

BETTERfarm Beef Programme

BUSINESS, ENVIRONMENT, TECHNOLOGY through TRAINING EXTENSION RESEARCH

Rain making silage harvesting difficult



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The unsettled weather is playing havoc with silage harvesting on the programme farms, although the majority of farms are not due to cut for another week. Taking the chance to mow

silage and leave to wilt for up to 24 hours is proving to be difficult. Regular rain showers have limited the opportunity for wilting silage which will have an impact on silage quality and preservation.

Analysis

Last year's silage analysis showed that silage that was wilted for 24 hours tended to have the highest feed value when compared to mowing and harvesting 12 hours later, or where grass did not get wilted at all.

Increasing dry matter to around 27% to 30% makes it easier to ensile silage in a clamp pit. It also helps to preserve feed value as there is little effluent lost from the crop.

More importantly, getting silage up to the target dry matter will increase energy intake in the animals that will be fed over the winter. This makes it easier to increase body condition and keep finishing or growing cattle performing at a high level.

Wet silage at 20% to 23% dry matter will reduce cattle intake as there may be a

palatability issue. If cows or growing cattle are not eating to their potential, then their performance will suffer if the energy gap is not bridged with concentrate feeding.

Having a wetter silage makes silage expensive when priced in relation to meal.

Saving silage

While there is little that can be done about the weather, the programme farms are working as best as they can to get silage saved.

Those farmers with their

own machinery have a distinct advantage in being able to work between wet periods to lift silage.

Where possible, these farmers are trying to follow best practice by mowing in the afternoon when grass sugars are highest and getting some period for wilting grass before baling.

Paddocks that have become too strong for grazing are also being cut for silage at present. While some farmers opted to close and harvest with the main first cut area, some farmers have opted to stagger the cutting

date of surplus grass.

The main reason for this is to prevent all of the silage area coming ready for grazing at the one time.

Instead, with a staggered cutting approach, the paddocks will be coming back into the grazing rotation in a more manageable order.

Heavy rainfall in the western regions has led to some farms re-housing stock as ground has become extremely difficult to manage. Cows have been housed and where possible, light weanlings or calves remain at grass or else are on/off grazing.



ON THE GROUND PATRICK DROHAN

“Having dry land shortens the winter feeding period to four months on average”

Like winter or spring cereals, grass is a crop and yield will be influenced by management factors such as soil fertility and maintenance.

Grass varieties will also have an influence on growth rate, sward density and persistence. Reseeding an unproductive sward will increase grass growth over the grazing season. But if the sward is neglected or poorly managed, a young reseeded sward can fail within a few years of being sowed out.

Keeping grass productive relies on good grassland management. This is crucial if there are plans to increase stocking rate on farm to lift output per hectare. Patrick Drohan farms 46 adjusted hectares near Kilmacthomas, Co Waterford.

Over the past two years, he has increased his herd from 35 spring-calving cows to 50 cows calving between January and March. Cows are predominantly Simmental and Limousin cross and bred to stock bulls of the same breed.

Scrahan,
Kilmacthomas,
Co Waterford



Calves are taken through to sell as store cattle. Steers are sold at 16 to 18 months of age in July and August, at 500kg to 550kg liveweight.

Before joining the BETTER Farm programme, heifers were taken through to finish off grass, but are now sold privately at similar ages and averaged €1,200 this year. Patrick works closely with his local discussion group, facilitated by Teagasc adviser Paddy O'Brien and his programme adviser Peter Lawrence.

Increasing demand

Before joining the programme, Patrick's farm was

operated fairly extensively with a low stocking rate of 1.22LU/ha. Since then, stocking rate has increased to 1.71LU/ha, which places a greater demand on grass growth.

Assuming the original herd of 35 cows (from the time he joined the programme) had an average liveweight of 700kg, the farm would have been carrying 24,500kg.

If they all produced a calf annually and if the store cattle had been grazing through to August at a typical liveweight of 520kg and taking a liveweight of 200kg for the calf by midsummer, the farm would have been stocked at:

- ☛ 35 cows @ 750kg = 26,250kg
- ☛ 35 calves @ 250kg = 8,750kg
- ☛ 35 stores @ 520kg = 18,200kg
- ☛ Total liveweight = 53,200kg
- ☛ Liveweight per hectare = 1,156kg/ha.

Cattle will consume approximately 2% of their liveweight when grazing. Therefore, the grazing demand in 2012 when Patrick joined the programme would have been around 23kg DM/ha per day



This sward, which was reseeded in September 2013, has been grazed three times in 2014.

by midsummer, which would have been easily met, even with the poor growing conditions that year. Ground conditions would have been the limiting factor for grazing. This is based on all 46ha of land on the farm being available for grazing.

With the herd now consisting of 50 cows, grazing demand has increased. Patrick is planning to increase this to 60 cows calving down next year, provided he can alter housing to cope with the numbers.

