



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 25-10-2021

Farm Details:

Area available: 17.43ha
Current Stocking Rate (MP): 3.27 LU/ha
Cover/LU: 168kg DM/LU
Farm Cover: 550kg DM/ha
Milk platform closed: 12.6ha/17.43ha (69%)
Growth Rate: 23kg DM/ha/day
Demand: 20kg DM/ha/day
Average Concentrate Supplement: 3kg/head/day
Average DIM: 244 days



Current Daily Feed Budget: Cows are now 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 16.2%.

Grazing Plan: The current AFC is 550kg DM/ha (range 80 – 1090kg DM/ha), cover/LU is 168kg DM and growth is 23kg DM/ha/day. Growth levels are beginning to decline, as to be expected for the time of year. Average soil temperature at 100mm is stable at 11.9°C but rainfall has risen to 12.7mm between 18th-24th October (rain data from the nearby Casement Aerodrome). Cows were housed by night from Wednesday 20th October to extend the grazing season while maintaining AFC above a minimum of 500 kg DM/ha. The final grazing rotation began on Thursday 7th October and to date 12.6ha/17.43ha (69%) of the milking platform (MP) has been closed. Our aim is to have 75% of the MP closed on 1st November in line with the Teagasc autumn grazing targets. Silage is being fed to maintain the average farm cover above 500kg DM/ha as we aim to close at an AFC of 600-650 DM/ha. Rotation length is set at 40 days in line with Teagasc autumn grazing targets.

Milk Production: Average production from 18th-24th October was 18.8kg/cow at 5.27% milk fat, 4.19% protein, 1.78kg MS and SCC was 75,000 based on milk recording on 22nd October. Milk production from this time last year was 18.3kg/cow at 4.69% milk fat, 4.22% protein, 1.68kg MS and SCC was 81,000.

Breeding: The final scan of the herd was done on 14th October. In total, 53/55 bred cows (96%) were scanned as pregnant. Therefore, our empty rate which includes two pre-breeding culls, is 7% (4/57 cows).