



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 03-08-2020

Farm Details:

Area available: 16.41 ha (1.02 ha out for bales)

Current Stocking Rate (MP): 3.47

Farm Cover: 756kg DM/ha

Growth Rate: 86kg DM/ha/day

Demand: 63kg DM/ha/day

Average Concentrate Supplement: 3.43kg/head/day

Average DIM: 169 days



Current Daily Feed Budget: The herd are being allocated 18kg DM of grass per day with an average of 3.43kg DM of concentrate based on their DIM. In advance of taking intake measurements from cows as part of our 2020 nutrition trial, 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 3rd August was 756kg DM/ha (range: 225-1530kg 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 to help the clover establish in the sward. Two paddocks (1.02ha) will be mowed for bales this week.

Milk Production: The average milk production from 27th July-2nd August was 27.1 kg/cow at 3.97% milk fat, 3.56% protein, 2.04 kg MS and 131,000 SCC based on milk recording on 30th July. Average milk production this time last year was 23.8 kg/cow at 4.41% fat, 3.70% protein (2.00 kg MS) and SCC at 65,000.

BCS: On 30th July, 57 cows were assessed for BCS. Average BCS was 2.92 with 7% (4/57) with a BCS of ≤ 2.5 and 3.5% (2/57) with a BCS ≥ 3.5 .