

BETTERfarm Beef Programme

BUSINESS, ENVIRONMENT, TECHNOLOGY through TRAINING EXTENSION RESEARCH

Silage ground closed on BETTER farms



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Silage ground has been closed on a number of the BETTER farms for harvesting first cut silage in early June. Ground was slurried and fertilized based on soil analysis. Reseeded and productive ryegrass swards

received up to 100 units of nitrogen. There are still some older swards on the programme farms and where silage ground has a low presence of ryegrass, up to 80 units of nitrogen has been applied. As a rule of thumb, the farms are working off the principle of two units of nitrogen being used up daily by the growing crop. Therefore, a field that was closed on 19 April and received 100 units of nitrogen between slurry and bagged fertilizer should not be harvested before 10 June as there is a risk of cutting the sward when there is still a

high residual nitrogen level present. If this grass was ensiled, the nitrogen would increase ammonia in the pit and lead to a poor fermentation and turn silage black.

Grazing demand
As a result of closing silage ground, grazing demand has been increased as cattle are confined to a smaller grazing

area. A 40ha (100 acres) farm carrying 60 spring-calving cows and calves that closes 12ha (30 acres) for silage has the grazing demand increased from 1,200kg live-weight per hectare to 1,715kg liveweight per hectare. Grazing demand increases from 24kg DM/ha/day to 34kg DM/ha/day. The average grass growth

over the past week was 52kg DM/ha/day. Grass growth should continue to increase over the coming month, so the farms will continue to spread fertilizer at a rate of one bag per acre. Fertilizer applied in late April and May will give an excellent return of 60kg to 80kg DM per kilo of nitrogen applied.

The grazing rotation length is now dropping back to the target 21 days. With the shorter rotation, grass quality will be easier to control. A grass surplus will be easier to identify and can be removed as silage along with the main crop or taken out earlier if the paddock is required for the next grazing rotation.

Table 1: Converting growth rate into kilos of liveweight per hectare/acre

	Daily growth rate kg/DM/HA						
	20	30	40	50	60	70	80
Kg/LW/HA	700-1,000	1,000-1,500	1,400-2,000	1,750-2,500	2,100-3,000	2,450-3,500	2,800-4,000
Kg/LW/Ac	280-400	420-600	560-800	700-1,000	850-1,200	1,000-1,400	1,100-1,600

*During period of poor utilisation, use figures at the lower end of the range.

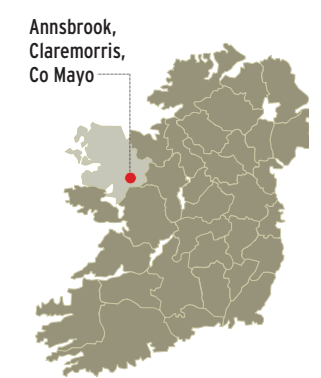


ON THE GROUND

RICHARD JENNINGS

“Calving started on 1 November and finished on 15 February with 54 live calves on the ground”

Getting cattle back to grass becomes more challenging where land type is naturally heavy. Having a mixed cattle and sheep farm also makes early grazing more difficult, where ewes are outwintered until the final few weeks before lambing starts. A sheep flock offers many benefits in a mixed grazing situation. For instance, sward quality is usually improved where sheep and cattle graze side by side as grass utilisation is generally increased. Tighter grazing from sheep helps grass plants to tiller out, making the sward thicker and less prone to weed grasses becoming established. Just as feed demand increases after calving, ewes have a greater nutritional requirement after lambing which can be mostly supported by good quality spring grass. Allowing sheep to graze over the whole farm all winter will leave a shortage



of spring grass, therefore delaying turnout of cattle and sheep and increasing the reliance on concentrates. Richard Jennings is one of a limited number of BETTER Farm participants who runs a suckler and sheep farm. The farm carries 57 calving cows and 66 March lambing ewes on 36ha of grassland. **Stock details** Calving started on 1 November and finished on 15 February with 54 live calves on the ground. Cows are mainly Limousin cross Friesian and

served to Blue sires through artificial insemination. Calving has been tightening year on year by two to three weeks. The breeding season is now underway with the first cow inseminated on 5 February and Richard plans to finish by 5 May, which should have calving finished by mid-February. Calves are sold for export at 10 to 11 months of age at 400kg to 500kg live-weight. Lambing started on 12 March and finished on 1 April with 117 live lambs on the ground, which is a live lambing percentage of 1.77 lambs per ewe. **Spring turnout** Planning for spring grazing started last October on Richard's farm. The farm has been completely reseeded and is productive early and late in the year. Soil fertility is good on the farm with a lot of 10-10-20 used on grassland. Paddocks are closed from mid-October with drier,



