



Lyons Systems Research Herd Notes

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) 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 and sustainable when built on a foundation of good grassland management and meeting both milk and fertility targets and has a place in the 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 06-12-2021

Farm Details:

Area available: 17.43ha
Average Concentrate Supplement: 1.8kg/head/day
Cows dried off: 6/57 cows (11%)
Average DIM: 284 days



Current Daily Feed Budget: Milking cows are being offered on average 1.8kg/day of an 18% protein commercial concentrate until dry-off. Since 3rd December, the cows are being fed at the following rates per day to ensure the herd's BCS profile remains on target; BCS 3.5: 0kg (5 cows), BCS 3.25: 1kg (17 cows), BCS 3: 2kg (22 cows) and BCS 2.75: 3kg (7 cows). Cows are also allocated 14kg DM of 82% DMD silage. To date, the cows have consumed 3,112 kg of grazed grass, 1,443 kg DM of silage and 1,426kg of concentrates/head during the year.

Milk Production: Average production from 28th November-5th December was 13.4kg/cow at 6.04% milk fat, 4.02% protein, 1.35kg MS and SCC was 83,000 based on milk recording on 2nd December. The herd's average yield to date is 7613kg/cow (range: 4796kg – 9886kg) and 614kg MS/cow (range: 393kg MS – 764kg MS). The average predicted 305d yields are 7949kg/cow and 648kg MS/cow. Milk production from this time last year was 13.6kg/cow at 5.61% milk fat, 3.77% protein, 1.28 kg MS and 80,000.

Dry-off: Cows that yield \leq 9kg milk for four consecutive days or that are within 60 days of their expected 2021 calving date will be dried off. Lyons has practiced selective dry cow therapy for several years. Cows with consistently high SCC (>150,000) throughout the year will be assessed by the Veterinary Herd Health team to determine if antibiotic dry cow therapy is necessary. Of the 53 cows that are due to calve next year, 21% (11/53 cows) will receive antibiotic treatment and sealer while 75% (42/53 cows) will just receive a sealer. On 30th November, two more cows were dried off and 16 cows will be dried off on 7th December.

BCS: On 30th November, the BCS of 53 cows (including two cows that were dried off that morning) in the herd was assessed. The average BCS was 3.1 with 6 cows being \geq 3.5 (10%).

And finally... This week's notes will be the final notes of 2021. We will resume weekly notes in March and the 2021 annual report will be published on the Systems herd weekly notes website. In the meantime, please follow us on Twitter at @UCD_SystemsHerd for more updates. We would like to wish all our readers a merry Christmas and all the best for 2022.