

Creating a united front on environmental sustainability



We will ensure a successful future for Irish Dairy

WHAT IS THE GRASS ROOTS MOVEMENT?

The Grass Roots Movement brings together the strength of Ireland's dairy industry creating a united front on environmental sustainability to ensure a successful future for Irish dairy.

HOW IS THE NATIONAL DAIRY COUNCIL GOING TO DO IT?

We are forging the link between farmers and consumers, sharing the stories of changing farming practices, of technological innovation and tangible results, of commitment to today's targets coupled with the appetite to do more.

The Grass Roots Movement demonstrates real progress while ensuring that everyone knows dairy farmers are committed to change and improvement.

WHERE WILL YOU SEE THE GRASS ROOTS MOVEMENT?

The NDC officially launched the Grass Roots Movement in May 2023 and you will see the Grass Roots Movement across a national, multi-channel media campaign (TV, OOH, Digital, Radio/Audio) providing consumers with factual information about the dairy farming practices that are driving the necessary change.

WHY ARE WE DOING IT?

Farming is all too often portrayed negatively, particularly when it comes to environmental impact. The full story of Irish dairy farming is one that needs to be communicated and understood as the national discourse continues to target dairy farming as an environmental challenge, without reference to the work that is already ongoing.

Dairy farming has been taking place in Ireland for over 6,000 years and we are all proud of Irish dairy products which are globally renowned. We can't lose sight of this. We need to ensure that our dairy farmers, and the work that they do, are represented fairly – that the full story is told.

ABOUT THE CAMPAIGN:

The Grassroots Movement focuses on the actions that Irish dairy farmers are taking to reduce their environmental impact, and the natural advantages that Ireland has when it comes to dairy production - these include:

- The Latest Tech Scientists focusing on grassland research have shown that introducing white clover into dairy pastures can reduce the need for chemical fertilisers by as much as 40%.
- Nurturing Nature By caretaking field borders, hedgerows and trees, Irish farmers can encourage biodiversity and increase their land's ability to sequester CO₂.
- The Perfect Climate Ireland's temperate climate is ideal for the production of grass that our cows turn into naturally nutritious milk.
 95% of an Irish dairy cow's diet is grass.

The campaign also features two of NDC's farmer ambassadors, Miriam Gunn, mother of four and proud dairy farmer from Co. Roscommon and Gearoid Maher, a fourth-generation dairy farmer from Cappamore in Co. Limerick, whose family have been farming the land since the mid-1800's.



In 2024, we will continue to use the Movement as a platform on which to increase understanding of, and pride in, Irish dairy. We will ensure that the Movement is widely seen and understood and continues to be associated with quality, with commitment and with performance against environmental targets.

HOW CAN YOU HELP?

We want to ensure that our dairy farmers, and the work that they do, are represented fairly. We want the public to hear the full story – and there is no better person to tell your story than... you!

Help us to launch the **Grass Roots Movement** in 3 easy ways!

1. SHARE THE GRASS ROOTS MOVEMENT CAMPAIGN VIDEO

Share the latest television advertisement featuring NDC Farmer Ambassadors Miriam Gunn and Gearoid Maher across your social media channels to highlight the commitment of Dairy Farmers.

Scan to download the video.



2. SHARE YOUR EXPERIENCE

Environmental sustainability innovation and practice is evolving all the time – help us share the stories of your progress. Use **#GrassRootsMovement** on your social media channels. Tag us so we can like, comment and re-share!

3. FOLLOW THE NATIONAL DAIRY COUNCIL

a. Twitter: @NDC_ie
b. Facebook: NDCireland
c. Instagram: @NDC_ie

AUGUST 2023 EDITORIAL



FARMERS BEING SOLD SHORT

'Know your number' is the new catchphrase from Teagasc, and a very important number it may well become for Irish farmers. The development of individual calculations allowing farmers to determine their carbon reductions from a series of actions based on the third iteration of the Marginal Abatement Cost Curve (MACC) has benefits, as well as potential pitfalls. Ultimately, if the sums do not add up to major emissions reductions, the protective cover of average reductions across all farms may not suffice. While the efforts of Teagasc to highlight emissions reductions on individual farms and encourage farmers that their actions are delivering results are praiseworthy, there is also the potential to target shortcomings on farms that may, ultimately, impact their economic wellbeing. We are all in favour of inducements to curtail carbon outputs, but the contra entry may well be that farmers will be penalised if they do not reach certain targets. That is not to defend any so-called laggards. It is merely pointing out the potential for 'knowing your number' becoming a double-edged sword over time.

MISSING ELEMENTS

There are critical elements missing from any calculation of a farm's contributions to mitigating climate change. For example, the installation of a range of renewable energy production technologies on farms will not be attributable to any overall emissions reductions achievements by the farm sector. Solar panels on farm roofs, for instance, do not contribute to a farm's number; neither would a solar farm. Biomethane digesters are another example. Whether a farmer establishes one on his own farm or is a raw material supplier to a larger facility, none of that is counted as a contribution to a farm's emissions reduction figures. Wind turbines, similarly, have no beneficial impact on the number. Forestry is another enterprise that should reduce the

number, but that won't count towards it, either. Farm-based renewable energy production will be claimed as a win for the energy sector. Forestry is assigned to the Land Use, Land-Use Change and Forestry (LULUCF). Presumably, if a farmer electrifies part of his farm vehicle fleet, that too, will be a win for the transport sector or the energy sector, or any sector other than agriculture.

BALANCING THE CARBON BOOKS

Are farmers being short-changed by this discretionary assignment of emissionsbalancing actions? It is certainly plausible to argue that actions taken by a particular sector should be credited to that sector, right down to the number calculated to reflect actions taken on individual farms to reduce CO2 emissions or counterbalance them. It is not clear whether the carbon storage capacities of farms will be credited in any way towards a farm's progress towards net zero carbon. It seems unlikely. The value of carbon sequestered in soils and hedgerows is increasingly recognised and a market for carbon credits may be in its infancy. If sequestered carbon is saleable, should it be available for balancing farm carbon accounts? Ultimately, the fact that those credits would not appear to be available to offset farmbased emissions may become problematic for individual farms. The concept of zero carbon in this jurisdiction has not gained enough traction. The idea is straightforward and reasonable. No matter what actions a food producer takes, he/she will cause carbon emissions. That is a natural consequence of food production of any kind. Balancing the carbon books entirely is not possible without the benefit of at least some of the actions mentioned above. Renewable energy production should reduce the carbon number on a farm. Ditto wind energy or gas production. By not challenging the current carbon allocation policies, we are doing ourselves a grave disservice.

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SHAMBOLIC RTÉ

RTÉ has really felt the wrath of politicians and the general public over alleged payment irregularities that emerged following the broadcaster's confirmation that it had under declared Ryan Tubridy's earnings. While we watched in amazement as senators and TDs from both the Committee of Public Accounts and the Committee on Media, Tourism, Arts, Culture, Sport and the Gaeltacht grilled senior RTÉ executives, it is still not clear who did what or why and, ultimately, who will be held responsible for the whole debacle. The licence fee can only be good value for money if RTÉ provides good and original content and is seen to be managed competently. Let's hope the new director general, Kevin Bakhurst, is up to the task as RTÉ is now struggling to collect licence



fees from disillusioned viewers. Likewise, sponsors and advertisers might take a hard look at their budgets in future and be far more selective in their support of the national broadcaster. RTÉ needs to take action quickly, as advertising and sponsorship budgets for 2024 are traditionally planned in September.

While few people want to see the demise of the national station and its public-service remit, clearly a root and branch reform is necessary, which will ultimately mean a trimmed down entity with fewer people being paid more than the Taoiseach and Tánaiste combined.



