



Teagasc/Irish Farmers Journal

BETTER FARM BEEF CHALLENGE

SPRING FARM WALKS 2019



Maurice Hearne
Leperstown, Co Waterford

Farm walk date and time:
4 April 2pm-4pm

Ricky Milligan
Robertstown, Co Kildare

Farm walk date and time:
11 April 1pm-3pm





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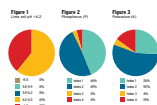
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Teagasc/Irish Farmers Journal BETTER Farm management team: Pearse Kelly, Paul Maher, Alan Dillon, Tommy Cox, John Greaney (Teagasc); Matthew Halpin, Darren Carty, Adam Woods (IFJ)

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Adam Woods

Beef editor,
Irish Farmers
Journal

On behalf of the stakeholders of the Teagasc/*Irish Farmers Journal* BETTER Farm beef, challenge I would like to welcome you to this spring series of events. We hope you will find the farm walks informative and that you can take home some key messages to improve the profitability of your own farm. While increasing output has been a central theme to all farms, achieving this higher output via the cheapest possible method is equally important. All of the programme farms have placed a huge emphasis on grass and growing and utilising as much of it as possible in a bid to reduce costs. The farm walks will look at strategies employed by the farmers in relation to early turnout and grassland management. Maintaining the quality in the swards through optimum management means animals will perform to their maximum ability at grass. 2018 was an extremely tough year for many of our programme farms, with storms hitting in spring followed by drought conditions in June and July. This increased costs on many of the farms and this, coupled with difficult market conditions, has meant profits have taken a big hit in 2018. There have been some valuable lessons learned around having a buffer of silage for difficult weather conditions and important messages around dairy-calf-to-beef systems. Many of these issues will be discussed at the farm walks and the farmers should be given credit for talking about these issues in an open and transparent manner. Finally, I would like to acknowledge the continued support of the programme sponsors FBD, ABP, Dawn Meats and Kepak.



Alan Dillon

Teagasc/*Irish Farmers Journal*
BETTER
farm beef
programme
manager,
Teagasc

On behalf of the Teagasc/*Irish Farmers Journal* BETTER Farm Beef Challenge management team, I would like to welcome you all to the farms of Maurice Hearne and Ricky Milligan. Both farmers have been kind enough to open their gates to the public to help demonstrate some of the practices that they have engaged in since joining the programme. I want to thank them and their families and also their local B&T advisers Graham Waters and Austin Flavin for helping. Last year will go down as one of the hardest in living memory. If anything, 2018 demonstrated the value of grazed grass in the diet of livestock with regards to cheap weight gain. Our programme farmers have managed to increase production levels and, while profitability levels didn't improve last year due to adverse weather, they have set themselves up to reap the rewards of increased productivity when more normal weather patterns resume. The strength of the BETTER Farm Beef Challenge is that all the data comes from commercial farms with the same struggles and issues to deal with as any other farm. I hope everyone who attends these open days can take at least one message or new idea home with them.

Maurice Hearne

Clear farm plan was key to progress for Waterford farmer

On behalf of myself and my family, I would like to welcome everyone here today to Dunmore East to our family farm. We hope you have an enjoyable day and you find it both informative and worthwhile.

Since joining the Teagasc/*Irish Farmers Journal* BETTER Farm Beef Challenge programme in 2017, there has been plenty of ups and downs on the farm. The weather conditions experienced last year definitely created many difficulties, but thankfully they have all since passed and we are looking forward to 2019.

The farm has also made numerous positive changes to improve efficiency. These changes were all simple steps, but have proved very beneficial in the performance of the farm.

The completion of the farm plan at the start of the programme gave me a clear vision as to what way I was going to drive on my farm and what changes needed to be made in order to maximise its potential.

Since joining the programme in 2017, the key



The key areas targeted were grassland management, soil fertility and herd health

areas I targeted most were grassland management, soil fertility and herd health. I firmly believe I am starting to see the benefits of these improvements.

Finally, we would like to thank our Teagasc BETTER farm programme adviser Tommy Cox and local Teagasc B&T adviser Austin Flavin for their continued advice and support.

Furthermore, we would like to thank both Teagasc and the *Irish Farmers Journal* for allowing us to participate in this programme

and we would also like to acknowledge the industry stakeholders for their continued support of the programme.



