



## 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 21-09-2020

#### Farm Details:

Area available: 17.43 ha  
Current Stocking Rate (MP): 3.27  
Farm Cover: 1129kg DM/ha  
Growth Rate: 64kg DM/ha/day  
Demand: 56kg DM/ha/day  
Average Concentrate Supplement: 3kg/head/day  
Average DIM: 218 days



**Current Daily Feed Budget:** Cows are being offered on average 3kg/day of concentrates based on their DIM. Cows that are  $\leq 180$  DIM (3/57 cows) are being offered 3.5kg/day and cows  $>180$  DIM (54/57 cows) will be offered 3kg/day. Cows are being fed one of three concentrates; a 14% protein concentrate, 12% protein native formulation concentrate or a 12% protein non-native concentrate in the parlour. These diets will be offered as part of our 2020 nutrition trial until the start of the final grazing rotation in October. The herd is also being allocated 17kg DM of grass per day.

**Grazing Plan:** The AFC on 21<sup>st</sup> September was 1129 DM/ha (range: 221-2298kg DM/ha) with a cover/LU of 345kg DM/cow. We are aiming for a cover of 335 kg DM/cow by 1<sup>st</sup> October so currently we are slightly above target. Rotation length is set at 37 days in line with the Teagasc autumn grazing targets.

**Milk Production:** The average milk production from 14<sup>th</sup> - 20<sup>th</sup> September was 19.0 kg/cow at 4.86% milk fat, 3.87% protein, 1.65kg MS and 63,000 SCC based on milk recording on 17<sup>th</sup> September. Average milk production this time last year was 19.2 kg/cow at 4.67% fat, 3.89% protein (1.64 kg MS) and SCC at 61,000.

**BCS:** On 17<sup>th</sup> September, all cows were assessed for BCS. The average BCS was 3.0 with 3 cows (5.3%) being  $\leq 2.5$  and 3 cows (5.3%) being  $\geq 3.5$ .