As we go to print, we hear that the RDS chief executive, Geraldine Ruane is leaving the organisation after almost three years. Geraldine succeeded Michael Duffy and took the reins in October 2020. The Sligo native worked in a number of senior roles in the pharmaceutical sector (Novartis, Schering-Plough and Chanelle Pharma) before being appointed as CEO of Ordinance Survey of Ireland, and then on to Trinity College Dublin as chief operations officer. In an interview with Irish Farmers Monthly in August 2021, Geraldine spoke about her priorities for the RDS going forward: "Part of my job is to tell the story of the RDS and I want to put an emphasis on the Philanthropic Foundation and its values." With the Dublin Horse Show just around the corner, it's an unfortunate time for the RDS to part company with its CEO. Let's hope that RDS president, John Dardis and his team can soon appoint a successor to Geraldine, even on an interim basis, and we wish Geraldine the best of luck in her future endeavours.

In 2031, the RDS will celebrate 300 years since its foundation in 1731. It's a fantastic organisation with a great tradition and has contributed much to Ireland over those three centuries.

CLAAS APPOINTS NEW CEO

Jan-Hendrik Mohr has taken over as CEO of Claas from Thomas Böck, who has stepped down to pursue new endeavours after four years at the helm. Mohr takes over at an exciting time for the manufacturer. He is a qualified engineer who has been with the Claas Group since 1984. He has been a member of the Group Executive Board since 2008, most recently he is responsible for the Business Unit Grain, which he will continue to lead. Claas has a reputation for incorporating high levels of technology in its products and still manages to cater for a diverse customer base that requires anything from simple, basic machines to the most sophisticated products available.



Cormac Farrelly, Agriland managing director.

AGRILAND CELEBRATES 10TH BIRTHDAY

Congratulations to Cormac Farrelly and all the Agriland team who recently celebrated the company's 10th birthday. Agriland is now the largest digital-news publisher in the agri-media sector in Ireland; it also runs a sister site in the UK, which was launched in 2018. Over the last 10 years, Agriland has evolved and grown to become a highly regarded player in Irish agri-media. Its editor, Stella Meehan recently stepped into the role as chair of the Guild of Agricultural Journalists of Ireland. We wish them all the best for the future!



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COW CULL CONTAGION

The demand for reductions in livestock numbers is now getting traction on the other side of the Irish Sea. The Welsh Government, through its surrogate mouthpiece, the State-funded Wales Centre for Public Policy, is making noises that a cow cull would be beneficial in the race to reduce farm emissions. Welsh and Irish livestock farmers can feel a certain bond in the face of adversity, assailed as they are on all sides, by those who believe that culling cows is the answer to climate challenges. The Welsh think-tank is suggesting in its report that a proportion of grazing land should be reallocated towards more carbon-efficient uses including forestry. The report does note that the only way this reallocation of land use can work is if strategies are adopted to restrict land demand. Since no more land is being made, that's a tough proposition.

A HATFUL OF RABBITS

Can we expect some rabbits to be pulled out of Paschal and Michael's budget hat next October to counteract The Law of Unintended Consequences in relation to cow banding and worries about derogation reductions? The surge in demand for land on foot of expectations of lower stocking rates being forced on livestock farmers has sent leasing prices through the roof. Will the Government interfere with the tax reliefs around long-term leasing in order to correct an ill-thought-out emissions reduction strategy? The success of those tax reliefs in encouraging long-term leasing needs no embellishment. Support for long-term leasing of land effectively killed off the 11-month conacre system and delivered improvements in soil fertility and productivity, while also encouraging generational transfer, among a range of benefits. Is there a serious intention to damage one of the most

WHAT SECRET?

There was some bewilderment in farming circles as to what exactly 'Dairy's Dirty Secret' title was referring to in the recent RTÉ Investigates programme. In highlighting shortcomings in calf handling and potential breaches of livestock-transport regulations, the documentary uncovered actions and practices - beyond the farmgate that are totally unacceptable, that deserve the condemnation they have received, and that demand consequences for those responsible. The dairy sector, generally, and those working within it do not condone such actions, nor do they behave in such a way as to cover up such actions. There is no 'secret' here and any suggestion to the contrary is disingenuous and does Irish farmers a grave disservice. The Department of Agriculture, Food and the Marine (DAFM) is investigating this matter, which is welcomed by all.

It is also certainly no secret that Irish calves are exported every year. This is a fact of our agricultural system, the same system that produces the beef, the milk, the cheese, the yoghurts, and so on, that we all love to consume, and which costs us not a second thought. It would be great to see some continued, constructive debate on



successful land-use reform measures enacted in the past 50 years?

this issue. We understand that there was a prime opportunity for such a debate in a follow-up programme to this documentary. Unfortunately, the Irish Farmers' Association's dairy executive, the well-qualified Aine O'Connell, did not have an opportunity to participate in the programme, which would have afforded her debating time with Cork TD, Holly Kearns. Aine was awarded a PhD for

her research in milk quality undertaken at Teagasc Moorepark in conjunction with the University of Wisconsin; she lives on a dairy farm; and she is passionate about the sector. It is certainly no secret that we have some of the best and brightest working in our sector, all of whom want the best for the sector, we need to hear more from these, and their expertise, on our national airwaves.

PLOUGHING CHAMPIONSHIPS SOLD OUT

Following on from the Farm Tractor and Machinery Trade Association (FTMTA) machinery show, next stop is the return to Ratheniska in Co. Laois for the 92nd National Ploughing Championships. The event, which started in 1931 in Athy, Co. Kildare frequently has over 200,000 attendees including farm families and members of the

general public. This year, for the first time, there is a waiting list for trade exhibitors. The event is no longer just for ploughing or machinery enthusiasts. The modern modern event features something for everyone in the family: a tented village; a food fair; craft village; livestock; forestry; education; and bio-energy. The show takes

place from September 19-23. While there was general enthusiasm for the Ploughing to be held at a site near Gowran, in Co. Kilkenny in the coming years, uncertainty around road logistics and the challenges of moving thousands of vehicles on and off site efficiently, have put the proposed venue in some doubt.



WE CAN'T SEE THE WOOD, OR THE TREES

And still, we wait, and our wonder grows about how zealous proponents of afforestation are so tardy in resurrecting tree planting. Bureaucracy is slow by its nature and the lethargic delivery of a viable strategy to ensure that we plant upwards of 8,000 hectares annually is at odds with the expressed urgency of increasing our forestry area. In November 2022, Forestry Programme 2023-2027 was launched with a €1.3bn support commitment. First, it was the Department of Agriculture, Food and the Marine's responsibility to complete a State Aid application and send it to Brussels. Then Brussels took its time, necessary I'm sure, in sanctioning the plan. If or when it is sanctioned, hopefully before the EU Commission goes into its annual summer slumber for the month of August, there will still be no planting of any scale this autumn or next year, for that matter. Notice must be provided of intention to plant, followed by a period for appeals, of which there is likely to be no shortage, and then we might see some trees planted. Provided the support mechanisms and tree type and other stipulations coincide with providing a viable return for the land being planted, we could expect some trees to be put in the ground by 2025, at the earliest. That's a lot of fiddling around while the world burns.





