Silage Campaign 2025

Lakeland Dairies

Teagasc

Joint Development Programme

Edition 2

Delaying first cut reduces silage quality and results in less grass grown annually, thus increasing the chances of a fodder deficit on farm.

Consider your cutting date to increase overall grass production

When planning fertiliser for the silage ground consider your cutting date. Many focus on bulk rather than quality as they fear they will not have enough silage if they don't get a bulky first cut. However, research has shown that delaying the first cut into mid-June increases the risk of fodder shortages because it leads to reduced yields from the second cut silage and subsequently total annual grass production.

Management decisions around first cut silage yield should be made on silage Dry Matter Digestibility (DMD) targets and improving annual grass tonnage per hectare, rather than focusing solely on the bulk of an individual cut. Table 1 outlines typical quality targets and corresponding expected DM yields for first-cut silage crops.

Differences in yield due to cutting date will generally be offset by heavier second-cut crops on swards cut earlier for first cut. In some circumstances (e.g. silage-only land blocks), earlier cutting will also facilitate a third cut in late August, further boosting total annual silage production. It is important to remember increased quality will also reduce the requirement for concentrate feeding and improve cow health, production and fertility.

	Dry Cows	Spring Milking Cows	Winter Milking Cows
DMD%	68-70	74+	76+
First cut date	Early June	Mid- Late May	Early - Mid May
First cut yield (t DM/ha)	5.5-6.0	5.0-5.5	5.0

Remember it is important to consult your advisor regarding your total annual chemical nitrogen and phosphorus allowances.

Remember 65-75% of silage on farm needs to be high quality 74DMD+ to meet herd demand including young stock.

A common reason for putting off cutting silage is concern about nitrogen (N). A useful guide for fertiliser N is that grass uses 2.5 kg N (2.0 units) per day on average, so final N should be applied approximately 50 days before planned cutting date.

What fertiliser do I need for the 1st cut?

The recommendation for first cut silage is 80 -100 units of total nitrogen (Old swards won't be as efficient so require less N), 16 units of Phosphorous and 100 units of Potassium plus Sulphur at 15 units per acre.

N - P - K advice (5 t DM/ha)	
Kg/ha	100-125N : 20P :125k +19S
Units/acre	80-100N :16P :100K +15S

The P (Phosphorus) and K (Potassium) requirement can be made up from 3,000 gallons of slurry per acre and then topped up with 1.9 bags protected urea (38% N + 7%Sulphur) per acre to meet your nitrogen requirement (other fertiliser combinations can be used).

If not applying slurry look at 3.5 bags of 13-6-20 per acre and 1.6 bags protected Urea (38% N +7% sulphur) per acre (other fertiliser combinations can be used).

Sulphur is closely associated with nitrogen uptake and efficiency. As the rate of nitrogen fertiliser applied increases, the response to sulphur fertiliser also increases, therefore we must pay particular attention to sulphur requirements on heavily stocked farms and when fertilising silage crops.

Apply additional P and K (soil build-up rates) to index 1 and 2 soils after 1st cut silage or in late summer. For example, 16% P or 50% K or 0-7-30 are very suitable fertilisers for building soil P and K levels to the target index 3. Slurry / FYM can replace fertiliser where available. Potassium (K) is as important as nitrogen in producing silage, it is the K that produces the bulk, therefore you need soil test silage ground regularly and if you need to build potassium, do so after your first cut silage or later in the year.

Lakeland Dairies/Teagasc Joint Development Programme.
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