

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 07-09-2020

Farm Details:

Area available: 17.43 ha Current Stocking Rate (MP): 3.27 Farm Cover: 1061kg DM/ha Growth Rate: 71kg DM/ha/day Demand: 62kg DM/ha/day Average Concentrate Supplement: 1kg/head/day Average DIM: 204 days



Current Daily Feed Budget: All cows are being offered 1kg per day to counteract the increased amount of concentrates fed earlier this summer during a drought period. The herd has 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. The herd is also being allocated 19kg DM of grass per day.

Grazing Plan: The AFC on 8th September was 1061kg DM/ha (range: 50-1900kg DM/ha) with a cover/LU of 324kg DM/cow. We are aiming for a cover of 340 kg DM/cow by mid-September so currently we are slightly below target. Rotation length is set at 32 days in line with the Teagasc autumn grazing targets.

Milk Production: The average milk production from 31st August - 6th September was 23.0 kg/cow at 4.66% milk fat, 3.70% protein, 1.92kg MS and 93,000 SCC based on milk recording on 3rd September. Average milk production this time last year was 20.63 kg/cow at 4.26% fat, 3.70% protein (1.64 kg MS) and SCC at 122,000.

BCS: On 3^{rd} September, all 57 cows were assessed for BCS. The average was 3.00 with 2 cows (3.5%) being \leq 2.5 and 5 cows (8.8%) being \geq 3.5.