Lyons Systems Research Herd Notes

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 29-03-2021

Farm Details:

Area available: 17.43 ha

Current Stocking Rate (MP): 3.16

Farm Cover: 548kg DM/ha Growth Rate: 27kg DM/ha/day Demand: 38kg DM/ha/day

Average Concentrate Supplement: 8 kg/head/day

Average DIM: 36 days Cows Calved: 55/57 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 being offered 5.5kg of silage and are allocated 11 kg DM of grass. Grass DM is 19.8%.

Spring Grazing Plan: The current AFC is 548kg DM/ha (range 70 to 1400kg DM/ha). Average daily growth rate is 27kg DM/ha this week. Growth has slightly increased this week due to favourable weather conditions. Between 22nd- 28th March, the average soil temperature at 100mm was 8°C and 6.5mm of rain fell (rain data from the nearby Met Eireann station, Casement Aerodrome). To increase the AFC, cows are being offered silage after milking. The target of completing the first grazing rotation on 28th March was achieved.

Calving: Calving started on 30th January and there is currently 55 of 57 (96%) of the cows calved as of 29th March. Three cows calved in the last week and the final two are due to calf on 4th and 6th April.

Milk Production: Average production from $22^{nd} - 28^{th}$ March was 37.3 kg/cow at 3.64% fat, 3.48% protein (2.66 kg MS) and SCC is 50,000. Fat, protein and SCC figures are based on milk recording results from 18^{th} March. Milk production from this time last year was 35.9 kg/cow (milk recording was suspended this time last year due to Covid-19 restrictions). Six cows are currently on OAD to improve BCS.

