



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 25/03/2019

Farm Details:

Area available: 17.59 ha
Current Stocking Rate (MP): 3.2
Farm Cover: 1330 kg DM/ha
Growth Rate: 43 kg DM/ha/day
Demand: 54 kg DM/ha/day
Average Concentrate Supplement: 8 kg/head/day
Average DIM: 37 days
Cows Calved: 56 (out of 60)



Photo © Zoe McKay

Current Daily Feed Budget: Cows are being fed 8 kg of an 18% crude protein concentrate in the parlour (this is built up gradually over two weeks post-calving) and being allocated 18 kg DM of grass. Estimated grass intakes last week were 16.3 kg DM/ha. This was measured by calculating pre grazing herbage mass minus post grazing herbage mass using a rising plate meter.

Spring Grazing Plan: The current AFC is 1330 kg DM/ha (range 104 to 3262 kg DM/ha). Average daily growth rate was 43 kg DM/ha this week and grass DM was 14.9% on average. Currently there is 73% of the MP grazed. The aim is to finish the first rotation during the first week in April. In order to start the 2nd rotation early next week, we plan to take out two paddocks (1.87 ha in total) which currently have an average cover of 3063 kg DM/ha for baled silage. Paddocks that were grazed first in early February have an average cover of 1150 kg DM/ha. We expect them to be around 1300-1400 kg DM/ha when we begin to graze them in the 2nd rotation. The current pre-grazing yield is 2780 kg DM/ha, all paddocks that are left to graze in the 1st rotation have heavy covers of >2800 kg DM/ha.

Calving: Calving started on the 29th of January and there is currently 56 (of 60) or 93% of the cows calved. The 6-week calving rate this year was 93%. This is based on an expected calving start date of February 6th. The last cow is due to calve on the 7th of April.

Milk Production: Average production is currently 30.7 kg/cow at 4.98% fat and 3.36% protein (2.56 kg MS). SCC is 98,000. Fat, protein and SCC figures are based on milk recording results from the 13th of March. There are 17 cows being milked once a day as their BCS is ≤ 2.5.



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March Herd EBI:

EBI	Milk	Fertility	Calving	Beef	Maint.	Health	Mgt
176	64	63	42	-8.3	5	5.5	3.9
Milk kg	Fat kg	Pro. Kg	Fat %	Pro. %	Calving int.	Surv %	
125	11.9	8.7	0.12	0.07	-2.9	2.17	