

BETTER farm Beef Programme

BUSINESS, ENVIRONMENT, TECHNOLOGY through TRAINING EXTENSION RESEARCH

Heavy rainfall forces housing on farms



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Hheavy rainfall over the weekend has increased the rate of housing on the programme farms, with some farmers having little option but to bring all stock indoors regardless of

ungrazed covers. While it is important to graze out heavy covers, it is more important to avoid damaging swards as this will limit growth early next year.

If ground becomes poached, it will open the soil up and allow weed grasses, which are less productive than ryegrass, to become established. If there is a settled period in the coming weeks and ground conditions allow, the programme farmers can resume grazing with light weanlings through an on-off grazing approach.

Some of the farms have

sheep flocks or buy in store lambs. With cattle housed, sheep will now concentrate on cleaning out the remainder of the grazing platform. Store lambs and ewes will manage to clean out pasture much tighter than cattle at this time of year, especially on heavier land. However, they still require careful management to prevent poaching as they tend to be stocked in higher numbers.

Breeding

Autumn breeding has started on the programme farms and is progressing well to date.

“If there is a settled period in the coming weeks, the programme farmers can resume grazing with light weanlings

The farms are using a mix of AI and natural service to breed cows.

Where cows remain at grass, they are mainly being covered with stock bulls, whereas cows being inseminated are predominantly

housed for convenience. Cows have been quick to come back into heat after calving which bodes well for keeping calving patterns tight. AI bulls are being selected based on past performance, market outlet and on €-star ratings. Heifers that will calve at 24 months are being predominantly served with easy-calving Angus and Limousin sires.

Heat detection is being carried out manually with monitoring of cows ongoing throughout the day. Cows that were served in mid to late October will be due to

come back into heat now if they have not held to their first service. Attention will be paid to these animals from this week on.

Animal health

A number of programme farmers have opted to treat finishing cattle and spring-born weanlings for fluke and worms using a product that targets fluke at the immature and mature stage. Faecal samples have been taken on farms and there has been an increase in fluke presence in recent weeks. Cattle have also been treated for lice.

ON THE GROUND

FOCUS ON SOIL FERTILITY

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Increasing output has been one of the major objectives of the BETTER farm programme. While it is beneficial to produce more cattle for sale, it is important that the additional liveweight produced for sale is primarily gained from a grass-based system.

Increasing stocking rates has been the primary method of increasing output on farms.

But before the farms started to increase numbers, the programme farmers and programme advisers targeted reseeding and improving soil fertility so that they could produce more grass to carry additional stock.

Without addressing soil fertility, in the long-term it will be unsustainable to increase stocking rates, as it will be difficult to produce

enough grass for grazing and winter feed. Unfortunately, Irish farms cannot be guaranteed grazing conditions like those experienced in 2014 every year.

It is easy to increase stocking rate in a good year. But during a year when weather is less favourable, there will be grazing problems if there has been no effort made to improve soil fertility or sward quality.

Soil analysis

Soil testing is carried out regularly on the programme farms. At the start of every year, the programme and local Teagasc advisers will meet with the farmers to determine the level of soil fertility on farms and to develop a fertilizer plan for the year ahead. It is a relatively simple process.

A fertilizer plan identifies which fields are low in lime, phosphorous (P) and potassium (K). Thereafter,

the plan outlines what type of fertilizer will be applied to specific fields to balance P and K requirements. It also outlines the rate of slurry applications for grazing and silage ground.

Almost 75% of Irish farms are below the recommended level of P and K. Over 60% of farms are low in P, which can reduce grass yields by 1.5t DM/ha compared with soils at the ideal level (index 3). On a fresh weight basis, the lower yield is approximately the equivalent of 18t/acre of grass over the season.

Potassium levels are also below optimum levels on Irish farms, partly as a result of higher compound fertilizer prices. In addition, cutting of silage two to three times per year removes large quantities of potassium from soils that are not being adequately replenished with slurry or chemical fertilizer.

Every tonne of silage dry matter harvested removes

4kg/t DM of P and 25kg/t DM of K.

Lime status is just as important to monitor on farms. Grassland that is below pH 6.0 will produce less grass.

At pH 5.5, approximately 50% of chemical fertilizer applied to swards will actually be used for growth. This highlights how important it is to address soil fertility if you are spreading more fertilizer as you increase stocking rate.