Table 1: Farm plan for 2021

Measure	Base year 2016	Target 2021
System	Suckler to beef	Suckler to beef Dairy-calf-to-beef Store beef finish
Stocking rate (LU/ha)	2.5	2.6
Land base (adj.ha)	60	75
Gross output/ha (kg)	877	1,189
Gross output/ha (€)	2,188	2,546
Variable costs	61%	50%
Gross margin €/ha	879	1,270

Sucklers, ewes, stores and dairy calves on 120ha

Maurice Hearne is flying the flag for Waterford in the Teagasc/*Irish Farmers Journal* BETTER Farm beef challenge which commenced in 2017.

Maurice operates a mixed suckler, sheep and tillage enterprise in the townland of Leperstown which is located outside Dunmore East, Co Waterford. Maurice is married to Mairead and they have a son, Patrick.

The farm comprises of 121.5ha in total, 39.9ha of which is tillage and the remaining 81.6ha in grassland. The majority of the land can be described as light, sandy-type soil.

The grassland area is quite fragmented being split into three blocks; the main block of over 36.4ha is situated around the yard, with the remaining 45.2ha split in two separate blocks with the furthest approximately 8km away.

Infrastructure is quite good on the farm, with well laid-out paddocks. Since the start of the programme extra paddocks have been installed, as well as

upgrades to roadways, to provide ease of access and management.

Maurice is currently running a 110-cow autumn-calving herd and a 110-ewe mid-season lambing flock. After a difficult few years for tillage, the decision was made at the farm planning meeting to put some of the tillage ground back into grassland to facilitate carrying extra stock.

The plan is to maintain cow numbers at the 110 mark and continue slaughtering males as under-16-month bulls and heifers at 24 months. To complement his own stock, the plan is to buy 30 to 40 store bulls at 350kg to 400kg and finish them along with his own progeny.

Along with the bull-finishing enterprise, a small-scale dairy-calf-to-beef operation was introduced to the farm last year, with 30 spring-born calves purchased. The plan is to take them to beef as bulls under 20 months.

The farm has made steady progress since the start of the programme and it will really kick on in the next year as the farm plan takes shape.

Maurice Hearne

Getting to grips with grass and mixed grazing

Since joining the BETTER Farm beef challenge programme, Maurice has continued to improve his grassland management.

INFRASTRUCTURE IMPROVEMENTS

Extra grazing divisions and water troughs have been installed on the farm to ensure stock residency in paddocks is no longer than three days and recovery is 21 days before grazing again.

Along with extra paddocks, Maurice walks the farm weekly to measure grass growth and assess farm covers. Measuring highlights if there is a surplus or deficit of grass on the farm, but also ensures that grass is high quality.

Target pre-grazing yields are 1,300kg to 1,600kg DM/ha (8cm to 10cm) for all stock to maximise intake and weight gain. Measuring also allows Maurice to identify lower-growing paddocks for reseeding.

Along with increasing paddock infrastructure, extra roadways have been installed on the farm to allow ease of access, especially during the shoulders of the year.

RESEEDING AFTER REDSTART

Like the majority of farmers on lighter soil, the extended dry spell last summer resulted in a significant reduction in grass growth.

The reduction in grass growth, coupled with the difficult spring, resulted in a huge challenge trying to build depleted fodder reserves and maintaining grass in front of stock.

Last July, when a fodder budget was

completed for the farm, a significant fodder deficit was identified. To try to counteract this, the decision was made to plant 20ha of redstart on tillage ground and a proportion of grassland once harvesting was complete.

The crop was sown the end of August and yielded approximately 4.2t/ha of dry matter. The crop is now totally grazed and the focus is getting the ground back in production as soon as possible.

The grassland area will be reseeded in the spring as soon as conditions allow and spring crops will also be sown on the tillage ground.

GETTING THE MIX RIGHT

Mixed grazing is a new concept being looked at as part of the BETTER Farm beef challenge.

