



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 27-09-2021

Farm Details:

Area available: 17.43ha
Current Stocking Rate (MP): 3.27 LU/ha
Cover/LU: 274kg DM/LU
Farm Cover: 897kg DM/ha
Growth Rate: 48kg DM/ha/day
Demand: 29kg DM/ha/day
Average Concentrate Supplement: 3kg/head/day
Average DIM: 216 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 897kg DM/ha (range 100 – 1500kg DM/ha), cover/LU is 274kg DM and growth is 48kg DM/ha/day. Drought in August had seen a slower than expected growth rate leading to a below target AFC and cover/LU. Silage was introduced to the diet on September 11 to help with building covers for the start of the autumn rotation. Rotation length is set at 38 days in line with Teagasc autumn grazing targets. Cows are achieving very good graze outs of paddocks with grazing conditions very favourable this week.

The autumn grazing planner is set to start on the 10th of October with are first paddocks being closed from this date. The plan is to house cows around the 21st of November, weather dependant. The target is to have 75% of the platform grazed and closed for the Spring by the 1st of November. Cows are typically housed by night around this time also due to poorer weather and ground conditions.

Milk Production: Average production from 20th-26th September was 21kg/cow at 4.31% milk fat, 3.76% protein, 1.63 kg MS and SCC was 79,000 based on milk recording on 22nd September. Milk production from this time last year was 20.7kg/cow at 4.54% milk fat, 3.92% protein, 1.75kg MS and SCC was 65,000.