



Background: It is widely recognised that grass-based systems offer a competitive advantage and will predominate in Ireland. However, grazing systems that have been developed to utilise large quantities of grazed grass have in the main been based on low-output per cow. In this scenario, high levels of profitability are possible through avid cost control and comparatively high stocking rates for grazing systems. There are now reasons to consider the development of grazing systems that are based on high-output per cow. These reasons include (i) concerns about increasing dairy cow numbers and environmental emissions, (ii) facilitating farm expansion post EU-milk quota removal for land limited and fragmented farms, (iii) lack of available skilled labour on farms to deal with expanding animal numbers. The rationale for this research is that a high output grass-based spring milk production system can be profitable when built on a foundation of good grassland management and meeting both milk and fertility targets and has a place in a sustainable Irish dairy industry.

For more details on the High Output Systems Research Herd visit <http://www.ucd.ie/agfood/welcomemessage/systemsresearchherd/>.

Lyons Systems Research Herd Notes Week 05-03-2018

Farm Details:

Area available: 17.65
Current Stocking Rate (MP):2.49
Farm Cover: 775 kg DM/ha
Growth Rate: 19 kg DM/ha/day
Demand: 21 kg DH/ha/day
Supplement: 8kg/head/day
Average DIM:30
Cows Calved: 44 (out of 60)



Current Daily Feed Budget: AFC on the 26th of February was 775kg DM/ha (range 96 to 1700 kg DM/ha). Cows have been out grazing since the 19th of February by day and out full time since the 21st of February. Cows have been allocated 10kg DM of grass and 1.5kg DM (31% DM; 81% DMD) of 1st cut silage. However, since the 28th of February cows have been housed fulltime due to the heavy snow. Their diet consists of 12.5kg DM of silage (31% DM; 81% DMD) when housed during this period. Cows will turn out to grass full time when conditions allow. Cows are being fed 8 kg of concentrate at this time, which is built up slowly after calving.

Spring Grazing Plan: Turnout was delayed to the 16th of February, when AFC was 805kg DM/ha and ground conditions improved. We had 21% of the milking platform grazed by the end of February. We have been following the spring rotation planner and buffer feeding silage to make up the deficit in the feed budget. The plan is to start the second rotation by 2nd of April. The MP got 28.3 kg N/ha (urea) on the 26th January.

Milk Production: Average production is currently 24.24kg/cow as of the 6th of March at 4.66% fat and 3.44% protein (1.95kg MS). SCC is 67,000. Fat, protein and SCC figures are based on milk recording results from the 7th of February. Milk yield was 26.96kg/cow before cows were housed due to the snow. The drop in yield can be likely due to a reduction in concentrate from 8kg/head to 5kg/head in order to ration the feed on the farm during the recent difficult conditions.



Body Condition Score at calving: The average BCS at calving so far is 3.21. 31.6% of the cows calved had a BCS of 3.0, while 39.5% of cows calved had a BCS of 3.25. The milking herd was condition scored on the 7th of March. Average BCS was 2.84, 19.5% recorded a BCS less than 2.75.

Herd EBI Jan 2018:

EBI	Milk	Fert	Calv	Beef	Mint	Health	Mgt
161	56	61	42	-8	4	3	3
Milk kg	Fat kg	Protein kg	Fat %	Protein %	Calving int	Surv %	
78	10.54	6.9	0.12	0.074	-3.0	1.8	