

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 <a href="http://www.ucd.ie/agfood/welcomemessage/systemsresearchherd/">http://www.ucd.ie/agfood/welcomemessage/systemsresearchherd/</a>.

## Lyons Systems Research Herd Notes Week 02-07-2018

## Farm Details:

Area available: 16.09 (1.56 removed for reseeding)

Current Stocking Rate (MP): 3.73 Farm Cover/LU: 122 kg DM/LU Growth Rate: 21 kg DM/ha/day Demand: 35 kg DM/ha/day

Average Concentrate Supplement: 4.2 kg/head/day

Average DIM: 136.5 Cows Milking: 60

**Daily Feed Budget:** Cows are being allocated 9.5 kg DM of grass, 5.5 kg DM of silage and 3.5 or 6 kg of concentrate depending on DIM (cows > 120 DIM on 3.5 kg, cows < 120 DIM on 6 kg).

**Grazing Plan:** AFC on the 2<sup>nd</sup> of July was 454 kg DM/ha (range 111 to 1054 kg DM/ha) with a cover/LU of 122 kg DM. Average grass growth was 21 kg DM/ha/day due to drought conditions. Demand is 35 kg DM/ha/day as silage is being buffer fed to ration grass supply on the farm. Silage (bales that were made from MP on the 30<sup>th</sup> of April) is being fed for an hour before and after the evening milking for the next 7 days, grass utilisation remains high at 91% for last week. Another farm cover will be conducted on Thursday to reassess. Average DM of the grass this week was 24.7.

**Milk Production:** Average production this week is currently 24 kg/cow as of the week ending the 1<sup>st</sup> of July, at 3.86% fat and 3.56% protein (1.77 kg MS). Average production this time last year was 28.7 kg/cow, at 4.20% fat and 3.52% protein (2.2 kg MS). SCC is currently 104,000. Fat, protein and SCC figures are based on milk recording results from the 20<sup>th</sup> of June.

**Breeding Season 2018:** The breeding season started on Monday 30<sup>th</sup> of April and are now in week 10 of 12 weeks. Breeding is all by A.I. and is being done twice daily. Bulls used for the first 9 weeks were as follows: HZB, LWR, FR2031, FR2236, FR2297, FR2298, FR2314, FR2371, FR2460, FR4020, FR4244. From week 9 onwards, beef genetics (Hereford) is being used on all cows. Heat detection is being done using Moo Monitors with a scratch card and crayon system used to replace visual heat detection.