

BETTERfarm

BUSINESS, ENVIRONMENT TECHNOLOGY through TRAINING EXTENSION RESEARCH

Building grass for autumn grazing



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A lack of rainfall has hindered grass growth on the programme farms in the south east. While there was some rain at the weekend, it will have little effect on addressing the soil moisture deficit. Grass growth has dropped to 13kg

DM/ha/day compared with 43kg DM/ha/day in the north west, where growing conditions are good.

The farms are now spreading their last application of nitrogen for this year. Even with the date of the closed period moving back to 30 September, the farms will see a higher growth response to nitrogen applied now rather than in late September. At present, soil temperatures are still between 15°C to 20°C, depending on location.

Later in the month, day temperatures will most likely be lower and soil temperatures will reflect this. A shorter growing day will

see grass growth drop from approximately 15kg DM/ha/day from every 1kg of nitrogen applied to below 10kg DM/ha/day for every 1kg of nitrogen applied.

On the programme farms, grazing days ahead are running around 22 to 28 days at present, which is ideal for the time of year. What this means is that when cattle en-

ter a field to graze, it will be another 22 days before they are back in the field to graze it off again.

With rotations lengths running at current levels, this should see the programme farms able to comfortably graze into October. If weather conditions deteriorate and ground conditions become wet, by moving cattle every

day, the farms should be able to get one more grazing rotation completed before cattle start to be housed.

Moving cattle every day will limit the level of sward damage, but if swards are becoming poached, cattle should be removed immediately. The rotation length should be increased by 1.5 days per week from now un-

til the end of the month. On the programme farms that are dry in nature, the aim is to have at least 30 days ahead by the end of this month. On wet farms, the target will be lower as there is a risk of carrying too much grass into the winter. Light weanlings will be prioritised for grazing off covers, while heavier livestock are being housed.

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

Alan Dillon
Programme adviser

“ The focus is on achieving high weight gain from grass prior to housing for an 80 to 100-day finishing period on ad-lib concentrates ”

Donie Ahern farms near Kiltteely in east Limerick and runs a suckler to finishing system on his 68ha farm. The focus is on achieving high weight gain from grass prior to housing for an 80 to 100-day finishing period on ad-lib concentrates.

The farm consists of 28ha of owned land with the remainder rented. Land quality varies from good, free draining limestone-based soil on the rented farm to a slightly heavier clay type soil on the home block.

Donie runs 60 spring calving suckler cows, calving from mid-January to the end of March, and 25 autumn calving cows calving from September to December.

Heifers are finished at 18 to 19 months of age with bulls finished at 20 months of age. All are slaughtered through the Keenan Kepak Beef Club. As a new participant in the

Kiltteely,
Co Limerick



BETTER farm programme, a farm plan was drawn up by the BETTER farm management team in conjunction with local Teagasc advisers Derek O'Donoghue and Pat Blackwell. The main focus of the plan is to reduce the ration bill by making better use of early spring grass and increasing output.

➤ BREEDING STOCK

Cow type consists mainly of Limousin cross cows sourced from the dairy herd, along with a small amount

of homebred Limousin and Simmental cows. Cows were bred this year to Charolais and Limousin stock bulls.

Next year, only Limousin bulls will be used on the farm. With pressure coming on slaughter weights of bulls, Donie aims to finish earlier, with a maximum carcass weight of bulls of 440kg. To source good quality replacements from a reliable source, Donie has an agreement in place with his brother, who is a dairy farmer, to purchase 20 Limousin cross heifers in November of each year. This eliminated the need for Donie to have a maternal sire on the farm or use AI to breed replacements allowing him to focus on terminal traits on bulls to produce stock for finishing.

➤ INCREASING OUTPUT

As part of Donie's farm plan, a number of changes are to be made to his farm. The first



change was to purchase stock for finishing, increasing farm output.

In February, 10 yearling Limousin bulls weighing roughly 360kg were purchased with the aim of finishing them before the end of the year. In addition, 10 yearling heifers have also been purchased with the intention of finishing before the end of this year.

These stock, in addition to the progeny being finished from Donie's 85-cow suckler herd, leads to a high stocking rate on the farm at 2.45 LU/ha. The demand for grass can be very high at certain times of the year. This means that Donie needs to have a high level of grassland management. Donie measures grass on a weekly basis throughout the main growing season.

This lets him make informed decisions on spreading fertilizer or taking out grass surpluses as baled silage.

➤ CALVING SPREAD

One area that needs improvement on the farm is the calving spread, which lasts for almost 6.5 months between autumn and spring. This leads to a long, drawn out workload. Farmers in general are better off with a shorter calving spread. Less time is spent observing cows which should result in fewer losses and less fatigue from the farmer's perspective. This will lead to a more uniform group of stock for finishing and easier grouping of stock for the winter.

