

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 27-07-2020

## Farm Details:

Area available: 15.38 ha

Current Stocking Rate (MP): 3.71 Farm Cover: 709kg DM/ha Growth Rate: 86kg DM/ha/day Demand: 59kg DM/ha/day

Average Concentrate Supplement: 3kg/head/day

Average DIM: 162 days



**Current Daily Feed Budget:** The herd are being allocated 18kg DM of grass per day with an average of 2.7kg DM of concentrate based on their DIM. Usually, cows that are 91-120 DIM will be offered 5kg and cows >120 DIM will be offered 2.5kg per day. However, in advance of taking intake measurements from cows as part of our 2020 nutrition trial, all cows will be offered 3kg until 21<sup>st</sup> August. The herd have been split into three groups and are being offered a 14% protein concentrate, 12% protein native formulation concentrate or a 12% protein nonnative concentrate in the parlour. These diets will be offered as part of our 2020 nutrition trial until the start of the final grazing rotation in October.

**Grazing Plan**: The AFC on 27<sup>th</sup> July was 709kg DM/ha (range: 50-1340kg DM/ha) with cover/LU of 217kg DM/cow. The target pre-grazing cover for a recent reseed is around 1000kg DM/ha and this paddock was grazed for the first time this week. We will continue to graze the reseed at this pre-grazing cover until the end of the year in order to help the clover established in the sward. Two paddocks (1.05ha) will be mowed for bales this week.

**Milk Production:** The average milk production from 20<sup>th</sup>-26<sup>th</sup> July was 27.4 kg/cow at 3.96% milk fat, 3.55% protein, 2.06 kg MS and 134,000 SCC based on milk recording on 22<sup>nd</sup> July. Average milk production this time last year was 24.7 kg/cow at 4.41% fat, 3.70% protein (2.00 kg MS) and SCC at 65,000.

