



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) 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 and sustainable when built on a foundation of good grassland management and meeting both milk and fertility targets and has a place in the 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 13-09-2021

Farm Details:

Area available: 17.43ha
Current Stocking Rate (MP): 3.27 LU/ha
Cover/LU: 226kg DM/LU
Farm Cover: 740kg DM/ha
Growth Rate: 46kg DM/ha/day
Demand: 29kg DM/ha/day
Average Concentrate Supplement: 3kg/head/day
Average DIM: 202 days



Current Daily Feed Budget: Cows are being offered 3kg/head/day of one of four experimental concentrates; a 14% protein concentrate with non-native ingredients, a 12% protein concentrate with non-native ingredients, a 12% protein concentrate with native ingredients or a 12% protein concentrate with native ingredients supplemented with methionine. These diets are being offered as part of our 2021 nutrition trial until the start of the final grazing rotation in October. Cows are also allocated 5kg DM of silage and 9kg DM of grass. Grass DM is currently 18.7%.

Grazing Plan: The current AFC is 740kg DM/ha (range 90 – 1672kg DM/ha), cover/LU is 226kg DM and growth is 46kg DM/ha/day. As the soil type at UCD Lyons farm is prone to drought, the low levels of rainfall over the last three weeks have led to low grass growth levels. Consequently, our AFC is far lower than the Teagasc autumn grazing target AFC for mid-September of 1200kg. To counteract this, we will seek to build up the AFC by providing silage from Saturday 11th September for the time being until the AFC increases. Rotation length is set at 30 days in line with the Teagasc autumn grazing targets.

Milk Production: Average production from 6th -12th September was 22.8kg/cow at 4.73% milk fat, 3.78% protein, 1.94kg MS and SCC was 74,000 based on milk recording on 8th September. Milk production from this time last year was 22.2kg/cow at 4.64% milk fat, 3.77% protein, 1.87kg MS and SCC was 94,000.