JOHN CAFFREY RIP

Last month, Irish agriculture lost a real gentleman with the news that John Caffrey had passed away. I first met John at a Macra rally in 1977, with his sidekick, the late Steve Tracy. The Irish Farmers Journal at that time had a formidable team of photographers with Tony O' Gorman covering Munster, and

John and Steve covering the rest of the country. John was an exceptional photographer, always looking for something special in the shot. He had a great eye for a picture, and delivered magical images on a weekly basis for Journal. Socially, John loved a pint, and the opportunity to share stories with his friends either at the Farm Centre or at the many Guild functions held over the years. He and Steve were a fantastic double-act, and when I joined Irish Farmers Monthly, I had the pleasure of working with John, as we covered the likes of the Spring Show and countless country shows around Ireland. John was nominated a number of times for photographic awards both in Ireland and internationally through the International Federation of Agricultural Journalists. John's son, Jack started to work for the Journal in 2000, and John was exceptionally proud of this. In 2013, Jack was listed as one of the top Irish photographers by Time magazine.

John Caffrey of Enniskerry, passed away peacefully on July 25, at St Vincent's University Hospital, Dublin, surrounded by his loving family. We send our sincere condolences to all John's loved ones. May he rest in peace. **David Markey.**

InTouch

CATHAL BOHANE,
INTOUCH NUTRITION

AUTUMN FOCUS

With the arrival of August, it is now time to carry out a number of jobs to assess how the past few months have gone and to prepare for the seasons ahead. It is also a time to recharge the batteries after a long number of months. It is important to do this to get perspective and, if nothing else, think about something else for a week. Once you return, it will be easier to refocus on the job at hand. For those who have autumn calving, the season begins again soon. Grass has been very variable in quality this year, in part due to the extended dry and hot spell earlier in the season and also due to changing of fertiliser practices. Analysis has shown grass low in energy, and surprisingly in the mid-teens for protein, when some would expect it to be in the 20s. A lot of the grass under pressure would have turned reproductive, lending itself to these levels. Of course, this will also be reflected in the silage crops, and farms should test their silage for nutritional values as well as minerals and should also assess quantity. Even the most potent diet in the country will have 50 per cent forage contained within, and every ounce of energy and protein we have will allow us to reduce our levels and costs of the corresponding concentrate. Knowing the mineral status of this silage will allow us to adjust any mineral that we can in the milking and dry periods. A simple assessment of these results by a trained eye can prevent many problems occurring over the next nine months. Also, knowing the quantity of silage you have and comparing it to stock on hand will give you an opportunity to correct any deficits or surpluses in a costeffective manner.

Breeding should be over on farms now if you are focusing on a good spring calving spread, and so now is the time to see how successful this was by scanning if you have not already done so. If they were given ample opportunity, you should not be still trying to get cows in-calf; these cows will be over-conditioned at calving and will not receive the TLC they require post calving. Also, leaving the performance of the cow to one side, these cows and any offspring are subfertile, so persevering with these cows will result repeatedly in poor breeding performance.

With autumn calving cows, the focus as always is to calve them down with minimal metabolic issues and to rapidly increase their intake. Ideally, these cows at four-five weeks pre-calving should be inside so that we have control over them and their diet. If we have control, we can dictate the outcome. Assuming that we want them outside, we need to minimise the amount of grazing as it is too high in energy, leading to excess condition, and is also high in potassium/ potash, predisposing them to milk fever, etc. Allocate magnesium to cows as well to minimise metabolic issues.





EXTENSION GRANTED FOR SHALLOW CULTIVATION MEASURES

An extension has been granted for farmers to complete the shallow cultivation scheme. In recognition of the recent unseasonably wet period of weather, Minister for Housing, Local Government and Heritage, Darragh O'Brien in consultation with Minister for Agriculture, Food and the Marine, Charlie McConalogue, have extended the current 14-day period to 28 days. This extension applies to crops that have been harvested up to August 4. Where shallow cultivation is required on this land, it must be done by September 1.

Announcing the decision, Minister McConalogue stated: "Some early crops of winter barley were successfully harvested with shallow cultivation completed, however more recently harvested crops are already lying on the ground for over 14 days as it has not been dry enough to bale. When weather conditions improve this straw will have to be tedded out to dry before being raked up again to facilitate baling. In difficult weather conditions tillage farmers have to prioritise trying to save their grain to avoid further loses. I recognise harvesting grain must be the priority ahead of clearing straw and the flexibility agreed by Minister O'Brien will allow this."

There is already flexibility for farmers in the rules around shallow cultivation of land post-harvest. These flexibilities include an exemption for all land where a winter cereal crop, oilseed rape or beans is due to be sown by the October 31. In addition, to avoid unduly impacting the source of food for seed-eating birds, there is a requirement not to conduct shallow cultivation post-harvest on 20-25% of the total cereal land area on each holding.

"These flexibilities cover a very significant majority of the land already harvested/ being harvested at present. However, this situation will quickly change as the spring barley harvest commences." The ministers said this decision would be reviewed again soon and a further extension may be considered at that stage if necessary.

IFA INTRODUCES HYBRID VOTING FOR ELECTIONS

The National Council of the Irish Farmers' Association (IFA) agreed a number of rule changes at its recent meeting including the introduction of hybrid voting for the election of president and deputy president. For the elections, each member will receive their ballot papers in the post and will have the option to attend their branch AGM to cast their ballot, or to return it by post. In addition, the president, deputy president and regional chair will be elected for a maximum of one four-year term, and not two two-year terms, as is currently the case. These were among a host of changes that, according to the IFA, will equip the organisation to deal with the challenges facing the sector. According to the IFA, a strengthened National Officers' Committee (NOC) with additional delegated powers will have the power to co-opt up to three extra members, subject to a transparent process and criteria agreed in advance by the National Council. The NOC currently consists of the IFA president, the deputy president, the four regional chairs and the national treasurer/returning officer. In addition, members elected to the NOC positions will not be able to go back to any other position in the IFA. They can only move upwards. The roles of national treasurer and national returning officer will be split. The national returning officer will not be a member of national council or the NOC and will be elected for four years. The person will be ineligible to be nominated for any other position within IFA.

Up to three members can now be co-opted onto each national committee from Macra or the IFA's Future Leaders Programme. Any person who has served 12 years on national committees will not be eligible to go forward for election if somebody who has not served on any national committee is validly nominated.

IFA president, Tim Cullinan said the rule changes will help to bring new people into the association. "It's important that we continue to renew the organisation and send out a strong message that IFA is open to new people, new ideas, and new ways of doing business," he said.



Minister Pippa Hackett with Matt, Eoin and John Thorne who grow new-season Queens potatoes, parsnips and celery in Lusk, north county Dublin.

IRISH CONSUMERS SAY VEGETABLES ARE GOOD VALUE FOR MONEY

Recent research by Bord Bia has revealed that nine in 10 (89 per cent) consumers think vegetables are good value for money and is the category least likely to have been cut back on in the grocery shop as a result of cost-of-living pressures.

on in the grocery shop as a result of cost-of-living pressures. It also revealed that 90 per cent of consumers claim they like to support local fruit and vegetable growers, 79 per cent believe locally grown vegetables are of higher quality and 74 per cent believe they are worth paying more for. Bord Bia is encouraging consumers to support local growers by purchasing fresh, local, in-season fruit and vegetables and to actively check on-pack information and labels such as the Bord Bia Quality Mark to ensure it is locally grown. Lorcan Bourke, sector manager for fresh produce and potatoes, in Bord Bia said: "Our research shows that grocery shoppers believe that fresh vegetables represent good value for money and the majority of Irish consumers like to support local growers. We would like to encourage people to take that extra step at point of purchase and check the label for source information to ensure they are buying the freshest, tastiest locally grown, in-season produce which also allows them to eat in the most healthy and sustainable way possible". He acknowledged the 'really difficult year for Irish vegetable growers who have been faced with unpredictable weather' but added: "It is really heartening to see such a great appetite to support local growers and our aim now is to try to convert this into action by encouraging grocery shoppers to seek local."

