



Irish Grassland Association

Quarterly Newsletter Issue No. 32 Summer 2016

“To advance the knowledge of good grassland management in Irish farming”



Milk price
volatility-
implications
for choice
of milk
production
system

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Irish Grassland Association President's Address

Dear Member,



Let me give you a quick taster of the latest edition of the Irish Grassland Association's Newsletter.

For starters we have a preview of our upcoming events. Our Dairy Summer Tour takes place on Tuesday 19th July kicking off from the Green Glens Arena, Millstreet, Co.

Cork (page 12). The theme for the day is "milk production on more challenging soils" and is kindly sponsored by AIB Bank. Our hosts for the day are Sean O'Riordan, Kiskeam, Co. Cork and Conor Creedon, Rathmore, Co. Kerry. Early booking for this event is strongly advised as places are limited and this event sells out early every year.

Our AGM takes place on Thursday 15th September at the Heritage Hotel, Killenard, Co. Laois (page 6). It is a good opportunity to see how the Irish Grassland Association operates. Registration to attend the AGM is essential. Please email Maura Callery secretary@irishgrassland.com by Thursday 1st September if you wish to attend.

Our annual Student Conference will take place in Kildalton College, Piltown, Co. Kilkenny on Monday 10th October (page 14). FBD Trust are sponsoring this important event in the IGA calendar and we look forward to engaging with the next generation of farmers on the day!

Taking a look back at our most recent events we have a report on our Sheep Conference and Farm Walk (page 7) and a review of our Beef Conference (page 10). Both events were kindly sponsored by GDN IRDLAND and Mullinahone Co-op.

Over 100 farmers and industry delegates attended our sheep event in Aughrim, Co. Wicklow on Tuesday 26th April. The focus running through the event was the importance of grassland management and its potential to underpin profitable enterprises. This was evident in the morning conference and again in the afternoon on the farm of John Pringle.

Our Beef Conference held in Limerick on Wednesday 27th April also had a strong focus on grassland management with Micheal O'Leary challenging beef farmers to grow 12-15 t DM. Putting a breeding plan in place to achieve this was addressed by Mervyn Parr and Derek O'Donoghue. Taking control of finances was addressed by Peter Young and Glasnant Morgan wrapped up the day with his take on farming in Wales.

We have a full Farmer Focus Section. After recently featuring on RTE's Big Week on the Farm, we catch up with John Fagan, Garlanstown Co. Meath (page 20) and Heinz Eggert (page 18). Both farmers have made significant contribution to the IGA over the years and we find out how they are both driving production on their farms from grass based systems.

We have two "A Year in my Wellies" articles – Bryan Hynes, dairy farmer, Clarinbridge, Co. Galway says it's time to get out and meet other farmers after a challenging spring (page 15) He details how is taking control of the explosive grass growth and managing the breeding season. Jonathan Higgins is back on his sheep farm after sitting his summer exams, and is looking forward to catching up on farming tasks (page 16).

In our opinion section Michael Brady gives his perspective on dairy farming in Ireland (page 22). He believes that we need to plan for the future and the focus should be on what the average milk price will be in the next 10 years and not on volatility which is common in dairy discussions.

In our technical focus section Austin Flavin explains why a winter fodder budget is the most important budget of all (page 34). George Ramsbottom asks "who benefits from the removal of quotas?" The answer lies in whether you are grass rich or poor! But what about choice of milk production system in an era of milk price volatility? Joe Patton addresses the perennial debate (page 30). We continue our health and safety series and Val O'Connor asks us to incorporate farm health and safety into every aspect of our farm management.

Finally, on behalf of the Irish Grassland Association I am delighted to announce that we are now accepting applications for our Student Bursary (page 38).

I hope you enjoy this edition of our newsletter and I hope to see you soon at one of our upcoming events! (Check out dates for your diary – page 39)

Yours Sincerely,

Karen Dukelow
Irish Grassland Association President 2015/'16

DATE SET FOR THE 2016 AGM

**Thursday 15th September at 10am
Heritage Hotel Killenard, Co. Laois**

The 2016 AGM of the Irish Grassland Association will take place on Thursday 15th September at the Heritage Hotel, Killenard, Co. Laois at 10am. All members are entitled to attend, and it is a good opportunity to see how the Association operates and it is also an opportunity for members to become involved in the Council. Each year a number of seats on Council are available to be filled through election. All members of the Irish Grassland Association are eligible to put their names forward for election. If you wish to put your name forward, then your name along with the name of a member who is nominating you and the name of a member seconding that nomination must be received by the Office Manager two weeks before the AGM, this year that date is the 1st of September. As well as the election, a round up of the year's activities will be presented, as will the 2014 accounts.

It has being a successful year again for the Irish Grassland Association and I would like to take this opportunity to thank everyone involved in running our events. I look forward to meeting you at the AGM.

**Registration to attend this meeting is essential.
Please email Maura Callery secretary@irishgrassland.com
by Thursday 1st September if you wish to attend this AGM.**

Karen Dukelow

Karen Dukelow
President of the Irish Grassland Association 2015/16



IGA Sheep Conference and Farm Walk

Darren Carty,
Irish Grassland Association
Council and Irish
Farmers Journal



Over 100 farmers and industry delegates attended the Irish Grassland Association sheep conference and farm walk, sponsored by GÐNÐ IRÐLAND and Mullinahone Co-op, in Aughrim, Co Wicklow, on Tuesday 26 April.

A focus running through the event was the importance of grassland management and its potential to underpin profitable enterprises. This was evident in all of the presentations at the morning conference and again in the afternoon on the farm of John Pringle which comprises a 50-cow suckler-to-beef herd and a flock of 250 mature ewes and 70 yearling hoggets with their lambs.

Conference

There is massive potential on Irish livestock farms to increase the volume of grass grown and utilised. This was the view of Micheál O'Leary, Teagasc Moorepark, in his presentation explaining PastureBase Ireland, Teagasc's web-based grassland management tool, in operation since 2013.

Micheál showed that from drystock farms measuring regularly in 2015, there was a range in the volume of grass dry matter (DM) produced from 9.1t DM/ha to 14.7t DM/ha. Breaking up the year into three periods of spring (1 January to 10 April), summer (11 April to 10 August) and autumn (11 August to 31 December), he also showed that grass growth varies greatly in spring with a range of 0.5t DM/ha to 1.7t DM/ha. This accounts for 8% of yearly growth in a typical year, with 61% in summer and 31% in autumn. While on the topic, Micheál described 2016 to date being far from the typical year, with grass growth running 40% behind previous years' levels.

The drivers behind early spring grass growth were summarised into six areas as follows:

1. Early closing: A balance needs to be achieved between extending the grazing season and closing a sufficient

percentage of ground from October onwards to safeguard the potential for early grazing. "Every week delay in closing from 2 October reduces spring grass supply by 77kg DM/ha."

2. Closing cover: Farms with higher growth rates had a higher average closing cover, putting the farms in a strong position to capitalise on early grazing.
3. Winter growth: This, according to Micheál, is influenced 50% by weather and 50% by the farmer. "If you close at too low of covers, ground will be more exposed and more at risk to poor weather which in turn will translate into lower winter growth."
4. Spring N application: The application date of spring nitrogen will have a big bearing on grass growth. This will also be influenced by the fertility status of the soil to stimulate a response and the composition of the sward (new perennial rye grass swards respond quicker).
5. Spring grass management: Getting stock out early, if possible, will get covers grazed off quicker and grass growing quicker. "Farms that had stock out early and finished the first grazing rotation by 10 April grew 200kg DM/ha more spring grass and 1.1t more annual grass in 2015 (12.2t v 11.1t).
6. Grass growth: Micheál says this is influenced 50% by weather and 50% by the farmer through management practices listed above.

A lot of drystock and sheep farmers are not getting enough grazing out of their paddocks, according to Micheál.

"Large fields are not producing as stock are in there too long. This affects quality and liveweight gain and also limits the volume of grass grown (grazing regrowths). Looking at PastureBase, farms who achieved seven to

eight grazings from paddocks grew 12 t DM/ha to 13 t DM/ha in these areas. There is also likely to be a nitrogen interaction but it shows what can be done compared to set stocking with two grazings per season only delivering about 5 t DM/ha to 6 t DM/ha. An extra grazing on dairy farms delivers 1,385 kg DM more grass. On sheep farms it could deliver up to 1 t DM/ha more worth in the region of €265/t."

The importance of increasing the number of paddocks and operating a rotational grazing system was highlighted as a key take-home message. Applying sufficient nitrogen for the stocking rate on the farm is also another important consideration. However, Micheál cautioned farmers in this area.

"There is no point spreading 200 kg nitrogen over the year if your fertility is incorrect. 90% of soil samples are not at the optimum for soil fertility so the key is to start with lime and improve the pH".

The final message delivered is that without measurement you cannot accurately identify how the farm is performing and where changes need to be made.

"I'd advise anyone interested in driving grass production to think about using PastureBase. It is free to farmers and is easy to access as long as you have access to a web connection."

The concept of rotational grazing being possible no matter what type of enterprise or scale of enterprise is present was rubber-stamped by Welsh guest speaker Neil Perkins, who along with his wife Linda and family runs a flock of 2,500 ewes on Dinas Island in southwest Wales.

The farm extends to 600 acres (243ha), with two-thirds of this land classified as productive and the remainder a mixture of woodlands, coastal areas or rough grazing that contributes very little to the system.

Neil described the farm as having the potential for early grazing, but with shallow soils and exposed swards, the farm is at risk of burning off heavy covers

in spring, if weather and wind direction and speed are unfavourable. At the same time there is a risk of burning up in a dry summer. Neil adds that the heavy clay nature of soil that is present limits the potential for grazing late in the year or out-wintering ewes.

The production system has therefore developed to exploit the farm's resources of producing high quantities of dry matter during the main grazing season. Neil says there is as much emphasis placed on grass measuring and budgeting as there is on data recording in the sheep flock.

"We have focused on grassland for the last 10 years. We are now producing 30% more grass from the same area – that's the same as having an extra 120 acres of land. It has come at a cost of £15,000 (€18,987) to set up the farm for rotational grazing but it is giving a return of £12,000 (€15,190) per year so it has more than paid for itself."

This has been achieved in the main through close attention to soil fertility, reseeding with high-sugar grasses and mixed species such as red and white clover, plantain and chicory that have the potential for delivering high dry matter production and utilising rotational grazing to the maximum effect.

The rotational grazing system is interesting. Fields on the farm are laid out in 24- to 25-acre divisions and every field is run in its own rotational grazing system. This system is achieved by having one main fence which splits the field in half.

In spring, ewes and lambs are set stocked for a couple of weeks and as growth normally rises, each area is transformed into a rotational grazing system with six paddocks.

Square or rectangular fields are further divided into three parts in the same manner as spokes on the wheel of a bike with electric fencing, with animals tightened to one segment to begin rotational grazing.

"As soon as grass starts growing, we put ewes into one half. We then start subdividing which basically involves putting up 12 kilometres of electric fencing.

Demand in each area is running on average at about 25 kg DM/ha per day. Once growth hits 44 kg to 45 kg DM/ha, we drop out one paddock and when we hit over 60 kg DM/ha we drop out another."

Neil delivered a take-home message that is relevant no matter what enterprise is being run.

"You don't have to go as technical as we did. If you can split a field in half and grow 10% more grass then the farm will be in a better position. This is the way we have gone and it's only after we have achieved this that we move on and go to the next level".

Farm walk

Witnessing the Pringle farm run a large number of animals in just three grazing groups showed what can be achieved at farm level and proves that rotational grazing systems can be set up to account for different flock/herd sizes and mixed grazing systems in a relatively low-cost manner.

John explains that the initial focus on the farm was to ensure field boundary fencing was adequate: "We started to improve grassland management many years ago and began working on boundary and internal fencing.

"We gradually split a few large 15 to 16 acre (6ha to 6.48ha) fields in two, with some consisting of new hedgerows and a double sheep wire permanent fence to improve shelter as we are pretty exposed. This worked well and I got used to seeing a high number of stock in fields of seven acres.

"Bob Sheriff, my Teagasc B&T adviser, and Pearse Kelly, who was a beef specialist at the time, visited to draw up a farm plan and recommended subdividing paddocks again. I thought there is not a hope of halving fields again with the numbers being run, but it works and proves itself."

Cost was a major consideration in the move, as well as having the flexibility to remove fences if closing larger fields for silage. John explains how the temporary

fencing works for him and how he gets sheep accustomed to electric fencing.

"Most of the ewes on the farm are now well used to electric fencing, so there is no problem there apart from one ewe who continues to test the patience, but could find herself on the culling list this year.

"I start the lambs with netted electric fencing, which works better to get them started. This type of fence works very well, but the higher cost [about €100 per 50m roll] wouldn't be practical to roll it out across the whole farm."

