Low Stocking Rate Group (2.5 HF Cows/ha)

Critical Issues
1) Maintain post-grazing height at 4cm
2) Identify any surpluses and maintain pre-grazing yield at 1000kg

Situation
Figure 1. Farm Feed Wedge 07/04/09

Low Stocking Rate Feed Wedge 07/04/09 463kg/ha (185/cow)

1) The ideal pre-grazing yield for this group is 900kg if their allowance is 17kg/day and the rotation length is 21 days. As can be seen in the wedge Block 3 has a cover of 1200kg. This block has been skipped and will be cut for silage in 4 weeks.
2) With Block 3 closed for silage and Block 12 removed for reseeding the stocking rate has now increased to 2.8 cows/ha, which means our ideal pre-grazing yield is now 1000kg.

High Stocking Rate Group (3.3 HF Cows/ha)

Critical Issues
3) Maintain post-grazing height at 3cm
4) Maintain pre-grazing yield at 1050kg
1. Cover per cow dropped from 163kg/cow last week to 130kg/cow this week. This is exactly where we want to be at this time, in anticipation of high growth rates.

2. However, we have a very uneven wedge. On a 20 day rotation length with an allowance of 15kg/cow our ideal pre-grazing yield is 1050kg. We will achieve this target for the next 7 days but thereafter our pre-grazing yield will be a lot less (approx. 700kg in Block 14).

3. We have two options to address this issue; i) do nothing and continue as we are and finish the second round after 16/17 days or ii) put in supplements now which will slow down our rotation and allow our low paddocks to catch up to the target line.

4. We have chosen the latter option and are currently feeding 3.5kg supplement/cow.

5. Because the second half of the wedge is so flat it is likely that it will all grow at the same time and we will have surpluses in two/three weeks.

**Whole Farm Situation**

1. Average soil temperature for the past week was 7.9°C, last week 7.3°C.
2. Total rainfall for the week was 19mm.
3. Average weekly growth this week was 41 kg/day, average for the last 3 years was 38kg/day. As soil temperature is increasing the expectation is that growth rate could hit 50kg/day this week.
4. Dry matter was 14.5% on Monday.
5. Total N application per hectare to date is 43kg N/ha (38% of farm has received slurry)

6. Cows have been tail painted for pre-breeding heat detection.

7. Block 12 was sprayed with glyphosate last week and has since been grazed. This block will be reseeded next week. The grass variety Bealey will be sown along with Crusader clover using a one-pass.

8. Latest milk quality rest results from the milk processor are; Fat 4.41%, Protein 3.48%, Lactose 4.7%, SCC 207k, TBC 20k, Thermoduric 2600, Sediment A.

9. Critical Short-term Actions:
   a. Allocation is on 36 hr basis and cows move to fresh pasture once the desired post-grazing height is achieved. Cows are moved between milking if necessary.
   b. As soon as weather conditions allow, spread lime and sow grass seeds in Block 12.
EXPERIMENTAL PROGRESS REPORT AS AT SUNDAY, 06/04/09

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

<table>
<thead>
<tr>
<th>Herd Details</th>
<th>EBI (€)</th>
<th>MILK SI (€)</th>
<th>FERT SI (€)</th>
<th>CALVING SI (€)</th>
<th>HEALTH (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>112</td>
<td>59</td>
<td>45</td>
<td>20</td>
<td>-3</td>
</tr>
</tbody>
</table>

(November 2008 ICBF)

<table>
<thead>
<tr>
<th>Calving Date Group</th>
<th>Stocking rate Group</th>
<th>Early Calving</th>
<th>Late Calving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stocking rate (cows/ha)</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Mean calving date</td>
<td>8/2</td>
<td>8/2</td>
<td>8/2</td>
</tr>
<tr>
<td>Ear-tag Colour</td>
<td>White</td>
<td>Blue</td>
<td>Orange</td>
</tr>
<tr>
<td>Band Colour</td>
<td>Yellow</td>
<td>Yellow</td>
<td>Yellow</td>
</tr>
</tbody>
</table>

WE 15/3/09 Details:

- Area allocated (m²/day): 2400, 2000, 1800
- Farmlet cover (kg DM/cow): 191, 158, 130
- Pre-herbage mass (kg DM/ha): 1200, 1350, 1250
- Residual grazing height (cm): 3.9, 3.4, 3.33
- Diet (kg DM/cow/day):
  - Grass: 17, 16, 15
  - Silage: 0, 0, 0
  - Concentrate: 0, 0, 0
- Milk solids (kg/cow/day): 1.97, 1.75, 1.69
- Milk yield (kg/cow/day): 25.63, 23.21, 22.41
- % Fat: 4.27, 4.24, 4.22
- % Protein: 3.45, 3.35, 3.39
- Bodyweight (kg): 503, 480, 476
- Condition Score: 2.94, 2.8, 2.73

Cumulative:

| Milk solids (kg/cow) | 102 | 102 | 98 | 102 | 102 | 98 |
| (kg/ha) | 256 | 298 | 321 | 256 | 298 | 321 |
| Milk yield (kg/cow) | 1263 | 1284 | 1215 | 1263 | 1284 | 1215 |
| % Fat | 4.7 | 4.68 | 4.66 | 4.7 | 4.68 | 4.66 |
| % Protein | 3.48 | 3.33 | 3.5 | 3.48 | 3.33 | 3.5 |
| Days in milk | 54 | 59 | 58 | 54 | 59 | 58 |
| Total supplement fed (kg/cow) | 155 | 155 | 155 | 155 | 155 | 155 |
| Concentrate | 70 | 70 | 70 | 70 | 70 | 70 |
| Silage | 0 | 0 | 0 | 0 | 0 | 0 |
| Conserved silage (kg DM /cow) | 0 | 0 | 0 | 0 | 0 | 0 |

Farmlet area (hectares): 9.17, 7.87, 7.01
Number of cows calved: 23, 23, 23
Number of cows in group: 23, 23, 23

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