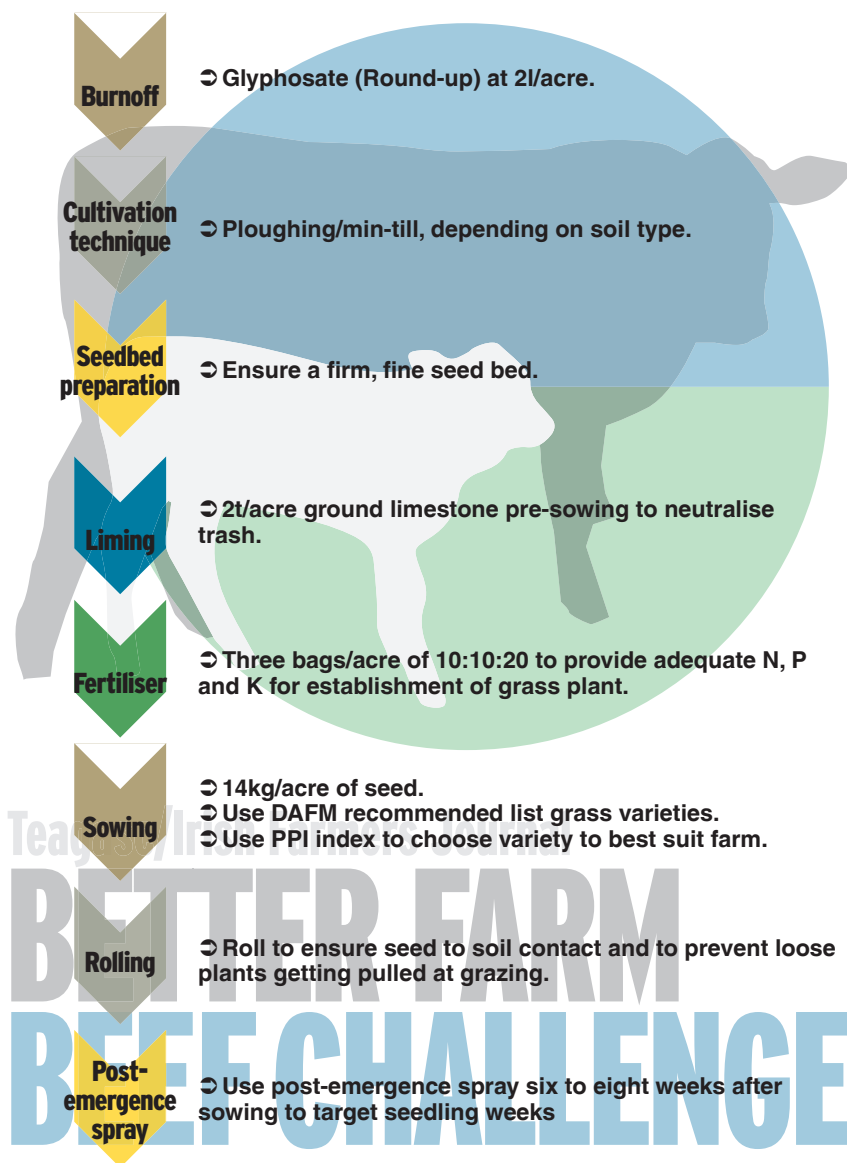
As part of the programme, the management team is looking to develop a suitable blueprint to facilitate mixed grazing of sheep and cattle.

Along with 110 autumn-calving suckler cows and followers on the farm, there is a flock of 110 ewes on the farm, which lambs in late February.

Demand for grass in early spring for both cattle and sheep is high. Planning for spring grazing starts the previous autumn to ensure there is an adequate supply.

Paddocks are closed from early October to allow covers to build over the winter. Maurice aims to have at least 50% to 60% of the farm closed by the end of October and that is not grazed again until the spring.

Fertiliser is spread in late August to build up grass covers and then again in



early spring as soon as conditions allow to kickstart growth.

Sheep are grazed on the silage out-block before being housed at the end of November. Sheep are usually grazed with yearling bulls at turnout.

Temporary divisions are proving difficult to implement on the farm, so to successfully enable the operation of a paddock system to graze the sheep and cattle together, Maurice has incorporated a lot of extra permanent sheep fencing.

Maurice Hearne

Honing in on herd health

In recent years, Maurice experienced some severe pneumonia outbreaks in calves and yearlings. In 2017, a thorough herd health plan was put in place for the farm as part of the herd health challenge. The herd health challenge is geared towards improving animal husbandry and animals' environment, as well as implementing a vaccination programme.

As part of this, modifications to existing buildings were carried out to improve ventilation. Ventilated sheeting was replaced with Yorkshire boarding and extra air outlets were put in the roof to improve air circulation.

Then, as well as the building changes, a strict vaccination policy was introduced for the herd which included IBR and pneumonia. Across the whole programme, as stock numbers increase, more and more farmers are opting for a strong vaccination programme to try to prevent herd health outbreaks, rather than looking to cure problems afterwards.

Furthermore, parasitic burdens are



IBR and pneumonia are vaccinated against as part of a vaccination programme.

regularly monitored with pooled faecal samples testing for infestations at regular intervals throughout the year.

