



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 15-11-2021

Farm Details:

Area available: 17.43ha
Current Stocking Rate (MP): 3.27 LU/ha
Cover/LU: 206kg DM/LU
Farm Cover: 674kg DM/ha
Milking platform closed: 16.4ha/17.43ha (94%)
Growth Rate: 19kg DM/ha/day
Demand: 20kg DM/ha/day
Average Concentrate Supplement: 3kg/head/day
Cows dried off: 1/57 cows (2%)
Average DIM: 265 days



Current Daily Feed Budget: Cows are being offered 3kg/day of an 18% protein commercial concentrate until dry-off. Cows are also allocated 10kg DM of silage and 6kg DM of grass. Last week's grass DM was 17.3%.

Grazing Plan: The current AFC is 674kg DM/ha (range 60–1400kg DM/ha), cover/LU is 206kg DM and growth is 19kg DM/ha/day. Growth levels and ground conditions are good for this time of year due to mild weather conditions. Average soil temperature at 100mm was 10.6°C and 4.4mm of rainfall fell between 8th-14th November (rain data from the nearby Casement Aerodrome). The final grazing rotation began on Saturday 9th October and to date 16.4ha/17.43ha (94%) of the milking platform (MP) has been closed. Cows will be housed full-time indoors from 18th November to achieve a closing cover of 650-700kg DM/ha on 1st December.

Milk Production: Average production from 8th-14th November was 16.3kg/cow at 5.25% milk fat, 4.09% protein, 1.53kg MS and SCC was 72,000 based on milk recording on 11th November. Milk production from this time last year was 15.2 kg/cow at 5.48% milk fat, 4.02% protein, 1.42 kg MS and 93,000.

BCS: On 9th November, the BCS of the herd was assessed. The average BCS was 3.06 with one cow being ≤ 2.5 (2%) and four cows being ≥ 3.5 (7%). Therefore, 93% of cows are on target BCS for this time of year. The four cows with a BCS of 3.5 will be provided with less concentrates to ensure they are correctly conditioned for calving next spring.



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Dry-off: Cows that yield ≤ 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 12th 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.