Bord Bia's annual Best in Season campaign aims to educate people about what is in season and the benefits of buying seasonal produce which, not only supports local growers and communities, but also guarantees the freshest, tastiest and most nutritious ingredients. To promote the benefits of eating locally grown, in-season fresh produce, Bord Bia has developed an interactive 'Best in Season' calendar along with a range of tasty recipes highlighting the versatility and flavour of seasonal fresh fruit and vegetables.



Getting back on track with reseeding

Maeve Regan, Head of Ruminant Nutrition, Agritech

After what has been a tumultuous year weather wise, many reseeding plans have either been placed on hold or delayed. However, it is worth considering that in any year where the 10% target (grazing ground) is not achieved, there is rarely the opportunity in the subsequent year to take out 15%-plus of the grazing block over one season. For many, early autumn reseed is the preferred option to reseed grazing ground due to reduced pressure on grass availability and the increased availability of grazing ground after second cut silage. The fear of drought has also subsided in drier regions.

The changing weather

However, as we experienced during mid and late July, the weather can change quickly! As autumn progresses, timing is critical; and the earlier we plan on completing our reseed, the more flexibility we have regarding grazing and weed control. Remember an unproductive sward could be losing you 3t of Dry Matter/ha/year – with input prices at the farm gate where they are currently, swards with low percentages of perennial ryegrass not producing sufficient levels of grass in the shoulders of the year and have a poor response to N shouldn't be tolerated on the grazing platform. As ever, the target turnaround should be 50 to 60 days with a reseed – therefore if we complete spray-off by mid-August, target first grazing should be approximately the same date in October.

One grazing before winter

Ideally, we should aim to get at least one grazing before winter to create a more established sward for the following spring. With late autumn reseeds, avoid jeopardising your investment in reseeding by skimping on weed control or missing the window of opportunity.

Post-emergence spraying is always your best chance to control weeds, typically applied approximately five to six weeks after sowing. One of the most common issues seen annually is the inadequate rolling of new reseeds. Creating a firm seedbed is critical.

Often new plants emerge quickest where the tractor tyre marks are, or in the headlands due to the increased contact. This is a typically the first sign that the field has been inadequately rolled where moisture is adequate. Ensure the seed bed is firm, not fluffy – so roll prior to sowing if necessary to firm up.

For more information contact your local Agritech Sales Advisor or visit www.agritech.ie.



CALLING ALL AG-TECH AND AGRI-FOOD START-UPS!

The AgTechUCD Innovation Centre is seeking applications from early-stage start-ups with innovative products and services in the ag-tech, agri-food, equine, and veterinary sectors, and who have ambition to grow globally, to join its dedicated accelerator programme, which is now in its third year.

The 2023 AgTechUCD Agccelerator
Programme, commencing this October, is an intensive 12-week hybrid programme, which includes dedicated business development workshops and investor readiness training, mentoring from industry experts and business advisors, guest speakers and facilitated introductions to AgTechUCD's venture capital and business angel networks.

The in-person workshops will take place at the new AgTechUCD Innovation Centre which is currently under construction at UCD Lyons Farm. Once completed in September this 890m² facility will include flexible lab spaces, meeting rooms, offices and an

exhibition and seminar space. AgTechUCD is focused on promoting and accelerating the launch and scaling of start-ups and SMEs, with disruptive innovations in Ireland and Europe, in the AgTech, Agri-food, equine and veterinary sectors, as they build their innovative businesses into leading companies on the global stage. AgTechUCD also provides additional support such as access to incubation space and to on-farm testing for new products and services at UCD Lyons Farm.

Among the 19 start-ups that have completed the programme over the last two years are: Cotter Agritech, Farm Fayre, MyGug and Proveye. Farm Fayre, based in Co. Kilkenny, is developing a complete field-to-field solution for farmers to buy and sell their livestock online in a convenient, safe, secure and transparent ecosystem. Kevin O'Connor, CEO and founder, Farm Fayre, said: "Our experience with last year's AgTechUCD Agccelerator Programme was very beneficial. For any early-stage venture with limited time

and resources, this programme is a definitive 'yes'. The outcomes far exceeded our time inputs. It's well organised and professional." MyGug, based in Co. Cork, has developed a micro-scale anaerobic digester that turns food waste into a green renewable energy source, suitable for homes, schools and small food businesses.

Fiona Kelleher, CEO, MyGug, said: "MyGug continues to benefit from participation in the AgTechUCD Agccelerator Programme. The combination of excellent support and encouragement from the highly talented team and access to the best of entrepreneurs in this space set us on a fast-track path to increased media exposure, sales and investment opportunities. I highly recommend it to anyone looking to achieve success in their business." Partners on the AgTechUCD Agccelerator Programme, include; Enterprise Ireland, AIB, The Yield Lab Europe, Devenish, Ornua, Herdwatch, IFAC, Thrive/SVG Ventures and support from AgTech Ireland member companies.



Damien O'Reilly
EU Affairs and
Communications Manager, ICOS

LETTER FROM BRUSSELS

"Never go food shopping on an empty stomach." It was the most practical advice I took from a food-waste expert I interviewed on radio some years back. I am in no doubt the advice has served me well in being more efficient when it comes to buying perishable food. In Ireland we generate nearly 800,000 tonnes of food waste annually. It is a significant contributor to climate change creating about 10 per cent of global greenhouse gas emissions.

The Government's Climate Action Plan, and Waste Action Plan for the Circular Economy aim to tackle this, and the Environmental Protection Agency is a central driver in helping us meet targets. Whether it's food that never makes it outside the farm gate, food going off in the fridge or food we throw in the bin at home or in a restaurant, we

share this problem with the rest of Europe. Last month here in Brussels, the European Commission unveiled one of the mostawaited packages by agri-food stakeholders which deals with 'sustainable use of key natural resources' such as soil and plant reproductive materials. And reducing food waste is very much part of that ambition. The Commission has proposed legally binding targets to reduce food waste by 2030, including a 30 per cent reduction for households, restaurants, and retail. In addition, a 10 per cent reduction binding target will be put in place to tackle food waste during the processing and manufacturing of food. They estimate that 59 million tonnes of food are thrown away in the EU each year costing around €132bn. In a world where so many people go to bed hungry every night, including 30 million EU citizens who cannot afford a proper meal every other day, it is a no brainer that tackling food waste should be priority in Brussels. As part of the overarching EU proposal launched in July, the issue of soil health is also being prioritised. Food waste and soil health are inextricably linked particularly since the EU estimates that 70 per cent of soil in member states is in an unhealthy state.

At a time when farmers feel that they are being marginalised and targeted by NGOs in the battle to decarbonise the planet and protect biodiversity, this is a real opportunity to reclaim respect among consumers. Nurturing healthy soil and producing quality food are the genesis of tackling the scandal of food waste. According to EU Commission vice president and driver of the EU Green Deal, Frans Timmermans: "If food waste was a Member State, it would be the fifth-biggest greenhouse gas emitter in the EU." There are many aspects of the EU Green Deal which are controversial and maybe unattainable, but this is certainly a very practical and sensible approach to reduce food waste, tackle climate change, support farmers and underpin food security. What is not to like?

The proposals will now enter the usual legislative process in the Parliament and Council. In the meantime, next time you go shopping, make sure you are not hungry. That way, we are taking our own personal steps to reduce food waste.