At such a stocking rate, grazing demand over the full 46ha will be increased to 40kg DM/ha/day by midsummer

when demand is at its peak, based on:

- ☛ 60 cows @ 750kg = 45,000kg
- ☛ 60 calves @ 250kg = 15,000kg
- ☛ 60 stores @ 520kg = 31,200kg
- ☛ Total liveweight = 91,200kg
- ☛ Liveweight per hectare = 1,983kg.

The stocking rate has increased on Patrick's farm. In 2011, 295kg liveweight/ha was produced for sale, which rose to 454kg liveweight/ha in 2013. Output/LU also increased from 242 to 265 kg/LU, indicating that cattle weight gains are improving from a combination of better grassland management, tighter calving and calf qual-

ity. The fact that this extra output and weight gain is being achieved from grass is increasing farm profit.

Silage

While increasing fertilizer will have increased grass growth, the farm would have struggled to graze all cattle and produce sufficient winter forage for the herd. The grazing demand is based on having the full farm available for grazing.

Patrick does not close up a specific area for silage. Instead, he chooses to close fields that are getting too strong for grazing and cut for silage. When grass growth is

Table 1: Silage budget on Patrick Drohan's farm

Cattle type	Tonne per month	No months	No cattle	Tonne required
Suckler cows	1.4	4	50	280
Weanlings	0.6	3	48	86
Replacement heifers	0.9	4	7	25
Stock bull	1.25	4	2	2.5
Total silage required				393.5



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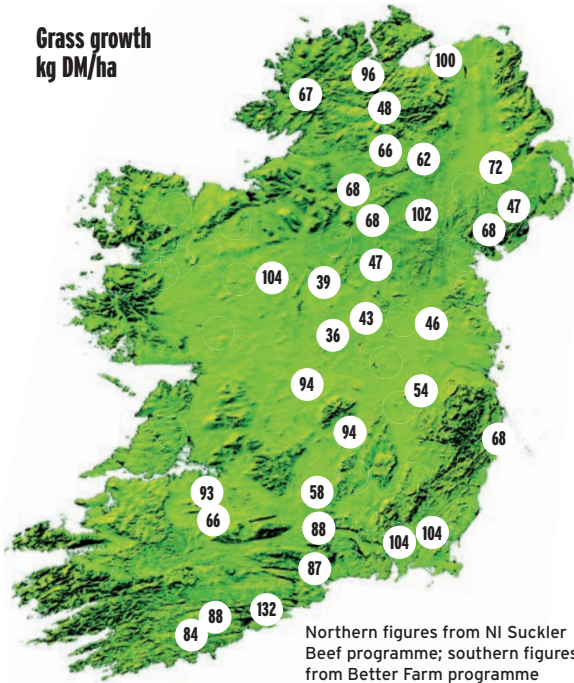
WEEK IN REVIEW

- ➔ Grass growth was on average 74kg DM/ha/day this week.
- ➔ Controlling grass is an issue on most farms at present.
- ➔ Wet weather in the west is continuing to make ground conditions difficult on some farms and cleaning out paddocks is a problem.
- ➔ Silage harvesting is being interrupted on farms that closed off ground early for cutting.
- ➔ Paddocks are being cut in a staggered approach so that they gradually return to the grazing rotation.
- ➔ Cows have been housed on some farms where paddocks are unsuitable for stock.

➔ If silage is normally ensiled in a clamp, it may be worth while making a small number of bales, eg 20 to 30. The bales can be used if cattle have to be housed at any point over the grazing season. If they are good quality, they can also be targeted to finishing cattle at housing or offered in an outdoor feeding area in late autumn when grass supplies are low.

TOP TIP

Grass growth kg DM/ha



Northern figures from NI Suckler Beef programme; southern figures from Better Farm programme



The same sward before reseeding.

exceeding demand as it currently is, he will stop fields to try to keep his grazing rotation under 21 days.

All silage is made as round bales and to maintain grass quality. Quality is more important than bulk for Patrick as it helps to reduce the amount of concentrates fed during winter. Bales made in 2013 ranged from 74 DMD to 78 DMD and 13% to 14.1% crude protein. Bales were mostly made between 20 May and 4 July 2013.

With such a high feed value in his silage, there was great weight gain in weanlings last winter.

Due to the dry nature of the farm, weanlings were housed by the start of December and given first cut silage and 2kg of meal until January to help them settle.

Meal was cut to 0.5kg/day in January and stores went to grass in late February. Steers gained 0.87kg/day from housing to 14 February and averaged 403kg liveweight. Heifers

gained 0.75kg/day over the same period and weighed 361kg liveweight. Steers are on track to reach 580kg to 600kg if sold in August.

Table 1 outlines the demand for silage this year based on standard feed values. Having dry land is an advantage as it shortens the winter feeding period to four months on average. Weanlings will continue to creep graze over November to clean out paddocks before closing. They will also be the first cattle to go out in February, weather permitting.

