

Lyons Systems Research Herd Notes

Background: The main aim of the **Systems Research Herd** at UCD Lyons Farm is to evaluate the feasibility (including profitability) of a higher input/output grazing system within a limited land holding scenario. The focus is on maximising milk solids output from the existing land holding which involves high output from individual cows and high stocking rates on the MP. This will occur most efficiently through maximising the use of grazed grass/home grown forage in the system and the strategic use of supplementation thereafter. Such a system might facilitate the successful expansion of the farm business without the need to buy or rent extra land, to buy stock, to acquire extra labour or to provide extra cow facilities. For the study purpose, stocking rate and concentrate inputs are fixed. For more details on the Systems Research Herd visit http://www.ucd.ie/agfood/welcomemessage/systemsresearchherd/.

Lyons Systems Research Herd Notes Week 26-06-17

Farm Details:

Area available: 17.65 Current Stocking Rate (MP): 3.4 Farm Cover: 580 kg DM/ha (170 kg DM/cow) Growth Rate: 69 kg DM/ha/day Demand: 61.2 kg DM/ha/day Supplement: Concentrate 4.3 kg/cow/day Average DIM: 125 (range 63-157)



Grass Supply:

AFC on 19th June was 580 kg DM/ha (range 50 to 1300 kg DM/ha). We are continuing to graze our 6th rotation on the MP, aiming to go into covers of 1300-1400 Kg DM/ha.

The Abergain/Abermagic grass seeds are establishing well and beginning to tiller, and will be sprayed with a post emergent spray next week.

Feed Budget

40 cows are now being fed 3.5 kg of concentrate with the remainder (20) on 6 kg. Grass allowance has been increased to 18 kg DM per day to try and challenge the cows to eat as much grass DM as possible. Average residual last week was 132 kg DM/ha. Grass DMI last week was 16.7 kg, at an average of 16.7% DM.

Fertiliser:

185kg/ha (151 units/acre) of Nitrogen has been spread on the MP to date.

Milk Production:

Average production is currently 29.4 kg/cow for the week 19th to 25th June, at 4.20% fat and 3.52% protein (2.3 kg MS). SCC is 84,000. Fat, protein and SCC figures are based on milk recording results from the 21st June. 3% of the herd had a milk fat recording <3.3%.

BCS:

The average BCS on 27th June was 3.0, with a range of 2.5 to 3.5. 92% of the herd was in the range 2.75 to 3.25.

Breeding Season 2017:

Breeding started on April 24th and will continue for 12 weeks, until the 16th July. We will continue using AI for the full 12 weeks, using only the bulls which have given the highest conception rates to date for the final three weeks of breeding. At the end of the 9th week of breeding, 98% of eligible cows have been served. Submission rate in the first three weeks was 92%, with 50% of these cows now scanned in calf.