

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 19-10-2020

Farm Details:

Area available: 17.43 ha

Current Stocking Rate (MP): 3.27 Farm Cover: 758kg DM/ha Growth Rate: 30kg DM/ha/day

Demand: 49kg DM/ha/day

Average Concentrate Supplement: 3kg/head/day

Average DIM: 246 days



Current Daily Feed Budget: Cows are being offered 3kg/day of concentrates as all cows are >180 DIM. As the final grazing rotation has begun, cows will now be offered an 18% protein concentrate until dry-off. The herd is also being allocated 15kg DM of grass and 2kg DM of silage per day.

Grazing Plan: The AFC on 19th October was 758kg DM/ha (range: 89-1500 kg DM/ha) with a cover/LU of 232 kg DM/cow. As of 19th October, 6.63ha (38%) of the MP was closed from grazing. Our aim is to have 70% of the MP closed on 1st November in line with the Teagasc autumn grazing targets. Between 12th - 18th October, the average soil temperature at 100mm was 10.0°c which was similar to last week. Rainfall levels were far lower during this week as 6.3mm of rain fell (data from the nearby Met Eireann station, Casement Aerodrome).

Milk Production: The average milk production from 12th - 18th October was 18.8 kg/cow at 4.69% milk fat, 4.22% protein, 1.68kg MS and 81,000 SCC based on milk recording on 15th October. Average milk production this time last year was 15.9 kg/cow at 5.04% fat, 3.97% protein (1.43 kg MS) and SCC at 106,000. Currently, the average predicted 305d milk yield and milk solids yield per cow are 7937 kg and 640 kg respectively.