



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 02-04-2018

Farm Details:

Area available: 17.65 ha
Current Stocking Rate (MP): 3.23
Farm Cover: 632 kg DM/ha
Growth Rate: 29 kg DM/ha/day
Demand: 24 kg DM/ha/day (when out at grass)
Average Concentrate Supplement: 8 kg/head/day
Average DIM: 53 days
Cows Calved: 57 (out of 60)



Current Daily Feed Budget: AFC on the 3rd of April was 632 kg DM/ha (range 187 to 1076 kg DM/ha). Due to heavy rainfall on Monday and challenging ground conditions, slight damage was done on Tuesday, resulting in cows being housed fulltime on Wednesday (4th April). We will monitor ground conditions daily to see if it is suitable to let cows out. While indoors, cows are being allocated 15 kg DM (31% DM; 81% DMD; 0.92 UFL) of 1st cut silage and 8 kg of a high energy concentrate. Cows that are over 60 DIM are still on 8 kg of concentrate for this week rather than the 6 kg originally planned in the feed budget. The extra concentrate fed to these cows will be adjusted in the feed budget later in the year.

Spring Grazing Plan: Prior to being housed, the cows were out during the day and in at night over the Easter weekend to reduce grass demand and to prevent AFC going below 500 kg DM/ha. With average daily growth rates of 29 kg DM/ha since last Thursday, AFC has increased to 632 kg DM/ha. However, covers on the first three paddocks grazed are ranging from 520-720 kg DM/ha and therefore it will be April 15th before these paddocks have sufficient grass to start the second rotation. On April 3rd, 63% of the milking platform was grazed. Average soil temperature (at 100 mm) last week was 5.9°C.

Milk Production: Average production is currently 29.63 kg/cow at 4.67% fat and 3.27% protein (2.36 kg MS). SCC is 78,000. Fat, protein and SCC figures are based on milk recording results from the 14th of March.