

## 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 18/11/2024

### Farm Details:

Area Available	17.43	Ha
Current SR (MP)	3.27	LU/ha
Farm Cover	678	kg DM/ha
Cover/LU	0	Kg DM/day
Growth Rate	16	kg DM/ha/day
Demand	0	kg DM/ha/day
Average Conc.	4	kg/day
Average DIM	267	days
Grass DM	16	%

### Cow Details:

YIELD	12.8	kg/cow/day
Fat	5.08	%
Protein	3.98	%
MS	1.14	kg
SCC	76.96	Cells/ml milk

### Grazing plan:

The AFC is 678 kg DM/ha (range 256–1197 kg DM/ha), with a growth rate of 16 kg DM/ha/day. Average soil temperatures across the milking platform are 8°C. The herd is currently on a diet of 15 kg DM silage and 4 kg DM concentrates. The silage DM is currently 44%. The herd has been fully housed since Sunday 10<sup>th</sup> of November.

### Comments:

Drying will begin on November 25th and will conclude on December 23rd, continuing Lyons' practice of Selective Dry Cow Therapy. For the cows due to calve next year, 59% will receive teat sealer only, while 41% will receive antibiotic treatment and sealer. For 2nd lactation or older cows, ADCT is given if they had mastitis, are 3 spinners, had an SCC incident above 200,000 cells/ml, or an average above 100,000 cells/ml. For first lactation cows, ADCT is given if they had mastitis, are 3 spinners, had an SCC incident

above 100,000 cells/ml, or an average above 50,000 cells/ml. This schedule allows time for shed cleaning ahead of calving in late January, ensuring a minimum 60-day dry period for each cow. This strategy is consistent with very acceptable SCC levels in the bulk tank for most of the year.