The fence is also slightly different to many similar types on the market, with vertical plastic sections providing more rigidity. The majority of temporary fencing used up to this year comprises PVC posts and polywire, which also works excellently for mixed grazing cattle and sheep.

"It doesn't cost a lot to split a field in two. A roll of polywire will go a long way and with 20 PVC stakes [Picture 2], a field could be split for €70 to €100. I don't have a mains fence, but the setup works fine with a normal battery fence and a car-battery fence. The only thing you have to really watch is that the sheep know faster than you when the battery is dead."

John also wanted to make the system more labour efficient for a one-man operation and purchased a number of multi-strand electric gate systems. These worked out at a cost of about €26 each. They are attached with fittings to a timber stake with a self-contained post fastening the gate at the closing end.



John Pringle
Host Farmer



Neil Perkins

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our sponsors GENE IRELAND and
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Irish Grassland Association Beef Conference

Tommy Moyles
Irish Grassland Association
council member
and beef farmer



The 2016 IGA Beef Conference was held in the Radisson Blu Hotel and Spa, Limerick on Wednesday April 27th. A highlight of the day was an address from award winning Welsh farmer Glasnant Morgan. The conference also featured presentations on grassland management, breeding, financial management and plans for the development of the Pallaskenry College suckler herd.

Grassland management

There is a widespread mentality among beef farmers that they are unable to match up to their dairy counterparts when it comes to producing grass, but Micheál O'Leary from Teagasc debunks this and says it is possible to grow between 12 to 15 tonne dry matter per ha (t DM/ha) of grass no matter where in the country you are or what system you operate. Soil fertility is the main factor driving production on these farms with farms having a pH of at least 6. Micheal praised beef farmers for how competent they were at walking the farm and taking grass measurements, but he highlighted that they must improve when it comes to making the critical decisions. Farms are well able to grow over 12 t DM/ha of grass if they put the right system in place.

Looking at figures from the 1,000 farmers sending in measurements through Pasturebase, 20% of which are beef farmers, he stressed that the main factor holding back growth on farms was not location but rather management. Research has shown that every kilogramme of grass that is grown in the spring is worth 16 c. Micheál outlined some of the key factors affecting available spring grass. Data from Pasturebase shows that paddocks closed on 2 October grew 1,100 kg DM/ha over the winter compared to just 650 kg DM/ha on paddocks that were closed on 23 November. Spring grass supply reduces by 77 kg DM/ha every week paddocks are

closed after 2 October, which shows the importance of early closing of paddocks where possible.

Micheál accepted that winter growth rates were influenced by weather conditions, but he added that every farmer controls 50% of the grass grown on their farms over the winter. Early spring grazing is critical to maximising grass production, with farmers who finished their first rotation by 10 April growing 200kg DM/ha more than their counterparts whose first rotation went on past this date.

For mid-season grass management, it is vital that farmers stick to a rotation length of approximately 21 days. Leaving stock in paddocks for too long means cattle will eat the energy reserve of the grass, which will in turn lead to slower regrowth in paddocks.

Breeding

Mervyn Parr from Teagasc Grange focused on optimising reproductive farm efficiency in the suckler herd. He presented results from two trials. The first result was on the impacts of pathogenic challenges on reproductive performance. For this Mervyn looked at the presence of different infectious pathogens in vaccinated and non-vaccinated herds. A total of 155 herds were used for the trial, encompassing 5,554 cows. Results showed high levels of exposure to BVD and IBR with neospora being much less important.

His second trial focused on breeding management and the use of AI. He examined the use of synchronisation and fixed-time AI on over 2,205 cows. He compared the cost of using a stock bull, which was €52 per cow per year for a 30-cow suckler herd. While using synchronisation with fixed-time AI on a herd of the same size cost between €47 and €62 per cow per year.

Managing finances

Peter Young from the *Irish Farmers Journal* gave a talk on how to improve financial management on your farm. He emphasised the need to set goals, which are different for each farmer, on what they want to get from their farm. He outlined the need for farmers to balance the management of the day-to-day farming activities with the financial planning needed for the farm to succeed.

The importance of developing a monthly cashflow budget on the farm could not be overstated. He did accept that you would not get it perfect the first time but the more experience you get, the more accurate your monthly cashflow budgets would get. With volatile prices common for farmers, the aim is to focus on what you can control.

Glasnant Morgan

Glasnant Morgan is a sheep and beef farmer from Wales and at this stage of his career is now passing his experience onto others. "I have been involved in a mentoring programme in Wales called the Young Entrants Support Scheme. The scheme entitles young farmers under 40 up to four days free mentoring. It involves us calling to the entrant's farm and looking at their accounts and making a business plan for the farm. The entrants also come to visit the mentors' farms and see how they are run. This is very good because it keeps us on our toes as well. We have to do some homework on developing the farms and making sure they are run as efficiently as possible. Fertiliser and lime are usually the two keys costs which are analysed and are also the key behind good grassland management.

Glasnant talked openly about the need for succession plans for a truly sustainable business. "I've sorted out succession when I'm alive. We have three sons in the family, the eldest of whom farms at home with me. We have helped out the other two sons and they all know exactly the situation and what they will receive in the future".

He firmly believes that for farmers to be really successful they have to enjoy what they do, especially on the farm. Grazed grass is integral for his farming system. The aim is to get the most from pasture to maximise self-sufficiency. In the spring, 10% of the farm has grass seed stitched in with a grass harrow and hopper. A paddock system is used for sheep.

Pallaskenry College plans

Principal of Pallaskenry Agricultural College, Derek O'Donoghue told the conference of the plans to upgrade the college's suckler herd. "With the farm being used as a tool to teach over 650 students, it must demonstrate best practice, but it must also be a viable and profitable suckler herd." At present a 50-cow suckler enterprise is run, among others, on the farm. What was traditionally an autumn-calving herd is changing to a spring-calving system to fully utilise grass production and live weight gain from grass on the farm.

There is a clear need to alter the breeding programme to improve the maternal genetics of the herd as the average is currently €65. This puts the herd at an average of three stars, which is not where the college wants to be. The aim is to get the herd to an average of €180 to €185 on the Replacement Index, which would place them in the top 1% in the country. This would lead to a €120 increase in profit per cow; with 50 cows on the farm this would be an increase of €6,000.

A common theme throughout the conference was the need for farmers to use a network of people for advice, and this applies also to Pallaskenry, accepted Derek. A new suckler herd will be sourced with the help of ICBF. The herd will not be breed specific. Derek was adamant about this. As long as the cow is high on the replacement index, it does not matter what breed the cow is. A key target is for calves to achieve an average daily gain of 1.1 kg from birth.

While this type of herd may cause management issues with different breeds, the college has to demonstrate best practice. Derek concluded by saying "the student is number one, and to be best you need to learn from the best."

Peter Young and William Conlon (both Irish Farmers Journal) contributed to this article



Speakers

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Dairy Summer Tour – milk production on more challenging soils

George Ramsbottom,
Irish Grassland
Association Council
Member and Teagasc



A total of 4.39 million hectares of the land of the Republic of Ireland is classified as lowland mineral soil while a further 1.47 million hectares of land is classified as mountain and hill land. Approximately one third of the lowland mineral soil category (1.44 million hectares) is classified as wet land. It is estimated that up to one third of Irish milk is produced on either heavy or elevated soils. Inclement weather conditions have the potential to add complexity, cost and risk to the milk produced on such soils.

With this in mind, the organising committee of the Irish Grassland Association invited two milk producers farming on more challenging soils to host this year's Dairy Summer Tour. The event, kindly sponsored by AIB Bank, will take place on Tuesday 19th July. Our hosts are;

- Sean O'Riordan Kiskeam, Co. Cork;
- Conor Creedon, Rathmore, Co. Kerry.

Sean O'Riordan, Kiskeam



Sean O'Riordan

Sean and Liz O'Riordan farm at Knockenaugh, Kiskeam, Co. Cork. In 2015, the 80 ha farm grazed an average of 95 dairy cows. Overall farm stocking rate was 1.5 LU/ha with the 40 ha milking platform stocked at 2.4 cows/ha. Sean also reared 30 replacement heifers and cut pit silage on the out farms to support the dairy herd. In 2015 milk solids production was 422 kg milk solids per cow (4.21% fat; 3.65% protein). Current herd EBI is €178 (€51 milk SI; €93 fertility SI). Last year cows were housed part-time by 20th October and full-time by 10th November. They spent an average of 274 days in milk last year. The herd was fully dried off by the 15th December. Housing consists of slatted cubicle accommodation for both cows and replacements. The first cow calved on February 5th, the median calving date was February 29th and the 6-week calving rate was 77%. Spring 2016 was wet and cold and cows were turned out to grass full-time on March 10th but spent approximately another week indoors on and off until early April. The first rotation ended on April 28th.

The O'Riordans are participants in Teagasc's Heavy Soils Programme. The milking platform has been assessed and comprises 0.3-1.0 m of high clay content top and sub soils overlying stony soils on top of shale bedrock. On view at the farm walk will be an improved paddock, drained using a network of shallow (1.1 m deep) gravel-filled drains. To ensure the rain drains through the tightly consolidated top and sub soils to these drains, a subsoiler was used to crack the top and sub soils to improve drainage. Adjacent to the improved paddock is a similar paddock that was reseeded at the same time without drainage. Dr. Pat Tuohy and James O'Loughlin of Teagasc Moorepark will discuss the principles underpinning improvement of more challenging soils at the event.

Sean O'Riordan is also a grassland monitor farmer participating in the cultivar evaluation trials and recording growth rates and dry matter production on PastureBase. Farm grass dry matter production in 2015 was 10.5 t DM/ha on the milking platform during a year when annual rainfall totalled just over 2 metres. Different monocultures have been sown on the farm over the past couple of years. Their performance and his experience of the different varieties will be discussed at the walk.

Conor Creedon, Rathmore



Conor Creedon

Conor and Eilisha Creedon farm at Gortnagown, Rathmore, Co. Kerry on an elevated, steeply sloping farm (200-300 m above sea level). The farm comprises 43 ha of owned land in two divisions. The out farm, located approximately 20 km from the milking platform, is used to rear the 18 maiden and 40 weanling replacement heifers. The milking platform is adjusted to 26 ha. The majority of it has been reclaimed over the 1997-2005 period. Underlying 10-30 cm of topsoil, a deep gravelly layer of subsoil provides good drainage once reclaimed. Similar to the O'Riordans, the farm is in a high rainfall area because of the elevated nature and aspect of the farm. It received 1.95 m of rain last year.

Overall farm stocking rate was 2.73 LU/ha in 2015 with the milking platform stocked at 3.73 cows/ha. In 2015 the milk solids yield was 413 kg per cow (4.54% fat; 3.73% protein) from a predominantly Friesian Jersey crossbred herd. Cows spent an average of 288 days in milk last year with 75% of the herd milked through the month of November while grazing by day, to ensure that a long lactation was achieved. Housing consists of slatted cubicle accommodation for both cows and replacements. Meal fed averaged 580 kg per cow in 2015 with over 16 tonnes of grass dry matter grown per hectare on the milking platform. Current herd EBI is €178 (€63 milk SI; €81 fertility SI).

This year, the first cow calved on 11th February, the median calving date was 26th February and the 6-week calving rate was 96%. Cows were turned out to grass part-time from mid-February, housed full-time for a week in early March and turned out again from mid-March. The first rotation ended on 10th April, 250 kg meals have been fed to date per cow and no more will be fed until the autumn if grass growth continues as expected.

Speaking about the low milk price prevailing at the moment Conor said, 'We've done our cash flow budget for this season. It's tight and while farm production costs are low, when all costs are included we'll be close to the line but should be fine. I'll avoid spending money on capital expenditure this year, price around carefully before buying but won't take a P&K holiday. We did that before and won't do it again'.

Commenting at the launch of this year's event, Donal Whelton, Agri Advisor, AIB said, 'We are delighted to continue our support of the Irish Grassland Association Dairy Summer Tour. This year's event is a further opportunity for farmers to learn first-hand from two progressive dairy farmers who are farming on more difficult farms. The fundamentals of grass and maintaining efficiencies are key for all farmers, particularly in a period of volatile milk prices'.

Early booking essential

Early booking for this event is strongly encouraged as places are limited and the event sold out early for the last four years. A special discounted registration fee of €30 for Irish Grassland Association members and €60 for non-members applies to registrations up to and including Friday 8th July. You can register and avail of these prepaid discounts online at www.irishgrassland.com or at the Irish Grassland Association office at (087)9626483. Registration will take place at the Green Glens Arena, Millstreet, Co. Cork at 8.30am sharp.

Conference Registration fee includes attendance, bus transfers to and from both farms, a copy of the booklet and lunch. Breakfast rolls and tea will also be provided to delegates who arrive before 8.45am.