reseeded blocks being closed first. As weanling calves and lambs are sold off farm from August to September, leaving only dry cows and dry ewes to graze, it is easier to start closing ground and building grass supplies for winter grazing. Cows were housed in late October. Ewes continued to graze out the wetter parts of the farm into mid-winter. Ewes were housed in mid-January and offered haylage. Concentrates were introduced from mid-February onwards based on scanning results. Calves have access to grazing paddocks through on-off grazing throughout winter. Cows are only let out to graze once settled in-calf

and when ground conditions allow. Ewes go out to grass within days of lambing and this year were grazing two weeks before cows returned to grass. **Grazing management** Stocking rate is approximately 1350kg liveweight per hectare in early April, which is the equivalent of four ewes and lambs and a cow and calf per hectare. Grazing demand in spring was approximately 27kg DM/ha in early April and has now increased to 34kg DM/ha as more cows go back to grass. Assuming a daily grass growth of 5kg/day DM from November to 1 March and 10kg DM/day from 1 March until 20 March, approximate-

ly 800kg DM would have been grown over the winter. At the grazing demand of 27kg DM/ha/day in early April, there was 29 grazing days ahead which has now reduced to 21 days as stocking rate has increased. **“The farm has been completely reseeded and is productive early and late in the year. Soil fertility is good on the farm with a lot of 10-10-20 used on grassland**



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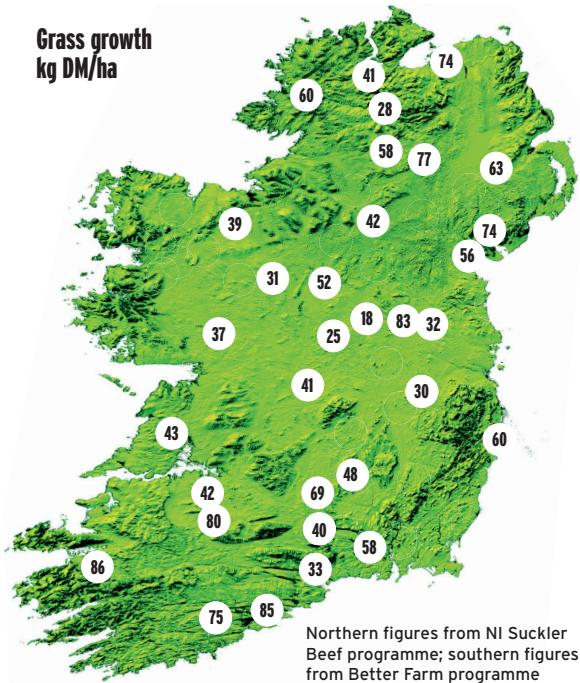


WEEK IN REVIEW

- ➔ Silage ground has now been closed up on the programme farms.
- ➔ Fertilizer is being applied based on soil analysis.
- ➔ Reseeded swards and swards with high levels of ryegrass are getting 100 units of nitrogen between slurry and bagged fertilizer.
- ➔ Grazing demand is increasing as silage ground is now closed and cattle are on the grazing block only.
- ➔ Grass growth averaged 52kg DM/ha/day this week.
- ➔ Grazing rotations are now targeting 21 days in length.

➔ Stock bulls will be going out with cows to start the breeding season in the coming weeks. To ease the workload on a young bull, mixing cows that calved early and late in the calving period means that cows will not all be cycling closely together.

TOP TIP



Cows have been turned out to grass once they are settled in-calf. Calves have had access to grass throughout the winter through on/off grazing.



Sheep have grazed reseeded ground and the heavier parts of the farm this spring.

Table 1: Silage requirement on farm

	No. of days	Silage required (t)
57 suckler cows (@ 45kg silage/day)	162	415
8 replacement heifers (@ 40kg silage/day)	162	52
66 ewes (@ 5kg silage/day)	80	27
Total volume of silage required (t)		494

Ewes grazed the heavier blocks of land this spring until ground conditions improved enough to carry cattle. The sheep are normally grazed in two groups, the same as the cattle from May onwards. Richard is currently re-fencing the farm under TAMS. Once finished, he will have the opportunity to forward creep graze calves and lambs improving performance.

