



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 05-10-2020

Farm Details:

Area available: 17.43 ha
Current Stocking Rate (MP): 3.27
Farm Cover: 1077kg DM/ha
Growth Rate: 48kg DM/ha/day
Demand: 49kg DM/ha/day
Average Concentrate Supplement: 3kg/head/day
Average DIM: 232 days



Current Daily Feed Budget: Cows are being offered on average 3kg/day of concentrates based on their DIM. Cows that are ≤ 180 DIM (1/57 cows) are being offered 3.5kg/day and cows >180 DIM (56/57 cows) are being offered 3kg/day. Cows are being fed one of three concentrates; 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 15kg DM of grass and 2kg DM of silage per day.

Grazing Plan: The AFC on 5th October was 1077kg DM/ha (range: 200-2019kg DM/ha) with a cover/LU of 329kg DM/cow. Rotation length is set at 40 days in line with the Teagasc autumn grazing targets. Between 28th September – 4th October, the average soil temperature at 100mm was 10.4°C and 27.9mm of rain fell (data from the nearby Met Eireann station, Casement Aerodrome). Grazing conditions had been very favourable for this time of year up to the weekend. However, heavy rain has led to above target residuals in recent paddocks. This will be a major focus going into the last grazing rotation which is due to start on the 9th October. Grass growth is holding steady due to the good soil temperatures and weather over the last few weeks.

Milk Production: The average milk production from 28th September – 4th October was 20.7 kg/cow at 4.48% milk fat, 3.87% protein, 1.73kg MS and 76,000 SCC based on milk recording on 1st October. Average milk production this time last year was 17.4 kg/cow at 5.25% fat, 3.99% protein (1.61 kg MS) and SCC at 69,000.