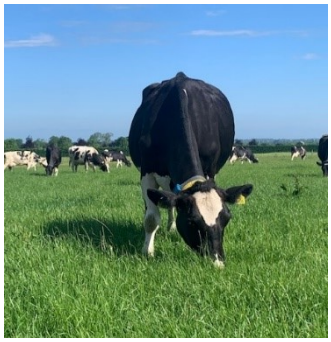
Background: It is widely recognised that grass-based systems offer a competitive advantage and will predominate in Ireland. However, grazing systems that have been developed to utilise large quantities of grazed grass have in the main been based on low-output per cow. In this scenario, high levels of profitability are possible through avid cost control and comparatively high stocking rates for grazing systems. There are now reasons to consider the development of grazing systems that are based on high-output per cow. These reasons include (i) concerns about increasing dairy cow numbers and environmental emissions, (ii) facilitating farm expansion post EU-milk quota removal for land limited and fragmented farms, (iii) lack of available skilled labour on farms to deal with expanding animal numbers. The rationale for this research is that a high output grass-based spring milk production system can be profitable when built on a foundation of good grassland management and meeting both milk and fertility targets and has a place in a sustainable Irish dairy industry.
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 04/07/2022



Farm Details:
Area available: 15.45 ha
Current Stocking Rate (MP): 3.69
Farm Cover: 639 kg DM/ha
Cover LU/ha: 173
Growth Rate: 55 kg DM/ha/day
Demand: 63kg DM/ha/day
Average Concentrate Supplement: 3.5 kg/day
Average DIM: 132 days

Current Daily Feed Budget: All cows are being fed 3.5 kg of a 14% crude protein concentrate in the parlour which is formulated with native ingredients. Cows are also allocated 17kg of grass DM and grass DM is 24%

Grazing Plan: The current AFC is 639 kg DM/ha (range 30 to 1400kg DM/ha). Average daily growth rate is 55 kg DM/ha this week. From the 27th June to 3rd July, the average soil temperature at 100mm was 16.7 ºC and 20.7 mm of rain fell (rain data from the nearby Met Eireann station, Casement Aerodrome). Demand for grass is currently at 63 kg DM/ha.

Milk Production: Average production from 27th June to 3rd July was 24.13 kg/cow at 4.37 % fat, 3.46 % protein (1.89kg MS) and SCC was 39,000. Milk production from this time last year was 26.8 kg/cow at 4.29% fat, 3.62% protein (2.12 kg MS) and SCC was 43,000.

BCS: 56 cows were body condition scored on the 28th of June. 5/56 scored 2.5 (9%), while 1 scored 3.5. (1.79%) All other cows scored between 2.75 and 3.25 (89%).

Breeding season 2022: On 3rd May, the breeding season began. A decision has been made to stop breeding after 10 weeks.

For the first 6 weeks of the breeding season, all cows were inseminated with dairy bulls. From the seventh week to the end of the breeding season (11th July, end of week ten), any repeat serves are being inseminated with beef bulls. The beef bulls being used are AA4235 (Gabriel Mossy), AU5506 (Whitestown Leyland), and LM2014 (Ewdenvale Ivor).

The weighted Dairy Beef Index (DBI) averages (May 2021 evaluation) of the beef bulls are:

DBI €	Calving €	Beef €	Gestation Length PTA	Carcass Weight PTA
109	7.3	101	1.05	17.43

In the ninth week of the breeding season, there were no repeat serves. At the 30-day scan on 21st June, 40/41 eligible cows were scanned pregnant (98%).