



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 20-09-2021

Farm Details:

Area available: 17.43ha
Current Stocking Rate (MP): 3.27 LU/ha
Cover/LU: 272kg DM/LU
Farm Cover: 891kg DM/ha
Growth Rate: 57kg DM/ha/day
Demand: 29kg DM/ha/day
Average Concentrate Supplement: 3kg/head/day
Average DIM: 209 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, 9kg DM of grass and grass DM is currently 18.7%.

Grazing Plan: The current AFC is 891kg DM/ha (range 60 – 1540kg DM/ha), cover/LU is 272kg DM and growth is 57kg DM/ha/day. As the soil type at UCD Lyons farm is prone to drought, the low levels of rainfall over the last month has led to lower grass growth levels than expected. Consequently, our AFC is lower than the Teagasc autumn grazing target AFC for mid-September of 1200kg for a farm stocked at 3.5 LU/Ha. To counteract this, silage was included in the diet on the 11th September to reduce demand for grass and build up the AFC. Rotation length is set at 35 days in line with the Teagasc autumn grazing targets. Silage has been included for 10 days in the diet, Yields have been negatively effected since the introduction of silage, dropping from 22.8 kgs to 20.7 within a week. This will be monitored closely throughout the coming week for any major change or drop in yield to ensure swift action can be taken to mitigate the issue.

Milk Production: Average production from 13th -19th September was 20.7kg/cow at 4.76% milk fat, 3.64% protein, 1.69 kg MS and SCC was 75,000 based on milk recording on 13th September. Milk production from this time last year was 19kg/cow at 4.86% milk fat, 3.87% protein, 1.65kg MS and SCC was 63,000.



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To date, cows have averaged 6256 kgs of milk and 491.6 kg MS.