

BETTERfarm Beef Programme

BUSINESS, ENVIRONMENT, TECHNOLOGY through TRAINING EXTENSION RESEARCH

Soil sampling underway in BETTER farm programme



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December is a good time to get on top of some of the routine tasks that were put off earlier in the year because of time constraints. Maintaining soil fertility is something that should receive more attention on suckler farms and

now is a good time to take samples.

When taking a soil sample, you want to get a realistic indication of the level of nutrients in the soil. Therefore, samples should be taken during the winter period as there will have been no chemical fertilizer applied since mid to late September, or slurry applied since October.

Over the next few weeks, there will be a large emphasis on taking soil samples on the programme farms. Samples will be taken to provide an indication of the status of soil pH (lime requirement), phosphorous (P) and potash

(K). For optimum grass growth soil should have a pH of 6.5 and a P and K index 3. The samples will be taken on a mix of land types to give an indication of the impact regular cutting of silage has on soil fertility compared with just grazing land.

The purpose of carrying out soil testing is to use the results to produce a fertilizer plan for each farm.

Spreading fertilizer at the same time annually and using the same type of product year-on-year will not be cost effective if soils are at index 1 or index 0.

Likewise, the pH of the land will impact on how ef-

fective fertilizer will be once it is spread. Soils at pH 5.5 are low in lime. At this pH level, nitrogen fertilizer is approximately 50% effective, which basically means that for every 27 units of CAN applied, only 13 units are utilised.

At a cost of €330/tonne, a bag of CAN costs €16.50. If only 50% of the nitrogen is being utilised, due to a low soil pH, it is basically the equivalent of spreading CAN that is costing €660/tonne to buy. At a cost of €20 to €25 per tonne for spreading lime, it is an excellent investment to make.

Once a fertilizer plan is



completed, the programme farms are in a much better position to buy the correct fertilizer for their land ahead of next spring.

In the past, there was a tendency on a few farms to buy fertilizer early before the cost started to rise.

Buying urea for use in early spring meant that lime could not be applied on the farms, even though it was required to correct soil pH.

Soil samples will be collected on the programme farms in the coming weeks to monitor soil fertility.

ON THE GROUND

Grazing season review

“Grass growth on the programme farms averaged 50kg DM/ha/day with an average grass yield of 9.2 t/ha from grazing ground”

Grass is the most abundant feed produced on livestock farms in Ireland. It forms the basis of the majority of cattle diets all year round. Grass is a crop and, just like wheat or barley, the yield can be measured.

Farmers will often remark on the yields of silage produced, but few will know much grass is produced from their grazing ground. A general comment on growth rates is often made when there is an abundance of grass, as in the second half of 2013, or when there is a shortage as in the first six months of the year.

With the grazing season now over, the weekly growth figures collated by the programme farms can be used to assess how grassland performed. The data can be

KEY POINTS

- ➔ Average daily grass growth - 50kg DM/ha/day
- ➔ Average grass yield - 10.9 tonnes DM/ha
- ➔ Grass records cover a 188 days grazing season.
- ➔ North west - average growth rate 48kg DM/ha/day and yield 8.6t/ha.
- ➔ North east - average growth rate 50kg DM/ha/day and 9.2t/ha.
- ➔ South east - average growth rate 44kg DM/ha/day and 8t/ha.
- ➔ South west - average growth rate 58kg DM/ha/day and 10.6t/ha.

used to compare individual paddocks, outfarms and reseeded ground. It can also be used to compare grass growth in previous years and

to determine if the changes being made to grassland management are having any effect on growth rates.

