



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) 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 and sustainable when built on a foundation of good grassland management and meeting both milk and fertility targets and has a place in the 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 10-10-2022

Farm Details:

Area available: 17.43ha
Current Stocking Rate (MP): 3.27 LU/ha
Farm Cover: 978kg DM/ha
Cover/LU: 299kg DM/LU
Growth Rate: 36kg DM/ha/day
Demand: 39kg DM/ha/day
Average Concentrate Supplement: 2kg/head/day
Average DIM: 255 days



Current Daily Feed Budget: Cows are currently being fed 2 kg of 14% crude protein concentrate (formulated with native ingredients) in the parlour. Cows are also allocated 2kg DM of silage, 12kg DM of grass and grass DM is currently 19.8%. From 14th October, half of the herd will be offered an 18% protein commercial concentrate on until dry-off.

Grazing Plan: The current AFC is 978kg DM/ha (range 100 – 1950kg DM/ha), whilst cover/LU is 299kg DM, and growth is 36kg DM/ha/day. From 3rd to 9th October, the average soil temperature at 100mm was 11.5°C, and 9.1 mm of rain fell (rain data from the nearby Casement Aerodrome). The final grazing rotation will commence on 14th October. The herd is grazing out the paddocks well. Rotation length is set at 40 days.

Milk Production: Average production from 4th-10th October was 18.57 kg/cow at 5.07% milk fat, 4.08% protein, 1.70kg MS and SCC was 61,000. Milk production from this time last year was kg/cow at 5.07% milk fat, 3.99% protein, 1.78kg MS and SCC was 67,000.

EBI: The most recent (October 2022) genetic evaluation of the herd is as follows:

EBI €	Milk S.I.	Fert S.I.	Calv €	Beef €	Maint €	Mgmt €	Hlth €
204 (Top 2%)	67 (Top 3%)	89 (Top 5%)	39	-11	11	2	7
Milk kg	Fat kg	Prot kg	F%	P%	Calv Int	Surv%	
155.7	13.13	10.28	0.12	0.09	-4.92	2.74	