Taking a bale weight of 750kg, there is a requirement for 524 bales. Realistically, there will be fewer bales required as silage dry matter will be higher in bales and grass quality is likely to be similar to last year.

Dry cows can potentially be restricted to 30kg of silage from housing until mid-January, when calving starts. At this point, cows will get ad-lib silage until turnout. This can potentially reduce silage demand by cows by 50 to 60 tonnes, or by as much as 80 bales.

Table 2: Reseeding costs for 2013 on Patrick Drohan's farm

	€/acre
Spray (Barbarian)	€11.50
Ploughing	€40
Levelling (three runs)	€36
Drilling (one pass)	€40
Fertilizer (four bags 10-10-20 @ €470/t)	€94
Grass seed (18kg/acre)	€122
Lime (2.3t/acre)	€55
Post emergence spray (Pastor)	€26
Total	€424

Reseeding

Producing high-quality silage and meeting the increased grazing demand will depend on reseeding annually and managing these swards properly. Patrick reseeded 11 acres in 2012 and a further eight acres last year.

The reseed in 2013 was sprayed with Barbarian to kill off grass. Then it was ploughed, harrowed, levelled and grass seed was drilled in on 4 September. The sward was left untouched over winter. It was sprayed on 15 March for weeds and received 1.5 bags per acre of CAN on 12 March to boost growth once the weeds had been killed.

As soil fertility was low, four bags of 10-10-20 were applied with 2.3 tonnes/acre of lime. The reseeding was expensive, but has been grazed three times this year and will be cut for silage in the next two weeks.

Patrick feels it was a worthwhile investment and can see the benefits already with grass growth over 100kg DM/ha on reseeded ground over the past two weeks.

Adviser comment

“The value of the reseeded ground can clearly be seen in terms of grass growth and silage being produced on the farm. With increased demand for grass and silage, targeting more fertilizer to younger swards is essential to meet the winter fodder demand.”

Teagasc adviser Peter Lawrence



FARMER FOCUS

Marty Lenehan Sligo

The couple of drier days over last weekend enabled me to get my first cut of silage harvested before the end of May and yields were excellent. I harvested 36 acres of silage in total and have another 36 acres which I intend to cut in 10 days time, weather permitting.

If the rain that was forecast this week comes, with the high soil temperatures, the remaining silage should bulk up well before cutting.

The silage ground that has been harvested for first cut has got farmyard manure and one bag per acre of CAN before the rain arrives to give a boost to grass growth. I will be cutting different ground for my



second cut to the land that

was used for first cut.

The autumn weanlings are being grazed as a priority group on top quality grass. I will start to introduce meal to the weanlings in the coming weeks whenever grass growth slows and quality starts to decline. The meal will be used to keep liveweight gain high and to prepare the weanlings for sale in August.

Over the past month, I sold a number of older cows with calves at foot. I have an increased number of replacement heifers coming into the system that are due to calve down next spring, so I can afford to be more critical about culling any poorer performing cows.

The spring calving herd has been grazing in two batches up until now. A Simmental bull is with the milky type cows and the Charolais bull is with the remaining cows.

These bulls will be removed by mid-June as I do not want any cows calving after mid-March.

A group of the dry cows from the autumn herd are being grazed after the main spring herd. I found this was a great way to graze out paddocks over the past few weeks during the wet weather.

James Strain Co Donegal

Cows and calves are performing well at grass despite weather conditions being far from ideal for grazing.

Calves were allowed to graze outdoors during the day since early March. Due to the poor weather and ground conditions in early spring, the calves were delayed in getting out as I had hoped to get them to grass from late February.

Over the past few years, I have found on/off grazing to be a great way to get lighter stock out to grass and reduce my fodder demand. It also helped break the bond between the cow and the calf and get the cows back in heat much quicker, which is helping to tighten my calving pattern.

I have 24 acres closed for first-cut silage. It has started to bulk up well over the past fortnight as soil temperatures are very good on the farm. I am planning to cut the majority of the first cut silage this week if the weather permits.

The pit will

be temporarily covered until the rest of the first cut is harvested over the next week.

Silage ground has got almost 100 units of nitrogen from a combination of slurry and compound fertilizer. Grazing ground received a bag of compound fertilizer after the last rotation.

All cows have been scanned and there were a few cows that were too early to confirm in-calf. They will be scanned again in a few weeks' time to confirm if they are in-calf.

Yearling heifers were turned out to graze the silage ground in mid-March. This was a great way to utilise early grass and increase weight gain on the heifers cheaply. A group of the yearling heifers was sold a month ago. The heifers had good conformation and averaged 450kg liveweight. I was very pleased with them. The calves are due to get a dose next week. I also plan to

weigh them when I have them in. I will weigh them again at weaning and monitor their performance over the grazing season.