THE AGRICULTURAL SCIENCE ASSOCIATION (ASA) HOSTS ITS ANNUAL CONFERENCE NEXT MONTH. THE EVENT ALWAYS ATTRACTS AN IMPRESSIVE LINE-UP OF SPEAKERS AND THIS YEAR PROMISES TO BE NO DIFFERENT. ASA PRESIDENT, PROFESSOR TOMMY BOLAND RECENTLY SPOKE TO *IRISH FARMERS MONTHLY* EDITOR, MATT O'KEEFFE ABOUT HIS EXPECTATIONS FOR THE EVENT

"One of the key strengths of ASA membership is the willingness of people to come together and network to the benefit of everyone involved," says Tommy. "The Association's conference brings together a whole range of people from across the agri-food sector and is really important for the entire industry."

SUSTAINABLE FOOD SYSTEMS

Tommy provided details around the various conference sessions: "Everybody is aware of the challenges that society is facing around sustainability, not only environmental sustainability but also social and economic sustainability. We are bringing together a group of national and international speakers to discuss the good work that is being done around primary production, food processing and around the agri-tech sector, all under the conference theme of 'The science of sustainable food systems'."

COMPARATIVE PROGRESS

When asked how far along the sustainability journey Irish agriculture is, Tommy had this to say: "We had an event in the School of Agriculture and Food Science in University College Dublin (UCD) last December at which it was highlighted that Ireland is one of the few countries globally that has a comprehensive plan for our agriculture

sector. We hear a lot in the media about the challenges facing our sector. There are some inaccurate accusations that agriculture is not acting on these challenges. The reality is that we are at the forefront internationally in actions being taken including a plan or roadmap as to how the food sector is going to address its sustainability challenges. "The need for balance in terms of the economic, environmental and social aspects of sustainability will be reflected in our conference presentations and discussions. We will hear from farmers, and it has been said that the industry talks at farmers rather than with farmers, so we will hear the farmer perspective on what is happening on the ground to address sustainability challenges. "Recent data produced by my colleagues in UCD shows some of the pressures that farmers are under in terms of mental health and the risks being encountered by farmers as well as some of the drivers of those risks and mental-health pressures among the farming population. It's important to understand what it takes for farmers to

produce food in a manner that allows them to generate a good income for their families from their farms as well as supporting their local and regional communities," says Tommy. The food-processing sector will also be represented at the event, with the likes of

Jeroen Dijkman, head of Nestle's Institute of Agricultural Sciences, and Margaret Berry, head of sustainability with Kepak highlighting what food processors can do to promote sustainable food production.

"Processors are the conduit between the

primary producer and the consumer and Margaret and Jeroen will look at what can be done to improve sustainability right along the food chain," explains Tommy.

Jim Bergin, CEO of Tirlán and global vice president of ESG for Alltech, Tara McCarthy, will address issues around the solutions that are being developed and adopted for farmers in a commercial and practical manner. "And several other speakers will broaden the debate so that we can be more fully aware of the challenges and solutions around the development and management of sustainable food systems."

THE UCD ROLE

UCD has a strong reputation for bringing well-researched initiatives to reality. In providing some practical examples, Tommy explains: "Maybe when we were having more theoretical discussions 10 or 15 years ago about reducing emissions from the agri-food sector, there might have been an anticipation among some people that there would be a silver-bullet solution. It is abundantly clear that there is no single strategy that is going

to solve all the challenges. We have been researching and developing, together with the wider industry, a suite of tools that are and will be available to the entire farming and food-processing sectors.

"I recently attended the launch of the latest iteration of Teagasc's Marginal Abatement Cost Curve (MACC). What came through very clearly was that we now have a number of viable and practical options for use on farms to decrease greenhouse gas, including nitrous oxide, emissions. What is clear is that there are fewer options to reduce enteric emissions from our livestock and that's where UCD, along with industry our colleagues both in Ireland and internationally, are concentrating our efforts to come up with viable solutions."

PRACTICAL SOLUTIONS

The UCD academic discussed the progress being made in developing practical options for methane suppression in ruminants: "If you look at much of the work being done by companies in developing methane-suppressing technologies, the work is predominantly being done around confined herd management and nutrition. That's an easier environment to work in with total

mixed ration (TMR) feeding being the normal practice. Pasture-based production presents difficulties. A different approach to feed additives is required. For dairy herds, a slow-release additive that could be fed morning and evening at milking times is being explored. A bolus-based option is also being examined, or can we provide an additive through the water system that will effectively reduce methane emissions in cattle? We are still at early-stage research and effective commercial solutions are not yet ready to be applied but we are getting closer."

THE LYONS COW

Tommy gives an overview of a typical cow on the higher input/higher output production model at UCD Lyons Farm: "This is a grass-based system with cows fed 1.5 tonnes (t) of concentrate, annually. They produce almost 600kg of milk solids (MS), on average. That compares to the average cow producing 450kg MS on 1.2t of concentrate.

"It is not useful to get into a comparison of one system over another. Different production systems suit particular farms or herds or individual circumstances. The key point is that you can have efficient or inefficient production outcomes from any system. What favours the Lyons system is that our carbon figures compare very favourably both nationally and internationally."

MONITORING AND MEASURING

The Irish infrastructure to monitor, measure and collect data on carbon inputs and outputs from Irish agriculture is very well developed, according to Tommy: "We have seen huge investment in the necessary infrastructure over the past five years. We have the largest concentration of carbon flux towers in the world. Teagasc, with funding from the Department of Agriculture, Food and the Marine (DAFM) and the industry, generally, has been to the forefront in these developments. There has been heavy investment in technologies to measure methane emissions from ruminant animals, and at Lyons farm, we recently took delivery of equipment to get methane output measurements of sheep and younger bovines. All of this provides proof of the importance placed in agriculture by our government and state agencies. It also highlights the commitment of our industry to meet the challenges of reducing emissions from our food sector and in promoting the positive carbon credentials of the sector,"



SOME OF WHAT WAS SHOWN SUGGEST ILLEGALITY, WE ARE INVESTIGATING THAT'

EDITOR OF *IRISH FARMERS MONTHLY*, MATT O'KEEFFE DISCUSSED A WIDE VARIETY OF ISSUES WITH MARTIN BLAKE, CHIEF VETERINARY OFFICER (CVO) AT THE DEPARTMENT OF AGRICULTURE, FOOD AND THE MARINE (DAFM), WHEN THEY MET RECENTLY

Animal movements between Ireland and the UK, was first on the list and the CVO confirmed that these have continued to operate well despite Brexit: "Intra-community movement of animals always required certification and even though Britain is outside the EU now, that regulatory system still applies. There were big changes on the import side for animal products from Britain. A lot of infrastructure and resources had to be deployed at our border control posts. So, there were impacts on our inspection side as well as on industry. At this stage, things have settled down and people have adapted to the changes," he says. At the end of October 2023, the UK authorities are planning to enforce their import controls in a more systematic way across all food products, in particular. Martin explains the impact of this: "That will require significant additional investment and time by our exporters and will need us to provide the extra export certification necessary. Apart from final confirmation of requirements we are ready for the changes coming. Electronic certification has simplified the system and will help when these new UK procedures are finally implemented."

KEEPING THE BIOSECURITY GATES CLOSED

The conversation moves to the complex topic of biosecurity on farms. Although

certainly not a new phenomenon, more frequent outbreaks of Avian influenza, and increased prevalence of African swine fever across Europe, have hammered home the importance of biosecurity on our farms. And we all have a role to play in promoting better practices. Martin explained: "There are actions that can be taken at a national level as well as regionally, and at farm level. In the context of importing animals, there are certain guarantees we have in place to protect against diseases. There are diseases for which there is no certification in place, but we maintain biosecurity measures to protect against them entering. Bird diseases are difficult to control for obvious reasons, so protection must be localised, on farms, for instance.

