



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 17-10-2022

Farm Details:

Area available: 17.43ha
Current Stocking Rate (MP): 3.27 LU/ha
Farm Cover: 780kg DM/ha
Cover/LU: 239kg DM/LU
Growth Rate: 26kg DM/ha/day
Demand: 39kg DM/ha/day
Average Concentrate Supplement: 2kg/head/day
Average DIM: 262 days



Current Daily Feed Budget: Cows are currently being fed 2 kg of concentrate in the parlour. Since the 14th October, as part of our nutrition trial, half of the herd are being offered an 18% protein commercial concentrate, whilst a 14% crude protein concentrate (formulated with native ingredients) will continue to be offered to the remainder; with both regimes continuing until dry-off. Cows are also allocated 2kg DM of silage, 12kg DM of grass and grass DM is currently 15 %.

Grazing Plan: The current AFC is 780kg DM/ha (range 100 – 1750kg DM/ha), whilst cover/LU is 239kg DM, and growth is 26kg DM/ha/day. From 10th to 16th October, the average soil temperature at 100mm was 10.5°C, and 8.9 mm of rain fell (rain data from the nearby Casement Aerodrome). The final grazing rotation began on 14th October. The herd is grazing out the paddocks well. Rotation length is set at 40 days.

Milk Production: Average production from 10th to 16th October was 17.45 kg/cow at 4.65 % milk fat, 4.02% protein, 1.51kg MS and SCC was 51,000. Milk production from this time last year was 19.4 kg/cow at 4.76 % milk fat, 4.14% protein, 1.73kg MS and SCC was 69,000.