*We would like to thank
our sponsors AIB*



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Irish Grassland Association Student Conference 2016

David Cummins Irish
Grassland Association Council
Member and Department of
Agriculture



The seventh annual Irish Grassland Association Student Conference will take place in Kildalton College, Piltown, Co. Kilkenny on Monday 10th October 2016. The Conference will be divided into two main sessions, with the morning session to be hosted in Kildalton College and the afternoon session to be hosted on a nearby farm. Details of speakers and farm visits will be announced in advance of the Conference.

The Irish Grassland Association is very grateful to Kildalton College and host farmers for facilitating this important event in the IGA calendar. Every year this event is attended by students studying a range of third level courses in agriculture at the Agricultural Colleges, Universities and Institutes of Technology across Ireland. Once again, we would like to sincerely thank our sponsor the FBD Trust, who have sponsored this event since its inception in 2010.

Irish Grassland Association
Student Conference 2016
is kindly sponsored by

F|B|D Trust

A Year in my Wellies

Controlling grass and making headway with breeding

BRYAN HYNES, CLARIN FARM, CLARINBRIDGE, CO GALWAY

Background: Bryan Hynes started farming in partnership with David Neilan in May 2013. Cow numbers increased gradually in advance of the abolition of milk quotas with 130 cows grazing in 2016 at a stocking rate on the milking platform of about 3.2cows/ha.

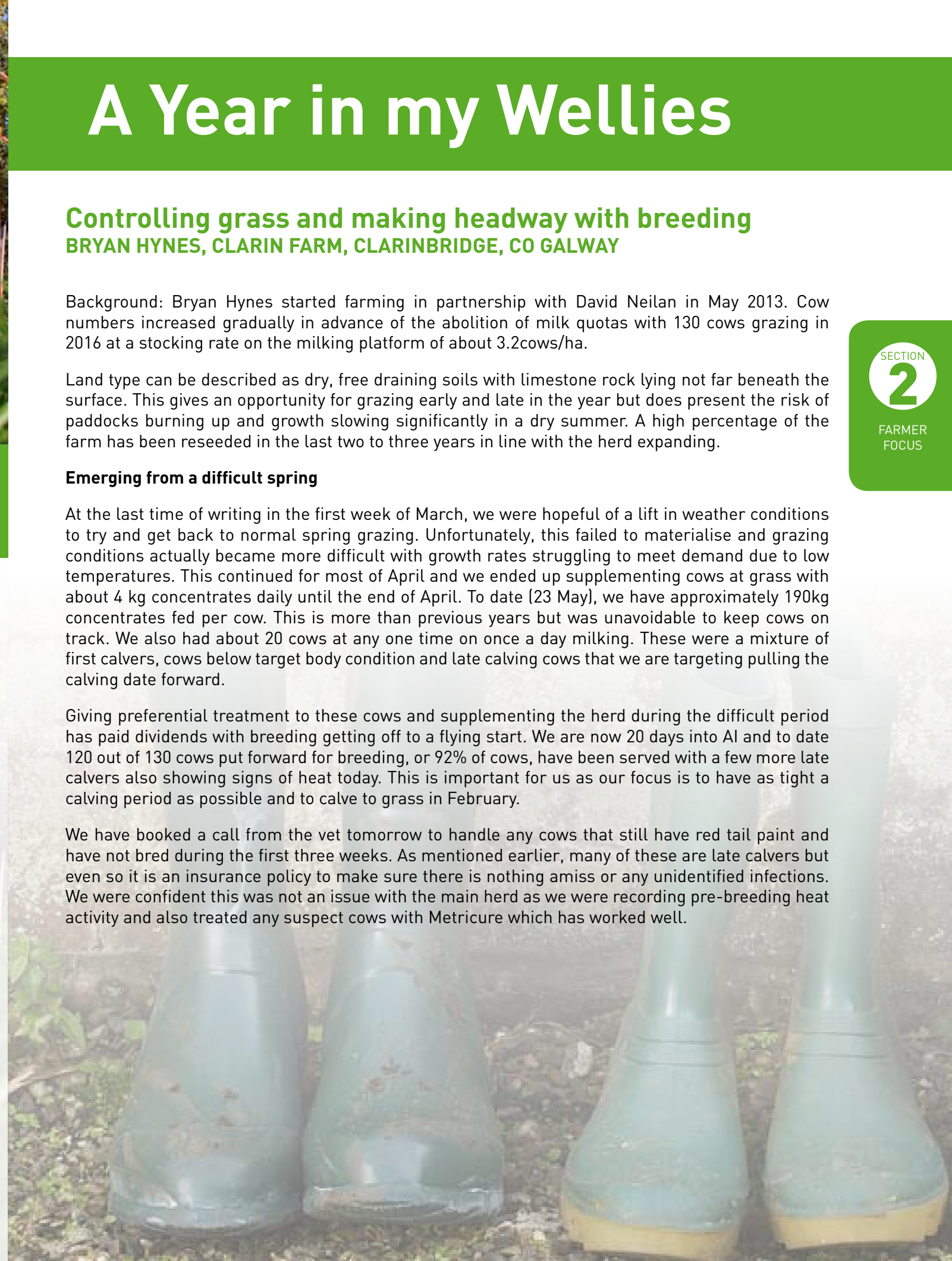
Land type can be described as dry, free draining soils with limestone rock lying not far beneath the surface. This gives an opportunity for grazing early and late in the year but does present the risk of paddocks burning up and growth slowing significantly in a dry summer. A high percentage of the farm has been reseeded in the last two to three years in line with the herd expanding.

Emerging from a difficult spring

At the last time of writing in the first week of March, we were hopeful of a lift in weather conditions to try and get back to normal spring grazing. Unfortunately, this failed to materialise and grazing conditions actually became more difficult with growth rates struggling to meet demand due to low temperatures. This continued for most of April and we ended up supplementing cows at grass with about 4 kg concentrates daily until the end of April. To date (23 May), we have approximately 190kg concentrates fed per cow. This is more than previous years but was unavoidable to keep cows on track. We also had about 20 cows at any one time on once a day milking. These were a mixture of first calvers, cows below target body condition and late calving cows that we are targeting pulling the calving date forward.

Giving preferential treatment to these cows and supplementing the herd during the difficult period has paid dividends with breeding getting off to a flying start. We are now 20 days into AI and to date 120 out of 130 cows put forward for breeding, or 92% of cows, have been served with a few more late calvers also showing signs of heat today. This is important for us as our focus is to have as tight a calving period as possible and to calve to grass in February.

We have booked a call from the vet tomorrow to handle any cows that still have red tail paint and have not bred during the first three weeks. As mentioned earlier, many of these are late calvers but even so it is an insurance policy to make sure there is nothing amiss or any unidentified infections. We were confident this was not an issue with the main herd as we were recording pre-breeding heat activity and also treated any suspect cows with Metricure which has worked well.



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A Year in my Wellies

I am inseminating cows every morning after milking. Research shows that there should be no negative impact with once a day breeding once it is carried out at the same time every day. I am generally working off the principle of inseminating any cows in heat that have their tail paint removed and as such have been in standing heat for some time. Cows receive tail paint after AI and if cows are still in standing heat and have their tail paint removed during that day, they are inseminated again the following morning. The number inseminated this way is low with only about one in 20 cows receiving a second straw.

Explosive grass growth

Growth over the last two to three weeks has been phenomenal. We hit 140 kg DM/ha two weeks ago, something we had not done previously, close to 90 kg DM/ha last week and in the region of 100 kg DM/ha in recent days. We are working hard on managing grass. We have about 20% of the grazing platform being taken out for baled silage this week at covers of 1,600kg DM/ha to 3,000kg DM/ha. With the farm prone to drought in June/July, these bales are an invaluable source of high-quality feed if required. We will continue to drive grass growth and are currently applying 25 units nitrogen per acre (120 units spread over four rounds to date). Low index soils are receiving 18:6:12 and sulphur and high index soils have to date received Urea Sulphur. Silage ground is bulking up well and all going well will be cut the first week of June.

For now, I'm off to a discussion group meeting. After the difficult spring, it's good to get a break and get out and talking to other farmers. Many are in the same position and a lot can be learned from each other.

Happy to be back at base JONATHAN HIGGINS, LEEKFIELD, SKREEN, CO SLIGO

Background: Philip Higgins and his son Jonathan hosted an Irish Grassland Association farm walk in August 2014. The event was very well received by farmers, with over 300 delegates attending the day. A notable feature of the day was Jonathan's discussion on establishing his own pedigree Texel flock with the attendance welcoming a well-needed injection of youth into the sheep sector. Two years on, Jonathan has expanded his flock, the Avondale Flock, and is juggling management of the flock with a busy schedule studying Animal Science in University College Dublin School of Agriculture and Food Science.

Two years done and dusted

In writing this on 23 May, I have just finished college for the summer with my final exam last Friday. Second year has been much more enjoyable with modules covered more related to agriculture compared to a largely science-based first year programme. That said, the course is still challenging but I am happy with how the exams went. From what I hear the third year Animal Science programme also has lots of topics that I am interested in with the possibility of some visits to Lyons Research Farm also appealing. I will miss the first semester in UCD as I have been successful in applying to do a student exchange programme and am heading to Illinois in August. Depending on dates, I could be writing my next piece for the newsletter from there!

A Year in my Wellies

For now, I am looking forward to getting back into a routine at home and catching up on farming tasks. The last three weeks have been heavy going with studying so there is plenty of jobs that were put on the long finger to get stuck into. This work will be confined mainly to evenings and weekends as I have also got a summer job working with a local builder. This evening we moved cows and calves and ewes and lambs to fresh grass. It is amazing the difference a couple of good weeks grass growth makes. We skipped two 3-acre sheep paddocks along with a 7-acre field and these will be baled in the coming week or two as high-quality silage and allowing new regrowth for the sheep in the next rotation. The silage crop has also started to bulk up well. We take a later first cut due to the high grass demand in spring and all going well will cut the third week of June.

The current grass growth is in stark contrast to a tough spring that most will not forget too easily. We got by ok by prioritising grass supply for ewes and lambs and opting to hold up cows and calves in a nine acre field and supplementing outdoors with silage. It was a lot easier to feed these than let cows and calves compete with the sheep for tight grass supplies and then be faced with the prospect of possibly having to supplement ewes too.

All mature ewes received 500 g concentrates for the first 5 weeks after lambing whilst the yearling hoggets and ewes who took extra time fostering lambs received the same but for 7 weeks. There was actually a bit more mastitis this year which is not surprising given the difficult weather. Thankfully, we lost no pedigree ewes but we did lose two commercials and more will have to be culled in the coming weeks. I am disappointed to be also losing two pedigree ewes, at least we will have the cull value later in the year.

Yearling hoggets

We started feeding yearling hoggets earlier pre-lambing this year and it made a huge difference with hoggets lambing down in good condition, with plenty of colostrum and vigorous lambs. Supplementing for the first few weeks of lactation also proved important in avoiding excess pressure on their system and ensuring their lifetime performance is not negatively affected. We are going to introduce creep to these lambs as we don't want them hanging around late in the year and competing with ewes for grass.

Keeping lambs performing is the main target in the mature flocks. There is one large batch of 160 to 180 ewes and their lambs, a batch of 75 ewes on the outfarm, the batch of yearling hoggets and problem ewes and another group of 50 fosters and weak lambs, some of which were later lambers. Lambs have received treatment for Nematodirus and are thriving well. I am also happy with the pedigree Texel ram lambs. The best will be picked out for showing during the summer. I am happy with how the hoggets are doing and if the market for hogget rams that have not been pushed with concentrates proves good, I might hold onto some of this year's lambs and carry over until autumn 2017. I will have a better indication of this in my next newsletter piece.



Sheplands Farm – our journey on the Teagasc/Farmers Journal BETTER Beef Farm Program

Heinz Eggert
Farm Manager,
Sheplands Farm Limited,
Sallins, Co. Kildare.



Sheplands Farm is a 75 ha grassland farm located near Sallins Co Kildare, and I have been the farm manager since August 1988. It is a low lying farm in two blocks divided by a public road with mostly heavy soils and high water tables. In the early years we kept a 350 head lowland ewe flock and fattened heifers for a local abattoir. In 1990 I identified 35 Simmental crossbred heifers which were purchased for fattening, and judged they would make very good suckler cows. I then purchased our first Limousin stock bull and started breeding these heifers and so the Sherlockstown Herd was established. Over the next few years the sheep enterprise was phased out and the suckler herd expanded which is much more suitable for this farm.