"We [DAFM] coordinate our biosecurity strategy with industry, taking into account all the layers such as border controls and certification guarantees, but often it's the last few hundred metres that are critical and farmers need to be constantly vigilant."

BVD ERADICATION ALMOST THERE

Huge strides have been made in Ireland in relation to the eradication of bovine viral diarrhoea (BVD). According to Animal Health Ireland (AHI), currently 95.8 per cent of breeding herds and 97.2 per cent of all herds have negative herd status (NHS). The

stats are very positive but we have not yet reached a BVD-free status. Martin comments: "Because of the efforts of farmers and vets we have made huge progress. We don't want to restrict industry to the extent that trade cannot happen, but, ultimately, movement of animals and/or people will move disease. The challenge as we near final BVD eradication, is to find those residual disease pockets and that requires an even greater effort. "Reduced vaccination can allow spread and where there is a threat of neighbourhood spread, that needs to be protected against. I believe that by the end of 2023, we will have targeted the last remaining herds with positive results."

However, he cautions that the big challenge arises when we have reached a disease-free status. "This will require ongoing surveillance given that confirmation of disease-free status will require the ending of vaccination. That's a big decision to make," he says.

Other disease-eradication/control targets, such as those for infectious bovine rhinotracheitis (IBR) are in motion: "IBR control is important because several EU countries with which we trade, are well advanced in IBR eradication measures. It is a difficult and costly process, and we need to progress the options available, along with AHI and other interested parties."

GENOTYPING

In June 2023, the National Genotyping Programme opened for applications making Ireland the first country in the world to provide a DNA-verified traceability system. This, according to Teagasc, will provide a huge opportunity for both the dairy and beef industry to increase its sustainability credentials on a global scale. The National Genotyping Programme was developed on a cost-sharing model between the programme partners, consisting of the DAFM, Dairy Industry Ireland (DII), Meat Industry Ireland (MII) and participating farmers. The first year of the programme will be funded by the Brexit Adjustment Reserve (BAR). Martin believes this is a valuable strategy: "It provides valuable information on which to make decisions around optimising output and production on farms, while at the same time minimising risks around breeding strategies. A big challenge on the bovine side is the integration of the dairy and beef sectors. We have made significant progress with the Dairy Beef Index (DBI) and Commercial Beef Value (CBV) in relation to trying to identify the value of calves being produced on the dairy side. This will allow optimum choices to be made and will drive better integration between dairy and beef. Genotyping also improves traceability and assurance of parentage. "There are also potential benefits for breeding more carbon-efficient animals. There are significant variations even within breeds in terms of genotype traits. Ultimately, there are benefits for food safety, animal health and welfare, climate and farm profitability."

CALF CARE

Issues around calf health and welfare, specifically dairy-bull calves, were highlighted recently in the RTÉ Investigates documentary that aired some weeks ago. Commenting on the programme's disclosures, the CVO said: "Some of what was shown suggest illegality by certain people and we are investigating that. We carry out checks on marts and farms and our general assessment is that Irish farming and the care of animals are good. Mortality levels are better than most other comparable countries.

"Animal transport over long distances is being discussed at EU level. It may well be that the standards set in 2004 are no longer adequate in the eyes of society. Science in relation to animal welfare has moved on. We review, annually, the performance in relation to animal exports and include additional controls where necessary. If there are enforcement issues, we will examine that. The vast bulk of people are compliant, and we will

take action where this is not found to be the case," he says.

A LIFE WORTH LIVING

"Almost all farmers look after their animals very well," he continues. "Each animal, to quote a recent comment, has a life worth living. Each farmer must ensure than any animal bred has a purpose. It cannot be a byproduct with no value. Killing animals within hours of birth does not sit well with society, generally. That has not been a common practice in Ireland.

"It is important that people understand their responsibilities in relation to managing animal welfare throughout the animal's life and we need to regularly evaluate our production systems with that in mind. The male dairy-bred calf is a case in point. The evolution of the DBI, sexed semen, and CBV will all help," he says.

KNOWLEDGE IS VALUABLE

The contentious National Veterinary Prescription Database has been established, currently on a voluntary basis, but soon to be mandatory under pending legislation. Martin explains: "The Veterinary Medications Act has passed through the Oireachtas, and statutory instruments will now be brought forward to give effect to the Act. One of those will be to make the database compulsory. All of this will feed into our efforts to curb antimicrobial resistance (AMR). It will also provide greater reassurance in the marketplace in relation to animal medication and resistance. The food industry exists within society and we have to be conscious of the values and expectations of society in relation to the medication of animals. There are also EU commitments to be considered with medicines and pesticides."

Can all of this be managed without mandatory milk recording, he is asked. "Recording brings huge benefits not only for reducing AMR. It provides so much information to manage a herd optimally. It allows breeding intervention, the maintenance of quality standards and control of cell counts, to consider a few. There is encouragement of recording across the industry for a multitude of positive benefits. We are challenged under EU protocols to reduce antimicrobial use by 50 per cent by 2030 and progress is being made across the bovine and pig sectors. However, progress



Martin Blake, chief veterinary officer at the DAFM.

EACH FARMER MUST ENSURE THAN ANY ANIMAL BRED HAS A PURPOSE. IT CANNOT BE A BY-PRODUCT WITH NO VALUE

in reducing somatic cell counts in herds has stalled and targeted advisory resources are in place to assist in getting the figures down further."

HIGH TECH

Technology has a huge role to play in assisting in animal welfare and health protection, Martin agrees: "A healthy cow will optimise her production, and animal monitoring, for instance, can identify where sub-clinical disease is impacting on that optimal performance. A technology that helps improve nutrition, health, lameness, comfort, feed intake, has a potential role.

"In diagnostics, we are starting to use more whole genome sequencing across herds as well as domestic fowl and wildlife, in the context of trying to understand developments, for instance, in disease transmission. It is also valuable in food traceability to trace food contamination outbreaks, the origin and mode of movement, even across countries. Those examples show how relevant and important novel technologies can and will be in the whole food area."



Agricultural Extension and Innovation

Animal Science (Online) **NEW**

Environmental Resource Management

Food Business Strategy

Food, Nutrition and Health (Online)

Food Regulatory Affairs (Online)

Food Safety (Online) NEW

Food Safety and Regulatory Science (Online)

