



## 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 14-11-2022

#### Farm Details:

Area available: 17.43ha  
Current Stocking Rate (MP): 3.27 LU/ha  
Farm Cover: 546kg DM/ha  
Cover/LU: 167kg DM/LU  
Growth Rate: 23 kg DM/ha/day  
Demand: 23kg DM/ha/day  
Average Concentrate Supplement: 2kg/head/day  
Average DIM: 268 days



**Current Daily Feed Budget:** Cows are currently being fed 2 kg of concentrate in the parlour. As part of our nutrition trial, half of the herd are being offered an 18% protein concentrate (native formulation plus Soyabean meal), whilst a 14% crude protein concentrate (formulated with only native ingredients) will continue to be offered to the remainder; with both regimes continuing until dry-off. Cows are also allocated 7kg DM of silage, 7kg DM of grass and grass DM is currently 14.5%. The herd have been housed at night since the 2<sup>nd</sup> November.

**Grazing Plan:** The current AFC is 546 kg DM/ha (range 100 – 1150kg DM/ha), whilst cover/LU is 190kg DM, and growth is 23 kg DM/ha/day. From 7<sup>th</sup> to 13<sup>th</sup> November, the average soil temperature at 100mm was 11.1 °C, and 16.8 mm of rain fell (rain data from the nearby Casement Aerodrome). The final grazing rotation began on the 14<sup>th</sup> of October. The herd is grazing out the paddocks well. The rotation will finish on November 18<sup>th</sup>, with the herd being housed full time on this date.

**Milk Production:** Average production from 7<sup>th</sup> to 13<sup>th</sup> November was 13.96 kg/cow at 4.67 % milk fat, 3.83 % protein, 1.19 kg MS and SCC was 93,000 . Milk production from this time last year was 16.3 kg/cow at 5.25 % milk fat, 4.09% protein, 1.53kg MS and SCC was 72,000.

**Dry-off:** Cows that are within 60 days of their expected 2023 calving date, or those that yield ≤9kg milk for 4 consecutive days will be dried off. Lyons has practiced selective dry cow therapy for several years now. The herd's milk yield will be monitored closely over the coming weeks in case early dry-off is required.