeding 4kg of concentrate per day along with 2.5kg of bale silage.
2. This supplement is allowing us to maintain rotation length at 30 days.
3. Growth rate for this group is at 41kg/day while demand for the coming week is 31kg/day.
4. Total dry matter intakes are estimated to be 16kg/day

Whole Farm Situation

1. Average weekly growth this week was between 31 and 43kg/day.
2. Dry matters were estimated to be 16% on Monday morning.
3. Rotation lengths for all groups has been set at 30 days, lengthening by one day per day for the month of September.
4. 27 units of CAN is being spread per acre after grazing. Total amount of nitrogen spread to 1st August is 231kgN/ha
5. Latest milk quality test results from the milk processor are; Fat 4.46%, Protein 3.72%, Lactose 4.69%, SCC 179k, TBC 11k, THD 0, Sediment A.
6. AI commenced on the 26th of April and ceased on the 7th of August.
7. Critical Short-term Actions:

- a. Achieve desired post grazing heights for treatment groups, if this involves moving cows to fresh pasture between milkings it will be done.

Farmers and their advisors who wish to follow the progress of the High Stocking Rate group on the IFC Grass Program can do so by sending an invitation through the program to the username: Curtins Farm High SR

EXPERIMENTAL PROGRESS REPORT AS AT SUNDAY, 29/08/10

Objective: To compare the biological efficiency of alternative calving date and stocking rate combinations for Irish spring calving pasture-based production systems

Herd Details	EBI (€)	MILK SI (€)	FERT SI (€)	CALVING SI (€)	BEEF SI (€)	HEALTH SI (€)
Average	120	59	52	22	-10	-3

(September 2009 ICBF)

Calving Date Group Stocking rate Group	Early Calving			Late Calving		
	Low	Medium	High	Low	Medium	High
Stocking rate (cows/ha)	2.51	2.92	3.28	2.51	2.92	3.28
Mean calving date	17-Feb	17-Feb	17-Feb	2-March	5-March	3-March
Ear-tag Colour	White	Blue	Orange	White	Blue	Orange
Band Colour	Yellow	Yellow	Yellow	Blue	Blue	Blue

Week Details:						
Area allocated (m ² /day)	4360	3700	2600	4360	3700	2600
Farmlet cover (kg DM/cow)	199	189	182	201	188	179
Pre-herbage mass (kg DM/ha)	950	1200	1350	950	1200	1350
Residual grazing height (cm)	4.24	4.17	3.33	4.95	4.20	3.45
Diet (kg DM/cow/day)						
Grass	11.5	10.5	9.5	11.5	10.5	9.5
Silage	2.5	2.5	2.5	2.5	2.5	2.5
Concentrate	4	4	4	4	4	4
Milk solids (kg/cow/day)	1.55	1.42	1.39	1.51	1.40	1.38
Milk yield (kg/cow/day)	19.6	17.4	16.8	19.4	18.5	17.6
% Fat	4.12	4.39	4.46	4.06	4.01	4.22
% Protein	3.81	3.82	3.86	3.78	3.66	3.69
Bodyweight (kg)	550	519	508	535	522	503
Condition Score	3.05	2.97	2.88	2.91	3.03	2.86

Cumulative:						
Milk solids (kg/cow)	337	310	316	317	291	304
(kg/ha)	846	905	1037	796	850	997
Milk yield (kg/cow)	4438	4017	4112	4210	3975	4017
% Fat	4.09	4.22	4.25	4.02	3.89	4.14
% Protein	3.51	3.48	3.47	3.51	3.42	3.44
Days in milk	193	192	193	179	178	179
Total supplement fed (kg/cow)						
Concentrate	404	395	404	346	340	342
Silage	46	101	111	42	57	81
Conserved silage (kg DM /cow)	958	558	575	958	558	575
Bought in Silage (kg DM /cow)	593	593	593	593	593	593
Farmlet area (hectares)	9.17	7.87	7.01	9.17	7.87	7.01
Number of cows calved	23	23	23	23	23	23
Number of cows in group	23	23	23	23	23	23
Non-lactating cows						

NB: These are raw data that have not been statistically analysed and, therefore, no definite conclusions can be drawn from them.