At pH 6.3 to 6.8, soil organic will release additional nitrogen for growth. For instance, at pH 6.5, there will be an additional 60 to 80 units of nitrogen available, compared with soils at pH 5.0. This additional nitrogen is the same as spreading an extra bag of CAN per acre – a cost saving of €60 to €80/ha.

Farmer experience

Billy Glasheen farms 43ha of grassland near Ballingarry, Co Tipperary. Billy operates

a store-to-beef finishing enterprise, buying Angus and Hereford-cross dairy cattle. Prior to joining the programme, Billy finished 150 cattle per year on one tonne of concentrates per animal.

The system has increased to over 240 head of finishing cattle, with a greater emphasis on grass finishing, rather than indoor finishing.

By improving grassland management and consistently making high-quality silage at 75 to 76DMD, Billy has reduced concentrate use by 50% per animal.

In 2012, soil analysis showed 50% of the farm was at index 2 or lower for P. It also indicated 60% of land was below index 3 for K. Stocking rate has increased from 1.5LU/ha to 2.6LU/ha. Taking an average liveweight of 500kg per animal, grazing demand has increased from 26kg DM/ha to 43kg DM/ha.

Over a 200-day grazing season, Billy needs to be produc-

ing 8.6t of grass DM to meet grazing demand alone. In 2014, Billy produced almost twice this grass yield, which includes surplus grass conserved as silage. In 2013, 10.5t DM/ha was produced from the same land base.

Improving soil fertility by targeted use of compound fertilizer has enabled Billy to increase stocking rate.

According to Billy, there is potential to increase stocking rate to 3.0LU/ha next year if he so desires and still finish two thirds of these cattle off grass.

BETTER farm analysis

Alan Dillon is the programme adviser in the south-west region for the BETTER farm programme, which covers the farms in Cork, Kerry, Tipperary, Limerick, Clare and Westmeath. Alan has compiled the soil analysis results for the farms in the region which are outlined in Figures 1 to 4.



Regular liming will improve fertilizer uptake by grass. At pH 5.5, approximately 50% of chemical fertilizer applied to swards will actually be used for growth.

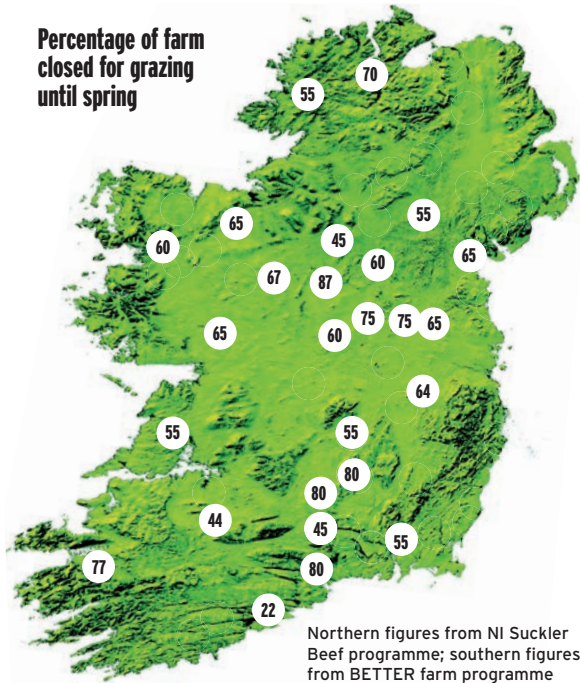
WEEK IN REVIEW

- ➔ Heavy rainfall over the past week has forced a number of farms into housing all stock to prevent heavy poaching from occurring.
- ➔ Protecting grass swards from grazing damage is taking priority over grazing paddocks out.
- ➔ Store lambs and breeding ewes will be used to clean off remaining covers on some mixed livestock farms.
- ➔ Breeding is progressing well in autumn herds, with AI and natural service being used.
- ➔ Cows served in mid to late October will be monitored closely from this week on for repeats.

➔ Late autumn and early winter is a good time to take soil samples to determine soil fertility. Samples should be taken randomly across the field by walking in a zig-zag or W shape. Take at least 20 cores per sample and only sample fields that have not received slurry or chemical fertilizer in the past six to eight weeks.

TOP TIP

Percentage of farm closed for grazing until spring



Phosphorous levels in this region are the highest in the programme, with 79% of soils at index 3 or index 4.

Farms with soils at index 1 or index 2 are targeting straight phosphate and slurry to these fields to increase P levels. Where slurry is limited, compounds such as 20:0:40 are also being used.

Potassium levels are much lower than P levels on farms in the southwest region, with 61% of farms at index 3 or index 4.

On farms with fields that are low in K, the farmers are spreading muriate of potash, along with compounds such as 20:0:15 and 0:7:30.

Slurry is high in K, with an estimated 38 units/1,000 gallons. Slurry is also being targeted to silage ground before and after calving.

There has been a trend for fields on outfarms to have low P and K levels as they have received less slurry or FYM.

Approximately 53% of farms in the southwest are in the optimum range for pH. Almost 500t of lime has been spread on the farms in the past two years.

Some farms have a molybdenum problem, which prevents lime applications. Lime applications on heavy farms have been limited to 2t/acre/year to prevent the soil structure breaking down and increasing the risk of poaching.

Similar soil analysis is included for farms in the southeast region (Wexford, Waterford, Kilkenny, Wicklow, Laois, Kildare, Meath), northwest region (Donegal, Sligo, Leitrim, Roscommon, Galway, Mayo, Longford, Westmeath) and northeast (Cavan, Monaghan, Louth).

Figure 1 Southwest
P index

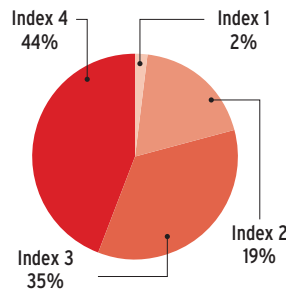


Figure 2 Southeast
P index

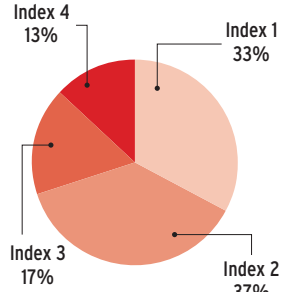


Figure 3 Northeast
P index

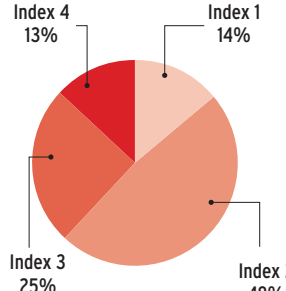
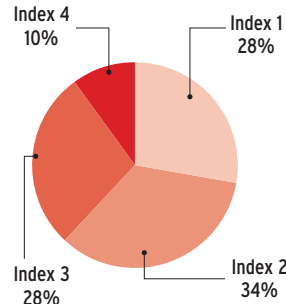
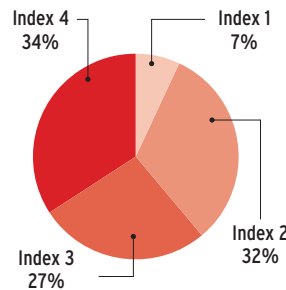