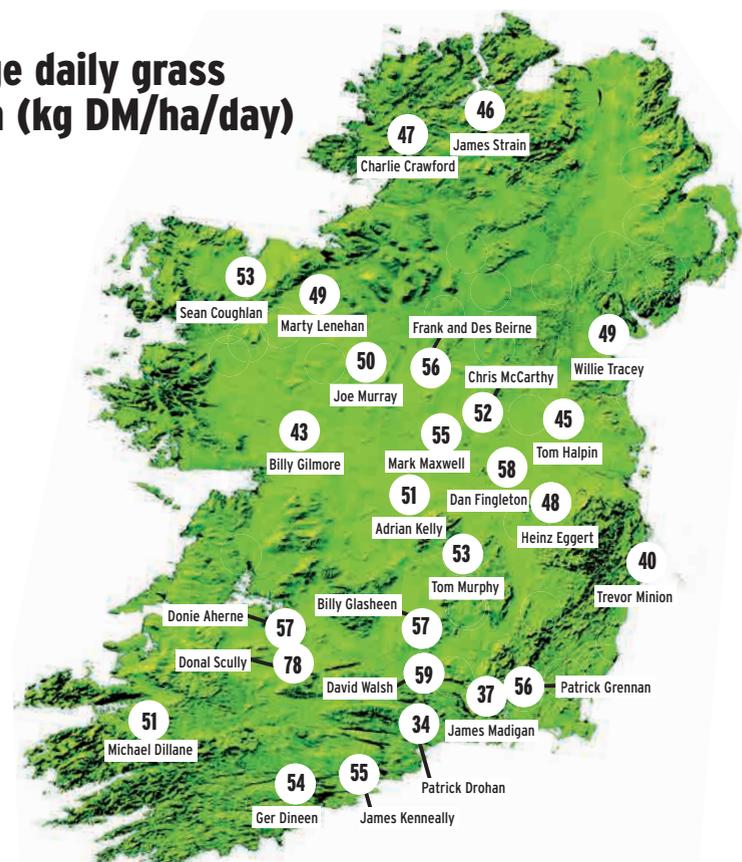
Figure 1 outlines the trend in grass growth from 17 April to 15 October (188 days). Over the grazing season, the farms recorded an average daily grass growth of 50kg DM/ha/day. The late spring kept grass growth under pressure throughout April with an average daily growth rate of 29kg DM/ha/day.

Taking a stocking rate of two 600kg, spring calving cows grazing one hectare of land in April required a grass growth of approximately 30kg DM/ha/day to meet their grazing demand.

Supplemented

As no one will need reminding, the low grass growth and difficult ground conditions meant that cattle were sup-

Average daily grass growth (kg DM/ha/day)



plemented with concentrates, straw and fodder at grass, while some cattle were re-housed when grazing was not possible.

From mid-May onwards, weather conditions turned more favourable and grass growth started to recover with the average daily growth rate over May at 58kg DM/ha/day. In June, the average growth was 72kg DM/ha/day.

The lack of rainfall and high temperatures in July caused grass growth to drop to 42kg DM/ha/day, although July is normally a period of low grass growth.

While growth rates are lower in July, they normally

recover in August as the plant returns to a vegetative, rather than reproductive, phase.

In August, the average daily growth rate on the farms was 62kg DM/ha/day, falling to 38kg DM/ha/day in September as another dry spell took hold on drier farms. The

“While growth rates are important to monitor, so too is the volume of grass produced by an individual paddock and the entire grazing block

unseasonably mild autumn led to strong late season growth, as indicated in Figure 1. The average daily growth in October was 47kg DM/ha/day.

Grass yields

While growth rates are important to monitor, so too is the volume of grass produced by an individual paddock and the entire grazing block. There is little benefit in increasing the fertilizer rate on poor performing grazing swards as they are unable to provide the same level of response as a productive sward with the ideal lime, P and K status.

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WEEK IN REVIEW

- Soil sampling is now underway on the farms and this will be completed by late December.
- Samples are being taken from silage and grazing ground to give a broad overview of soil fertility.
- Fertilizer plans for 2014 will be produced once the results have been received from the lab.
- Autumn breeding is progressing well, both indoors and in the cases where autumn calving cows are still at grass.
- Weighing cattle is almost completed on the farms.

With cooler temperatures predicted over the coming days, frost will be more common on farms. Make sure that water pipes are insulated to prevent them from freezing. If heavy frost is forecast, fill some barrels with water in case a pipe does burst, so you can still provide water for your cattle.

