

DAIRY

May 2024

May top tips



Milk earlier in the afternoon to create a more structured working day.

1. Dairy farmers have had a tough time lately, with seemingly endless challenges coming from inside and outside the farm gate. The mood at discussion groups reflects this. Take some pressure off when you can – a day away from your routine can make a big difference.
2. Examine the issues now to plan for the next bad spring. List the main problems and make a list of priorities. Grazing infrastructure and silage reserves should be sorted first.
3. Milk earlier in the afternoon for a structured working day. Productivity increases with a defined day. A 16:8 milking interval has no effect on yield or somatic cell count (SCC).

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**EVERY
1%
REDUCTION
IN GRASS
DIGESTIBILITY**

*will reduce milk
solids yield
by 1-2%.*

4. The Dairy Beef Index (DBI) gives an opportunity to breed better beef calves for next spring, with low calving difficulty. Do not breed dairy genetics to your lowest performing cows. Instead use a high-DBI beef AI straw.
5. Milk record to identify low performers and persistently high-SCC cows. Don't keep cows that can't generate break-even milk value. Cull these ASAP, especially if you have to buy silage. Culling four to five chronic high-SCC cows could save nearly 100 tonnes of silage for the year.



Culling high-SCC cows will reduce your silage requirements.

Keep up momentum on submission rate

In addition to conception rate, a high submission rate (the proportion of cows bred in a period) is also vital to drive a six-week calving rate (Table 1).

The aim is to submit 90% of eligible cows within three weeks and to have all eligible cows intended for breeding submitted by six weeks after mating start date. For a cow to be eligible, they must be calved in time. Reduce the number of potential late calvers for next year by doing the following:

1. Define your breeding season (12 weeks).
2. Milk late calvers once a day until bred to reduce the recovery time post calving.
3. Treat non-cycling cows calved >42 days to ensure 100% submission as early as possible in the breeding season.
4. Continue to AI until the number of non-bred cows are in line with your bull power.
5. Use short gestation bulls with good beef traits in the final three weeks of breeding.

Table 1: Combined effect of submission rate and conception rate on six-week in-calf rate (cows).

		Conception rate (%)			
		60	50	40	30
Submission rate (%)	90	79	70	59	47
	80	73	64	54	42
	70	66	58	48	38
	60	59	51	42	33

Grazing targets in May

May is often when grass growth reaches its yearly peak, so supply can change fast. How you respond to grass growth is the key:

- during a 20-day rotation in May 1,300-1,400kg/ha of grass will be grown;
- one of the main reasons for cows falling too quickly off peak in summer is poor grass quality;
- every 1% reduction in grass digestibility will reduce milk solids yield by 1-2% – grazing heavy covers will reduce milk solids by 15-20kg per cow in mid season;

- keeping the sward green from top to bottom is important for grass quality and regrowth – the grass plant is right for grazing when it is at the 2-3 leaf stage, so if grass starts growing the ‘fourth’ leaf, the rotation is getting too long; and,
- average farm cover should be at 160-180kg DM/cow in May. This is equivalent to an average farm cover of around 600-700kg DM/ha. Paddocks should be removed as silage if they are too strong or where the rotation is too long.

Silage 2024 – quality and quantity needed

Recent weather reinforces the need to have quality silage reserves. Do not delay first-cut silage in order to bulk up the crop and replenish diminished silage stock. Delaying is likely to have a negative effect on silage quality, as well as reducing the total yield for the year. Delaying the first cut beyond late May is likely to result in lower total dry matter yield between the first and second cuts. Silage crops will lose one unit of DMD for every two days cutting is delayed after heading out (Figure 1). Harvest the crop at the right time to reset the grass plant and get it back producing digestible material.

Use the options available

A concern this year will be allowing enough time for late applications of fertiliser N to be used up by the grass plant. The rule of thumb is that two units of N will be used on average

every day; however, the only way to be sure of the N levels in the crop is to have a sample tested. Where adequate sugars are available, grass can be successfully ensiled with nitrate levels in excess of 600ppm. Discuss test results with your advisor and use options such as wilting the crop or using additives if needed.

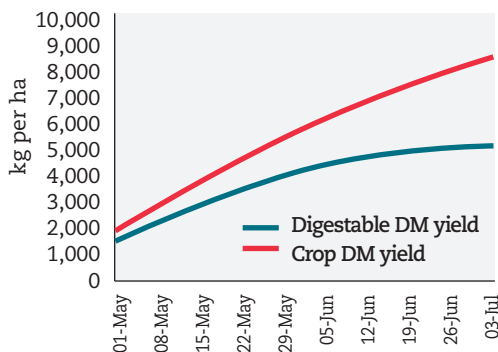


FIGURE 1: Digestible yield is limited by changes to grass quality post heading.

Nitrogen fertiliser for grass and clover swards

In the summer, when sward clover content is sufficient ($\geq 20\%$), nitrogen (N) fertiliser application can be reduced. Suggested N application strategies for grass-clover swards with a range of sward white clover content are outlined in **Table 2**.



Nitrogen fertiliser applications can be reduced in summer.

Table 2: Nitrogen fertiliser application strategy for a dairy farm on a range of sward clover contents assessed in April.

April average sward clover content ¹	Feb	March	Apr	May (two rotations)	June (two rotations)	July (two rotations)	Aug	Sept	Total
kg N/ha									
Grass sward	24	36	20	32	28	28	21	23	212
5% ²	20	35	20	20	20	20	20	20	175
10% ³	20	35	20	15	15	10	15	20	150
15% ⁴	20	35	20	15	10	SW ⁶	10	20	130
20% ⁵	20	35	20	15	SW	SW	SW	15	105

1. April average sward clover content (%) – clover content determined in April. 2. 5% clover content in April = 10% average annual sward clover content. 3. 10% clover content in April = 20% average annual sward clover content. 4. 15% clover content in April = 25% average annual sward clover content. 5. 20% clover content in April = 30% average annual sward clover content. 6. SW – soiled water – soiled water should be applied when chemical N fertiliser is not spread.