



## 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 22-11-2021

#### Farm Details:

Area available: 17.43ha  
Current Stocking Rate (MP): 3.27 LU/ha  
Farm Cover: 741kg DM/ha  
Milking platform closed: 17.43ha/17.43ha (100%)  
Growth Rate: 20kg DM/ha/day  
Average Concentrate Supplement: 3kg/head/day  
Cows dried off: 1/57 cows (2%)  
Average DIM: 271 days



**Current Daily Feed Budget:** Cows are being offered on average 2.7kg/day of an 18% protein commercial concentrate until dry-off. Four cows with a BCS of 3.5 are not being provided concentrates for the time being. Cows are also allocated 14kg DM of 82% DMD silage. Last week's grass DM was 17.6%.

**Grazing Plan:** The current AFC is 714kg DM/ha (range 150–1600kg DM/ha) and growth is 20kg DM/ha/day. The final grazing rotation began on Saturday 9<sup>th</sup> October and cows have been housed for the winter since the evening of Thursday 18<sup>th</sup> November. Turnout by day was 9<sup>th</sup> February, full-time turnout was 16<sup>th</sup> February, housing by night started on 20<sup>th</sup> October and three days were spent indoors in February due to bad weather. Therefore, the herd had 263.5 days of grazing. During this time, the herd consumed 3.4tn DM grazed grass/cow.

**Milk Production:** Average production from 15<sup>th</sup>-21<sup>st</sup> November was 14.9kg/cow at 5.21% milk fat, 4.02% protein, 1.38kg MS and SCC was 93,000 based on milk recording on 18<sup>th</sup> November. Milk production from this time last year was 15.0kg/cow at 5.76% milk fat, 4.00% protein, 1.46 kg MS and 60,000.

**Dry-off:** Cows that yield  $\leq 9$ kg milk for four consecutive days or that are within 60 days of their expected 2021 calving date will be dried off. Lyons has practiced selective dry cow therapy for several years with great success. Cows with consistently high SCC ( $>150,000$ ) throughout the year will be assessed by the Veterinary Herd Health team to determine if antibiotic dry cow therapy is necessary. On 12<sup>th</sup> November, a second-lactation cow was the first to be dried off due to diminishing milk yields. The herd's milk yield will be monitored closely over the coming weeks in case early dry-off is required.