In 2008 I was approached by Teagasc to take part in the Teagasc/Irish Farmers Journal BETTER Beef Farm Program as a monitor farm. My local Teagasc advisor Christy Watson gave me a lot of encouragement and once I understood what the program was set out to do, what it was trying to achieve and met the people involved, I agreed without any hesitation to join. At that stage we had built the herd up to 70 cows and a lot of the progeny were sold as stores; however, I realised we had to improve technical efficiency to improve profit.

After joining the program we filled out a profit monitor for the previous two years to get a detailed insight into the profitability of the farm. We also blood sampled all cattle for BVD, Lepto, and Salmonella to establish the health status of the herd. When we got the results back, the management team visited the farm and together went through all details of the results and then drew up a 5 year business plan which focused on reducing costs and raising output to improve profit. With the help of the program and local advisors we drew up a health plan and started a vaccination program specific to the Sherlockstown Herd to deal with all animal health issues. We continue to strictly follow this health plan, review it regularly and change it when required.

Since joining the BETTER Beef Farm Program the herd has grown to over 100 mainly Limousin crossbred cows and all progeny are either kept as replacements or finished through to beef. All cows are bred back to Pedigree Limousin bulls. The Sherlockstown herd has a small number of Pedigree Limousin cows from which the stock bulls are bred for the herd. With an average calving interval of 368 days over a ten week breeding period we are very close to producing a calf per cow every year which is vital for a profitable suckler herd. Our breeding season starts on April 23rd and the stock bulls are removed on July 1st. All heifers are homebred and calve down at 2 years of age. All breeding heifers are bred to a polled Hereford bull for easy calving and short gestation.

At present I am grazing 2 groups of 45 cows and calves, each group with a stock bull, and they are moved on every 2 to 3 days, and each group has 7 paddocks available. I wouldn't make the groups any bigger than 45 to run with one bull to keep the calving pattern tight. The third group are 20 breeding heifers and the late calving cows which are running with the Hereford bull. Because the Hereford bull has a 10 day shorter gestation period, he brings the later calving cows forward.

Improving the genetics of the cow herd is something that has always been done well on this farm because of the great interest I have in this subject. I find the work the Irish Cattle Breeding Federation is doing for Irish farmers and the reports they are creating under Herdplus to be of enormous help in making good breeding decisions and keeping on top of herd performance. I do think however a lot more work has to be done to find the ideal suckler cow which is not an easy task in a constantly and rapidly changing beef market.

The biggest impact the BETTER Beef Farm Program made on this farm is on grassland management. I also think this has had an effect country wide through weekly columns in the Irish Farmers Journal. No matter what direction I travel throughout the country, I see reels and pigtails dividing fields into paddocks for improved grass utilisation. Here on Sheplands Farm we divide the 21 existing fields into 48 paddocks with an average size of 1.56 ha and as a result we have improved grass yields by over 30%. No permanent fences have been erected for the paddocks; all divisions are set up with pigtails, tape and reels. But I improved the water system and installed a lot more water troughs to cope with all these paddocks. In 2015 the farm yielded on average of 13.5 tonne grass dry matter per hectare.

Every Monday morning I walk every paddock and measure grass growth with a plate meter and I base all grassland management decisions on the results. I am using the Kingswood farm management software package on my computer and I recently added an app on my phone to simplify the task of measuring grass and to have the results instantaneously whenever I need to make decisions. At the end of the year I look up the grass yield for every field on the farm and I specifically look at the lower yielding fields and if the soil fertility is good, I target that field for reseeding the following year. If the fertility is poor I correct it first before reseeding or at the time of reseeding. The farm is soil sampled every 2 to 3 years. The use of paddocks has given me much more control over grassland management and the extra yield has meant that can keep a lot more stock on the same amount of land therefore increasing output.

To be a monitor farm on the Irish Farmers Journal /Teagasc Better Beef Program has been a rewarding experience and invaluable to Sheplands Farm. To get intensive and specific advice on all aspects of this farming business through the program has taken farm to a level I didn't think was possible. The following table will show the progress the farm has made during the participation in the program:

	2009	2015	Change
Land (ha)	68	75	+10%
Suckler cow numbers	70	100	+43%
Stocking rate (LU/ha)	1.9	2.0	5%
Live weight output (kg/ha)	553	739	+34%
Financial performance (€/ha)			
Sales	1,219	1,847	+52%
Gross output	1,038	1,681	+62%
Variable costs	754	904	+20%
Gross margin	284	777	+273%

As you can see the farm has made very considerable progress with very large increases with output and much smaller increases in costs. In 2013 the farm purchased a neighbouring field of 7.5 ha which had to be drained, fenced and reseeded. I only began bringing this into production in 2014 and animal numbers have still not increased sufficiently to fully utilise this land – this explains why stocking rate increases have been quite small. I think the farm hasn't reached its limit yet and I would hope over the next couple of years to push the stocking rate to 2.5 LU/ha by increasing cow numbers.

The most enjoyable part of the program for me was the farm walks and program meetings. It really helps to meet up with like-minded farmers and advisors to discuss and exchange ideas. A lot of friendships have been made between the farmers and advisors. The Better farm trips have also been very educational and enjoyable.

The key lesson for me from the program is the importance of measuring, benchmarking and making good management decisions. I have always been a believer in monitoring performance on the farm through measuring grass and weighing cattle and I was doing both before joining the program, but I had no real comparison to benchmark my performance – my participation in the program changed all that. Benchmarks developed by Teagasc, including those for grassland, live weight, herd reproduction and farm finance were made available to me at the outset. I could also compare my performance with other monitor farmers in the programme to assess what my cattle should weigh, target herd reproductive performance and what is achievable in terms of grassland management and financial performance. I was always good at collecting data but that is only the start of good management; this must be followed by comparison with benchmarks and targets and then making decisions so that corrective action can be taken where necessary.

I would like to take this opportunity to thank my Program advisors Adam Woods and Peter Lawrence for their invaluable advice, the sponsors of the program for their generosity and the management team for their decision to include Sheplands Farm into the program. I also like to mention my local Teagasc advisor Christy Watson for his professional and positive contribution and for working so well with me and the program advisors during this time.





Plenty of mouths to feed in Westmeath

John Fagan, Garlandstown, Co. Westmeath.

John Fagan,
Garlandstown,
Co. Westmeath.



Background

John is currently running 1,000 ewes, 1,600 lambs and 400 replacement dairy heifers on his 180 ha farm. He has been an active member of the Irish Grassland Association for many years, holding a position on council for three years. He also spoke at the Student Conference in 2011 and in 2012 presented an overview of his farming system at the Sheep Conference, which at the time consisted of over 1,000 ewes and a 150-head yearling heifer to beef finishing enterprise.

After his recent exploits on RTE's *Big Week on the Farm*, we catch up with John to see what changes he has made to his farming system and find out what he views as the most important aspects in achieving his goal of driving production from a grass based system.

Farming system

Garlandstown farm has experienced many changes since John Fagan started phasing out the tillage enterprise and replacing with sheep six to seven years ago. The sheep enterprise quickly grew to 1,000 head and was initially teamed up with a 150-head heifer finishing system.

However, an opportunity to link up with expanding local dairy farmer, Brian Murphy, and enter into a contract rearing agreement was viewed by John as too good of a prospect to turn down. "At first, I was wary of entering into two new enterprises (sheep and dairy) in short succession but with unpredictable returns from the beef finishing enterprise, I knew I had to at least give it plenty of thought. It took about six months to flesh out an agreement and if there is one thing I

have learned from the experience and can pass on to others considering, it is to take your time in assessing the decision, think how it will impact on you, and not just your farm, and talk to plenty of people who are already doing it to learn at the outset what works well and areas where potential issues could arise".

John says the importance of having a clear and written agreement before starting cannot be emphasised enough. "Talking about certain aspects and making agreements in word of mouth is ok during initial discussions but it is important that all these are written down and a robust contract that both parties are happy with is established. That way, everyone knows what is expected of each other and if there is any doubt over something it is plain to see in the contact".

Starting in 2014, John sent back the first crop of heifers on the point of calving down in early 2016. He has become more accustomed to the enterprise and currently has in the region of 200 yearling-to-15 month old heifers and 200 spring 2016-born calves which came onto the farm once weaned off milk.

A background in sucklers and the beef enterprise gave a good grounding and like any system John says a disciplined approach and attention to detail are necessary. "Time management when running 1,000 ewes is a big component. Management is relatively straightforward with the dairy heifers. I was previously striving to hit weight targets at grass and make top-quality silage so not much has changed there. Like sheep there are critical time periods like the last few weeks for AI. It helps when working with a like-

minded person and along with Brian looking after the health treatments, he and I also discuss many management decisions and bounce different ideas of each other".

Focus on grass

John says working closely with Brian has also refocused his attention on grassland management. Significant improvements have been made in this area over the last decade with a large volume of sheep fencing erected to facilitate a rotational grazing system. "With grassland management I think it is continuous development. I don't have a full handle on it yet but am working towards making gradual improvements each year. I have recently got the farm mapped with Grasstec and am getting more up to speed on grass budgeting. I am having good success with grazing calves and heifers ahead of ewes and lambs and using them to graze out paddocks. With the correct grass management and pre-grazing grass height, this should achieve high levels of performance in both enterprises".

Driving growth

Soil fertility and reseeding has been identified as key areas that have the potential to increase grass growth. There is a sharp difference between grass production on ground that was used for the beef/suckler enterprise and the area under tillage production.

"I have often heard that continuous tillage has the potential to lower soil fertility, if soil nutrition is not precise, and I am experiencing this first-hand. Swards that were previously in tillage are improving steadily but it is taking time to get them up to the same soil fertility as other areas used for grazing. I am targeting these areas with slurry and farmyard manure and also applying more targeted fertiliser applications. I feel that the farm has the ability to do more (grass production) but has not been asked to do so yet. Hopefully, addressing soil fertility and more precise management through rotational grazing and grass budgeting will click and really get swards performing in the coming years. I also need to carry out more reseeding but want to balance getting the ground ready to fully reap the rewards and be in a position where taking ground out for reseeding fits naturally into the grassland programme without putting excess pressure on demand. I have a small level already done and will see how the year progresses and focus on replenishing fodder supplies after the difficult spring before making final plans".

Crossroads

There are a few areas where important decisions have to be made in the coming year. John says that running over 1,000 ewes without winter housing facilities for the entire flock is putting huge pressure on grass supplies in spring.

"The difficult spring obviously added further complications this year but having enough grass to turnout 1,000 ewes and their lambs and 200 yearling heifers is proving difficult. I need to be more disciplined in closing paddocks but will also need to consider other options. Erecting more winter housing is one option and a close look at the financial return will be required to assess this option. Cutting ewe numbers in line with the potential to carry 100 more heifers is also another option while one possibility that is looking more likely is pushing the lambing date closer to grass growth to allow areas of the farm to be designated to each enterprise".

Positive outlook

While challenges exist, John is positive that focusing on grassland management and continuing to make gradual changes as the system allows will reap rewards. "At the end of the day, my focus should be on grass and using whatever animal gives the best return and also suits the system to utilise it. I know my farm can produce more grass but the experience of the last five years has shown me growth in any enterprise needs to come in line with higher grass production or else the risk is that it will just increase costs".

"Talking about certain aspects and making agreements in word of mouth is ok during initial discussions but it is important that all these are written down and a robust contract that both parties are happy with is established. That way, everyone knows what is expected of each other and if there is any doubt over something it is plain to see in the contact".



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A perspective on dairy farming in Ireland

Michael Brady,
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Irish dairy farming is renowned for grass based milk production, exporting dairy produce of the highest of quality to countries all around the world. We have the land, climate, farmers, support industries, processors, exporting knowledge and supportive government policy to drive an industry which has been stagnant for over 30 years. However, as in sport we know that buying in all the best players does not guarantee success for the team. Is the same true for the Irish dairy farming?

The Past

The recent history of Irish dairy farming is dominated by the introduction of EU milk quotas in 1983. In the 40 years between 1975 and 2015 the number of dairy farmers decreased by 87% falling from 144,000 farmers in 1975 to 18,456 in 2015. The number of cows by comparison has only fallen 15% or circa 210,000 head. The focus of dairy farmers and the direction of dairy research in the milk quota era was to maximise profit per litre of milk quota produced. Acquiring additional milk quota to expand production was a challenge and a significant cost burden particularly to those dairy farmers supplying milk processors in the south of the country due to lack of availability. Whereas declining numbers of dairy farmers is a common phenomenon even in countries without milk quotas, it is clear that EU milk quotas have stunted the progress and development of our industry in the recent past. Therefore when the EU announced in 2007 that EU milk quotas would be removed on the 1st of April 2015 it was embraced by Irish dairy farmers, the industry and government as a signal to gear up and plan for the post quota era.

Table 1. Irish dairy farming – the last 40 years

	1975	1995	2015
Number of farms	144,000	40,800	18,456
Number of dairy cows	1.4 m	1.2 m	1.24 m
Milk production (litres)	3.2 bn	5.1 bn	6.4 bn

Source: CSO, DAFM, Teagasc.