TOP TIP

Programme Changes

Since the launch of the BETTER farm programme in 2008, Aidan Murray has served as the programme manager. Aidan is now moving to a new role within Teagasc to lead the development of the BTAP programme and training of advisors. Over the course of the programme, he has made a huge contribution to ensuring the profitability of the participating

farms is improved and that key lessons learned were communicated to a wider farming audience.

Programme adviser Adam Woods, will take over as programme manager. On behalf of participating farmers and stakeholders, we thank Aidan for his commitment and wish both men well in their new roles.



Adam Woods

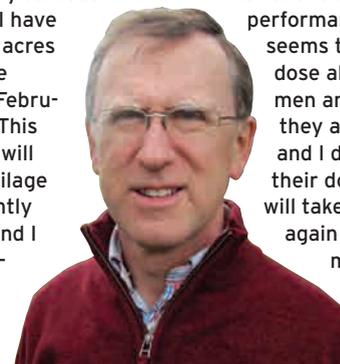
Aidan Murray

FARMER FOCUS

Billy Glasheen, Co Tipperary

All stock have now been housed on the farm. The last of the store cattle went indoors on 8 November, which is a little later than I would have liked, but I was waiting to get work completed on a shed before housing. I began closing grazing ground in mid-October and have some good covers of grass to carry into the spring. I have some very bare fields also and they will be used for spreading slurry in early spring.

I am a firm believer in housing stock early as experience has shown me that older stock do very little liveweight gain at grass during October and November. Early turnout is my aim and I have earmarked 30 acres of ground to be grazed from 1 February next year. This is ground that will be closed for silage which is currently being fenced and I am also installing new water troughs for livestock.



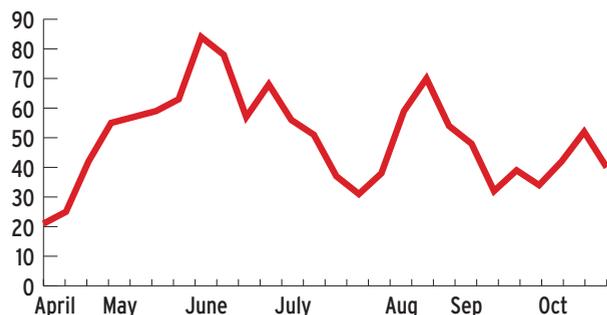
I weighed 36 finishing cattle last week. They have averaged 1.2kg per head per day since 2 October. They were housed on 15 October with 70 DMD silage and they started feeding on meal one week later. They have been built up to 5kg/day of meal since then.

I killed eight steers recently. They were eating 5kg/day of meal plus 70 DMD silage for 60 days and grew from 515kg liveweight to a final kill weight of 610kg. A further 85 stores are on 70 DMD silage plus minerals only and will be targeted for early turnout.

Cattle faecal samples turned up clear of rumen and liver fluke indicating that my dosing regime is working effectively. I had a problem with rumen fluke earlier this summer and it affected cattle performance but it now seems to be sorted. I dose all stock for rumen and liver fluke as they are purchased and I do not know their dosing history. I will take faecal samples again after Christmas to monitor fluke levels.

Figure 1

Average daily growth 17/4/13 to 15/10/13



Northwest

Average total grass yield (t/ha)

Sean Coughlan	9.5
Joe Murray	8.9
Marty Lenehan	8.8
Charlie Crawford	8.5
James Strain	8.3
Billy Gilmore	7.7

Southeast

Average total grass yield (t/ha)

Dan Finleton	10.4
Tomas Murphy	9.5
Patrick Grennan	8.3
Trevor Minion	7.2
James Madigan	6.7
Patrick Drohan	6.2

Southwest

Average total grass yield (t/ha)

