

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 05-04-2021

Farm Details:

Area available: 17.43 ha

Current Stocking Rate (MP): 3.27 Farm Cover: 621 kg DM/ha Growth Rate: 45 kg DM/ha/day Demand: 36 kg DM/ha/day

Average Concentrate Supplement: 8 kg/head/day

Average DIM: 41 days Cows Calved: 57/57 cows



Current Daily Feed Budget: Cows are being fed 8 kg of an 18% crude protein concentrate in the parlour (this is built up gradually over two weeks post-calving). Cows are being offered 5kg of silage and are allocated 11 kg DM of grass. Grass DM is 20.6%.

Spring Grazing Plan: The current AFC is 621 kg DM/ha (range 43 – 1100 kg DM/ha). Average daily growth rate is 45 kg DM/ha this week. Growth has slightly increased this week due to favourable weather conditions. To increase the AFC, cows are being offered silage after milking. The second grazing rotation began on 2nd April.

Calving: Calving started on 30th January and all 57 of the cows calved with the final calving being on 5th April. The calving period was 65 days with the 6-week calving rate being 90% (51/57 cows). The average calving interval was 373 days. Average gestation length was 276 days. There were 27 heifer calves and 30 bull calves born.

Milk Production: Average production from 29th March – 4th April was 36.5 kg/cow at 4.60% fat, 3.44% protein (2.94 kg MS) and SCC is 54,000. Fat, protein and SCC figures are based on milk recording results from 1st April. Milk production from this time last year was 35.9 kg/cow, 4.26% fat, 3.51% protein, 2.97kg MS and SCC was 73,000.

BCS: On 29th March, 55 cows were assessed for BCS. The herd average was 3.00 with five cows being \leq 2.5 (9.1%) and two cows being \geq 3.5 (3.6%). Six cows are currently on OAD to improve BCS.