The Present

We are now over a year into the post quota era, Irish milk production for the calendar year ending 2015 was up 13.4% on the previous year and the next 12 months is set for a further increase so we certainly have hit the ground running. We are well on target to meet our Food Harvest 2020 target of 50% extra milk volume produced by 2020. However increased milk production from America, New Zealand and some of our European dairy farmer neighbours combined with reduced Chinese demand and a Russian ban on dairy imports from the EU have caused a surplus of dairy product on world markets leading to collapse in the milk price paid to farmers. The annual price of manufacturing milk has fallen by 38% since the high of 2013. Milk prices internationally have been falling since the autumn of 2014 but Irish dairy farmers have been cushioned by milk purchasers supporting the milk price in

2015. Most expansion plans have been based on a 30 cent/litre base price which looked conservative in 2013/14 but at the present moment it would represent a welcome price for most farmers. Therefore, the present is a time to take stock of your position and put in place a robust plan to deal with the low returns and protect your business. There is no point in worrying about issues you cannot change or control such as the weather and the price of milk; however, a lot of pressure or stress can be removed from a dairy farmer, the farm business and the farm family if issues on individual farms are addressed or faced up to and a plan put in place.

Table 2. Irish dairy farming – manufacturing milk price 2012 - 2016

	2012	2013	2014	2015	2016 est
Milk price (incl. VAT) actual in cent/litre	34.0	40.2	39.0	30.9	25.0

Source: CSO, Brady Group.

The Future

The key question for dairy farmers to ask about the future is what will the average milk price be for the next 10 years? Base milk prices in the region of 24 cent per litre for a sustained period of time will break most confinement dairy farmers in America and the rest of Europe as they are actually losing money every day at such prices. The average spring milk dairy farmer in Ireland had a cost of production of 20.3 cent/litre in 2015 according to the Teagasc Profit Monitor; true this does not include the farmer's own wage but neither does it include the Basic Payment Scheme nor off farm income. The fact is the average farmer in Ireland is not actually losing money at present milk prices they are just not making money. Dairy farming presently is what beef farmers are accustomed to every year. It is probably a fair assumption that the longer the milk price stays low, the greater and longer will be the uplift when the recovery comes around, as present prices are clearly not sustainable for the majority of dairy farmers in the world. Therefore, the focus should be on what the average milk price will be for the next 10 years and not on volatility which is common in dairy discussions.

Assuming milk price is in the 30-35 cent/litre range in real terms it is fair to assume there will be a major expansion in the Irish dairy farming over the next 40 years. The number of dairy farmers in Ireland is expected to continue to decline according to Teagasc. This would be exaggerated by low milk prices but the age demographics, land fragmentation and the capital costs of entering dairying are also significant hurdles. The factors which will determine the future size of the Irish dairy industry are; (1) how much land will transfer from beef, sheep and arable enterprises into dairying, (2) how many extra cows will be milked, (3) what stocking rate will farms operate at, and (4) the level of milk production per cow.

New Zealand is an example we can examine for some clue as to what the future holds as it had a similar experience with the removal of state subsidies in the 1980's. Dairy farmer numbers have dropped by over 27% in the 36 year period yet production has increased by 373%. Average herd size has increased from 124 cows in 1979 to 419 cows in 2015 and both land farmed and stocking rate have significantly increased. The scale of the progress is staggering.

Table 3. New Zealand dairy farming – 1979/80 to 2014/15

	1979/80	2014/15	Diff %
Number of farms	16,506	11,970	-28 %
Number of dairy cows	2,046	5,018	245 %
Milk production (litres)	6 bn	21 bn	354 %
Milk production (kg milk solids)	506 m	1,890 m	373 %
Average herd size (number of cows)	124	419	338 %
Farm size excl support blocks (ha)	63	146	232 %
Stocking rate (cows/ha)	2.07	2.87	139 %

Source: Dairy NZ

Apply similar increases for New Zealand to Ireland and in the next 40 years we see a very different dairy industry emerging. Yes, New Zealand has approximately 5 times the land mass of Ireland but if the projected numbers are achieved it would still only account for 32% of the agricultural land in Ireland. If the historical difference in profitability between beef, sheep, arable and dairy continue, the swing to dairying in Ireland could be strong indicating the projections could happen.

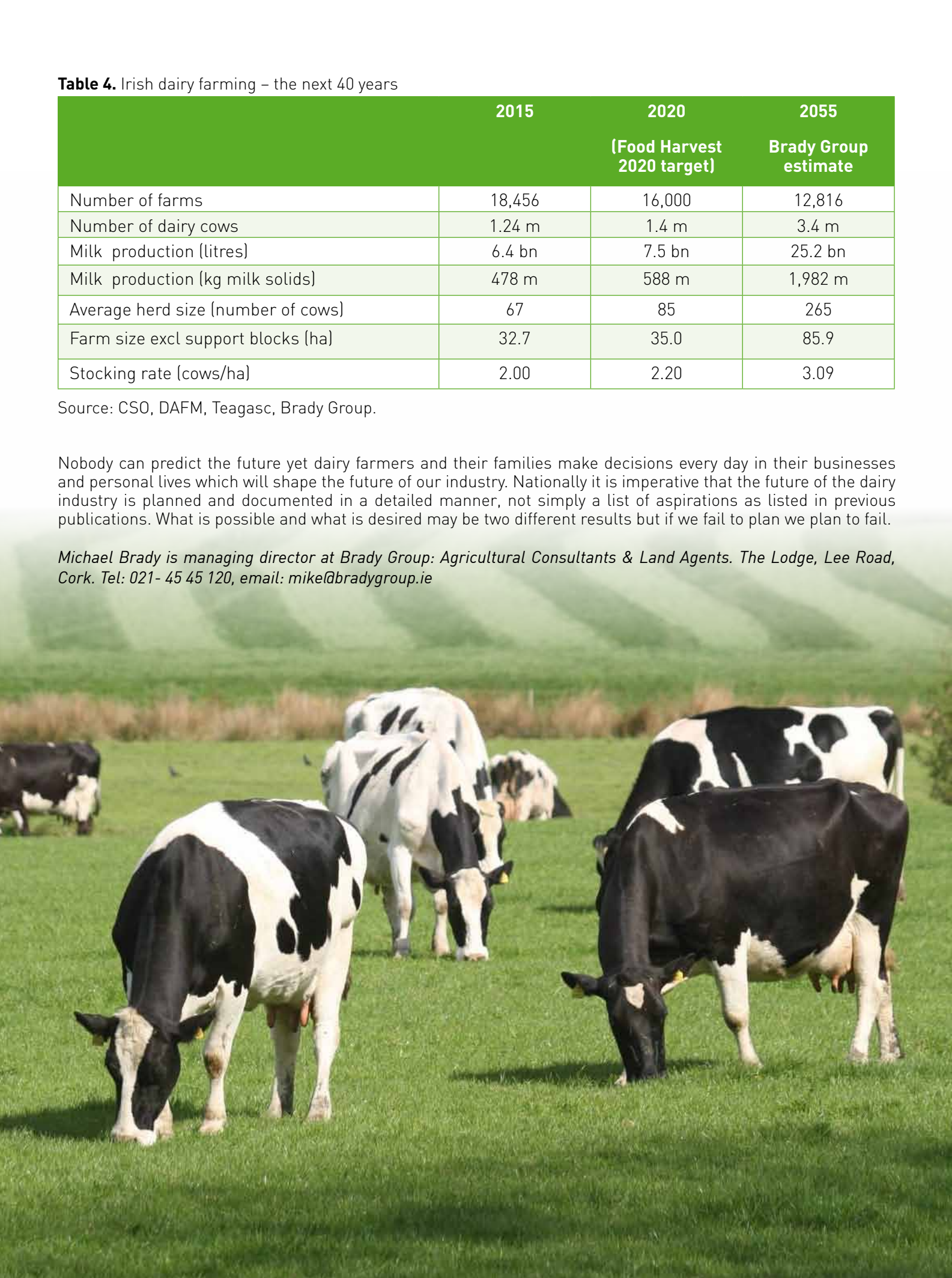
Table 4. Irish dairy farming – the next 40 years

	2015	2020 (Food Harvest 2020 target)	2055 Brady Group estimate
Number of farms	18,456	16,000	12,816
Number of dairy cows	1.24 m	1.4 m	3.4 m
Milk production (litres)	6.4 bn	7.5 bn	25.2 bn
Milk production (kg milk solids)	478 m	588 m	1,982 m
Average herd size (number of cows)	67	85	265
Farm size excl support blocks (ha)	32.7	35.0	85.9
Stocking rate (cows/ha)	2.00	2.20	3.09

Source: CSO, DAFM, Teagasc, Brady Group.

Nobody can predict the future yet dairy farmers and their families make decisions every day in their businesses and personal lives which will shape the future of our industry. Nationally it is imperative that the future of the dairy industry is planned and documented in a detailed manner, not simply a list of aspirations as listed in previous publications. What is possible and what is desired may be two different results but if we fail to plan we plan to fail.

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Grass rich or grass poor? You decide

George Ramsbottom,
Teagasc Oak Park,
Carlow



Introduction

“Who benefits?” Now that the limitations placed on milk production have ended, this is the question you need to ask yourself as both dairy farmers and potential new entrants gear up to a life without them. Most of you are glad to see the back of the quota regime but will you benefit from the opportunities it brings?

I spent a month visiting New Zealand in November 2014 having worked there as a consulting officer for a year in the late '90's. The change in how milk is produced is staggering. The creep towards more 'grass poor' systems of production was noticeable everywhere. A million cows have been added to their national herd in the last 10 years yet we're told that Kiwi dairy farmers are no better off. Who benefits? Well not the farmers anyway.

What can we learn from our own data from grass rich and grass poor systems of milk production about how cows perform and how the finances stack up? To do this I reviewed Teagasc's Profit Monitor database for over 1,500 dairy farms over the 2008 to 2011 period. These years were chosen to reflect both the variation in milk prices and weather conditions which we can expect on average over the next 5 years. The data collected is also representative of all regions of Ireland and the analysis represents the average performance of each system across all regions during the period. Using information on purchased concentrates and forage and comparing that with total demand, I was able to calculate the percentage of home grown grass used in the diet. I then categorised farms into four systems. Systems 1 and 2 used →90% grass and 80-90% grass in the cows diet respectively (termed 'grass rich'). Systems 3 and 4 used 70-80% and ←70% grass in the cows diet respectively (termed 'grass poor').

Production

The data in Table 1 show firstly the relatively large number of Irish dairy farmers who completed Profit Monitor over the period operating grass rich systems of milk production.

- As the percentage of bought in feed increased, the consumption of grass dry matter declined because the increase in overall and milking platform stocking rate was not great enough to make up the difference.
- Cows in grass poor systems had a shorter full-time and part-time grazing season than cows on the more grass rich systems.
- The milk yield per cow and per hectare rose with increasing proportions of the diet coming from bought in feed.

Table 1. Average feed, grazing season length and milk production performance of spring milk producers with varying proportions of grass in the diet of the dairy herd (2008-2011).

	Grass rich		Grass poor	
System number	1	2	3	4
No. of farms	425	1,630	571	124
Home grown grass in the diet (% of total feed consumed by the dairy herd)	92.0	85.1	76.2	65.7
Meal fed (kg DM/cow)	0.36	0.66	0.99	1.31
Grass used (t DM/ha)	8.5	8.1	7.6	6.8
Overall stocking rate (LU/ha)	2.02	2.04	2.10	2.12
Milking platform stocking rate (cows/ha)	2.06	2.15	2.28	2.27
Grazing season (full-time days)	270	257	250	244
Milk yield (litres/cow)	4,679	4,974	5,192	5,577
Milk yield (kg Milk Solids/ha)	723	769	823	883

The data in Figure 1 shows the response to additional feed consumed per cow. The response observed was the equivalent of 0.67 litres of milk per additional kg of feed eaten – assuming a milk and meal price of 30 c/litre and 30c/kg respectively, this suggests a return of 20c worth of milk for 30c worth of meal. The response to supplements is low indicating that cows were already on a high plane of nutrition. When the extra feed was introduced, it was eaten instead of grass – a high substitution rate happened at farm level as indicated in Figure 2.

