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) facilitating farm expansion post EU-milk quota removal for 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 when built on a foundation of good grassland management and meeting both milk and fertility targets and has a place in a sustainable Irish dairy industry.

For more details on the High Output Systems Research Herd visit https://www.ucd.ie/agfood/about/lyonsresearchfarm/lyonsdairyherd/

Lyons Systems Research Herd Notes Week 26/09/2022

Farm Details:

Area available: 17.43 ha

Current Stocking Rate (MP): 3.27 Farm Cover: 935 kg DM/ha

Cover LU/ha: 286

Growth Rate: 52kg DM/ha/day Demand: 33kg DM/ha/day

Average Concentrate Supplement: 2.7kg/day

Average DIM: 234 days



Current Daily Feed Budget: This week growth was 52kgDM/ha/day. Growth is expected to be steady with dry weather forecasted in the coming week. Feed budget was adjusted on the 21st to 10kg DM grass (up from 6 kg) 4kg DM silage (down from 9 kg) and 2.7 kg of concentrates (down from 4 kg) as were back out grazing by day and night this week. Demand has increased to 33kg DM/ha/day up from 20kg DM/ha/day .17 cows were identified with a BCS of above 3.25 and were reduced to a concentrate level of 2 kg/day and the rest of the herd with a BCS of lower than 3.25 were offered 3kg/day giving a herd average allocation of 2.7kg/day. Average Grass DM for the week was 17%. Cows are currently grazing covers of 1400-1600 Kg DM/ha.

Grazing Plan: The current AFC is 935 kg DM/ha (range 100 to 1600 kg DM/ha) the cover LU/ha is 286 which is beginning rise gradually. Cows are being allocated 0.5 Ha grass every 24 hours with them going into a fresh cover every night to ensure adequate feed during the longer milking interval and being sent to clean up after morning milking. Cows are being brought in an hour before evening milking to receive their allocation of silage daily.

Milk Production: Average production from 19th September to 25th September was 20.3 kg/cow at 4.56% fat, 3.63 % protein (1.59 kg MS) and SCC was 50,000 based on milk recording on the 22nd of September. Milk production from the same period in 2021 was 21kg/cow at 4.31% fat, 3.76 % Protein ,1.63kg MS and SCC was 79,000:

