

BETTER farm Beef Programme

BUSINESS, ENVIRONMENT, TECHNOLOGY through TRAINING EXTENSION RESEARCH

AUGUST CHOICES DICTATE GRAZING



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Management practices on the programme farms are starting to look towards setting up the farm for autumn grazing. While it is early August, it is decisions made in the com-

ing weeks that will influence the volume of grass available and the potential to extend the grazing season.

Decisions made will differ greatly between farms on heavier soils that currently have a surplus of grass and those on drier soils that have seen grass supplies tighten considerably over the last month. The aim is to find a balance for your farm that ensures there is a supply of grass to extend the grazing season and also sets the farm up for spring-grazing in 2015. On many farms, demand is actually increasing as autumn cows calve. For

Table : Target pasture farm cover for a herd stocked at 2.5LU/ha*

Date	Stocking rate on grazing area (LU/ha)	Typical growth (kg DM/day)	Target average farm cover	Target cover per LU (kg DM/LU)	Event
Aug 15	2.5	65.0	848	342	
Sept 15	2.5	37.1	1130	450	Peak cover achieved
Oct 10	2.5	26.8	1050	424	First paddock closed
Nov 15	2.5	8.5	650	262	
Nov 30	2.5	2.7	560	224	Animals housed

Source: Grazing Guide. *These figures will need to be adjusted if the farm is not stocked at 2.5LU/ha. For a man stocked at 1.5LU/ha reduce by 25%.

others, a supply of grass will be built by reducing demand through housing finishing bulls or selling store/finished animals.

The length of the grazing rotation should be increased in the next three to four

weeks from 21 days to 25 to 30 days in mid to late August and to 35 to 40 days in mid to late September to take account of reducing growth rates. A target example for a farm stocked at 2.5LU/ha that can generally graze in

a normal year until the end of November is shown in Table 1.

Farms on heavier soils or that have received regular rainfall are in a good position with the rotation length naturally increasing. The

aim on these farms is to have all surplus grass removed in the next two weeks so that these paddocks are quickly brought back into the rotation. Where surplus grass is available, fertilizer application rates are being reduced



OPEN DAY

MIKE DILLANE

TACKLING A MAJOR RECLAMATION JOB

Considering the high levels of rainfall in 2012 and 2013 and the associated damage caused to lands, it is not surprising that discussions and open days concerning land drainage have attracted close attention. Interest levels have grown in recent months with the strong grass growth rates and replenished fodder supplies providing many farmers with an opportunity to undertake drainage and reseeding.

This was very evident at the recent national open day held on Mike Dillane's farm in Lixnaw, Co Kerry, with farmers travelling huge distances to witness a land reclamation job on the farm. There has also been a long line of enquiries from farmers who did not attend the event with questions on how to go about tackling a major land reclamation/drainage project.

Teagasc adviser David Trant, positioned in Listowel, Co Kerry, has gained vast experience in the area and

detailed advice to consider when weighing up a land reclamation project. David uses Mike Dillane's drainage job as an example of the factors that should be considered and general lessons to take into account, in his advice below.

Initial survey

The site was surveyed and levels taken to establish falls, low areas and surface run-off directions. Soil and geological maps were consulted to get an overview of the conditions in the area. Indicative vegetation like rushes and iris, their distribution, and drainage factors like old drains were identified and noted.

The key element was the digging of four test pits, which were similar in their makeup. They showed peat varying in depth from 30cm to 70cm overlying a substantial layer of silty/clay material. Below this, at circa 1.5m, the till was somewhat more permeable. Ground water pressure was evident and while the depth of silt/

clay band was thick, the trial holes appeared less dramatic (filled to the top with water – approximately 2m depth of water) and weakened the case for shallow drainage. However, due to the evidence from the test pits (makeup of soil layers), it was decided that most drains would have to be at around 1.5m-plus depth, or alternatively at about 1m depth with sumps to a depth of 1.5m to 1.8m, located approximately every 30m.

