



**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 14/10/2019

#### Farm Details:

Area available: 17.53 ha  
Current Stocking Rate (MP): 3.31 LU/ha  
Farm Cover: 612 kg DM/ha  
Cover/LU: 185 kg/LU  
Growth Rate: 14 (13) kg DM/ha/day  
Demand: 36 kg DM/ha/day  
Average Concentrate Supplement: 3 kg/hd/day  
Average DIM: 231 days  
Milking cows: 58



**Current Daily Feed Budget:** From Thursday of this week, cows are being allocated 11 kg DM of grass, 5 kg DM silage and an average of 3 kg of a high energy concentrate. Since the 7<sup>th</sup> October all cows are being fed an 18% crude protein concentrate. Estimated grass intakes last week were 14.5 kg DM/hd/day, when cows were offered 15 kg DM/hd/day.

**Grassland:** The current AFC is 612 kg DM/ha (range 55 to 1537 kg DM/ha). Average daily growth rate was 14 kg DM/ha this week and grass DM was 13.6 % on average. We began our last rotation on the 7<sup>th</sup> October. Our target is to graze 65% by the 1<sup>st</sup> of November, with the remaining 35% grazed by mid-November. As of Monday, 14<sup>th</sup> October we have grazed 16% of the farm (2.97 ha). As growth has declined a lot in the last week, from the 17<sup>th</sup> October, 5 kg DM of silage will be offered to the cows before pm milking to keep on target for our Autumn planner.

**Milk Production:** Average production is currently 17.41 kg/cow at 5.25% fat and 3.99% protein (1.61 kg MS). SCC is 69,000. Fat, protein and SCC figures are based on milk recording results from the 1<sup>st</sup> of October. Milk production from this time last year was 17.2 kg/cow at 4.70% fat and 3.88% protein (1.47 kg MS).

**BCS Scoring:** On Wednesday the 9<sup>th</sup> of October, the herd was assessed for body condition score. Average BCS was 2.91 and there were 7 cows out of 58 thin ( $\leq 2.5$ ; 12% of herd). Two cows were fat, i.e.  $\geq 3.5$  BCS (3.4% of herd).