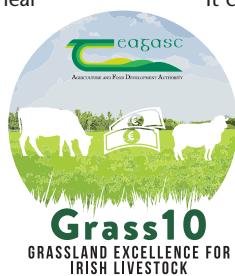


BEEF

July 2018

Winning grassland farmer

Ger Dineen, who farms near Macroom in Co. Cork, won the title Beef Grassland Farmer of the Year in 2017. Ger has around 60 suckler cows and finishes bulls under 16 months, with surplus heifers sold for breeding. The farm has 32 paddocks of roughly one hectare each. To quote Ger: "The more paddocks you have the more control you have over grass. I also have roadways running to most paddocks and every year I put in more roadways". This allows him to gain more access to grass. Cows calve to grass, and calving starts around February 1. Animals will go straight out to grass if the weather is ok but will come in again if they are doing a lot of damage.



It costs Ger around €1,200 per week to keep his cattle inside: "If I can get them out earlier and keep them out longer it will pay off. If I got €1,200 a week to put up wires and move stock in and out in bad weather, it is a

difference between making money and losing it".

He walks the farm and measures the grass every week, and uploads the information onto PastureBase Ireland. On PastureBase, farmers can see the paddocks that are doing well and the ones that are performing poorly. Last year Ger's paddocks ranged from 8-18 tonnes per hectare in grass production. At €105 per tonne for every additional tonne of grass

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utilised, this means that the 8t paddock is producing €840 of grass per hectare, and the 18t is producing €1,890 per hectare. That's a difference of €1,050!

Ger cuts a lot of round bales of silage to keep grass in good condition. If a paddock is getting strong he will take it out if he has plenty of grass. This is where the PastureBase package comes in. It will tell farmers how much grass is on the farm at all times. Ger cuts around five bales per acre. While many farmers may feel that this is a low amount of bales to be producing, Ger feeds the bales to the finishing bulls, as they are around 75% DMD+. These bales save him around 1t of ration per bull.



The more paddocks you have the more control you have over grass.

Fodder budget

Teagasc is encouraging all of its clients to complete a fodder budget early in July. The purpose of this budget is to compare what you are going to need this winter with what you

have now and are likely to make over the coming weeks. Dealing with any shortfall now (while there is still time to do something) is the most sensible approach. Blank budget forms are available from your adviser.



HEALTH & SAFETY

Protect against sunlight

Farmers in the working age category (16-64 years old) have a cancer mortality that is three times higher than that of blue/white collar workers in Ireland. Factors associated with this heightened death level include exposure to sunlight, lifestyle factors (particularly smoking but also diet, exercise and weight), and contact with cancer-causing substances (e.g., chemicals, asbestos fibre, and burnt oil). Late presentation for treatment is also a major factor in excess cancer mortality among farmers. Protect yourself against sunlight and other cancer causes. Further information is available at www.cancer.ie.



Protect yourself against sunlight and other causes of cancer.



BETTER FARM UPDATE

Another clean sheet in Claregalway

Perhaps you've often heard the old saying: "Keep it small and keep it all". In business terms, it refers to containing or minimising the size of your business and overheads, in order to make sure that the enterprise is profitable. This is even more important on smaller beef farms with beef prices being so volatile. Nigel O'Kane may have one of the smallest farms in the programme, farming 25 hectares, but it may well be the most efficient.

While farms in the BETTER Beef programme have often been known for running stocking rates of over 3LU per hectare and producing

over 1,000kg of liveweight per hectare, Nigel has focused on getting the simple things right first before adding scale.

Working off farm full time, and calving suckler cows, can always be a challenge, but for the second season in a row Nigel has kept a clean sheet in terms of mortality.

Unfortunately, Nigel has no secrets to share on why his calving report reads so well, except to do the 'simple' things right. Sire selection is something Nigel swears by and, having a keen



Table 1: Nigel's calving report for 2017 and 2018, along with national average figures and targets farmers should aspire to.

	2017	2018	National average	Target
Calving interval	385	364	400	<365
Mortality at birth	0%	0%	4.6%	<3%
Mortality at 28 days	4.8%	0%	5.7%	<4%
Calves/cow/year	0.90	1.04	0.85	>0.95

interest in breeding, he has learned the hard way.

Nothing with a calving difficulty above 4% is used on heifers and second calvers, while mature cows

are sired with bulls less than 6%. Working as a full-time plumber, Nigel just hasn't the time to be assisting cows at calving.

Gross margin for 2017 was an impressive €881 per hectare, as he tweaked his system slightly, slaughtering bull weanlings under 16 months of age as opposed to selling them live. Although the bulls were a huge success, Nigel has once again reverted to selling stores as fodder was tight this past spring. Nigel is holding an open day on his farm on July 19.

Upcoming events

Teagasc and the *Irish Farmers Journal* will run two national beef events in July on BETTER Beef farms.

July 17: Brian Doran, Carnew, Co. Wicklow

Brian farms 53 hectares running a 50-cow spring-calving suckler herd, with all of the stock brought through to finish as steers and heifers.

July 19: Nigel O'Kane, Claregalway, Co. Galway

Nigel farms 25 hectares and has a spring-calving suckler herd, with all male calves either sold as stores or finished under 16 months as bulls.

Two farm walks each day: 12 noon and 5.00pm. Admission free. Both events are approved under the Knowledge Transfer Programme.



Feed efficiency

Emily McGovern, Sinead Waters and David Kenny of Teagasc Grange report on the potential role of rumen microbes in enhancing the nutrient utilisation from feed.

The future of food production systems in Ireland and globally will need to be aligned with the issues that arise from addressing challenges including climate change and sustainable development goals. Feed efficiency is one determinant of the sustainability of beef cattle production. Animals with better feed efficiency consume less feed for the same meat production, and are therefore more profitable and have a lower environmental footprint than their less feed-efficient counterparts.

In the past, there have been many approaches to best assess and improve feed efficiency including genetics, diet composition and nutritional management. Evidence is growing on the important associations between feed efficiency and rumen microorganisms in ruminants; however, our understanding of the rumen microbiome and its linkages to host feed efficiency is limited. In order to examine the relationship between host feed efficiency and the rumen microbiome in cattle in more detail, a European-funded project (FACCE-JPI) was conducted at Teagasc Grange. The project examined the effect of feed efficiency phenotype on the rumen microbiome, encompassing the effects of castration, dietary

management, dietary transition, breed and age. Data from the project indicate that the abundance of certain bacterial genera such as *Fibrobacter* in the rumen exhibited relationships with residual feed intake phenotype, possibly due to their role in ruminal degradation of complex plant polysaccharides or increased capability to harvest nutrients from ingested feed. Supplementation of feed with prebiotics that promote the growth of *Fibrobacter* could enhance nutrient utilisation from feed. Researchers also discovered that the abundance of *Methanobrevibacter millerae* Y315 may be an indicator of host feed efficiency in cattle fed a high concentrate diet. This methanogen strain appears to thrive in a rumen ecosystem that is sustained by a feed-efficient phenotype irrespective of breed or age, and can thus potentially contribute to breeding strategies to enhance feed efficiency and lower methane emissions. This research will be continued in Teagasc Grange by another European-funded project, FACCE ERA-GAS, which will examine the relationship between feed efficiency, methane emissions, rumen microbes and animal genetics at a larger scale.