

# BETTERfarm Beef Programme

BUSINESS, ENVIRONMENT, TECHNOLOGY through TRAINING EXTENSION RESEARCH

## Autumn-born calves on/off grazing on



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Ground conditions are still variable across the programme farms, but some farms have taken the opportunity to get some slurry onto bare

ground this week. With paddocks closed up early, there are some heavy covers of grass built up and ready for grazing.

Rather than spread slurry on these swards and delay the turnout date, slurry has been spread on the paddocks that were grazed in December and the last to be closed up. Slurry is being applied at between 1,500 and 2,000 gallons/acre and has been well mixed before spreading.

Depending on the rate of application and the type of cattle being fed, an early application of slurry can

provide 15 to 25 units of nitrogen.

Where grass covers have built up over the winter, some of the programme farms have started to let autumn calves out to graze during the day.

The calves are re-housed in the evening and are offered 0.5kg per head of concentrates. As these animals are between 100kg and 200kg live-weight, they are not inflicting any damage on swards. Even on heavier land, there is little damage being reported.

Where ground conditions

are still very wet, the number of calves getting onto grass is restricted to the lightest animals.

If ground is unsuitable, or if there is no grazing available, some of the programme farms are using handling pens or temporary external pens to let the calves outside.

Calf health is greatly improved once they have access to outdoor areas and it also helps to acclimatise them for turnout. From previous experience, the calves that are able to on/off graze respond to spring grass faster than animals that are

housed for the full winter on silage. Therefore, they have improved performance from grass.

### Benefit

Another benefit of on/off grazing reported by the programme farmers is that the silage demand from autumn calving cows is lower.

With less silage fed, concentrates can also be reduced or removed from the diet if cows are on high quality (70+ DMD) silage.

At €30/tonne, a saving of 10kg of silage per day over a 60-day period is a saving of

€18 per cow, or €720 in a 40-cow herd. Where silage quality is good and autumn cows are settled in calf, reducing the concentrate (€260/tonne) use by 2kg/day over the same period is a further saving of €31 per cow, or €1,240, over a 40-cow herd.

Getting calves used to on/off grazing usually takes three to four days but once they get used to being handled, it takes little effort to move them. Some of the programme farms use a creep gate to provide access to grass which does not affect labour at all.



## ON THE GROUND

### MICHAEL SMITH

“Having soil-tested the farm in 2013, the analysis showed that the land was low in phosphate but fine for lime”

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Early season fertilizer plays a vital role in being able to get cattle back to grass early. In favourable conditions, it will stimulate grass growth to build covers ahead of livestock, or speed up regrowth so that there is sufficient grass to meet demand in the second rotation.

While land type will influence when cattle can get onto grazing ground, the availability of grass will determine how many cattle can be turned out and whether or not they can remain at grass without supplementation.

Where the aim is to get cattle out to spring grass as soon as possible, slurry should be spread in a strategic approach so that it does not affect grazing or potential turnout dates.

Michael Smith has been busy identifying which fields

on his farm are suitable for slurry and which need to be grazed before the slurry restrictions for his farm end on 31 January.

### Farm details

Michael farms 50ha (123 acres) of grassland near Mounthugent, Co Cavan. The farm has a mixed soil type between heavy and some drier land, all of which is located in one large block divided by a main roadway. Michael operates a 35-cow spring herd calving from January to March and an autumn herd of 21 cows calving from August to September.

The autumn herd is predominantly bred to AI with his spring herd bred to a Charolais stock bull. Cows are a mix of Charolais, Limousin and Simmental breeding and replacements are normally homebred. Bull calves are sold as weanlings through Ballyjamesduff Mart. Sale weights range from 350kg to 420kg in the

spring herd and 400kg to 450kg in the autumn herd.

Heifers that are not retained for breeding are sold as stores at 16 months or 19 months, depending on prices and weight. The preferred option is the 19-month store when sale weights average 550kg.

### Soil fertility

Having soil-tested the farm in 2013 with his local B&T adviser Roslyn Fay, the analysis showed that the land was low in phosphate (P) and potash (K) but fine for lime. Having traditionally used CAN fertilizer, slurry was the only source of P and K spread on ground.