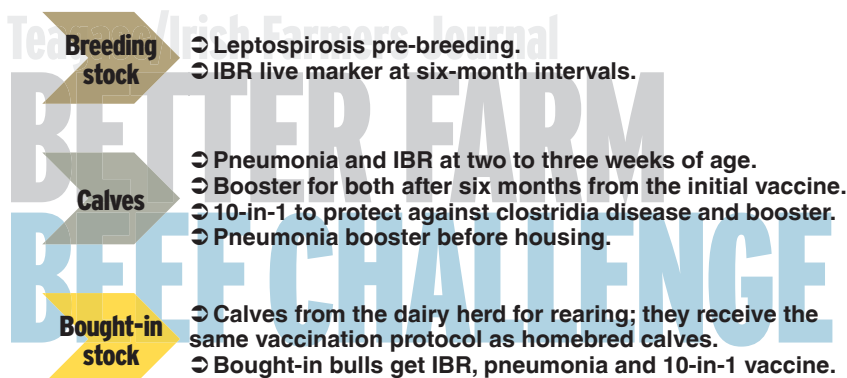


Table 1: Grass digestibility (DMD) for a first-cut harvest on 18 May, depending on

Previous grazing management	Ungrazed in spring or autumn	Grazed in late autumn	Grazed in early spring
DMD %	75.40%	82.10%	81.80%

Making good-quality silage

GRAZE OFF DEAD MATERIAL

Silage quality (digestibility, preservation and mould incidence) depends on both the quality of the harvested sward and the success of the silage-making and feed-out processes.

The quality of the harvested sward depends on its growth stage – leafy has a higher energy value (digestibility) than stemmy grass with mature seed heads.

Getting silage ground grazed off prior to closing can be challenging, but it is by no means impossible, even on heavier farms. This year, farmers are faced with heavy covers as a result of the mild winter, giving even more of a reason to get the sward eaten.

Turning out lighter cattle on silage ground to graze off dead material allows light to penetrate to the base of the sward and promotes tillering. Table 1 shows the variation of quality (DMD) depending on previous grazing.

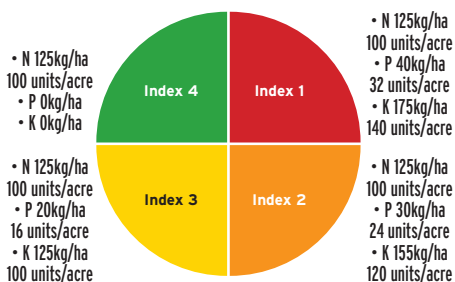
FINDING THE RIGHT BALANCE WITH FERTILISER

The soil fertility of the field will determine the fertiliser requirement of the silage crop in question. Sub-optimal soil fertility (and sometimes impeded drainage) is probably the core reason that target silage yields and (indirectly) high digestibility silages are not achieved on many farms.

Low soil phosphorus (P), potassium (K) or pH values

Figure 1

Fertiliser requirements depending on soil fertility



reduce the potential yield response to fertiliser nitrogen (including from slurry).

As a consequence, the yield of grass available to harvest when the sward is at an optimal growth stage will likely be lower than required. In many cases, the management response will be to defer harvesting by some weeks until sward yield has increased sufficiently.

However, since every one week delay in harvesting results in a 2% to 3% drop in sward digestibility, subsequent silage intake, feed efficiency and cattle growth rate will suffer.

It will require 0.6kg to 0.9kg concentrate/animal/day to undo the effect of the drop in silage digestibility and restore animal performance. Fertiliser advice, depending on soil fertility, is outlined in Figure 1.



Guide to AI this spring

The benefits of AI are undeniable. It offers access to a range of proven genetically-superior bulls of different breeds.

Using these sires can then significantly improve the quality and performance of all types of stock on your farm, including weanling performance, slaughter performance and replacement heifer quality.

HEAT DETECTION

Heat detection is the cornerstone of AI. About 10% of the reasons for failure to detect heats are attributable to cow problems and 90% to management problems.

The majority of heat detection aids require one key thing: frequent monitoring. There is no limit to the amount of times that females should be checked, but the minimum is definitely twice per day. The best times are often early in the morning and late in the evening. Simple things like keeping breeding females in a field near the yard or house all help with monitoring.

The most basic heat detection aids are tail paint or scratch cards. Rubbing paint or applying cards to the tail head of all breeding females will act as reasonably good indicators of activity.

Moving up the scale of effectiveness is the vasectomised bull and chin-ball. Monitoring the vasectomised bull regularly will be an obvious indicator in itself, but the chin-ball will provide greater security if monitoring is less frequent.

