



## 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 16-03-2020

#### Farm Details:

Area available: 17.52 ha  
Current Stocking Rate (MP): 3.14  
Farm Cover: 1138 kg DM/ha  
Growth Rate: 18 kg DM/ha/day  
Demand: 50 kg DM/ha/day (when out at grass)  
Average Concentrate Supplement: 8 kg/head/day  
Average DIM: 37 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 14kg DM of grass when grazing. Grass DM was 20.8%. As cows were housed indoors for the early part of this this week, they received 16kg DM of 2<sup>nd</sup> cut silage.

**Spring Grazing Plan:** The AFC on 16<sup>th</sup> March was 1177 kg DM/ha (range: 185-1971 kg DM/ha). The average daily growth for the week was 18kg DM/ha. We had aimed to have 50% of the MP grazed by 17<sup>th</sup> March. However due to heavy rainfall, 32% of the MP was grazed by this timepoint. The heavy rainfall during the end of last week persisted into this week, resulting in challenging ground conditions. As a result, cows were housed full-time indoors from Thursday the 12<sup>th</sup> of March until Thursday the 19<sup>th</sup> of March. The cows will be grazing full-time from Thursday 19<sup>th</sup> March. Average soil temperature (at 100 mm) this week was 6.4°C.

**Calving:** Calving started on the 24<sup>th</sup> of January and there is currently 56 (of 60) or 93% of the cows calved as of the 22<sup>nd</sup> March.

**Milk Production:** Average production from 16<sup>th</sup>-22<sup>nd</sup> March was 31.7 kg/cow/day. Milk production from the same week last year was similar at 31.1 kg/cow/day. Based on the milk recording data from 27<sup>th</sup> February, milk fat % was estimated to be 4.6%, protein % was 3.3% and SCC was 63, 000.