The farm has access to pig slurry but limited use on wetter land meant that soil fertility was depleted.

Last year, the fertilizer policy changed to using compound fertilizers only. Michael spread 18-6-12 on grazing and silage ground, as well as targeting slurry to



the lowest index fields.

While soil fertility will not be improved dramatically in less than one year, Michael commented that the compound NPK fertilizer has increased grass growth and improved sward quality. “Grass is more vigorous. It is much greener and the sward has thickened out with better tillering,” says Michael.

By his own admission, he is converted to the benefits of soil testing and using the required fertilizer despite the additional costs. Using 18-6-12 in 2013 increased grazing costs by £20/acre, but con-

sidering the additional grass growth, it was a cost worth incurring, in his opinion.

### Spring fertilizer

Being focused on making better use of soil nutrients in slurry should help to improve early season growth on Michael's farm. As the season progresses, the availability of nitrogen in slurry reduces, therefore it will provide the best growth response in early spring. This spring, Michael has three aims for the herd:

➔ Get weanlings out to grass early.

➔ Use slurry to replace 25 to 30 units/acre of early season nitrogen fertilizer.

➔ Ensure that slurry is spread on all grassland this spring.

With reasonably good growth in late autumn and early winter, there are a number of paddocks with grass covers that are too strong for spreading slurry. These covers need to be grazed first. If they are not grazed first and slurry is spread, they will not be suitable for grazing for at least three weeks, which delays the turnout date for the farm.

# heavy covers

## WEEK IN REVIEW

- ➔ Slurry has been spread on some drier land that was grazed late into December.
- ➔ These paddocks have low grass covers and are receiving 1,500 to 2,000 gallons per acre of watery slurry.
- ➔ Some farms have started to let calves out to grass during the day to utilise the heavy covers built up over winter.
- ➔ On the farms that have calves on/off grazing, the silage demand from autumn cows is being reduced, as is the level of concentrates being fed.

➔ Feeding in-calf cows late in the evening and restricting them from eating during the day can lead to more cows calving during the daytime, easing management and calving supervision.

**TOP TIP**



Store heifers on Michael Smith's farm. With beef prices under pressure, he is planning to slaughter these animals in March.



them will delay the turnout date. Even with watery slurry, there would be a lot of rejected, wasted grass if cattle were forced to graze this after slurry was applied, which would also inhibit grass regrowth. According to Michael, these covers will be grazed off before any slurry is applied. Lighter stock will be used to prevent poaching the sward.

**Picture 2** features medium covers of around 1,000kg DM/ha and are also suitable for grazing if ground conditions allowed.

Michael is planning to graze these swards in the middle of the first rotation, after the heaviest covers. This sward cover is at an ideal stage for spreading bagged fertilizer as it has a relatively low cover and will be actively growing, giving a better response to nitrogen.

Slurry will not be applied to these paddocks at this stage, in case the rotation speed has to increase and the sward is required for grazing sooner than planned.

**Picture 3** features low grass covers of 300kg DM/ha which is the ideal stage for spreading slurry. This sward will not be grazed until late in the first rotation. Spreading 2,000 to 2,500 gallons/acre of slurry can supply up to 25 units of nitrogen early in the season, depending on slurry type. This is the equivalent nitrogen supplied from one bag of CAN or a half bag of urea.

### Spreading costs

Contractors cost money and because it is an expense that can be quickly calculated, some farmers assume that carrying out the task by

themselves is the cheapest option. Many farmers do not value their own time and, if they own their own tanker, spreading slurry themselves makes more sense.

Both systems have numerous advantages and the correct system depends on the individual situation. A contractor using an umbilical system like Michael plans to bring in this year is capable of spreading up to 25,000 gallons per hour. A 50-cow suckler herd will produce close to 3,200 gallons of slurry every week from the cows alone.

Over a 20-week housing period, the cows alone would produce approximately 64,000 gallons of slurry.

Assuming that the umbilical system is working to capacity, this volume of slurry could be spread in under three hours. At a cost of €120 per hour, the slurry could be spread for approximately €300.

The same volume of slurry would take around 49 loads using Michael's 1,300 gallon tanker. As the land is located beside the yard, he can spread four loads per hour. But on land furthest from the yard, loads are reduced to three per hour. To spread the same volume of slurry using his own tanker would take up to 15 hours to complete.