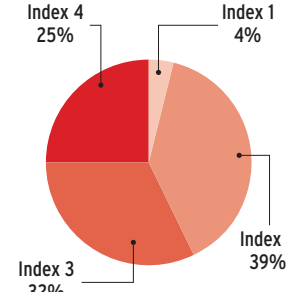
Figure 4 Northwest
P index



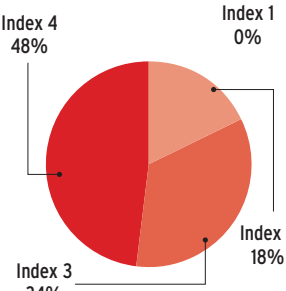
K index



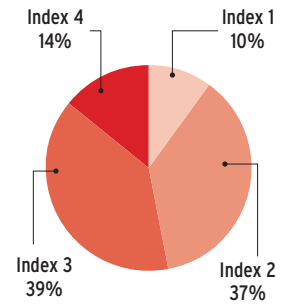
K index



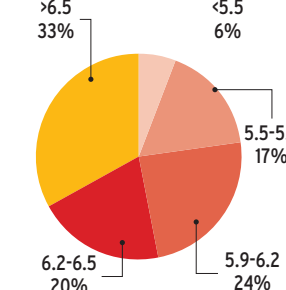
K index



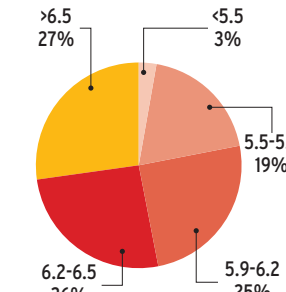
K index



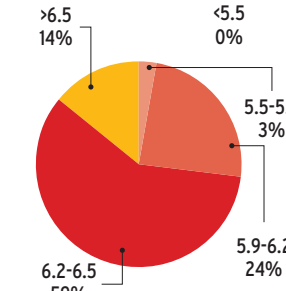
Soil pH



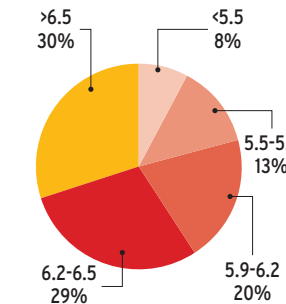
Soil pH



Soil pH



Soil pH



FARMER FOCUS

Donal Scully Co Limerick

My cows calved through late summer and autumn. Calving went well and I finished with 41 calves from 42 cows. Cows are now being bred for next year. I have finished using AI for this season, so the Limousin stock bull is now running with the later-calving cows and any repeats.

Silage has been analysed and I am pleased with the results. First-cut came in at 71 DMD and the second-cut at 74 DMD. High-quality silage will help reduce the levels of meal feeding this winter to cows with calves sucking.

I may need to buy in some silage, having carried out a budget with my adviser, as it shows that there is only enough fodder for a four-month winter at best.

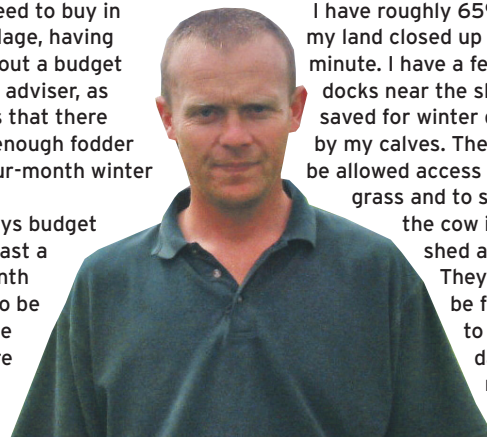
I always budget for at least a five-month winter to be safe. Due to severe drought this

summer, where I received just over an inch of rain from late May to late September, my land burned up and grass growth was very low. This resulted in me feeding baled silage I had conserved earlier in the summer, along with purchasing a substantial amount of bales. It will be interesting to see how it impacts on my profit monitor at year-end.

Last year's male calves are being finished as bulls under 16 months of age. The target is a 400kg carcass, which is a slight improvement on previous years. They are being fed up to 12kg of a 12% (0.95 UFV) bull finishing ration. Bulls were housed in early August when grass went scarce.

I have roughly 65% of my land closed up at the minute. I have a few paddocks near the sheds saved for winter grazing by my calves. They will be allowed access to grass and to suck

the cow in the shed at night. They may be fed up to 2kg/day of ration also.



James Kenneally Co Cork

I have been closing up ground at a slower rate than anticipated due to excellent autumn growth. I suffered badly with drought in the summer, but grazing was back on track by mid-September. I aim to have 70% of my ground closed by mid-November.

The majority of weanlings are housed at this stage and I am waiting on silage analysis results. I was delayed in cutting silage this year by a week due to a combination of wet weather and the contractor being busy. I have stored 35t of home-grown barley for feeding. Extra fodder beet will also be kept for feeding.

The barley was rolled and treated with prop-corn. The level of feeding will be decided by my silage results, but I expect to feed more fodder beet and barley this year. All fodder beet and barley is costed into the cattle enterprise at market price.

I have purchased extra heifers

for finishing this year after completing a few budgets.

Heifers weighed 310kg to 330kg liveweight and were purchased at an average price of €2.50/kg. The aim is to finish these animals out of the shed at 16 to 17 months of age and at approximately 310kg carcass weight.

Weanling bulls have been castrated and housed. They will be on a similar diet to the heifers. They will be fed 8kg to 10kg of beet, plus 0.5kg of soya, along with silage. I hope to turn these steers out to grass early in March next year.

My finishing steers are being built up to 7kg of barley, 15kg to 20kg of beet and 0.5kg of soya, plus silage. I aim to kill them at around 420kg to 440kg carcass weight at 22 to 23 months out of the shed.

With the help of my programme adviser, we assessed lifetime performance of cattle on farm. Steers have gained 0.94kg/day from birth, with heifers gaining 0.92kg/day. It was a fairly good result and something which I aim to improve over the next few years.

