Spring Grassland Management

Joint Development Programme

Edition 2

Spring Management Series 2024

Farmer Focus

Dermot Heaney
Kilberry, Co. Meath

Farm Profile

Start Date of Calving: 30th January

% of herd calved: 72%

Opening Farm Cover: 916 kg DM/ha (30th January)

Platform Stocking Rate: 2.6 cows/Ha

With 72% of the herd calved, and cow intakes increasing week on week, Dermot has found himself ahead of their spring rotation planner. With a farm cover of 694kg DM/ha recorded on the 2nd of March, the grass budget indicates that silage is going to need to be fed in order to ensure sufficient grass on 11th of April to start the second rotation.

"While we achieved our target of grazing 30% by the end of the first week in March, we were shocked to see grass supply on the farm had decreased to 694Kg/Dm/Ha. We will have to feed some silage in order to reduce the demand on the platform over the next few weeks, thankfully we have excellent quality bales taken as surplus of the milking platform last year, along with red clover silage that tested in at 78% DMD, and 17% crude protein."

Week	Target HA Grazed/Day	Target HA Grazed By Weekend	Actual HA Grazed By Weekend	Target %	Actual %
26/01/2024-01/02/2024	0.46	3.23		4	
02/02/2024-08/02/2024	0.50	6.73	2.90	9	**3**
09/02/2024-15/02/2024	0.55	10.57	6.31	14	**8**
16/02/2024-22/02/2024	0.61	14.82	13.12	20	**17**
23/02/2024-29/02/2024	0.68	19.57	25.90	26	**34**
01/03/2024-07/03/2024	0.77	24.96		33	
08/03/2024-14/03/2024	0.89	31.19		41	
15/03/2024-21/03/2024	1.05	38.55		51	
22/03/2024-28/03/2024	1.29	47.58		63	
29/03/2024-04/04/2024	1.66	59.21		78	
05/04/2024-11/04/2024	2.34	75.56		100	

Farmer Focus (Continued)

"We spread 23units per acre of Protected Urea on the milking platform in Mid-February, we hope that this will kick on growth rates from now on. While we are ahead of our SRP, we are happy as we will utilise wetter periods of weather to house the cows, and get back on target."

Milk Recording for SCC success

The first milk recording of the season is booked for 25th March. Bulk tank SCC have been between 80,000 – 150,000. "Once the milk recording results are returned, I will identify any high SCC cows, and distinguish which quarter is high and treat accordingly, in order to reduce the SCC to below 100,000.

"We were late in booking our first milk recording as ideally we would like it completed within 6 weeks of the first cow calving, and this would allow accurate reports to be generated for us to assess how successful the dry cow therapy/period was".

Time to graze

With unfavourable grazing conditions throughout February and early March, many farms have yet to start grazing or are now behind their targeted percentage grazed within their **S**pring **R**otation **P**lanner (SRP). With this period of unsettled weather, all efforts must be made to sustain a level grass in the diet, and to achieve 30% of the platform grazed by March 12th (or 7-10 days later on heavier soils).

Grazing Success

For the few farms that are on target with their SRP, continue to follow the SRP and the spring grass budget on Pasturebase. Keep your area grazed up to date, and complete two grass walks before early April, to monitor both grass growth and grass availability.

Following a series of spring grazing management workshops held across the Lakeland Dairies catchment, it was evident the grazing season has commenced on some farms. Attendees had varying levels of the platform grazed and were encouraged to complete a spring rotation planner.

Cleaning up for quality in 2024

Farms that fail to reach their target of 30% grazed by the 12th of March (or 7-10 days later on heavier soils), must ensure corrective action is taken to increase the % area grazed, while still ensuring high levels of grass utilisation. In order to reach your farms next target on its SRP of 60% grazed by the end of March (or 7-10 days later on heavier soils).

- Displace some silage from the diet with grazed grass, during difficult weather conditions on/off grazing, spur roads, and back fencing can aid in keeping grass as the majority of the diet. Ensuring cows graze twice daily, can therefore afford a reduction in the silage fed.
- Target lighter covers of 900-1100Kg DM/Ha, with intakes increasing every week post calving, more area can be grazed while meeting residual targets.

Monitoring Grass Supply

While getting your targeted area grazed off is key, monitoring the grass supply on the farm is key to managing the start of the second rotation. It is important to monitor the grass supply on your first 3 or 4 paddocks grazed and ensure there is between 400-500 Kg DM/Ha regrowth's on these paddocks today, in order to have sufficient grass on the farm to start the second rotation in early to mid – April. It is important to react to grass supply immediately on farms, as to ensure cows are grazing full-time, gaining BCS, and resumed cyclicity ahead of the start of the second rotation.

What are the options to reduce grass demand at herd level?

1. Feed the whole herd some silage everyday but continue grazing twice daily.
2. Feed silage to the herd during unfavourable grazing conditions. E.g. house cows 2 to 3 wet nights during the week.
3. Where feed space is limiting, but ground conditions remain favourable, house and feed silage to 3 rows of cows per milking. These housed cows can be alternated at each milking. E.g. milk the housed cows first and house the last 3 rows of cows per milking.