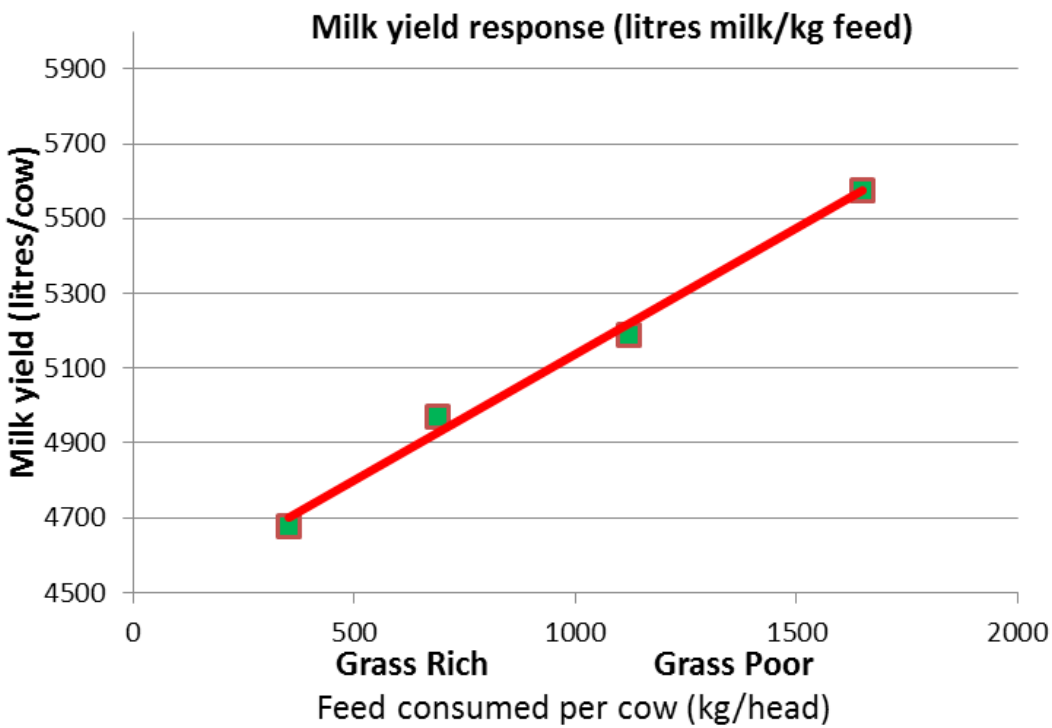


Figure 1. Milk yield response on the grass rich and grass poor systems of milk production.

The data in Figure 2 shows that for each additional tonne of feed purchased, grass utilisation declined by 600 kg of grass dry matter – a substitution rate of 60%. For every 1kg of additional feed consumed, total intake only increased by 0.4kg DM. If the cows were being underfed, the substitution rate would have been considerably lower.

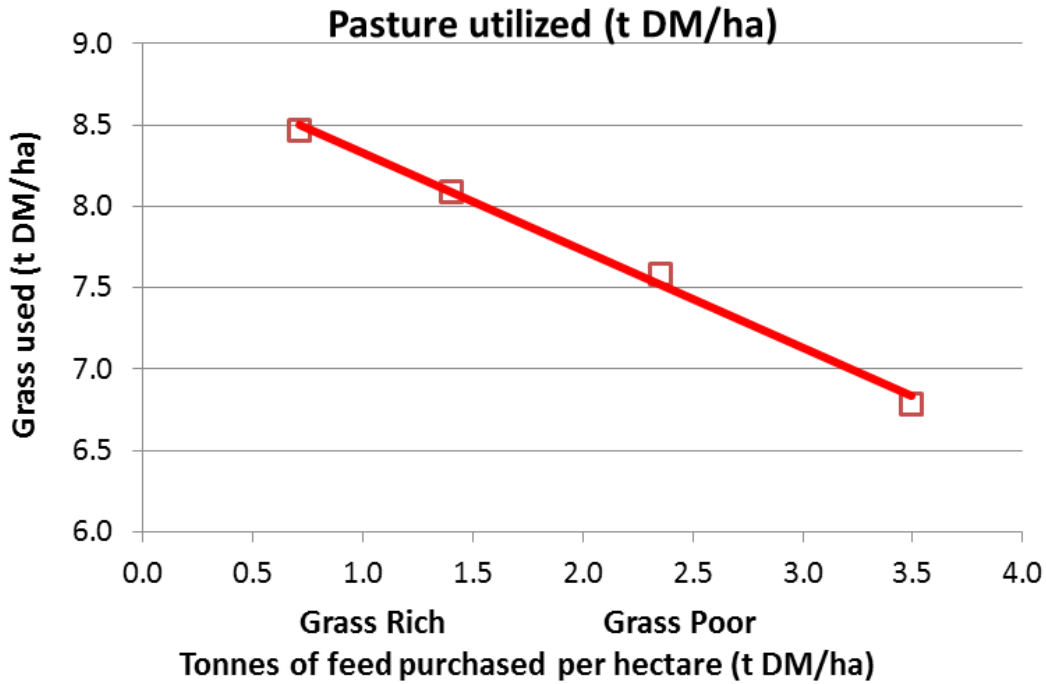


Figure 2. Pasture utilisation on the grass rich and grass poor systems of milk production.

Financial performance

What then are the implications for financial performance? Table 2 shows that on average, grass poor systems of milk production generate more output per hectare but are less profitable.

Table 2. Average financial performance of spring milk producers with varying proportions of grass in the diet of the dairy herd (2008-2011).

	Grass rich		Grass poor	
System number	1	2	3	4
No. of farms	425	1,630	571	124
Per litre (cent)				
Milk price	31.3	31.0	30.8	30.5
Gross output	31.6	31.3	31.1	30.9
Total costs	18.0	19.2	20.7	22.1
Net margin	13.6	12.1	10.4	8.8
Per hectare (€)				
Gross output	2,958	3,189	3,412	3,651
Total costs	1,660	1,932	2,231	2,568
Net margin	1,298	1,257	1,180	1,083
% of farms making over €2,000/ha	21	20	15	6

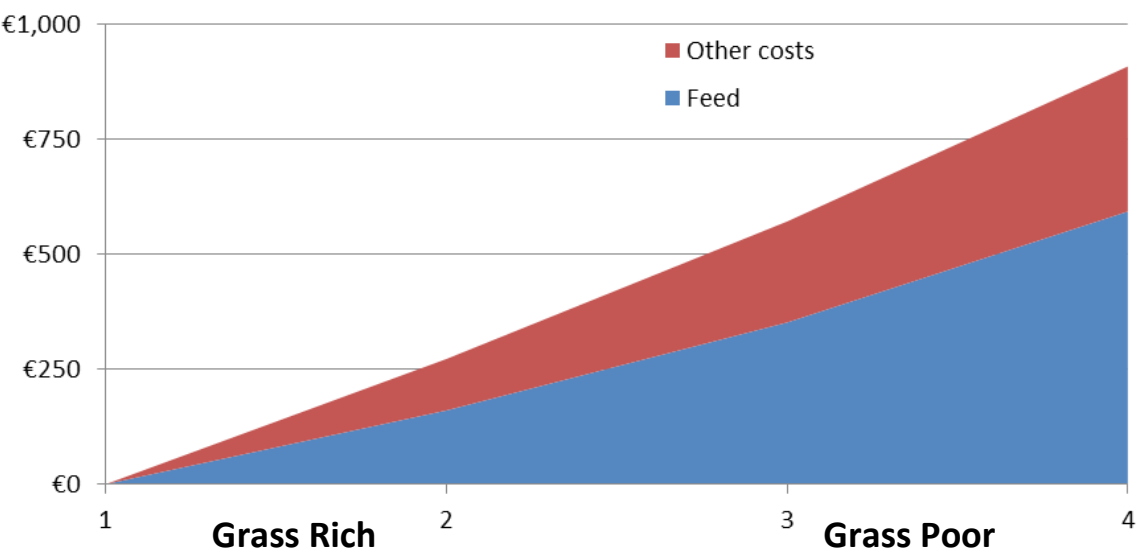
The data in Table 2 shows that higher output did not increase net profit on either a per litre or per hectare basis. Reducing the grass content of the diet increased total costs per litre – variable costs, particularly the feed costs jumped while fixed costs remained static. On either a per cow (not shown) or a per hectare basis, both variable and fixed costs increased. This increase was greater than the increase in gross output and so the net margin (the margin remaining to pay the farmer, bank principle and taxation) was €200/ha lower in the grass poor system compared with the grass rich systems of milk production.

It seemed surprising that a milk yield response of 0.67 litres/kg of additional purchased feed was not profitable when the four years of the study are taken into consideration. The reason for this is explained in Figure 3 where we look at what tends to happen as farmers increase feed input. Spending on the grass poor doesn't stop at just meal and forage purchase. For every €100 spent on feed (meals and forage), an average of an additional €60 was spent on other costs on the grass poor farms.

- The extra costs included:
- Machinery operating and running costs (including contractor costs);
 - Farm maintenance and running costs (including Car. ESB and phone);
 - Worryingly both short and long term interest costs are higher indicating a greater level of indebtedness is being incurred on the grass poor farms both through day to day expenditure and through long term borrowings.

The rest of the difference was made up of small increases in a range of different costs.

Figure 3. Change in feed and other costs (€/ha) as the proportion of own grass in the diet declines.



2015 update
Since completing this analysis, 2015 has come and gone. I’ve recently analysed the first 1,392 Profit Monitors completed for spring calving herds using the same grass rich: grass poor calculations. The results are presented in Table 3.

Table 3. Average physical and financial performance of 1392 spring milk producers with varying proportions of grass in the diet of the dairy herd (2015).

	Grass rich		Grass poor	
System number	1	2	3	4
No. of farms	244	831	261	56
Home grown grass in the diet (% of total feed consumed by the dairy herd)	92%	85%	76%	64%
Grass used (t DM/ha)	10.2	9.3	8.5	7.7
Overall stocking rate (LU/ha)	2.2	2.2	2.2	2.3
Grazing season (full-time days)	270	257	250	244
Milk yield (litres/cow)	5,142	5,477	5,681	6,267
Milk yield (kg milk solids/ha)	949	955	978	1,086
Per hectare (€)				
Gross output	3,795	3,865	3,954	4,495
Total costs	2,226	2,391	2,660	3,207
Net margin	1,569	1,474	1,293	1,288

The results show a very similar trend to the larger scale analysis. Milk production per cow and per hectare is greater with increasing use of purchased feeds. However, the higher costs of production incurred are greater than the increased output resulting in the grass poor systems of milk production being less profitable.

Conclusions
This study does not suggest that farmers in less grass rich systems of milk production can’t make a reasonable margin. There was as much variation in net margin per hectare within systems as there was between systems. However the proportion of farmers generating a net margin of greater than €2,000 per hectare was twice as great in the grass rich systems of milk production as it was for the grass poor operators.
As a result of this analysis, all dairy farmers irrespective of their system of milk production should ask themselves the question, “How can I increase the proportion of grazed grass in the diet of my dairy herd without incurring extra costs in the process?”

- Steps that farmers can take to achieve this include:
- Ensuring that the soil lime status and P and K index are optimised – if you don’t know, take soil tests now and act on the results.
 - Walk the farm regularly and measure the amount of grass that you grow to make better grassland management decisions and to identify poorer paddocks for improvement;
 - Ensure the ‘milking platform’ is fully reseeded and accessible by the cows – there is no place for growing forage crops such as maize silage or whole crop on the platform at platform stocking rates of over 2 cows per milking platform hectare and no need at lower stocking rates;
 - Many out farms are performing poorly. Improving their potential to grow grass for replacement heifers and to provide grass silage for the winter requirements of the dairy herd will be a lot more profitable than purchasing more feed or forage to feed the cows.

Legions of people looked forward to quota removal as an opportunity to improve their lot. Many of them were not farmers but make their living off farmers. Before you are tempted by promises of “maximising the cows potential” by using this, that or the other, stop and ask yourself the question, “Who benefits?”

This article is adapted from one I first wrote for the Irish Farmers Journal, 28th February 2015. The findings are from a research paper that I wrote for The Journal of Dairy Science in 2015 with Donagh Berry and Brendan Horan, Teagasc Moorepark and John Roche, DairyNZ.





Milk price volatility- implications for choice of milk production system

Joe Patton, Dairy Specialist, Teagasc Grange, Co. Meath.



Early in my career I attended, for training purposes, a dairy discussion group meeting in the company of a wily facilitator with decades of field experience. His prepared agenda looked somewhat threadbare on the day in question, due to other 'work pressures' that week. I wondered how the two hours would be taken up but my man had a solution. 'What is the most profitable system for milk production?' was written up on the flip chart. Fervent debate ensued and we were an hour late leaving the yard. Little of practical consequence was decided.

Over the last decade or more I have witnessed this same debate replayed many times at group meetings and farm walks, whether scheduled on the agenda or not - it is certainly a favourite subject for newly established discussion groups and dairy business students. Despite the complexity of the topic, a few predictable conclusions are inevitably reached; 'there is good and bad in every system'; 'every farm is different'; 'it depends on land type'; 'my system will do better at high milk price and yours will do better at low milk price'.