Fuel consumption would cost approximately €10 per hour for using his own machinery. This cost leaves Michael's time worth €10/hour for spreading slurry. As some land is heavy, he prefers to bring in a pipeline to prevent damage to this land which would occur using the tanker, although he will spread some slurry by himself on drier ground.

## FARMER FOCUS

### Niall Patterson Co Leitrim

So far, I am extremely pleased with how the calving season has gone on my farm. The cows are in good body condition at calving and this is definitely a factor in helping the cows to have plenty of colostrum for the calves. When calving indoors, calf health is important and as turnout can be late on this farm, making sure the calves get plenty of colostrum is important to cut down on the risk of scours.

The weanling heifers are being fed 20kg of silage and 3kg of concentrates, which consists of barley, distillers, maize meal and soya hulls.

The ration has a crude protein of 16%. The weanling bulls are on 4kg of concentrates and ad-lib silage. I am happy with their performance over the winter. I intend to sell them in two weeks' time, depending on the price. After calving, the cows are getting 2kg of the same ration as the weanlings and they are fed ad-lib first-cut silage until they are settled back in-calf. I plan to have the majority of cows back in calf before turnout.

Land type is a major factor hindering me getting stock out early. Hence, my turnout date is usually around mid-April. This results in increased housing costs. However, depending on weather and ground conditions, I am going to try to get my lighter stock out at the end of March and keep the cows housed until later in the spring.

I scanned my ewes last week. They scanned higher than last year, which I am happy about. The ewes that are carrying triplets have been housed. They are getting 0.5kg/head/day of ration and this will be increased over the coming weeks depending on body condition. I intend to house the other ewes over the next fortnight. The ewes are an ideal way to utilise grass early on heavy soils. I am looking forward to getting my soil analysis results to see how soil fertility has improved on the farm.



### Billy Gilmore, Co Galway

I housed the remaining 10 weanling heifers that were still grazing last week. It was great to be able to leave them out this long as it reduced the fodder requirement and housing pressure. As my herd is autumn-calving, the last heifers and cows to be inseminated were done on 6 January. I plan on scanning the whole herd in February.

Over the coming week, I plan to start gradually weaning the older calves. These calves are getting 1kg per day of a home-mix ration which consists of barley, pulp, soya and minerals. I will increase feeding levels slightly prior to weaning. It will then be gradually reduced once the calves go out to grass. The intended target date for turning out the calves is 15 February, weather permitting.

Due to heavy rainfall in recent weeks, some of the farm is inaccessible for machinery. To reduce the pressure on the slurry storage, I spread slurry at a rate of 2,500 gallon per acre on a dry six-acre field. This is well in advance of the ewes and lambs grazing in March.

The pedigree ram I purchased last year was infertile. This has led to my pedigree Charollais ewes lambing at the end of January instead of early January as intended. The ewes scanned with twins and triples are out grazing during the day and housed at night.

By scanning the ewes, this allows me to feed the required concentrates based on the number of lambs they are carrying. Therefore, the ewes with singles are not overfed which can lead to difficult lambing. Ewes with triplets can receive additional feed.

The faecal sample results for the cattle have come back negative for both liver and rumen fluke which shows that my dosing programme was successful last year. I recently took soil samples and I am awaiting the results. I will plan my fertilizer applications based on these results.



After walking the farm in the past week, Michael has decided to cut the meal from the group of 25 weanlings that will be grazed this year. He plans to gradually turn these animals out to the heaviest covers of grass, ideally from this week onwards if ground conditions are favourable.

The weanlings will be rotationally grazed using temporary electric fencing to make sure they do not damage ground.

Once grazed, slurry will be spread on drier land with a tanker and on wet-

ter land with an umbilical pipeline. Pig slurry will also be imported to increase the amount of P and K being applied on grassland in a continued effort to build soil fertility.

### Targeting grass covers

Pictured on these pages are three photos of different grass covers that can be found on Michael's farm at present. **Picture 1** features heavier grass covers of around 2,200kg DM/ha. As these covers will most likely be the first paddocks grazed, spreading slurry on