

## 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 04/11/2024

### Farm Details:

Area Available	17.43	Ha
Current SR (MP)	3.27	LU/ha
Farm Cover	583	kg DM/ha
Cover/LU	178	Kg DM/day
Growth Rate	34	kg DM/ha/day
Demand	23	kg DM/ha/day
Average Conc.	4	kg/day
Average DIM	253	days
Grass DM	21	%

### Cow Details:

YIELD	14.3	kg/cow/day
Fat	5.34	%
Protein	3.98	%
MS	1.32	kg
SCC	122.6	Cells/ml milk

### Grazing plan:

The AFC is currently at 583kg DM/ha (range 126-1110kg DM/ha) and growth is 34 kg DM/ha/day. The growth rate and ground conditions are favourable for this time of the year, due to the mild weather conditions. Average soil temperatures across the platform are 11.04°C. The herd's diet consists of 8 kg DM of silage (36% DM), 10 kg DM of grass, and 4 kg DM of concentrate. The final grazing rotation began on Monday 30<sup>th</sup> October and to date 13.55ha/17.43ha (77%) of the milking platform has been closed.

### 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 14.9%, dropping from 16.6 kg to 14.3 kg per cow per day. Milk solids have seen a decline, falling by 14.08%, from 1.52 kg to 1.32 kg. Despite this, the fat content

has improved by 4.01%, rising to 5.34% in 2024, from 5.13% in 2021. The protein percentage has experienced a slight reduction, dropping only 0.5%, from 4.14% in 2021 to 3.91%. Although yield and milk solids are down, the herd continues to maintain strong fat content, with only minor changes in protein levels.

**BCS:**

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