The plan is to reduce the calving spread to a maximum of two 10-week peri-

ods through a strict culling regime and having plenty of quality replacement heifers.

➤ GRASS

While improving Donie's output was one of the main aims of the farm plan, improving his grassland management was key to making a profit from this extra output.

Donie has started to turn stock out much earlier than normal to make maximum use of grass to cut production costs. Yearling heifers were turned out to grass in late February this year, along with the purchased yearling bulls.

Cows were also turned out to grass as they calved in the spring with the autumn-born calves creep grazing the land around the sheds over winter, while the cows remained



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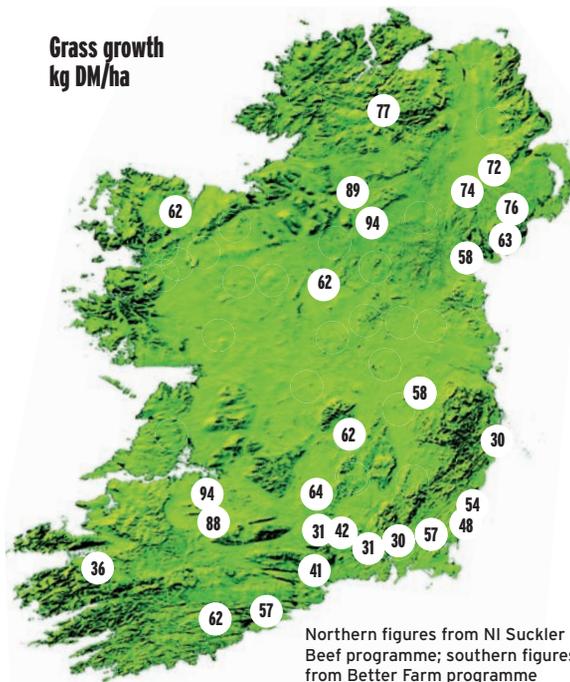
WEEK IN REVIEW

- ➔ A lack of rainfall has had a negative effect on grass growth in the south east of the country.
- ➔ The farms are applying the final nitrogen applications to grazing land at a rate of 20 to 27 units per acre.
- ➔ Applying fertilizer now will have a higher growth response than spreading in late September.
- ➔ Grazing days ahead are ranging from 22 to 28 days ahead, in general.
- ➔ Rotations lengths are being increased on dry farms for extended grazing.

Calves and weanlings should receive their first shot of a pneumonia vaccine now. The second shot is due in four weeks time, which is early October. Delaying the vaccination will mean that the calves have not developed immunity and still at risk of developing pneumonia at housing.

TOP TIP

Grass growth kg DM/ha



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

FARMER FOCUS

Jamie Kealy Co Carlow

I am preparing to calve my autumn herd which should start this weekend or early next week. The majority of them will calve in October. I put a lot of emphasis on hygiene to reduce the risk of scour and other diseases. Hence, I am busy washing and disinfecting the calving facilities and making sure I have all my calving equipment ready for use. My cows are in good body condition and some are carrying a little bit more than I would like. They are ranging from 3.5 to 4.0 (scale 0 to 5).

They are grazing in a leader-follower system with my weanlings to help restrict grass intake. I normally house them at night where they are offered hay. I also feed pre-calving minerals from six weeks pre-calving.

I weighed and weaned my 2012 autumn calved bull weanlings on 24 July. They weighed 380kg and gained 1.31kg/day since birth. They



received a fluke and worm dose and were fed 1kg of concentrates per day about two weeks before weaning. I find weaning them gradually by removing a small number of cows each time reduces stress levels significantly.

The bulls are built up to 3kg of concentrates and are on good leafy grass. They weighed 476kg on 9 September and grew 1.87 kg/day since their last weighing. They are doing 1.41kg/day since birth. I hope to sell them at the end of September. The 2012 autumn-born heifers were weighed and weaned on 20 August and averaged 375kg and gained 1.11kg/day since birth. They are on good quality grass and I will probably winter them and sell them next spring as bulling heifers. My demand for grass is low as I am trying to restrict the autumn cows before calving and, therefore, I have made some baled silage over the last two weeks from surplus grass. However, I still have to keep my eye on the ball to have adequate grass for the back-end for cows and calves.

Improved grassland management has seen bulls record daily liveweight gains up to 1.8kg/day over the summer.



indoors. This allowed Donie to stretch the limited silage supply over the long winter and late spring this year.

It was decided this year to install a paddock system on the rented land to improve grassland management and utilisation. This meant installing a number of water troughs at central locations in the fields and dividing these fields in two with a permanent electric fence. The position of the troughs allows the fields to be divided by temporary strip wires into four or eight divisions, depending on the field size and the number of stock being grazed.