At this stage most of us have heard these arguments so many times that they go unchallenged. In one way the sentiment is quite democratic - everyone's system has merit. On the other hand, the concept of sub-classifying pasture based dairy farms into different 'systems' can be very damaging, because it lessens the impetus to drive improved technical efficiencies in areas like grazing management, calving pattern and cow type for any given farm. Recent calls to reconfigure New Zealand dairy extension messages based on best practice pasture management, rather than a '5 Systems' approach based in feed inputs, is instructive in this regard.

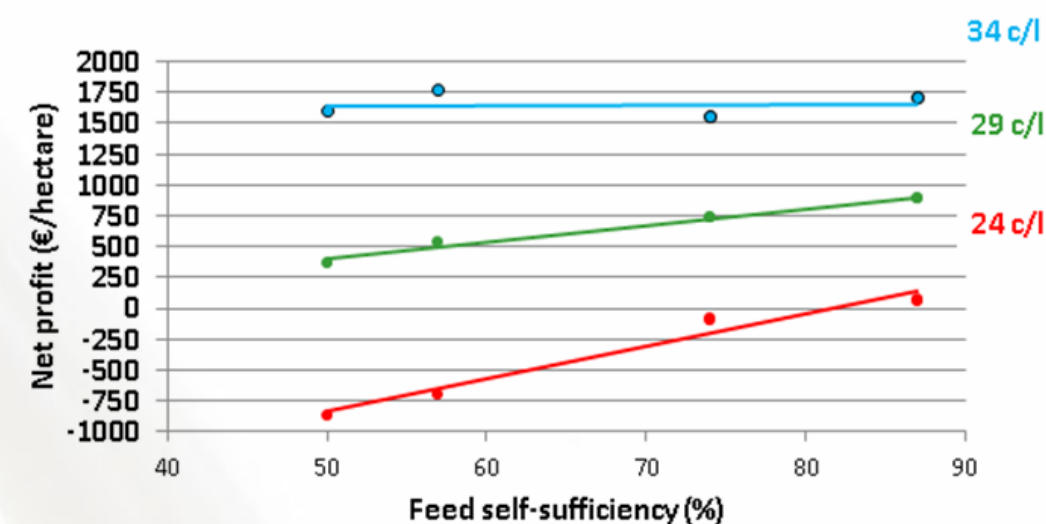
The key problem here seems to be that differences in technical efficiency are often misconstrued as differences in system. For example, is 'autumn calving' a system? Yes, if it is implemented at good technical efficiency to maximize an economically viable return on a milk pricing structure, but if practiced because of a herd fertility problem then it is just plain technical inefficiency. However, this distinction is rarely made when comparing systems at farm level. Similar problems arise when describing 'systems' based on feed input per cow without reference to a related metric like stocking rate.

System profit at different milk prices- what the research says

Of particular importance in light of dairy market volatility, is the contention that milk price is the major factor determining the relative merit of any given 'system'. Some dairy farmers are encouraged to take comfort in the notion that if they can wait around for long enough, a milk price rise will eventually prove them right all along. *What a dangerous assumption to make.*

The economic performance of various pasture-based production systems has been extensively studied by Teagasc dairy systems research over recent years, including farm-scale projects at Moorepark/Curtin's Farm and Ballyhaise College dairy herd. The overall conclusion from these feed system experiments is that the relative margin between trialled systems is indeed milk-price dependent.

Figure1. Self-sufficiency for feed versus farm profit at different milk prices (Teagasc Ballyhaise)



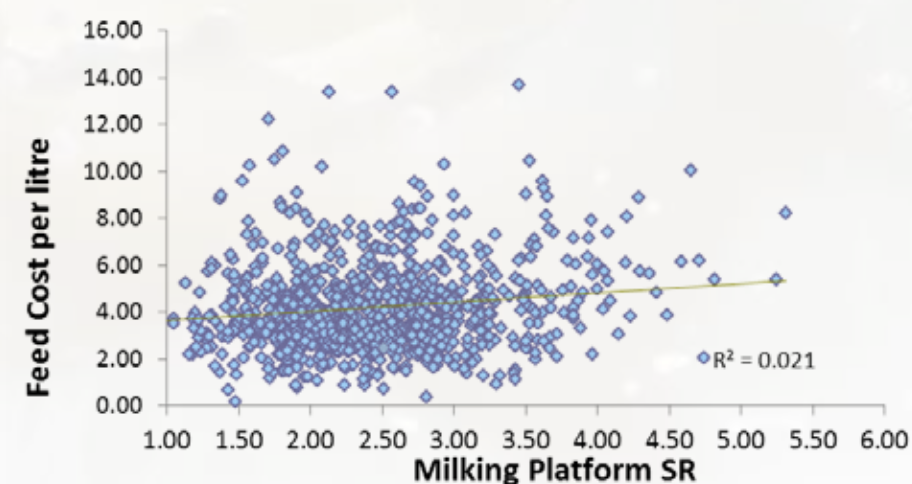
For example, Figure 1 (from Ballyhaise stocking rate experiment) shows that net margin on farm systems with a high degree of self-sufficiency for feed input (silage and concentrate) is more resilient to changes in milk price than 'high input' systems which rely on more purchased feed. Interestingly, a point often missed here is that high and low feed input systems actually return quite similar profits at the higher milk price; there is no significant advantage to higher feed inputs at 34cpl. So in this analysis the change in relative system profitability is due to a steeper decline at lower milk prices for the system importing a higher proportion of feed. This reflects the higher base production costs per litre within the system.

Systems versus efficiency at farm level

Research systems are compared across a common standard of technical efficiency - annual grass production, cow genetic merit, grazing management, calving pattern etc. - with one major factor typically changed e.g. stocking rate or calving pattern. The consequences of altering this factor can then be quantified across the overall system. For the Ballyhaise experiment described, stocking rate was used to alter self-sufficiency in the feed budgets and was a strong linear driver of feed input per litre, per cow and per hectare. On the other hand, the previously described confusion between system and efficiency at farm level means that changes to stocking rate or feed input per cow do not produce so neat and predictable an effect.

The point is well illustrated in Figure 2, which shows that stocking rate accounts for only 2% of variation in feed cost per litre across 800 eProfit Monitor dairy farms; milk yield per cow explains around 7% of same. This is a remarkable figure and a worrying one. It says that stocking rate, so extensively researched and heavily debated in terms of its effect on farm profit at different milk prices, barely registers as a factor in determining feed costs on individual farms. Variation in annual grass DM tonnage per ha, grazing efficiency, supplement feeding strategy, importing of silage and herd fertility all combine to render stocking rate effectively obsolete. Clearly this has direct negative consequences for the key metric of grass utilisation per hectare.

Figure2. Relationship between stocking rate and feed cost per litre on ePM dairy farms



Comparing farm systems at high and low milk price

It is also clear, therefore, that classifying a spectrum of farms into systems based on arbitrary thresholds for 'stocking rate' or 'feed input per cow' may be misleading. Which brings us back then to the original question - which system is best for low milk price?! And in particular does the idea hold that some farms do better at high milk price and some at low, but it evens out over time.

Perhaps the question should be asked in a slightly different way. Instead of defining arbitrary systems and then comparing their profit, why not simply rank the full range of farms at high milk price, and then look at the degree to which they are re-ranked if base milk price changes? In other words, it does not matter how we choose to label each system, what is important is how the farm ranks on profit through large swings in milk price.

To this end, we recently carried out a simple analysis based on data from 814 ePM dairy farms with full production costs and physical data submitted for 2015. Financial analysis was based on net margin per hectare farmed, excluding drawings, bank capital repayments and taxation and super levy payments. Using each farm's milk solids data, a gross output was calculated for a 34cpl base milk price (€8.01/kg protein, €3.20/kg fat and 4cpl processing) and a 24cpl base milk price (€5.90/kg protein, €2.36/kg fat and 4cpl processing). Net margin per hectare whole farm and per hectare grazing platform were calculated at 2015 variable and fixed cost levels at 34cpl and 24cpl base milk price. Farms were then ranked on their relative profitability (i.e. 1 to 814) at each milk price point.

Fig 3. Profit ranking per farm ha for Teagasc eProfit Monitor farms at 24cpl and 34cpl base milk price

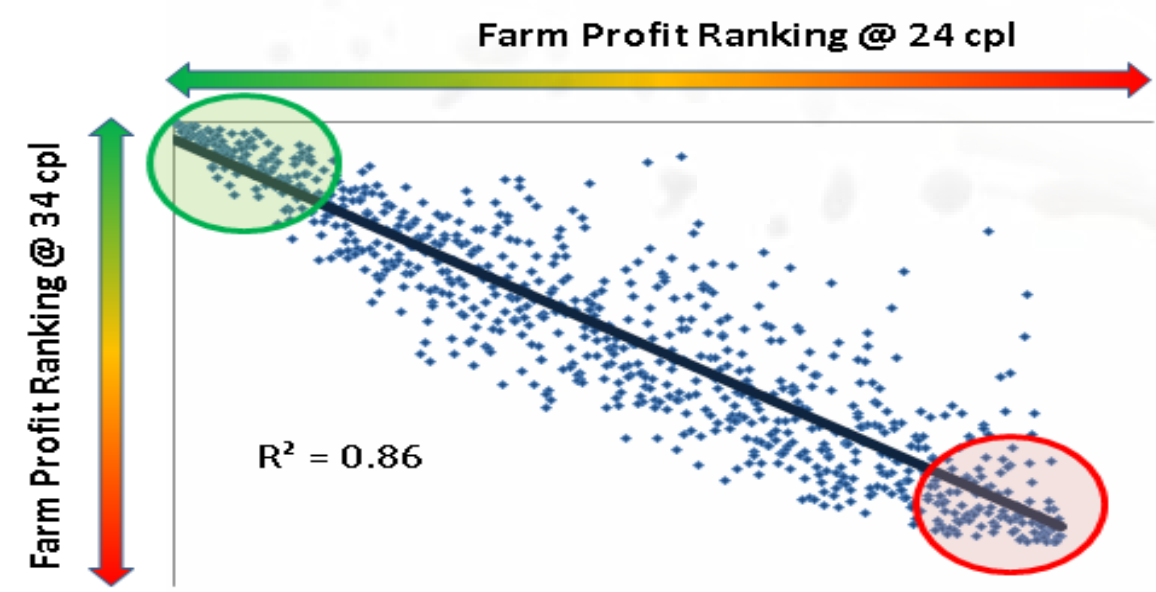


Figure3 plots the comparative dairy farm profit ranking per hectare farmed at the two milk prices for each of the 814 farms (1 blue dot = 1 farm). Farms further to the left are most profitable at 24 cpl, while farms closer to the top of the chart are most profitable at 34 cpl. It is noteworthy that the degree of fit between profit rankings is very high. Therefore 'top left' farms (circled green) have higher profit across both milk prices while 'bottom right' (circled red) are lower margin farms irrespective of milk price.

Table 1. Key physical and cost data for high and low margin farms ranked at different milk prices

	24 cpl		34 cpl	
	Hi Margin	Lo Margin	Hi Margin	Lo Margin
Milk solids (kg per cow)	471	409	481	410
Milk solids (kg per ha on milking platform)	1521	936	1669	812
Fat %	4.29	4.18	4.26	4.16
Protein %	3.65	3.52	3.62	3.51
Milking platform stocking rate (LU/ha)	3.23	2.29	3.47	1.98
Whole farm stocking rate (LU/ha)	2.47	2.14	2.49	2.03
Feed costs (c/l)	3.2	4.4	3.6	4.1
Fertilizer costs (c/l)	2.4	2.9	2.4	2.7
Machinery + contractor costs (c/l)	2.3	4.0	2.5	3.8
Depreciation costs (c/l)	1.6	1.9	1.8	2.2

Table 1 outlines some of the main differences between the higher ranked and lower ranked farms in terms of physical and cost performance. Unsurprisingly given the minor degree of re-ranking, the average profile for high and low profit farms does not change due to milk price. Across both milk price points, higher profit farms had higher grazing platform and whole farm stocking rates. Milk solids delivered per cow was 15% greater due to a combination of higher solids percentage and volume. Critically however, purchased feed cost per litre was lower meaning the additional stock carrying and milk solids capacity were generated from higher intake of better quality grass for longer during the year. Whole farm stocking rate was also higher at approximately 2.5 LU per ha indicating a high level of forage utilisation efficiency across every hectare farmed (dairy grazing platform, replacements and silage). Finally, costs such as machinery and depreciation were lower on a per litre basis, indicating good cost control on capital items.

In conclusion, it is evident that the most profitable farm management practices remain the most profitable across a range of milk prices. This is to be welcomed as it should give greater clarity for milk producers at a time of low milk price, but also must be strongly emphasized during times of high milk price. The basic formula for success is well recognized at this stage but improvement in the component parts and practices of soil fertility, grazing, herd nutrition, breeding and fertility is always sought. Understanding and implementing these practices should therefore be given priority over extensive debates over the best 'system' - it will make for more challenging group meetings for farmers and wily facilitators alike.



