

## Curtins Farm Walk Notes Tuesday 06-07-10

### Low Stocking Rate Group (2.5 HF Cows/ha)

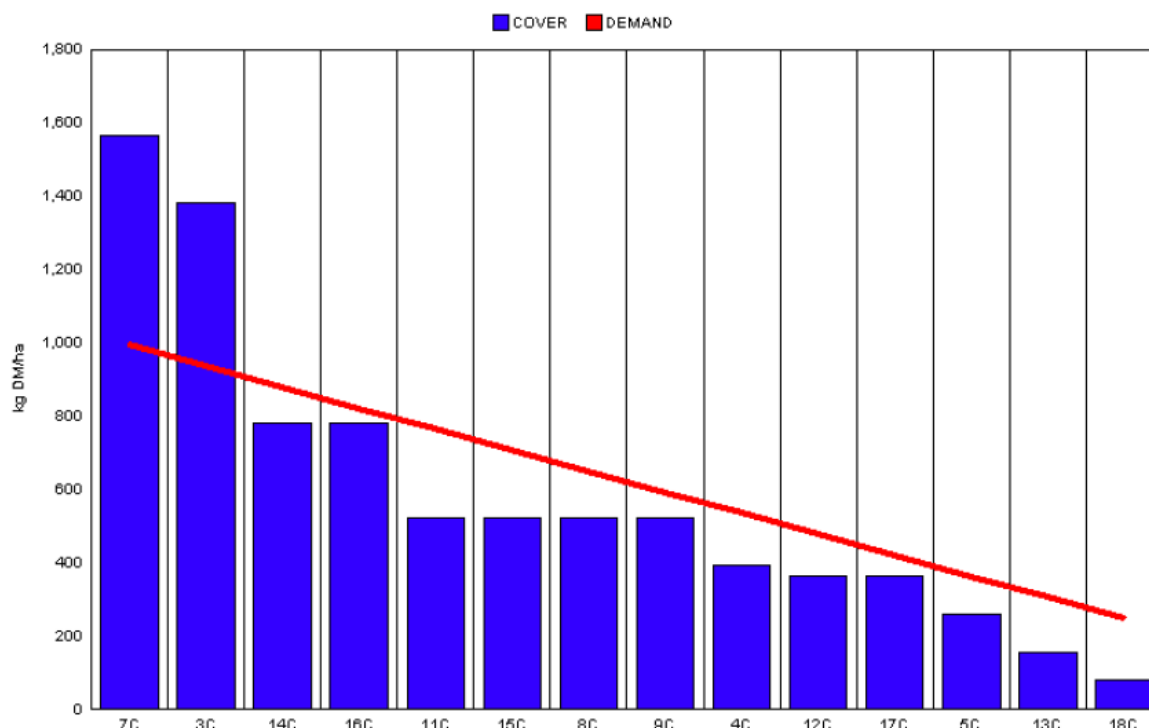
#### Critical Issues

- 1) Maintain post-grazing height at between 4.5 – 5.5cm
- 2) Achieve high grass intakes

#### Situation

**Figure 1. Low Stocking Rate Feed Wedge**

Teagasc, Dairy Production Department, Moorepark		GrazePlan - Grass Measurement Report	
Group : TEAGASC RESEARCH FARMS		Date Produced 06-JUL-10	
Farm : Curtins Farm		Effect of stocking rate and calving date on animal performance	
Date : 05-JUL-10		Treatment : Low SR	
Rotation Length :	21	Farm Cover (kg DM/ha) :	599
Grass Allocation /cow (kg grass dry matter/LU)	15	Farm Cover (kg DM/LU) :	189
Concentrate Fed (kg/cow) :	3	Current Monthly Fertilizer Rate (kg/ha) :	
Silage Fed (kg DM/cow) :	0	Stock Rate (LU/ha) :	3.16
N Application Rate (units/acre) :		Growth Rate :	42
N Application Rate (kg/ha) :		Farm Demand (kg DM/LU/day) ::	47
Residual Height :	5	Target pregrazing yield (kg DM/ha) :	997
Total Livestock :	23		