Horticulture

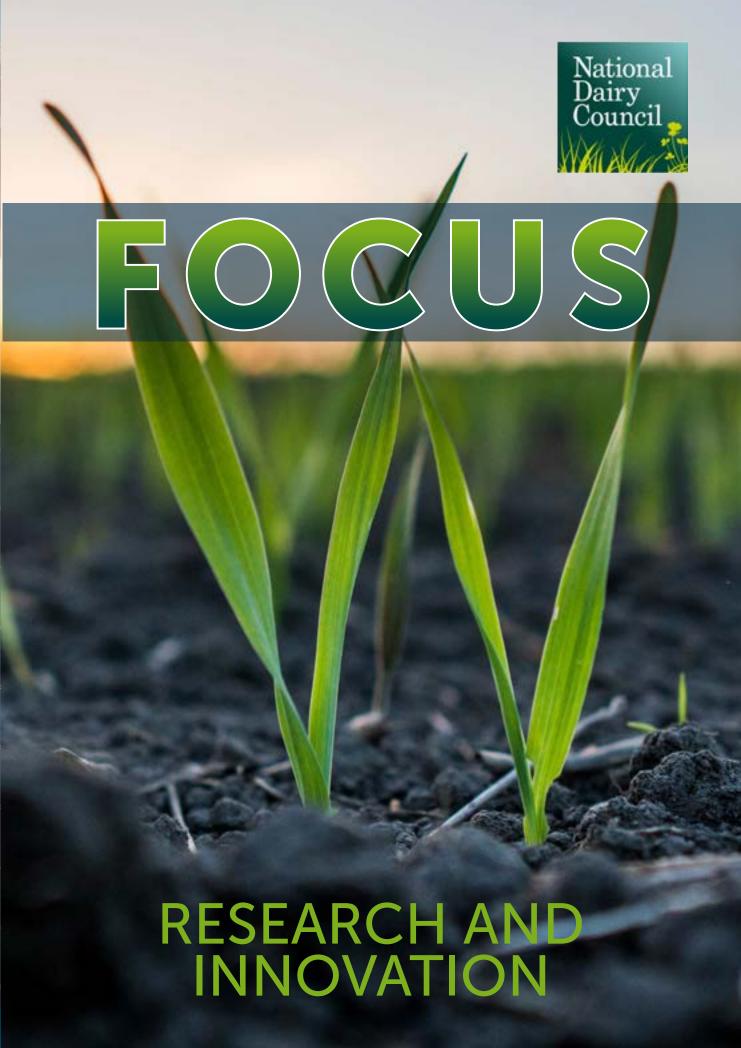
Humanitarian Action

Sustainable Agriculture and Rural Development

Sustainable Food Processing (Online) NEW

Wildlife Conservation and Management

CERTIFICATE. DIPLOMA, MASTERS **AND CONTINUOUS PROFESSIONAL DEVELOPMENT OPTIONS AVAILABLE**







MATT O'KEEFFE TALKS TO CATHERINE LASCURETTES, CHIEF OPERATING OFFICER FOR THE NEWLY FLEDGED AGTECH IRELAND, ABOUT THE ORGANISATION'S ROLE AND AMBITION FOR DRIVING AG-TECH IN IRELAND

Catherine Lascurettes was a familiar face and voice for thousands of Irish dairy farmers for 26 years in her role as executive secretary of the Irish Farmers' Association's (IFA's) Dairy Committee. She has now made a career change by setting up a consultancy service, Cill Dara Consulting. In addition Catherine has taken on several other roles, one of which is chief operating officer for the newly fledged AgTech Ireland. This is

an organisation representing the broad-based Irish agri-tech sector, comprising businesses spanning all aspects of this newly emerging economic sector.

MISSION STATEMENT

Discussing the role of Agtech Ireland,
Catherine explains: "It has a mission to
promote, support and enhance Ireland's agritech community. What we found is that a lot
of these companies tend to operate in isolated
silos. We wanted to create an opportunity
for a supportive ecosystem that would
facilitate networking among agtech leaders
in Ireland The idea is for the organisation to
agitate and lobby on behalf of its members
for the introduction of supportive policies in
the technical and financial environments,
favourable to the further development and
growth of the sector.

"We also want to promote collaboration across industry, research and Government departments and agencies because, again, there can be an element of isolation in all of these areas. These connections should help bring agri-tech research and product development into the commercial marketplace to a greater extent, where it can be adopted by farmers and food producers.

"Our aim, in addition, is to shape and communicate the agri-tech agenda in the context of sustainable agriculture because there is a lot it can contribute when it comes to supporting farmers along their sustainability journey. The technologies can assist in making farmers more economically efficient and more labour efficient, to allow them to secure their social licence to produce food.

POINT OF CONTACT

Catherine asserts AgTech Ireland's ambition to be a single point of contact for Government departments and agencies: "We also want to speak with one voice to media, to participate on trade missions, and to support our members in a commercial sense, helping them identify routes to market and develop communications with counterparts in other countries.

"We have developed a Memorandum of Understanding with AgriTechNZ [New Zealand] where very similar issues are being experienced by their agri-tech companies and farmers. There are many challenges that can be met through cooperation with our New Zealand counterparts. A joint webinar summit is planned for September to further enhance the benefits of mutual cooperation. Both countries have so much in common: climatically, pasture-based production, and a counterbalancing summer/winter grassgrowing season.

"We had a presence at the Moorepark Open Day last month and that raised our profile and illustrated the array of technologies of use and value to farmers. That exposure is important to inform people of the novel, as well as the tried and trusted, technologies that can make a positive contribution to farm businesses."

SUPPORT SYSTEM

Enterprise Ireland has been very supportive in the development of an agtech sector in Ireland, as the Agtech Ireland COO explains: "We work closely with Enterprise Ireland. Many of our member companies have benefited from supports provided by Enterprise Ireland, both in terms of financial supports and also with mentoring and advice on everything from product development to market research and export opportunities.

"By also developing links with French agri-tech interests we can expand our expertise as well as adopt and adapt novel technologies of relevance to our agricultural sector. In summary, our aim is to foster those connections and relationships that can assist us in the further development of the agri-tech sector in Ireland."

DEFINING THE SECTOR

Catherine continues: "Agri-tech is a multitude of different things. It encompasses areas such as biotech, genetics, chemical, software, hardware, sensors, drones and GPS. The whole artificial intelligence (AI) sector has

implications and relevance to agri-tech, which we are going to explore with University College Dublin (UCD) later this year. There is enormous scope in the whole AI arena. I want to emphasise the relevance of agri-tech to farmers and the broader food sector: the challenges around labour, around climate, economic efficiencies... all of these have implications for the sustainability of our agricultural sector.

"The production and delivery of feed supplements, animal health detection and prevention technologies, are an entire area of importance within the agri-tech area. We are uniquely equipped in Ireland because we have so much expertise and interest in agriculture. It is an industry built on tradition and continuous innovation, so we believe that the Irish agri-tech sector has huge potential to deliver solutions to many of the challenges facing agriculture in the coming years."

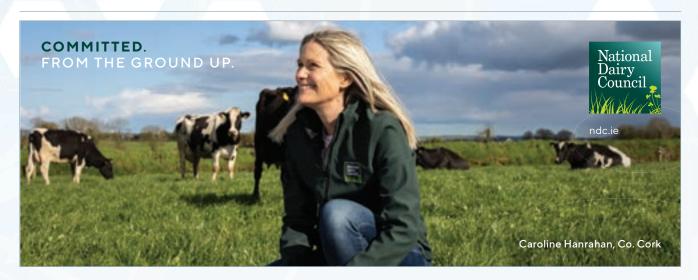
FINANCING TECHNOLOGY

While Catherine recognises there are challenges facing the sector in Ireland, she also sees the positive attitude across the various support sectors: "There are challenges and finance is one of them. However, while international technology companies have gone off the boil in popularity across the globe, the interest in and support for agri-tech has not diminished. I believe this is because it is so dynamic and close to the commercial agri-food sector. The flow of highly qualified people coming out of the general technological sector and developing their own ideas within the agri-tech sphere gives great hope and anticipation for the future. "Outside of the R&D and financing challenges,

one of the big hurdles is to bring a viable and potentially commercial product to market. Routes to market, distribution, international contacts; all of these are real challenges to developing a commercial long-term business. Ultimately, that is one of the biggest reasons to bring many of these enterprises into one overall representative organisation, which can raise the profile of all the stakeholders to mutual benefit.

NUFFIELD

Catherine has long been associated with the Nuffield Ireland scholarship programnme, in addition to her other varied interests. She is currently executive secretary of Nuffield Ireland, the Irish branch of the international promoter of agricultural knowledge. She describes the scholarship programme: "It is a rural leadership development programme for agri professionals, including farmers and others involved in the agri-food sector. It provides participants with opportunities to research farming and food systems, marketing techniques and other topics around the general theme of agri-food. This is more important than ever in the rapidly changing world of food production globally. We encourage solutions, ideas, better practice identification, and the sharing of those with fellow scholars and the general agricultural population. A bursary assists scholars in that quest. It involves international travel and the preparation of a final report. Applications are now open for anyone interested and interviews will take place in September to establish a successful cohort of Nuffield Scholars for the coming year."





