Spring Grassland Management

Edition 3

Spring Management Series 2023

Joint Development Programme

Farmer Focus

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Farm Profile

Start Date of Calving: 1st February

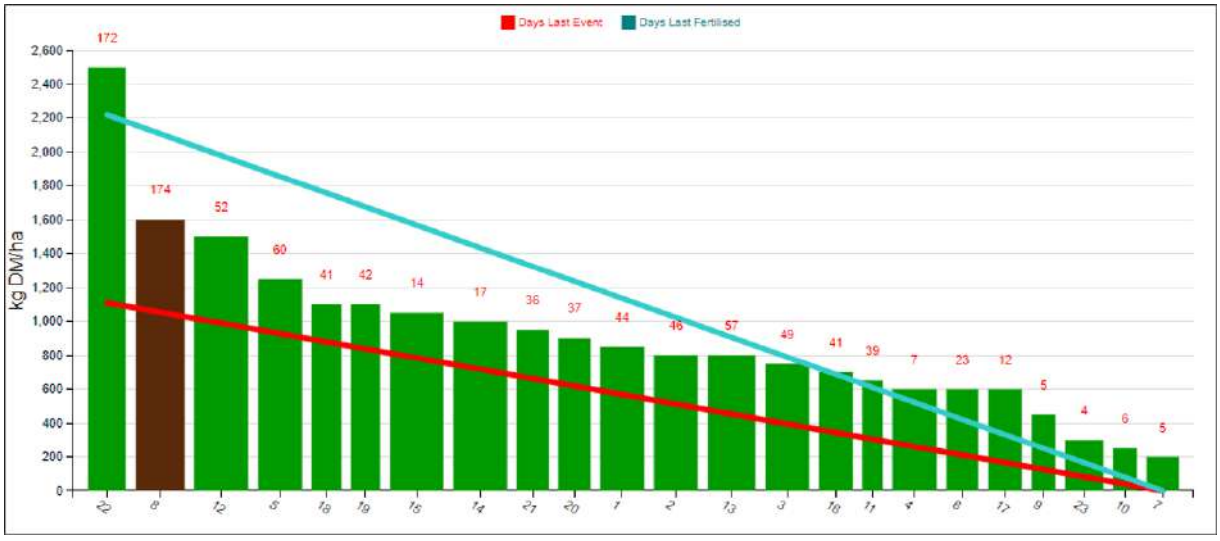
% of herd calved: 96%

Farm Cover: 940 kg DM/ha

Platform Stocking Rate: 3.22 cows/Ha

With 4% of the herd remaining to calve in April, herd demand is increasing steadily as the herd's average days in milk increase. "The farm is set up nicely for the second rotation with 1,100-1,500kg DM/ha on the first 3 paddocks grazed". The herd is grazing full-time, after being housed at night due to poor weather conditions last week.

"The SRP and grass budget on pasturebase has guided me through the spring - keeping the farm on track with area grazed, while also setting out a target for average farm cover each week when completing my grass measurement. Both these tools have combined to ensure the 2022 grazing season has kicked off successfully, and the farm is set up for the second rotation."



Farmer Focus (Continued)

Week	Target HA Grazed/Day	Target HA Grazed By Weekend	Actual HA Grazed By Weekend	Target %	Actual %
03/02/2023-09/02/2023	0.34	2.36		5	
10/02/2023-16/02/2023	0.37	4.94	4.62	10	**9**
17/02/2023-23/02/2023	0.41	7.79	9.55	16	**19**
24/02/2023-02/03/2023	0.45	10.97	18.64	23	**38**
03/03/2023-09/03/2023	0.51	14.57	22.89	30	**47**
10/03/2023-16/03/2023	0.59	18.72	22.89	39	**47**
17/03/2023-23/03/2023	0.70	23.62	24.51	49	**51**
24/03/2023-30/03/2023	0.85	29.59	29.91	62	**62**
31/03/2023-06/04/2023	1.09	37.23	38.69	78	**80**
07/04/2023-13/04/2023	1.52	47.81	45.4	100	**95**

Herd performance has continued to increase steadily over the past number of weeks to 2.0kg Ms/cow/day currently. Protein has decreased to 3.34% in the latest test, and this is being attributed to grazing some of the heavier covers on the farm of up to 2,500kg DM/ha.

