



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 17-08-2020

Farm Details:

Area available: 17.43 ha
Current Stocking Rate (MP): 3.27
Farm Cover: 911kg DM/ha
Growth Rate: 85kg DM/ha/day
Demand: 65kg DM/ha/day
Average Concentrate Supplement: 3.13kg/head/day
Average DIM: 183 days



Current Daily Feed Budget: The herd are being allocated 18kg DM of grass per day with an average of 3.13kg DM of concentrate based on their DIM. Cows that are 120-179 DIM will be offered 3.5kg/day and cows that are on 180+DIM will be offered 3kg/day. 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 non-native 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 17th August was 911kg DM/ha (range: 157-1710kg DM/ha) with cover/LU of 279kg DM/cow. The rotation is set at 21 days. Cows are being offered 20 kg DM/LU. Residuals are not being pushed this week as not to negatively impact on the intake run currently being carried out. A 4 cm post grazing height will be strived for going forward.

Milk Production: The average milk production from 10th-16th August was 26.4 kg/cow at 4.30% milk fat, 3.68% protein, 2.11 kg MS and 90,000 SCC based on milk recording on 13th August. Average milk production this time last year was 22.0 kg/cow at 4.41% fat, 3.56% protein (1.75 kg MS) and SCC at 59,000.

Animal Health: On 13th August, all cows received 5ml of Bovillis under the shoulder as a vaccination booster against salmonella.