

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 https://www.ucd.ie/agfood/about/lyonsresearchfarm/lyonsdairyherd/

Lyons Systems Research Herd Notes Week 15/03/2021

Farm Details:

Area available: 17.43 ha

Current Stocking Rate (MP): 2.75

Farm Cover: 705kg DM/ha Growth Rate: 20kg DM/ha/day Demand: 41kg DM/ha/day

Average Concentrate Supplement: 8 kg/head/day

Average DIM: 26 days Cows Calved: 48/57 cows



Current Daily Feed Budget: Cows are being fed 8 kg of an 18% crude protein concentrate in the parlour (this is built up gradually over two weeks post-calving). Cows are allocated 15 kg DM of grass.

Spring Grazing Plan: The current AFC is 705kg DM/ha (range 100 to 1700kg DM/ha). Average daily growth rate is 20kg DM/ha this week. Between 8th_14th March, the average soil temperature at 100mm was 6.4 °C and 21.3mm of rain fell (rain data from the nearby Met Eireann station, Casement Aerodrome). Ground conditions are holding up reasonably well considering the level of rainfall. One paddock did suffer from a degree of poaching during the recent wet weather but is expected to recover well when grass growth rates increase further into the grazing season. Our aim is to have 72% of the milking platform grazed by the end of the week. The target is to graze 100% of the milking platform by 28th March.

Calving: Calving started on 30th January and there is currently 48 of 57 (84%) of the cows calved as of 15th March. Three cows calved in the last week and five are due to calf this week.

Milk Production: Average production from 8th -14th March was 35.4 kg/cow at 4.00% fat and 3.51% protein (2.66 kg MS). SCC is 79,000. Fat, protein and SCC figures are based on milk recording results from 11th March. Milk production from this time last year was 31.7 kg/cow, 4.60% fat, protein % was 3.30% and SCC was 63,000.