

Project Objectives

- To develop a profitable high-output grass-based spring milk production system
- To incorporate the most recent advances in grassland management for dairy farms into a high- output system
- Use a type of dairy cow that has good genetic indices for both milk production and fertility
- Employ the best practices from nutrition research and dairy cow husbandry
- Incorporate nutritional studies into a high-output system
- To incorporate management technologies and system attributes that enhance the sustainability of dairy production



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 11/11/2024

Farm Details:

Area Available	17.43	Ha
Current SR (MP)	3.27	LU/ha
Farm Cover	569	kg DM/ha
Cover/LU	0	Kg DM/day
Growth Rate	11	kg DM/ha/day
Demand	0	kg DM/ha/day
Average Conc.	4	kg/day
Average DIM	253	days
Grass DM	18	%

Cow Details:

YIELD	14.6	kg/cow/day
Fat	4.74	%
Protein	3.89	%
MS	1.28	kg
SCC	94.9	Cells/ml milk

Grazing plan:

The AFC is 569 kg DM/ha (range 144–1102 kg DM/ha), with a growth rate of 11 kg DM/ha/day. Soil temperatures have cooled to an average of 6.6°C across the milking platform. The final grazing rotation began on Monday 30th of September and the herd was fully housed for the winter on the Sunday 10th of November. Our target was to have 100% of the milking platform (17.43 ha) grazed by housing on the 10th of November. However, we concluded the season with 88% of the platform (15.47 ha) grazed, just short of our intended goal. The herd is currently on a diet of 15 kg DM silage and 4 kg DM concentrates.

Comments:

Compared to the same week in 2021, which was our best year for performance, this year's herd performance shows some changes. The yield per cow has decreased by

approximately 10.4%, dropping from 16.3 kg to 14.6 kg per cow per day. Milk solids have also declined, falling by 15.7%, from 1.53 kg to 1.29 kg. The fat content has slightly decreased by 9.7%, from 5.25% in 2021 to 4.74% in 2024. The protein percentage has experienced a small reduction, dropping from 4.09% in 2021 to 3.89% in 2024. Although yield and milk solids are down, the herd continues to maintain a stable fat and protein content, with only minor changes in protein levels.

BCS:

The herds BCS was assessed on the 5th of November. 89% of them scored between 2.75-3.25 and 11% scored between 2.25-2.5.