Planning for Silage Excellence

Excellent quality (75% DMD+) silage is required to feed the milking cow in the shoulders of the grazing season, while good quality dry cow silage is required to increase BCS over the dry period.

Preparation for quality silage begins now;

Step 1: Getting silage ground either on the milking platform or out blocks grazed off by the 20th March.

Step 2: Get Cattle slurry spread via dribble bar or trailing shoe on the silage ground at a rate of 2500 - 3,000gallons/ac. Providing approximately 27:15:90 units of N:P:K respectively to the silage crop.

Step 3: Follow the fertiliser advice in the table below to provide adequate nutrient to the silage crop. Use protected Urea as a Nitrogen source, and have Nitrogen fertiliser applied to the crop by the 8th of April.

Table 2. N, P & K requirements for 1st cut grass silage (5 t/ha DM) & suggested fertiliser programmes

Soil Index	N kg/ha (units/ac)	P kg/ha (units/ac)	K kg/ha (units/ac)	Suggested fertiliser options at silage closing time [3, 4]	
				No slurry[1] (0 gal/ac)	+ Cattle slurry 33m³/ha[5] (@ 3,000 gal/ac)
1[1]	100 *(80)*	40 *(32)*	175 *(140)*	432 kg/ha (3.5 bgs/ac) 13-6-20 115 kg/ha (0.9 bgs/ac) ProUrea+S	175 kg/ha (1.4 bgs/ac) ProUrea+S
2[1]	100 *(80)*	30 *(24)*	155 *(120)*	432 kg/ha (3.5 bgs/ac) 13-6-20 115 kg/ha (0.9 bgs/ac) ProUrea+S	175 kg/ha (1.4 bgs/ac) ProUrea+S
3	100 *(80)*	20 *(16)*	125 *(100)*	371 kg/ha (3.0 bgs/ac) 13-6-20 136 kg/ha (1.6 bags/ac) ProUrea+S	175 kg/ha (1.4 bgs/ac) ProUrea+S
4[2]	100 *(80)*	0	0	265 kg/ha (2.1 bgs/ac) ProUrea+S	No slurry P & K needed at Index 4 265 kg/ha (2.1 bgs/ac) ProUrea+S

1 Index 1, 2 & 3 soils apply P & K balance to build / maintain soil P & K levels to after grass for example apply as 18-6-12 / 0-7-30 / Cattle slurry / etc. **2** Index 4 soils omit P for 2/3 years & retest, Index 4 K omit for 1 year and revert to index 3 advice thereafter until next soil test. Don't apply cattle on Index 4 soils. **3** For re-seeded / older swards with higher / lower yield potential increase/reduce N, P, K by 25 kg N, 4 kg P & 25 kg K per tonne of grass (DM) increase or decrease in target yield. **4** ProUrea + S = Protected Urea (Urea 38% N + 7.5% S + NBPT or 2-NPT or NPPT). **5** Cattle slurry (6.3% DM) assumed to be applied by low emission techniques (LESS) – Slurry N-P-K equivalent to a 50 kg bag of 9-5-32 fertiliser

Always adhere to the recommendations set out by the nitrates directive, in relation to fertiliser applications.

P & K Build Up

Apply additional P & K (soil build up rates) after 1st cut silage or in late summer.

Don't Forget Sulphur (S)

A silage crop requires 20Kg S/Ha per cut. This application will improve grass DM yields and quality, as it increases N efficiency.

Max Potassium (K) Application

Spreading over 90Kg/Ha K can reduce fertilized K efficiency. Where more than 90Kg/Ha is advised; only 90Kg should be applied in the spring, and the remainder after silage is cut or in late autumn.

Step 4: Cutting date, by following these steps, the planned cutting date for this silage crop should be the 15th - 20th of May. Silage should be cut and wilted for no longer then 12-24hrs, which will result in 75% DMD silage weather permitting.

When walking silage crops, see diagram below illustrating the different growth stages of the plant and resulting silage quality from cutting at each of these stages.

Value of Slurry

To make best use of this valuable fertiliser, it's important to have an understanding of the nutrient content of the slurry on your farm. This can be done with the use of a slurry hydrometer (pictured) to determine the dry matter percentage and subsequently using the table below estimate the nutrient content of the slurry.

	Units/1,000 gals			Kg/1,000 gals		
Dry Matter (DM) %	**N**	**P**	**K**	**N**	**P**	**K**
3	5	3	17	2.4	1.3	8.6
4	6	3	21	2.9	1.7	10.4
5	7	4	25	3.6	2.0	12.3
6	9	5	29	4.4	2.4	14.5
7	10	6	33	4.9	2.8	16.3
8	11	6	36	5.6	3.1	18.2
9	12	7	40	6.2	3.5	20
10	14	8	45	6.9	3.8	22.2

Figures are calculated on 40% of available N from cattle slurry. P & K is calculated at 100% availability. However, for slurry applied to index 1 & 2 soils the availability of P is at 50%, therefore the value of P is taken as half the value reported.

Lakeland DAIRIES teagasc

Joint Development Programme

Lakeland Dairies/Teagasc Joint Development Programme has produced this Spring Management Series. Our advisors are currently available by phone to discuss all farm related matters.

- Susan Casey 087 099 5359
- Owen McPartland 087 330 2254
- Michael Monahan 087 188 3803