Extra water troughs were installed along farm roadways on the home farm to allow a similar system to operate. This job was not overly expensive to undertake and,

so far, Donie is seeing real benefits from the investment.

Further reseeding was carried out on the home farm, and the rented out-farm, by Donie this year. He reseeded silage fields in 2011 and noticed a definite increase in the amount of grass grown, along with a marked improvement in the thrive of stock that were grazing these fields due to the higher feeding value of the new grasses.

WEIGHT GAIN IN CATTLE

Donie weighs his cattle regularly to assess their performance. Over the winter, his finishing bulls gained 1.6kg/day while the finishing heifers gained 1.2kg/day.

Donie attributes this to a more balanced diet fed to both the growing and finishing stock. Performance at grass has been exceptional this year, with spring-born yearling bulls gaining 1.8kg/day and yearling heifers gaining 1kg/day between May and July.

This performance is significantly higher than last year and is attributed to Donie's improved grassland management, ensuring growing stock have access to top quality leafy swards of ryegrass at all times.

Donie fed extra soya bean meal at a rate of 0.5kg/head/day to balance out the low protein (8%) in the 2012 silage and noticed an immediate improvement in performance.

Finishing bulls are normally built up to 14kg of meal, along with 1kg straw and 10kg silage. Finishing heifers

Table 1: Physical and financial targets

	2011	2012	2016 (target)
Stocking rate	1.69	2.23	2.43
Total farm kg LW	48,720	56,977	67,252
Kg LW/ha	609kg	838kg	989kg
Gross output €/ha	€1,347/ha	€2,058/ha	€2,176/ha
Variable costs €/ha	€873/ha	€1,333/ha	€1,088/ha
Gross margin €/ha	€474/ha	€725/ha	€1,088/ha

are built to a similar diet of 10kg meal, 1kg straw and 10kg silage. Weanlings were fed 2kg of meal along with silage, minerals and 0.5kg/day of soya over the winter.

CHALLENGES SO FAR

Last spring was as much of a challenge for this farm as it was for any farm in the country. Silage supplies ran out due to the late spring, grass supplies were very tight and extra meal had to be purchased. This was in addition to all the changes taking place in accordance with the farm plan and it led to a considerable workload and cash in expenditure for Donie. Thankfully, most of the required farm work has been completed and Donie is almost fully up and running.

The good summer weather that followed allowed Donie to recoup some of the extra costs incurred by

achieving large weight gain on cattle at grass. Bulls and heifers have been thriving extremely well, with bulls gaining up to 1.8kg/day prior to housing for finishing in September.

PLANNING AHEAD

Donie plans to continue pushing his stocking rate to increase output, while monitoring his costs. Donie completed a Profit Monitor for 2012 and saw how increased focus on output led to an increase in gross margin. This has more than covered all of his fixed costs and left a positive net margin, excluding all subsidies.

It had been anticipated that increased meal and silage costs, along with a lack of grass growth this spring, would Donie's plans and profitability this year. But the favourable grass growth over the summer, along with an improvement in silage quality may balance out the expensive spring somewhat.

The main thing to remember with any plan is to be flexible and open to making small changes should the need/opportunity arise. Donie is well positioned to make major strides in increasing the profitability of his farm in the future.



Donie Ahern

Mark Maxwell Co Westmeath

Grass growth has slipped a little in the last week dropping from 48kg last week to 42kg this week. I have seen a marked difference in nighttime temperatures and this has probably checked grass growth. I will still spread the last of our nitrogen this week as soil temperatures are high and I would be confident that there will be a good growth response.

Fertilizer will be applied at 20 units/acre of CAN. I currently have 30 days of grazing ahead of stock on the block that is being measured weekly. This will bring grazing well into October with the way growth is going.

The last of our spring 2011 steers will be sold off grass this week. Autumn calving has started with 112 cows calved to date. I have calves on the ground by CXY, LGL and CSQ, which all look promising. I have had two



assisted calvings and one caesarean due to a twisted uterus. Calves were dosed for hoose and worms a fortnight ago with Levamisole. This is a change from an Avermectin-based product which was used to for the last dose.

All store steers and heifers seem to be thriving at grass and they will be weighed in the next week to see how they have performed.

Our autumn bulls are approximately 450kg. These animals will be the first to be housed and started on meal for finishing under 16 months.

The spring calves will be castrated next week to avoid any stress at weaning time. I had 20 acres of spring barley under-sown with grass and this has been grazed twice since harvesting to thicken it up.

The spring barley yielded 2.2 tonnes/acre and straw has been baled and is now in the shed. The barley came in around 17% moisture and was prop-corned and lightly rolled to preserve it. I have some second cut to finish this week. Thankfully, I already have the fodder quantity needed for next winter.