

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 28/10/2024

Farm Details:

Area Available	17.43	Ha
Current SR (MP)	3.27	LU/ha
Farm Cover	539	kg DM/ha
Cover/LU	165	Kg DM/day
Growth Rate	23	kg DM/ha/day
Demand	36	kg DM/ha/day
Average Conc.	4	kg/day
Average DIM	246	days
Grass DM	16	%

Cow Details:

YIELD	16.85	kg/cow/day
Fat	5.30	%
Protein	4.05	%
MS	1.66	kg
SCC	80.54	Cells/ml milk

Grazing plan:

The Average Farm Cover (AFC) is 539 kg DM/ha, with grass growth rates recorded at 23 kg DM/ha/day. The herd's diet consists of 4 kg DM of silage (36% DM), 10 kg DM of grass, and 4 kg DM of concentrate. Currently 65% of the grazing platform has been closed for the season, and average soil temperatures across the paddocks being grazed this week are 12.1°C. By the end of this week, all paddocks on the platform will be closed and the herd will be housed.

Comments:

Compared to 2021 (our best year for performance), the yield per cow was 18.8 kg/day, with milk solids at 1.78 kg, a fat content of 5.27%, and protein at 4.19%. For the same period in 2024, we've seen the yield drop to 16.85 kg/cow/day, which represents a

decline of about 10.3%. Milk solids have also reduced by approximately 6.7%, from 1.78 kg to 1.66 kg.

Interestingly, despite the lower yield, fat content has slightly increased, moving from 5.27% to 5.30%. Protein content, however, has seen a minor decrease from 4.19% to 4.05%. Compared to last week, where the yield was even lower at 16.23 kg/cow/day, we have observed a modest improvement in output, with fat increasing from 5.02% to 5.30% and protein from 3.91% to 4.05%.

BCS:

The herds BCS was assessed on the 23rd of October. 85.7% of them scored between 2.75- 3.25, 10.7% scored between 2.25-2.5 and 3.6% scored 3.5.