Preparing for Silage Success

"With Excellent condition in February and early March the silage areas were grazed off by the replacements heifer. This left an excellent base to establish our silage crop on. When grazed we first spread 2,500 gallons of slurry which was tested and returned a result of 14:6:51 (N:P:K). Following this in late March we spread 65 units of Protected Urea. Reviewing our fertiliser programme after the slurry analysis was returned, we underestimated the nutrient content of your slurry, and would have reduce the chemical fertiliser if the result were returned before the time of spreading".

Spring Review

"Spring 2023 has been successful. Although grazing conditions were tough we were grazing from early February. I stuck to the spring rotation planner and my grass budget and they have guided my decisions throughout the spring."

Targets for the future;

- Maintain herd fertility performance – "There is more performance to be got from the herd and the farm by maintaining my calving pattern while the average lactations of the herd increase."
- Continue to establish grass/clover swards – "Over the past two years we have over-sown and reseeded paddocks with clover and the results have been promising, and I aim to continue this practice."
- Silage quality – The majority of our silage areas have been reseeded in the past two years, and we hope to improve silage quality on the farm further targeting 75% DMD+, in all cuts.

Second Rotation Insight

With grazing conditions deteriorating throughout March and early April, huge efforts must be made to set the farm up for the beginning of the second rotation. On farms that have already began the second rotation, all efforts must be made to ensure that pre-grazing yields (PGY) remain at 1400 kg dm/ha and ensure that the rotation length is matched to growth rates on farms.

Where a shortage of grass in the feed budget has manifested due to insufficient grass regrowths on the first paddocks grazed, grass demand must be reduced for a short period until grass covers allow for the finishing of the first, and start of the second, rotation.

When to start the second rotation?

Grass supply on the first paddocks grazed in early to mid-February will dictate the starting date of the second rotation on most farms. With grass covers reaching 1200-1400kg DM/Ha on the first 2-3 paddocks grazed, it's time to begin the second rotation. The start of the second rotation will coincide with magic day on the majority of farms which occurs between the 5-20th of April, depending on several factors listed below. While the second rotation will commence when the first paddock grazed has a grass cover of 1300kg DM/Ha, this doesn't signify the end of the first rotation, as a blended grazing approach may be required. A mixture of first and second rotation paddocks may be grazed together for some time to allow other second rotation paddocks to become available for grazing at the correct grass covers.

Soil Fertility

When setting out the fertiliser plan for the year ahead, it's important to ensure maintenance requirements are met. Additional P&K fertilisers should be targeted at index 1 and index 2 soils, as this is where the most significant growth response will be achieved. Where soils have returned an index 4 status for P&K, Potassium (K) should be omitted for 1 year, Phosphorous (P) should be omitted for 2 years and retested annually to manage the decline of the soil fertility to an optimal index 3 soil.

Options to reduce grass demand at herd level?

1. Feed the whole herd some silage every day but continue grazing twice daily.
2. Feed silage to the herd during unfavourable grazing condition .e.g. house cows 2 to 3 wet nights during the week.
3. Where feed space is limiting, house and feed silage to 3 rows of cows per milking. These housed cows can be alternated at each milking.

What is Magic Day?

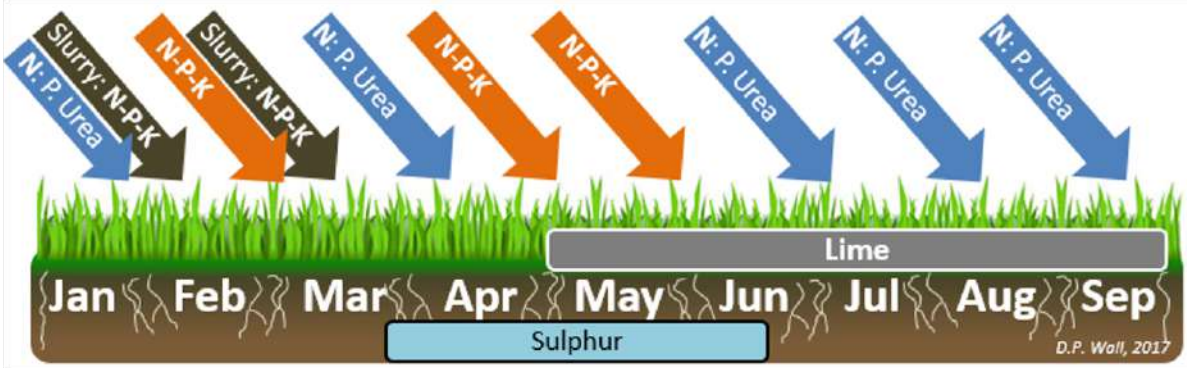
Magic Day is where grass growth surpasses grass demand per hectare on the farm.