Silage
Silage is harvested in a two-cut silage system. Silage ground was grazed in April before closing but the later turnout of cattle meant that Richard was behind target on getting silage ground grazed off before cutting. With

autumn and winter-calving cows, he is reliant on making high quality silage to reduce the level of concentrates fed to cows in milk. As cows are also bred indoors, making silage with 70 DMD is essential so that cows are able to meet their dry matter energy demand. Silage fed in winter 2013/14 was 72 DMD and cows were offered 2kg of concentrates until settled in calf. Making silage of this quality requires harvesting in late May to early June. Applying 100 units of nitrogen will mean there is a 50-day closed period for grass to utilise all fertilizer applied. With a target cutting date of 1 June, silage ground had to be grazed and closed by 10

April which was just about manageable this year. Heavy covers of grass built up over winter delayed slurry spreading this year until after grazing. Richard is considering the benefits of grazing the silage ground in January before housing ewes. The reason behind this is that it would allow early slurry to be applied on silage ground in early March. Ground could be closed earlier for harvesting first cut silage of even higher quality reducing concentrate requirement fed to cows after calving.

Silage requirement
There is a two-cut silage system yielding 10 tonnes

per acre of first cut (fresh weight) and six tonnes per acre in the second cut. Assuming that cows are housed from 20 October until 1 April, the winter feeding period lasts for 162 days. The silage intake for dry cows is based on an average 25kg as cows are housed in body condition score of 3.0 and eating an average 45kg of silage once calved. In addition, ewes are housed for 80 days. Table 1 outlines the silage demand for next winter. With 35 acres of silage ground, the first cut will produce approximately 350 tonnes of silage and second cut will produce 180 tonnes which will meet stock demand at the outlined levels.

FARMER FOCUS

Willie Treacy
Co Louth

Calving is just about finished up here in Hackballscross and it has gone pretty well. We had two caesareans with two heifers. But from a total of 56 calvings between cows and heifers, I am happy that the majority of cows calved with relatively little difficulty. We purchased a new Charolais stock bull last year and he was turned out to the cows for breeding which started on 10 April. We have changed back to the Blue as we feel that when we are selling stores, weight is more important than having a U-grade weanling. The bull I purchased is a new phenomenon called a 'curve bending' bull. This means that the calves have a very low birth weight and, therefore, they are easier calved. But the big selling point for me is they also have



very high 200 and 400-day growth rate which is where I need the weight. He is by the popular UK sire Blelack Digger and time will tell if he lives up to his name. What a difference a year makes. This time last year we were still purchasing bales while, this year, all stock are out and grazing happily. We have 11 days of grazing ahead of stock which is a little behind our target of 15. We are spreading 27 units of nitrogen after each grazing to boost growth in line with stock demand. Growth over the past week is really taking off and is running at 56kg DM/ha/day, which is right where we want it to be. We need a growth rate of 59kg to meet demand. Silage ground was closed up this week and it is receiving 3,000 gallons of cattle slurry and three bags of CAN. This means that it is getting 97 units of nitrogen, 21 units of P and 90 units of K.

David Mitchell
Co Monaghan

Calving is almost complete here in Shantonagh with four cows left to calve and no major problems to report. Grass growth is running at 32kg this week but has been slow to get going over the past few weeks. Our demand is 35kg on the area which I am measuring, but we have seen a marked improvement this week with some paddocks growing 1.5cm of grass. Most of the grazing ground has either received a half bag of urea per acre or a bag of pasture sward per acre at this stage. All cattle have been turned out except for our finishing heifers and bullocks and the few cows left to calve. We have some silage left and this will act as a buffer if the weather takes a turn for the worst in the next few weeks. Silage ground was closed up in the past week and I had intended spreading slurry on it. However, with conditions dry and sunny and also some grass covers



left on some fields, I chose to keep the slurry for the second cut. I am aiming for a two-cut system but I am already behind as ground should have been closed up two weeks ago. Silage ground received 3.5 bags of pasture sward. Silage ground is high in K, so I may top this up with one bag of super phosphate/acre which is 16 units/acre. Finishing bullocks are on 6.5kg meal in the shed and ad-lib silage. Finishing heifers are on 5.5kg meal and ad-lib silage in the shed. We have heifers ready to go and I am waiting to get them killed. We have one pedigree Hereford bull left to sell. This spring saw a brisk trade for my Hereford bulls with many of them going to local dairy farmers. We weighed our spring 2013 weanlings on 10 April. Bull calves weighed 423kg and gained 0.71kg/day since 22 November on 2kg meal and ad-lib silage. Their lifetime daily gain is 0.96/kg/day since birth. Heifer calves weighed 361kg and gained 0.51kg/day since 22 November on 1.5kg meal/day and ad-lib silage. Their lifetime gain is 0.81kg/day since birth.