Ground situation

A combination of the above drains were carried out and two-inch stone and bigger was used over the pipes. Drains were spaced at approximately 12m distance apart and most were used with 80mm corrugated pipe. There is the potential to install mole drainage in the future in localised spots should there be any surface drainage issues. The main outlet was deepened to improve fall and flow in the main open channel. The few low-lying hollows were filled



David Trant and Alan Dillon address the large crowd at the recent open day on Mike Dillane's farm.

with excess soil and when the drainage was completed, the whole area was ploughed and the land levelled to give all sections of the site an outfall.

General drainage lessons

Poor design. Spacing, depth and type of drain merit a lot of detailed investigation and contractors with local experience are good at advising on such matters. Where

the drainage system fails or is substandard, this can be confirmed by observing the water table depths between the drains and also the drain flow rate.

Ideally drains should be installed in dry weather. Deposition of soil particles in a drain pipe usually takes place just after construction when the backfill is loose. Generally this material is coarse as the "fines"

have been washed out. In wet weather, the problem is more acute and the chance of other problems occurring increases, ie scaling, which may cause breakage or misalignment of the pipe and non-uniform settlement of the drain itself and the backfill.

Soil particle entry into the buried pipe may occur in soils that are very fine-grained and uniform (fine



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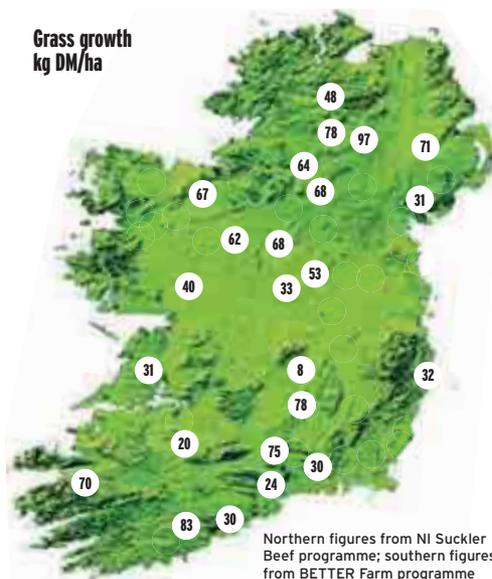
PATTERNS

or paddocks that have received fertilizer recently skipped. Applying even small amounts (10 to 15 units nitrogen) of fertilizer is paying dividends in maintaining grass quality.

On drier farms, fertilizer is being applied to boost growth rates following recent rainfall. Application rates range from 20 to 25 units on lower stocked farms (1.8 to 2LU/ha) to 30 units on highly stocked farms (2.2LU/ha) or those tight on grass where grass demand will also be rising in the coming weeks. Grass growth should recover quickly on these farms.

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Grass growth kg DM/ha



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

FARMER FOCUS

Donie Ahern Limerick

I am following up each paddock taken out for bales with one bag per acre of 27-2.5-5 while paddocks grazed are followed up with a bag of CAN per acre. The drought hasn't affected me as badly as others. I have received small amounts of rain on a regular basis over the past few weeks so growth rates are holding up fairly well. Spreading fertilizer is helping to maintain grass quality and also start to build grass reserves.

Spring 2013-born bulls set for finishing in November are now on meals at grass. I hope to build them up to 5kg before housing at the start of September for the final ad-lib finishing period. I'm hoping this will help keep a cover of fat on bulls until housed and shorten the timeframe to build bulls onto ad-lib feeding. They currently weigh around 560kg and I'm hoping to finish them in 60 to 70 days.

Heifers for finishing are on grass only now but I

will pull out the best 20 soon and feed them 3-4kg at grass also to speed them up for finishing. All finishing stock are kept on the best grass on the farm and are typically entering covers of around 1,400-1,600kg/DM/ha.

Autumn bulls were weaned in the spring and are now on 3kg of ration. I hope to kill these under 16 months around Christmas time.

