



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 08/08/2022

Farm Details:

Area available: 17.43 ha
 Current Stocking Rate (MP): 3.27
 Farm Cover: 418 kg DM/ha
 Cover LU/ha: 128
 Growth Rate: 36kg DM/ha/day
 Demand: 36kg DM/ha/day
 Average Concentrate Supplement: 6 kg/day
 Average DIM: 170 days



Current Daily Feed Budget: Due to the shortage in grass supply, cows are being fed 6 kg of a 14% crude protein concentrate since 22nd July, in the parlour, which is formulated with native ingredients. Cows are also allocated 11kg of grass DM and 4 kg silage since 29th July. Grass DM is 24.5%. The higher level of concentrates and the provision of silage will continue until grass growth rates improve.

Grazing Plan: The current AFC is 418 kg DM/ha (range 80 to 1100kg DM/ha). Average daily growth rate is 36 kg DM/ha this week. From the 1st August to 7th August, the average soil temperature at 100mm was 18.0 °C and 1.6 mm of rain fell (rain data from the nearby Met Eireann station, Casement Aerodrome). Grass is stressed and paddocks have developed a lot of stem in the sward. Maintaining grass quality has been challenging this season, due to the fluctuating growth rates. Demand for grass is currently at 36 kg DM/ha.

Milk Production: Average production from 1st August to 7th August was 24.21 kg/cow at 4.46 % fat, 3.74 % protein (1.98 kg MS) and SCC was 77,000. Milk production from this time last year was 23.0 kg/cow at 4.32% fat, 3.5% protein (1.8 kg MS) and SCC was 41,000.

EBI: The average July 2022 genetic evaluation of the herd is as follows:

EBI	Milk	Fertility	Calving	Beef	Maint.	Health	Mgt
225 (Top 1%)	72 (Top 1%)	95 (Top 5%)	44	-11	12	8	3
Milk kg	Fat kg	Prot. Kg	Fat %	Prot. %	Calv int.	Surv %	
165	13	10	0.11	0.08	-3.7	2.5	



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The Systems Research Herd notes will not be published for the remainder of August, and will recommence in September.