

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 http://www.ucd.ie/agfood/welcomemessage/systemsresearchherd/.

Lyons Systems Research Herd Notes Week 26-03-2018

Farm Details:

Area available: 17.65

Current Stocking Rate (MP): 3.12 Farm Cover: 546 kg DM/ha Growth Rate: 8 kg DM/ha/day Demand: 20 kg DM/ha/day

Average Concentrate Supplement: 7.84kg/head/day

Average DIM: 47 days Cows Calved: 55 (out of 60)



Current Daily Feed Budget: AFC on the 26th of March was 546kg DM/ha (range 96 to 1200kg DM/ha). Cows have been allocated 6.5kg DM of grass and 9kg DM (31% DM; 81% DMD; 0.92 UFL) of 1st cut silage before the evening milking. As per the feed budget, cows less than 60 DIM are being fed 8 kg of a high energy concentrate, while cows greater than 60 DIM are being fed 6kg. However, due to this period of difficult weather and poor grass growth, the decision has been made to leave the cows over 60 DIM on 8kg of concentrate for this week. The extra concentrate fed to these cows will be adjusted for in the feed budget later in the year.

Spring Grazing Plan: Cows are in at night from Monday and will continue to be housed at night until Thursday. A decision will be made on Thursday after a grass walk on whether to continue to graze by day or house fulltime if AFC is at or below 500kg DM/Ha. So far, we have 47% (8.23 Ha) of the milking platform grazed. Total N out to date is 85kg N/ha (69 units/a). Average grass DM% for last week was 19.46% and average soil temperature at 100mm was 5.2°C.

Milk Production: Average weekly production is currently 28.38kg/cow as of the end of the 25th of March at 4.24% fat and 3.00% protein (2.05kg MS). SCC is 97,000. Fat, protein and SCC figures are based on milk recording results from the 14th of March.

Body Condition Score: Last Thursday the herd was assessed for BCS, the average BCS for the milking herd is 2.88. There was 21.54% (11/53) of the milking herd with a BCS of \leq 2.5; 3.77% (2/53) have a BCS \geq 3.5. Of the five remaining dry cows, 2 of them have BCS of 3.25 and the other 3 have a BCS 3.5.