While it is undoubtedly an expensive method of heat detection, one product

that has made a big breakthrough in heat detection is Mocoall Heat. A text message will then be sent to the farmer informing him/her which animal is ready for AI. It

is particularly useful for part-time operators.

While not a method of heat detection as such, synchronisation and the use of fixed-time AI can eliminate the need for heat detection. That said, synchronisation programmes can be expensive per animal. It

is well worth consulting your vet and an AI breeding adviser about synchronisation and the correct programme to implement.



INFRASTRUCTURE

Getting animals in for AI is probably the second-most off-putting aspect of AI behind heat detection. Roadways are the Rolls Royce of AI infrastructure, but incur a significant cost. If you are considering AI, maybe just erect temporary fences (plastic stakes and polywire) this year before you go laying metres of gravel for roadways.

Also, give cattle a reason to come in. Giving 0.5kg to 1kg/head in the yard each day will entice animals in. But, remember, bring animals in every day, not just on the days where there is something in heat.

You need good handling facilities for AI too. Speed and ease of work will be improved thanks to good facilities, but, without doubt, the most important thing is safety.

Remember, in most cases, it's not just yourself, but also an AI person that will have to work in your facilities.



A to Z of FARM SAFETY



A

Always consider SAFETY on the farm.

B

BULLS: Beware of aggressive animals on your farm. Be sure to cull cross bulls, cows, rams, stags from your farm.

C

CHILDREN: Always supervise children on the farm, especially during machinery operations.

D

DRAWBARS: Never let anyone ride on the drawbar of your tractor or any other machinery. Do not allow anyone ride in an open trailer.

E

ELECTRICITY can kill. Beware of overhead power lines and buried cables.

F

FORESTRY and tree felling: Take care not to be caught under falling trees and logs. Attend a chainsaw and tree felling course.

G

GAS: Slurry gases can kill. Remove all stock from slatted sheds before agitating. Never enter a shed when slurry is being agitated. Close agitation point after each use.

H

HORSES: Some horses can be dangerous. Always wear safety equipment e.g. helmet when handling or riding horses. Be wary of being kicked by horses.

I

INSPECT: Check safety equipment on your farm regularly, e.g. machinery safety covers, PTO guards, fire extinguishers and First Aid kits.

J

JAWS: Keep away from blades of shear grabs, mowers, revolving knives and chainsaws.

K

KEEP CLEAR of machinery such as tractors, HiMacs, bulldozers when they are working. Stay in their line of vision and wear a high visibility jacket or vest.

L

LIVESTOCK: Be wary of being kicked or crushed while working in pens, yards or fields with livestock.

M

MACHINERY: Ensure safety covers and PTO guards are in place and working on all farm machinery. Avoid wearing loose clothing near machinery.

N

NEVER start a tractor when you are standing on the ground alongside it.

O

OVERTURN: Remember tractors have a high centre of gravity and can overturn easily. Drive slowly over uneven ground.

P

PESTICIDES and other toxic chemicals: Keep them out of the reach of children. Read the label and follow the manufacturer's advice on proper use, storage and disposal.

Q

QUAD bikes: Always wear a safety helmet when using a quad bike. Avoid letting children on them. Drive slowly over rough ground.

R

ROOFS: Use a roofing ladder when working on farm sheds. Stay clear of skylights.

S

SAFETY: Complete and update your Risk Assessment Document. This can be completed online at www.farmsafely.com. Take action on risks highlighted.

T

TRAINING: Attend a Farm Safety training course NOW at your local Teagasc centre.

U

UNTIDY: Poorly maintained farmyards/farm can lead to accidents. Keep your farmyard/farm neat, tidy and well maintained.

V

VISION: Your eyesight is vital – protect it. Wear safety goggles where your eyes are in danger.

W

WARNING SIGNS should be erected to warn the public of dangers or hazards such as "Tractors Crossing", "Beware of Bull".

X

XTRA: Be extra careful when there are children or elderly people on the family farm. Restrict access to dangerous ponds, tanks, unstable heights etc.

Y

YOU and YOUR FAMILY: Take every precaution to remain safe and healthy. Assess every farm task carefully for potential dangers or risks. Organise and complete tasks with safety in mind.

Z

ZOONOTIC DISEASES and infections which can be transmitted from animals to humans. E.g. TB, Toxoplasmosis, Weil's Disease, E.Coli ... Wear gloves when handling livestock. Always wash your hands after being in contact with animals.