



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 12-10-2020

Farm Details:

Area available: 17.43 ha
 Current Stocking Rate (MP): 3.27
 Farm Cover: 983kg DM/ha
 Growth Rate: 38kg DM/ha/day
 Demand: 49kg DM/ha/day
 Average Concentrate Supplement: 3kg/head/day
 Average DIM: 239 days



Current Daily Feed Budget: Cows are being offered 3kg/day of concentrates as all cows are >180 DIM. As the final grazing rotation has begun, cows will now be offered an 18% protein concentrate until dry-off. The herd is also being allocated 15kg DM of grass and 2kg DM of silage per day.

Grazing Plan: The AFC on 13th October was 983kg DM/ha (range: 170-2001kg DM/ha) with a cover/LU of 301kg DM/cow. Rotation length is set at 40 days in line with the Teagasc autumn grazing targets. Between 5th - 11th October, the average soil temperature at 100mm was 9.9°C and 34.5mm of rain fell (data from the nearby Met Eireann station, Casement Aerodrome). Heavy rain has led to above target residuals in recent paddocks. Grass growth is slowing slightly due to the lower soil temperatures and higher levels of rainfall during the last week.

Milk Production: The average milk production from 5th - 11th October was 20.0 kg/cow at 4.54% milk fat, 4.08% protein, 1.72kg MS and 108,000 SCC based on milk recording on 8th 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.

EBI: The most recent (October 2020) genetic evaluation of the herd is as follows:

EBI €	Milk S.I.	Fert S.I.	Calv €	Beef €	Maint €	Mgmt €	Hlth €
196 (Top 1%)	70 (Top 1%)	75 (Top 5%)	42	-9	9	3	6
Milk kg	Fat kg	Prot kg	F%	P%	Calv Int	Surv%	
156.9	13.3	9.6	0.10	0.10	-3.7	2.3	



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BCS: On 7th October, the BCS of the herd was assessed. The average BCS was 3.03 with 2 cows being ≤ 2.5 (3.5%) and 5 cows being ≥ 3.5 (8.8%).