



## 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 30/09/2019

#### Farm Details:

Area available: 17.53 ha  
Current Stocking Rate (MP): 3.31 LU/ha  
Farm Cover: 934 kg DM/ha  
Cover/LU: 282 kg/LU  
Growth Rate: 49 (49) kg DM/ha/day  
Demand: 40 kg DM/ha/day  
Average Concentrate Supplement: 3 kg/hd/day  
Average DIM: 217 days  
Milking cows: 58



**Current Daily Feed Budget:** Cows are being allocated 12 kg DM of grass, an average of 3 kg of a high energy concentrate and 5 kg DM of first cut silage. From the beginning of the second rotation (2<sup>nd</sup> April) until the start of the last rotation, half of the group are being fed an 18% crude protein concentrate while the other half are on a 14% concentrate. Estimated grass intakes last week were 12.8 kg DM/hd/day.

**Grassland:** The current AFC is 934 kg DM/ha (range 251 to 1974 kg DM/ha). Average daily growth rate was 49 kg DM/ha this week and grass DM was 14.3% on average. As we are behind our Autumn grazing targets, 5 kg DM silage per cow per day are being offered since the 20<sup>th</sup> September before pm milking to enable us to build farm cover for the last rotation.

**Milk Production:** Average production is currently 17.8 kg/cow at 4.67% fat and 3.89% protein (1.52 kg MS). SCC is 61,000. Fat, protein and SCC figures are based on milk recording results from the 18<sup>th</sup> of September. Milk production from this time last year was 19.0 kg/cow at 4.39% fat and 3.70% protein (1.49 kg MS).

The most recent (September) genetic evaluation of the herd is as follows:

E.B.I	Milk S.I	Fert S.I	Calv	Beef	Maint	Mmgt	Health
180	66	65	42	-9	6	4	5
Milk kg	Fat kg	Protein kg	Fat %	Protein %	Calving Int.	Surv %	
127	12.2	8.9	0.12	0.08	-3	2.1	

The overall herd EBI is within the top 1% nationally. Milk SI is in the top 1% and herd fertility SI is in the top 10%.