What influences Magic Day on farm?

1. Milking Platform Stocking Rates.
2. Concentrate supplementation level.
3. Location.
4. Land type (Free draining or heavy soils).

Reseeding Practice

Older grass swards have a reduced capacity to grow large volumes of grass and experience slower growth in the shoulders of the grazing season. Where soil fertility is optimum and reduced grass growth rates persist, reseeding will allow the sward to fully utilise the enhanced soil fertility.



When building soil fertility, it's important to target soil pH first by applying lime to soils. Lime can be applied any time of the year from April onwards. When building P indexes in soils, target to apply build-up rates of P fertiliser in April – July. For K build up, fertilisers should be targeted from August onwards. Always adhere to the recommendations set out by the nitrates directive in relation to fertiliser applications.

Lime is the cheapest form of fertiliser

Correcting soil pH with the application of ground limestone can generate up to a 300% return on investment.

Winter fodder budget

Silage stocks for next winter on dairy farms will be significantly impacted by what happens on farm over the course of the next few weeks. A rolling reserve of one month's silage per cow (equivalent of two bales) remains a core principle of managing risk on farm. With this in mind, adequate planning to secure enough winter feed is more important than ever.

When completing any silage budget it's important to examine previous winters along with planning for the current year. Records of how much silage you had left over this spring and answering the key questions below are critical for budgeting accuracy for winter 2023.

- Will there be more stock on-farm compared to last year?
- Will you end up cutting less area than last year?
- What is your fertiliser strategy for silage crops this year?

Once these key questions are answered you can carry out a simple budget for your own farm.

Where silage deficits exist on farm, action must be taken now to ensure adequate feed supply for the coming winter. Don't assume silage will be available to purchase later in the year. Selling poor performers, high SCC, lame or late calving cows has the potential to reduce any deficit or increase the reserve on farm.

Ensuring all replacements calve at 22-26 mths will not only reduce costs, but will increase silage reserves. Bringing the Lakeland Average percentage of heifers calved at 22-26 mths from 60% to 100% will result in a silage saving of 78 ton (fresh weight) per 100 cows.

Please contact your local joint programme advisor if you need assistance in putting a fodder plan in place for your farm.

Correctly fertilised 1st cut crop should yield 10 ton per acre and a 2nd cut crop 7 ton per acre.

Ensuring winter forage supplies

Culling poor performing or problem cows now will result in an additional 25 ton (fresh weight) of silage in the yard per cow culled.

This is halved to 12.5 ton of a saving if these cows remain on farm until next September.

Fodder deficit = Milk record / review health records and cull the problem and lowest preforming cows.

Section 1. What Fodder is required on the Farm?

	A	B	C	
Animal Type	No. of Stock to be kept over Winter	Number of Months (Include a 4-6 week *reserve)*	Pit Silage Needed, tonnes / animal / month	Total Tonnes of Silage Needed Multiply (AxBxC)
Dairy cows			1.6	
0-1 year old			0.7	
1-2 year old			1.3	
2+ year old			1.3	
Total tonnes needed			D	
Total bales needed (tonnes multiplied by 1.25)			E	

Section 2. Calculate silage to be cut

i. Silage in the pit	Length x breadth x settled height) metres ÷1.35 =		Silage in the pit (t) F
ii. Pit silage to be cut	G	H	
	Area (acres)	Yield t/acre	Total yield (t) (GxH*)
1st cut			
2nd cut			
3rd cut			
	Total yield pit silage to be cut		I
iii. Bales	J	K	
	Number of bales	Yield / bale	Total yield (t) (JxK)
Surplus bales		0.8 t / bale	
	Total yield baled silage		L

Section 3. Calculate the surplus / deficit

Total silage demand (D) minus total silage produced (F, I, L) = D-F-I-L	
% deficit= (deficit in tonnes ÷ total demand in tonnes) x 100	

Lakeland DAIRIES

teagasc Agriculture and Food Development Authority

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