



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 11/11/2019

Farm Details:

Area available: 17.53 ha

Average Concentrate Supplement: 3 kg/hd/day

Average DIM: 258 days

Milking cows: 57 (1 dried off)

Current Daily Feed Budget: Cows are being allocated 17 kg DM silage and 3 kg of a high energy concentrate. Since the 7th October all cows are being fed an 18% crude protein concentrate.

Grassland: The AFC at housing was 445 kg DM/ha (range 31 to 931 kg DM/ha). The final grass walk of the year will be on Monday 2nd of December. At housing, we have grown 14.4 ton of grass DM/ha, with an average 9.6 grazing's (ranging from 6 for 2019 reseeds to 12 grazing's for established paddocks).

Milk Production: Average production is currently 14.4 kg/cow at 4.69% fat and 4.15% protein (1.27 kg MS). SCC is 129,000. Fat, protein and SCC figures are based on milk recording results from the 30th of October. Milk production from this time last year was 14.5 kg/cow at 5.12% fat and 4.14% protein (1.32 kg MS).

Body Condition Score: The herd was scored on the 13th of November, with an average BCS of 2.97. Three cows were thin (>2.5; 5.3% or 3/57) and three cows were fat (<3.5; 5.3% or 3/57).

Drying off: Milk samples were taken from cows that had a high cell count based on recent milk recording, which will be cultured in the laboratory and put through a bacteria sensitivity test to determine which antibiotic tubes will be most effective for drying off. Any cows with consistently low SCC (<150000) throughout the year will be assessed by the Veterinary Herd Health team to see if antibiotic dry cow therapy is necessary.

