



## 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 06-09-2021

#### Farm Details:

Area available: 17.43ha  
Current Stocking Rate (MP): 3.27 LU/ha  
Cover/LU: 239kg DM/LU  
Farm Cover: 783kg DM/ha  
Growth Rate: 47kg DM/ha/day  
Demand: 49kg DM/ha/day  
Average Concentrate Supplement: 3kg/head/day  
Average DIM: 195 days



**Current Daily Feed Budget:** Cows are being offered 3kg/head/day of one of four experimental concentrates; a 14% protein concentrate with non-native ingredients, a 12% protein concentrate with non-native ingredients, a 12% protein concentrate with native ingredients or a 12% protein concentrate with native ingredients supplemented with methionine. These diets are being offered as part of our 2021 nutrition trial until the start of the final grazing rotation in October. Cows are allocated 15kg DM of grass and grass DM is currently 18.7%.

**Grazing Plan:** The current AFC is 783kg DM/ha (range 225 – 1560kg DM/ha), cover/LU is 239kg DM and growth is 47kg DM/ha/day. Growth rates and residuals have been excellent in the last few weeks due to the good growing conditions. However, since 22<sup>nd</sup> August, <1mm of rain has fallen so the soil moisture deficit has risen to 39mm (data from nearby Casement Aerodrome) and this has led to lower growth rates. The Teagasc autumn grazing target AFC for mid-September is 1200kg so we will seek to build up to this by introducing silage to the diet if growth rates do not improve. Rotation length is set at 30 days in line with the Teagasc autumn grazing targets.

**Milk Production:** Average production from 30<sup>th</sup> August-5<sup>th</sup> September was 23.5kg/cow at 4.73% milk fat, 3.88% protein, 2.02kg MS and SCC was 75,000. Milk production from this time last year was 23kg/cow at 4.66% milk fat, 3.70% protein, 1.92kg MS and SCC was 93,000.