



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 <https://www.ucd.ie/agfood/about/lyonsresearchfarm/lyonsdairyherd/>

Lyons Systems Research Herd Notes Week 02/09/2019

Farm Details:

Area available: 17.53 ha
Current Stocking Rate (MP): 3.31 LU/ha
Farm Cover: 779 kg DM/ha
Cover/LU: 235 kg/LU
Growth Rate: 77 kg DM/ha/day
Demand: 50 kg DM/ha/day
Average Concentrate Supplement: 3.1 kg/hd/day
Average DIM: 196 days
Milking cows: 58



Current Daily Feed Budget: Cows are being allocated 15 kg DM of grass and an average of 3.1 kg of a high energy concentrate. From the beginning of the second rotation (2nd April) until the start of the last rotation, half of the group are being fed an 18% crude protein concentrate while the other half are on a 14% concentrate. Estimated grass intakes last week from an 18 kg DM allocation were 16.1 kg DM/hd/day.

Grassland: The current AFC is 779 kg DM/ha (range 50 to 1622 kg DM/ha). Average daily growth rate was 77 kg DM/ha this week and grass DM was 16% on average. A final application of 20 kg of N per ha was spread on 3rd September across the whole milking platform. This brings our total N application to 250 kg/ha for the year.

Milk Production: Average production is currently 21.3 kg/cow at 4.82% fat and 3.69% protein (1.83 kg MS). SCC is 76,000. Fat, protein and SCC figures are based on milk recording results from the 21st of August. Milk production from this time last year was 22.30 kg/cow at 4.15% fat and 3.69% protein (1.73 kg MS).