Housing bulls and prioritising animals for finishing earlier will help to reduce demand and build covers heading into the back end. I will need more grass for autumn-calvers in the next two months and will also aim to build a good enough surplus to hold spring-calvers or weanlings outdoors for longer.

I am trying to clean up pastures at the minute and am targeting docks in particular. I aim to spray as stock leave the paddock, that is once the plant is at the correct growth stage. I carried out a lot of reseeding last year and want to keep on top of weeds while they are easier to control.



Alan Dillon's factors to consider

It is important that before anyone attempts to carry out a drainage job on their farm that they have taken care of the following:

- ➔ Every drainage job is only as good as its outfall. Cleaning and upgrading of open drains acting as outlets for land is a must before any drainage commences. All open drains must be dug to as great a depth as possible.
- ➔ Perform a site assessment. Test pits must be dug to ascertain soil type in the area and the type of drainage system required (shallow or deep).
- ➔ Hire an experienced contractor to carry out the work. A contractor with good knowledge and experience of carrying out drainage works can be the difference between a successful drainage job and an unsuccessful one.
- ➔ Have finances in place. Drainage is expensive and can have a serious impact on farm cashflow if plans for finances are not properly in place. Farmers need to sit down with their adviser to assess if draining land is the best move for them to make.
- ➔ When reseeding land post-drainage, select grass mixes that are suitable to heavy land, select mixes with good ground cover and persistency.
- ➔ The mix used on this farm on a per-acre basis was Twymax 4kg, Drumbo 4kg, Abermagic 5kg and Timothy 2kg.



Digging test holes is key to identifying the type of soil you are working with and the most suitable drainage method.



Levels were taken to establish falls, low areas and surface run-off.



sands) – this is where the soil enters the drains over time and clogs the system. However, this is not likely to be a problem in clay soils, especially where gravel is put in around the pipe.

Sedimentation or settlement out of the heavy soil particles from the drain water will tend to occur at joinings and where there is a sharp change in the fall. These should be avoided

where possible. Organic wastes like slurry or milk, etc entering the system will quickly form a gel which rapidly blocks the pipes.

Ochre or Red/Iron deposit can cause severe problems and is difficult to overcome – larger diameter pipes and/or more gravel fill can help in this regard and submerging of the system has been successful.

Finally, the drain mouth

outlet may become clogged by roots, weeds, silt, etc over time and can subsequently cause stagnation/sedimentation along the pipe, which compounds the initial problem.

Drain mouths should be identified and marked and cleared every so often and care should be taken when cleaning main drains that these outlets are not damaged.

Pat O'Reilly Clare

I finished up the last of my second cut 10 days ago and have followed it up with 35 units of Sulfa-Can per acre. It yielded a good crop and I have plenty of silage in the pit this year. Land here is suffering badly from drought. Apart from the small volume of rain at the weekend, I have received very little rain in the last two months.

Grass has become stemmy due to drought stress also. I am using autumn-calving cows to clean out paddocks before they calve and following up with Sulfa-Can. This is reducing grass demand, keeping cows fit before calving and also leading to a nice cover of clean, fresh grass in regrowths. The first two autumn cows that calved delivered a great surprise with one cow having twins and the other triplets. All calves are alive and doing OK.

The stocking rate on the farm is high. I had purchased Angus and Friesian bullocks for finishing but with the drought these are adding further to tight grass supplies. The rain I received last weekend and fertilizer

applied should start growth up again. I will keep fertilizer rates high for the next couple of weeks to help get a surplus of grass ahead of stock again.

I have bulls on the point of slaughter. They are between 650 and 700kg and are a mix of U and E grades. I would have normally exported these as weanlings but I was locked up with TB last year and this sent me down the finishing route.

I am currently weaning December- and January-born calves and will begin feeding these in troughs. These calves have performed well and I estimate are weighing between 300kg and 350kg. I will offer them the best quality grass and use weaned cows to follow priority stock and graze out paddocks, which will also reduce grass demand. I will weigh up the market and make a decision on whether to sell a percentage of animals or carry over the winter. Spring-born calves have been fed no meal at grass yet.