The most important budget of all? Next winters fodder

Austin Flavin,
Teagasc Mullinavat,
Kilkenny.



“The winter that did not want to let go” that was the most common account made by farmers after, along with 2013, one of the hardest and longest winter housing periods in living memory. Thankfully we have seen kindness and decent sun in the last fortnight to relieve the pressure. Grass growth rates have recovered significantly, doubling in parts of the country to 110 kg grass dry matter (DM) per hectare (ha). However given the difficult spring, growth is still back 25%. Farms recorded a growth rate of 900 kg DM/ha from the 1st Jan to 10th April this year compared to 1225 kg DM/ha last year.

Any early fertiliser applied seemed to only green up the field with no kick in growth seen. This was the case for the first two rounds of fertiliser which in turn pushed silage ground to be grazed twice in most cases. The general comment from farmers is they have less ground closed off for silage than normal. This due to the pressure of keeping grass ahead of stock during the poor spell. So you need to work out **NOW** how much silage you need next winter. It is also advised for farmers to plan for a reserve of winter feed for unforeseen issues, e.g., a month of bad weather, becoming locked up with TB, etc.

The aim is to get quality and not just quantity; 10/12 bales per acre at 72% DMD will be a hard target to achieve this year. In the example below the farmer with a 40-cow suckler herd would have to target 58 acres closed off to achieve their winter feed requirements. In fact closer to 8 bales/acre would be a good target and this would mean closing 88 acres for first cut. No farmer will have that capacity. So one option is to close a larger area for second cut silage, increase fertiliser usage on the grazing ground to allow for higher stocking rates and take out surplus grass as silage bales for winter feed.

A fodder budget will have to be carried out on every farm to access how much we need this winter. The table below shows the silage demand for stock on a farm over the winter. It is a very worthwhile exercise to estimate the total demand for your own farm and then to plan the area of silage you need to harvest accordingly.

Table 1. Example winter feed budget for a suckler beef farm

Animal type	Number of stock	Winter months	Pit silage needed per month (t)	Bales needed Per month	Total in t (bales)
Suckler cow	40	4.5	1.4	1.6	252 (288)
In calf heifer	6	4.5	1.3	1.4	35 (38)
Weanling	38	4.5	0.7	0.8	120 (137)
Store cattle	38	4.5	1.3	1.4	222 (240)
Total Requirement					629 (703)

In the example a farmer with 40 suckler cows bringing all progeny through to finish at 22 and 24 months will require 629 t DM of pit silage or 703 bales over a 4.5 month winter. Closing 45 acres achieving 8 bales/acre would yield only 360 bales. So there is a lot of ground to make up. In fact only 50% of the winter silage is available from the first cut, normally this is 80% and strong paddocks are taken out to make up the difference. So second cut becomes very important, closing off 35 acres with a yield of 6 bales /acre will give another 210 bales totalling 570 bales for the farm. The shortfall is still 140 Bales which means taking out a lot of surplus paddocks to make up the difference.

A point could be made to bulk up on 20 acres for the cows, give it an extra 10 growing days to get more bales, as a high DMD won` t be required for them. And get the quality into the young stock. This decision will have to be made soon. Good yields spread the costs of your silage over a greater tonnage. Quality is equally important dictating animal performance in beef live weight sold per ha.

Below are the key factors in achieving good silage second-cut yields and quality:

Soil Fertility

Maintain soil P, K and lime levels based on up to date soil analysis. Organic manures are very useful in helping to balance P and K levels on silage ground. There is plenty of slurry in slatted units thanks to the long winter. This should be used to help reduce fertiliser costs. Compound fertilizers (for example, 24/2.5/5) can be used to make up the deficit – but it is coming in at €20 a bag so optimise use of organic manures.

Nitrogen (N)

Apply circa 100 kg N/ha (80 units/acre) with high perennial ryegrass content swards (recently reseeded ground) requiring higher levels of N. Make sure you allow for any organic manures used. Apply all your fertiliser as soon as possible after the first cut and as evenly as possible. N fertilizer reduces grass sugar levels and increases buffering capacity, therefore allow enough time for any N applied to be utilized to ensure good crop preservation. A rule of thumb is that 2 units of N per day are used up by the crop. Therefore, if you spread 80 units/acre allow at least 40 days between N application and mowing. Note bad weather will reduce the uptake of N and more time may be required to reduce N levels.

Preservation aids

Good silage preservation requires a lactic acid dominant fermentation to ensure a rapid drop in pH and good preservation; lactic acid bacteria need high sugar levels (minimum 2.5%, preferably →3%). Sugar levels in crops tend to vary depending on the time of day (highest in the afternoon/evening) and weather conditions (increase with sunshine and cool nights). But in general over time it increases as the grass crop matures, hence making low digestibility silage easier to preserve.

Wilting is a useful preservation aid as it will help to increase sugar levels. Benefits are greatest after a wet spell but ensure the crop is reasonably dry before mowing (all dew disappeared) and spread rows of grass out over the field. There is no benefit in wilting crops for more than 24 hours prior to pick up.

The use of an additive will help greatly in the preservation of young leafy crops or where N levels or sugar levels are not ideal. They are less relevant for relatively mature, wilted crops given adequate time to use any N applied.

Pit management

Your aim is to achieve anaerobic conditions as quickly as possible and maintain these conditions until the pit is opened. This involves quick filling of the pit ensuring the grass is well compacted and sealing carefully beneath a double black polythene layer followed by a full covering of tyres and sandbags. Inspect frequently (at least once every two weeks, more in the weeks after covering) and immediately repair any damage to the polythene. At feed-out; try to move across the pit face quickly and evenly, preferably using a sheer-grab, to minimize heating losses.

Bale management

Whether bales are wrapped in situ or in the yard is often down to the equipment and time of the contractor. Careful stacking and management of the bale area after can also have a huge impact on the bale quality. Standing up is preferable to maintain the structure of the bale. Stacking two/three bales high is often down to space in the yard. The much debated cost of second cut silage goes out the window when there is a huge shortage on the ground. Second cut normally comes in around €20/tonne DM more expensive than first cut.

Our thoughts may move to an Indian summer after the winter we` ve had, it may just be the tonic we need heading into a second cut.



Health & Safety on a Grassland Farm is a Function of Management

Val O'Connor, A.E.V.
Health & Safety
Limited, Roesborough,
Tipperary Town

Introduction

"Good morning Jim, perishing, isn't it".

"Absolutely Baltic Mick, that north wind would cut you. People are in a bad way for fodder, how are you doing?"

"Looking at the end of the pit Jim and there's no sign of any grass coming, it's going to be a very late year for grass"

"We're looking at our last few bags and after that I don't know what we'll do, 'twould want to start warming up fairly lively!!"

This conversation was heard many times every day during the month of April and into the early days of May. It had been cold, fodder did run out in many places, grass was late and cutting silage in May seemed more of an aspiration rather than a possibility for most people. All of this puts farmers under pressure, not only physical pressure but under mental pressure, stress, as well. Will I be able to keep the cows grazing on good grass to the peak and close off enough for silage? How much first cut can I manage to get, when can I cut? The pressure is there every day and unfortunately it can lead to errors and oversights which may have unfortunate consequences.

How much thought have you given to health and safety for the coming season? There are things that we see from time to time on our farms that tell us "we need to do something about that before next year". Every year, unfortunately, there are accidents on our farms with serious and fatal consequences and these accidents often involve our family members. Those people who

have experienced such family tragedies have to live with the outcomes for the rest of their days. When we plan for our grassland operations for the year we must manage not only the fertiliser regime, the grazing, the paddock rotations, the milking, the bull, the contractor, silage covers etc., but we must manage the health and safety of our farms as part of the overall operation.

Farm health and safety is a function of farm management, it must be planned into every operation as seriously as changing paddocks, buying fertiliser or selling cattle. This may be part of the problem we face. Is health and safety planned into your farm operations? For me the biggest difference between farming and industrial work, indeed any other work, is the fact that on most farms you walk out your backdoor and you are in a work place. Most other workers drive or commute to work and they are miles from a family while they are working and their families are not exposed to workplace dangers all day. Those who manage farms, especially where there is a farm family in place, have a serious responsibility to manage farm operations in such a manner as not to put anyone on that farm into harm's way.

Some ground rules:

Firstly,

- Is there a plan for grassland operation?
- Have we the machinery or are we getting a contractor for all or part of the operations?
- Who is going to operate the fertiliser spreader, topper, mower, trailers?
- Are some of the operators going to be a son or daughter?
- What age are they?
- What experience have they got?

- Are they seriously capable of doing the job?
- Have you trained them on the job and have you checked that they are capable of carrying out the operation efficiently and safely?

It's not good enough for your son or daughter to "tell" you that they can do the job, you must check and be happy that they are well able and old enough. Nobody under 14 years of age should be operating a tractor on your farm, according to the "Code of Practice on Preventing Accidents to Children and Young People in Agriculture". I encourage all farm parents and grand-parents to visit the Health & Safety Authority site, www.hsa.ie and read over this "Code of Practice". Younger people must be trained and supervised as in any job, they must be able to comfortably reach controls and understand the function of each control. The ground on which they may be asked to operate must not present hazards such as steep slopes, river banks, lakes or ponds etc. Have you thought about sending your son and/or daughter for some tractor operation training with a competent training provider? Is there a training provider available for young farm operators? Yes, the Farm Relief Services provide such training which can be organised locally for you if you contact FRS Training Limited in Roscrea, 0505-22100.

Secondly,

- What's the plan for the young children while the work is going ahead on the farm?

This is a critical decision for parent farm managers to make. Let's not beat about with this one, "children and machinery do not mix", not only to be around machinery but not to ride on machinery at any time. At the moment this writer is coping with 2 year old twin grandsons and it's an eye opener for me. Their curiosity knows no bounds and they move like lightning once you take your eyes off them for a second. The most devastating thing imaginable to me would be for anything to happen to those two, so we will have to plan to keep them safe and satisfy their curiosity at the

same time. The child proof fence is going up so that they can be safely enclosed when they visit and at the same time I will take great pleasure from showing them the machinery when it is not in operation.

Thirdly,

- All machinery must be safe when being used!
- How ready are you for the silage season?
- Is your grassland equipment in good safe working order?

Having equipment well serviced in time is hugely important. Murphy's Law would say that "what can go wrong will go wrong", especially when you're under pressure. So start by making sure that your machinery is in good safe working order. There is nothing worse than a breakdown just after starting caused by something that could have been put right earlier.

Arrangements should be in place with your contractor so that all operations are planned and carried out safely. Your contractor's area of operation within the farm should be specified and limited so that tractors and machines do not appear in parts of the yards where they are not expected. All P.T.O. covers must be in place, in good condition, anchored so that they cannot rotate, U-guards and O-guards must be in place. If any of these get damaged during operation they must be replaced immediately, without exception. All other machinery guards must be in place at all times during operation.

Be observant and do not hesitate to act if you even think that there is a safety issue at any time during the grassland operations. The pressure is always there but our children and families are infinitely more important.

Val O'Connor B.Agr.Sc., DipSHWW, lectured on Machinery in the Rockwell Agricultural College from 1976-200. He has been MD of A.E.V. Health & Safety Limited since 2002. A.E.V. Health & Safety Limited provide training and consultation across agriculture and many associated industries.



Irish Grassland Association Student Bursary

Since its foundation, councils of the Irish Grassland Association have worked alongside the most progressive individuals in the farming, research and business communities for the betterment of Irish grassland farming. This relationship has been significant in bringing Irish grassland technology to the forefront as an international science. This year the Irish Grassland Association set aside a sum of money to support travel to conferences or events deemed to be of benefit to students undertaking a postgraduate degree in grassland research in Ireland. Attendance at relevant conferences and events is an important aspect in the development of a postgraduate student's career and provides an opportunity for Irish research to be presented to international audiences. A maximum of two bursaries of up to €500 each will be available in 2016. Postgraduate students can apply by completing the application form available at www.irishgrassland.com and emailing to secretary@irishgrassland.com. Closing date is Monday 22nd August 2016 at 5pm

EDUCATION

NEXT EXIT ↗



Paul Crosson Irish Grassland Association with the previous student bursary recipients Council Member and Cormac McElhinney and Frank Campion

DATES FOR YOUR DIARY 2016



**Irish Grassland Association
Dairy Summer Tour
19th July 2016**

Sponsored by



**AGM 15th September
Heritage Hotel
Killenard Co. Laois**



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FIBID Trust

**Student Conference
Monday 10th October
Kildalton Agricultural College**



Irish Grassland Association

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