

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 21/10/2024

Farm Details:

| | | |
|-----------------|-------|--------------|
| Area Available | 17.43 | Ha |
| Current SR (MP) | 3.27 | LU/ha |
| Farm Cover | 639 | kg DM/ha |
| Cover/LU | 195 | Kg DM/day |
| Growth Rate | 10 | kg DM/ha/day |
| Demand | 13 | kg DM/ha/day |
| Average Conc. | 4 | kg/day |
| Average DIM | 237 | days |
| Grass DM | 16 | % |

Cow Details:

| | | |
|---------|-------|---------------|
| YIELD | 16.23 | kg/cow/day |
| Fat | 5.02 | % |
| Protein | 3.91 | % |
| MS | 1.46 | kg |
| SCC | 76 | Cells/ml milk |

Grazing plan:

The AFC is currently at 639kg DM/ha, with grass growth rates at 10 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 46% of the grazing platform is closed for the season. Average soil temperatures across the paddocks currently being grazed are 11.06°C.

Comments:

Compared to the same week in 2021, our best year for the herd's performance, this year's herd performance shows some significant changes. The yield per cow has decreased by approximately 18%, dropping from 19.4 kg to 16.23 kg per cow per day. Milk solids output has fallen by 16%, from 1.73 kg to 1.46 kg. Despite this, the fat content has improved, rising to 5.04%, from 4.76% in 2021. Meanwhile, the protein percentage has experienced a slight reduction, decreasing to 3.91% from 4.14% in

2021. Although yield and milk solids are down, the herd continues to maintain a good milk fat content.

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.