

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 23-03-2020

Farm Details:

Area available: 17.52 ha Current Stocking Rate (MP): 3.14 Farm Cover: 1166 kg DM/ha Growth Rate: 34 kg DM/ha/day Demand: 53 kg DM/ha/day (when out at grass) Average Concentrate Supplement: 8 kg/head/day Average DIM: 39 days Cows Calved: 56 (out of 60)



Current Daily Feed Budget: In the parlour, cows are being fed with 8kg of 18% crude protein concentrate (increased gradually over two weeks post-calving) and allocated 17kg DM of grass when grazing. Grass DM this week was 18.4%.

Spring Grazing Plan: The AFC on 23rd March was 1166 kg DM/ha (range: 50-2434 kg DM/ha). The average daily growth for the week was 34kg DM/ha. Currently there is 47% of the MP grazed. The aim is to finish the first rotation in mid-April. With the drier weather this week resulting in ideal ground conditions we will graze some of the heavy covers. As this will give us an opportunity to achieve better utilisation rate on these paddocks. The current pregrazing yield is 2090 kg DM/ha, all paddocks that are left to graze in the 1st rotation have heavy covers of >1700 kg DM/ha. The improvement in weather was seen in the higher average soil temperature (at 100 mm) this week which was 7.3°c.

EBI: This week, the new EBI evaluations were released. The herd's average genetic evaluation is as follows:

EBI €	Milk S.I	Fert S.I	Calv €	Beef €	Maint €	Mmgt €	Hlth €
206	68	88	43	-9	9	3	5
	Milk kg	F kg	P kg	F%	P%	Calv Int	Surv %



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Calving: One cow calved this week which means there is currently 57 (of 60) or 95% of the cows calved as of the 29^{th} of March.

Milk Production: Average production from 23rd-29th March was 34.9 kg/cow/day, with the herd's average DIM being 43. This a higher rate than the milk production from the same week last year (30.7 kg/cow/day). Milk solids recording will be re-started next month due to the national public health emergency.