- 1) Farm cover is 599kg/ha (189kg/cow). As can be seen in Figure 1, we have a very uneven wedge with two surplus paddocks at the start and a deficit thereafter.
- 2) Thursday's rain was less than what was forecast and was insufficient to improve growth rates. Growth dropped again this week to 42kg/day. In hindsight, we were probably a little early in removing the concentrate last week but its impact was small.
- 3) At a stocking rate of 3.16cows/ha and with a grass allowance of 18kg demand is 57kg/day. As growth is well short of this we are going to reintroduce concentrate at 3kg which will reduce demand to 47kg.
- 4) Furthermore, the four paddocks that are closed for silage will be cut this Wednesday (regardless of weather). When these are cut the stocking rate will be reduced and demand will drop back to 38kg i.e. matching growth.
- 5) If growth drops further next week other supplement (bale silage) will have to be introduced.
- 6) Cows are getting full paddocks and residency time is approximately 36 hours per paddock. Cows are moved on when desired post grazing residual is achieved (4-5cm).
- 7) Total dry matter intakes are estimated to be 18kg/day
- 8) Growth rate last week was 42kg/day while current demand is 47kg/day but this will fall to 38kg once the silage is cut.
- 9) 4000gls/acre of soiled water will be spread on the silage ground after cutting