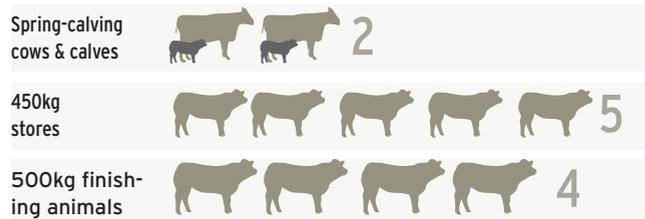
Donal Scully	14.1
David Walsh	10.6
Billy Glasheen	10.3
Donie Aherne	10.2
James Kenneally	10
Ger Dineen	9.8
Michael Dillane	9.2

Northeast

Average total grass yield (t/ha)

Frank & Des Beirne	10.1
Mark Maxwell	9.9
Adrian Kelly	9.2
Chris McCarthy	9.2
Willie Tracey	8.9
Heinz Eggert	8.7
Tom Halpin	8.1

The average growth rate in 2013 of 50kg DM/ha/day can meet the grazing demand (per ha)



are regional charts representing the total grass yields for a number of the programme farms that have recorded grass figures over a minimum of 75% of the grazing season. The average grass yield on the programme farms was 9.2 tonnes DM/ha.

To put this yield in perspective, the average yield calculates out at 3.7 tonnes DM per acre. Grazed grass has a dry matter of approximately 18%, which means that the average yield was 21 tonnes per acre of grass freshweight, or the equivalent of 28 round bales per acre (750kg bale).

Analysis

On closer analysis, there is a clear trend of how the prolonged dry spells have affected grass growth on the drier farms. In the south east, dry land such as Patrick Drohan's farm in Co Waterford, grew 6.2 tonnes DM/ha, or 67% of the average yield.

In contrast, the farms with heavier clay soils that usually suffer during wet periods had a productive grass year.

Farms such as Joe Murray's in Roscommon, Sean Coughlan's in Mayo, and Frank and Des Beirne's in Longford grew 8.9 tonnes, 9.5 tonnes and 10.1 tonnes of grass DM per hectare, respectively, or 97%, 103% and 110%

of the average yield. Donal Scully's farm in Bruree, Co Limerick, produced over 14 tonnes DM/ha, or 153% of the average yield.

The weather conditions are part of the reason for such a high grass yield but other factors will have played just as important a role.

Excellent management, attention to detail, soil fertility and matching the correct fertilizer to soil requirement all had an impact on grass growth.

The Scully farm has been reseeded ground which means that younger swards are more responsive to every kg of fertilizer applied. Grazing in two and three-day

paddocks also had a major bearing on the grass yield on the farm.



Farms have been measuring grass weekly using a platemeter

Marty Lenehan Co Sligo

I finished calving my autumn cows on the last week of October. They started calving on 1 August, so they calved over 13 weeks and things went reasonably well. I calved 48 cows and have 48 live calves on the ground. The cows are housed and eating ad-lib first cut silage which has 68 DMD and 11 to seven protein.

I calve my heifers at 24 months of age, so they require additional attention and feed after calving. They are eating ad-lib silage and 2kg per day of a 16% ration. The autumn herd calves mainly to AI Charolais and Simmental sires, with my Simmental stock bull sweeping up a few late calving cows.

I managed to get eight heifers born from my Simmental bull, which is a bonus as I hope to keep these as replacements. I started to inseminate the autumn cows on 15 October



and will be finished breeding the cows before the end of December. To date, I have 45 cows served.

The spring herd will start calving in January and is due to finish on 15 March. There are 52 cows to calve this spring and 42 of these should be calved in the first seven weeks.

They are being fed lower quality silage that I make especially for dry cows. They have received mineral boluses to cover them pre and post calving. I used to be able to calve these cows outdoors, but I have since lost this piece of land.

This is the first year they will be calved indoors. They will be brought home to calve before going back to the sheds on an outfarm. I had a few problems with rotavirus at the tail end of the autumn calving, so I have vaccinated the spring calving cows with Rotavec.

I weighed nine of my heaviest spring weaning bulls last week and they averaged 495kg liveweight. They have been eating 3kg of ration throughout autumn and will be sold in the coming weeks.