## High Stocking Rate Group (3.3 HF Cows/ha)

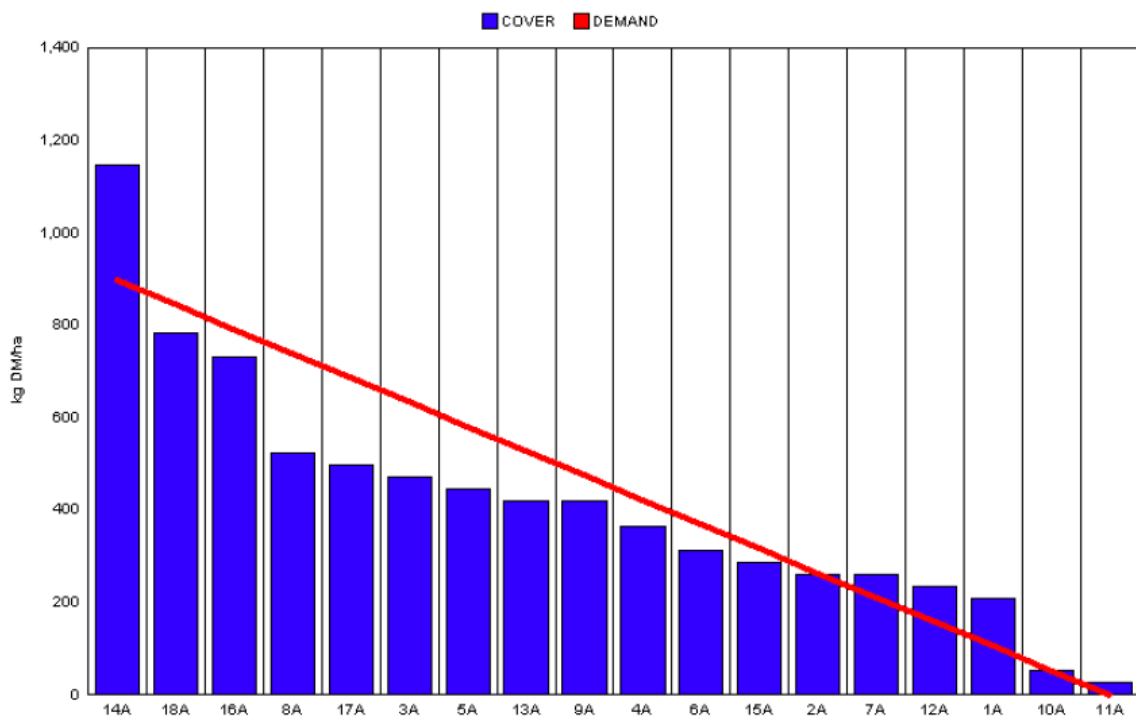
### Critical Issues

1. Maintain post-grazing height at between 3 and 3.5cm
2. Achieve high grass intakes

### Situation

**Figure 2. High Stocking Rate Feed Wedge**

Teagasc, Dairy Production Department, Moorepark		GrazePlan - Grass Measurement Report	
Group : TEAGASC RESEARCH FARMS		Date Produced 06-JUL-10	
Farm : Curtins Farm		Effect of stocking rate and calving date on animal performance	
Date : 05-JUL-10		Treatment : High SR	
Rotation Length :	21	Farm Cover (kg DM/ha) :	408
Grass Allocation /cow (kg grass dry matter/LU)	13	Farm Cover (kg DM/LU) :	124
Concentrate Fed (kg/cow) :	3	Current Monthly Fertilizer Rate (kg/ha) :	
Silage Fed (kg DM/cow) :	0	Stock Rate (LU/ha) :	3.30
N Application Rate (units/acre) :		Growth Rate :	39
N Application Rate (kg/ha) :		Farm Demand (kg DM/LU/day) ::	43
Residual Height :	3.5	Target pregrazing yield (kg DM/ha) :	900
Total Livestock :	23		



1. Farm cover is 408kg/ha (124/cow). As can be seen in Figure 2 we have one surplus paddock at the start of the wedge and a deficit thereafter. Of greater concern than the deficit in the wedge are the low pre-grazing yields that we are facing into.
2. Growth rate for this group over the last 7 days was 39kg while demand is 53kg when grass allowance is 16kg. In order to reduce this demand concentrate has been reintroduced at 3kg/day and will increase to 4kg/day by Thursday. This will reduce demand to 40kg/day.
3. As it is unlikely growth rate will increase much this week it is likely that silage will have to be fed next week as farm cover will continue to fall.
4. Pre-grazing yields have been 1000 - 1200kg, cows were getting full paddocks and residency time was approximately 36 hours. As pre-grazing yields are going to drop to 8-900kg this will probably change and our challenge will be not to reduce rotation length under 21 days. Cows are moved on when desired post grazing residual is achieved (3-3.5cm).
5. Total dry matter intakes are estimated to be 16kg/day
6. Growth rate was measured at 39kg/day while current demand is 43kg.

### **Whole Farm Situation**

1. Average weekly growth this week was between 39 and 47kg/day.
2. Dry matters were 21.8% on Tuesday morning.
3. 20 units of sulCAN is being spread per acre after grazing.
4. Latest milk quality test results from the milk processor are; Fat 4.25%, Protein 3.52%, Lactose 4.63%, SCC 177k, TBC 18k, THD 0, Sediment A.
5. AI commenced on the 26<sup>th</sup> of April
6. Critical Short-term Actions:
  - a. Monitor cows closely for signs of oestrous.
  - b. 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 086 3619628**

## **EXPERIMENTAL PROGRESS REPORT AS AT SUNDAY, 04/07/10**

*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 (€)
<b>Average</b>	<b>120</b>	<b>59</b>	<b>52</b>	<b>22</b>	<b>-10</b>	<b>-3</b>

*(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

<b>Week Details:</b>						
Area allocated (m <sup>2</sup> /day)	4360	3700	2600	4360	3700	2600
Farmlet cover (kg DM/cow)	189	170	124	192	170	116
Pre-herbage mass (kg DM/ha)	1600	1450	1150	1600	1450	1150
Residual grazing height (cm)	5.76	4.43	3.27	5.61	4.85	3.25
Diet (kg DM/cow/day)						
Grass	15	14	13	15	14	13
Silage	0	0	0	0	0	0
Concentrate	3	3	3	3	3	3
Milk solids (kg/cow/day)	1.70	1.58	1.66	1.72	1.60	1.69
Milk yield (kg/cow/day)	22.5	20.2	20.1	22.7	21.6	21.6
% Fat	4.02	4.22	4.76	3.99	3.92	4.45
% Protein	3.59	3.68	3.52	3.57	3.55	3.43
Bodyweight (kg)	561	500	536	555	500	544
Condition Score	3.13	2.89	2.96	3.04	2.97	2.94

<b>Cumulative:</b>						
Milk solids (kg/cow)	250	232	241	230	213	227
(kg/ha)	628	677	791	577	623	745
Milk yield (kg/cow)	3316	3026	3143	3082	2914	2989
% Fat	4.07	4.21	4.27	3.99	3.91	4.21
% Protein	3.47	3.44	3.41	3.48	3.40	3.41
Days in milk	137	136	137	123	122	123
Total supplement fed (kg/cow)						
Concentrate	347	338	347	289	272	285
Silage	46	101	111	42	57	81
Conserved silage (kg DM /cow)	463	354	455	463	354	455
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.**