THE IRISH GRASSLAND ASSOCIATION BEEF EVENT 2023 TOOK PLACE RECENTLY ON THE FARM OF CHRIS McCarthy, in co. Westmeath, and the beautiful sunny evening perfectly highlighted the quality of stock on show

Chris works full-time off the farm, but the level of detail evident on the farm simply does not happen without a lot of hard work, dedication, drive, and determination. The beef system in operation is probably best described as being meticulously planned simplicity.

THE SET UP

And, a simple system it is. The three-quarter bred Limousin cow type has power, milk, calving ability, strong carcass characteristics and fits perfectly into the McCarthy's system. A terminal Charolais stock bull – which Chris bred himself – is used to produce top-quality U- and E-grading bulls and heifers. The 46-cow, spring-calving herd calve in a tight block early in spring and get to grass typically in February where they are rotationally grazed on a well-set-up paddock system, so one person can move stock at

any time on their own. Well-managed swards combined with good soil fertility result in over 11t DM/ha of grass being grown from a relatively low chemical nitrogen input at just 125kg/ha (102 units/acre).

THE HERD

This high-quality grass is efficiently converted to live weight through a milky cow and by a calf with a high-genetic ability culminating in the consistent production of heavy weanlings in September, averaging 290kg for heifers and 330kg for bulls. Heifers are sold to a local farm in October each year at around 320-330kg average weight. The bulls are housed in early November at roughly 380-400kg where they go on to be finished at under 16-month bulls. The bulls consume around 1.8t/head concentrate lifetime and have an average carcase weight of 478kg at 15.9 months of

THE BEEF SYSTEM
IN OPERATION ON THE
FARM IS PROBABLY
BEST DESCRIBED
AS METICULOUSLY
PLANNED SIMPLICITY

age. That translates to a lifetime performance of almost 1kg carcase/day. While these are heavy carcase weights, Chris works closely with his processor and they know he can deliver high conformation carcases with sufficient fat cover.

STOCKING RATE AND OUTPUT

The farm extends to 28ha which is all in one block. This aids labour management around moving stock thoughout the grazing season. The overall stocking rate on the

farm is 2.05LU/ha. While this is almost double the average suckler farm in the country, the stocking rate is not excessive with Chris under the 170kgN/ha limit. A high level of output is what is driving the entire system. There was 769 kg/ha liveweight or 374kg/LU produced in 2022. From a financial perspective, this translates to a gross output of €2,580/ha and a gross margin, before any support payments, of €1,283/ha.

HIGH PERFORMANCE

The McCarthys achieve a long grazing season of over 270 days which maximises the proportion of grass in the diet and keeps production costs as low as possible in the cow-calf unit. Indeed, grass and grass silage account for over 80 per cent of the total feed used on the farm – considering that there is a bull-beef system in operation and heifers are sold as weanlings, this shows there is a high level of performance coming from grazed and conserved pasture.

Almost 90 per cent of the farm has a soil pH of greater than 6.2. The entire farm is index 4 for phosphorous (P) and 88 per cent of the farm is index 3 for potassium (K). Higher fertiliser prices in recent years have seen Chris reduce the use of compound fertiliser, which has resulted in K levels dropping on some parts of the farm. This is something Chris is eager to correct in the coming years.

During the main grazing season, there are just two grazing groups, which

THE STOCKING RATE IS NOT EXCESSIVE WITH CHRIS UNDER THE 170KG N/HA LIMIT

means two things. Firstly, it is easier to manage fewer groups and secondly, there is significant grazing pressure through big group numbers so that once the group enters the four-acre paddocks they graze them out in three days and then move onto fresh pasture.

ANIMAL HEALTH

The third stop of the evening focused on animal health. Chris is minimising the risk of purchasing replacements by using the same few farms each year for his stock, while the bulls are on a pneumonia-vaccination protocol prior to housing in autumn to minimise the risk at housing time. Chris is also using quiet wean nose paddles which he says takes the stress out of the weaning process.

In conclusion, the success of the farm could not be attributed to any one thing and it is the sum of all the individual parts and the attention to detail that is observed. The right cow for the system, good genetics that deliver high growth rates, excellent grassland management, a time-efficient system, achieving high output per livestock unit and – ultimately and most importantly – consistently delivering a financial dividend at the end of the day.





NOVEL RESEARCH

NEW RESEARCH, SUPPORTED BY THE NATIONAL DAIRY COUNCIL (NDC) AND DAIRY RESEARCH IRELAND, LOOKS AT THE BENEFITS OF EARLY INTRODUCTION OF COW'S MILK, AS A TREATMENT FOR INFANTS WHO HAVE DIAGNOSED COW'S MILK PROTEIN ALLERGY (CMPA). OTHER STRATEGIES COMMONLY USED TO MANAGE CMPA ARE THE COMPLETE AVOIDANCE OF COW'S MILK, AND ORAL IMMUNOTHERAPY. DR MARY HARRINGTON PHD, SENIOR NUTRITIONIST AT NDC, REPORTS

The researchers from Cork University Hospital reviewed the three methods of CMPA management generally used. In their paper they compared and contrasted the efficacy, safety and effects on immune response. They found the stepwise introduction of baked cow's milk, using what's known as the 'milk ladder' was seen to be safe and effective. The gradual introduction of baked milk showed a faster rate of tolerance compared to the complete avoidance of milk. While the 'milk ladder' has been used in clinical practice in Ireland for 10 years, this review highlights it as having one of the most successful outcomes for patients. The second strategy reviewed was the complete avoidance of cow's milk, which protects against allergic reaction until natural tolerance occurs. However, using this as a strategy to manage CMPA was noted as challenging, as dietary avoidance requires dietitian advice on foods to avoid that may contain traces of cow's milk. Although food law requires accurate labelling, accidental contamination can occur, as well as in other settings such as restaurants.

The third strategy examined was oral immunotherapy, where a child consumes the measured tolerable amount daily, eventually increasing the amount of milk consumed over a number of weeks. The authors question the practicality of this strategy, as there is a larger commitment for parents and children to have at least three oral food challenges. They note the process needs to be managed by a specialist which may be an issue if waiting lists are long.

COW'S MILK PROTEIN ALLERGY

CMPA is one of the most common food allergies in infants across the globe, affecting around 1 per cent of Irish children. It can appear around six months of age and most children naturally grow out of it by ages three to five years. The symptoms can include



gastrointestinal (e.g. vomiting, cramps), dermatological (e.g. hives and facial swelling) and respiratory (e.g. wheezing) issues. In severe cases, anaphylaxis can occur. The general approach and management of CMPA is the avoidance of milk products until the patient naturally outgrows the allergy and can introduce milk into their diet. However, as cow's milk provides essential nutrients for healthy growth and development, the complete avoidance of cow's milk may have a negative impact on the child's nutritional status and growth, as well as increase their risk of severe allergic reactions. Other mammalian milks such as goat and sheep are often not good replacements, as some may cause similar reactions. There is 30-50g of protein per litre of cow's milk, with at least 20 proteins which are potential allergens. Most CMPA is caused by whey proteins, which make up about 20 per cent of all proteins contained.

MILK LADDER

Most commonly used in Ireland, the milk ladder can be managed by a dietitian to safely re-introduce cow's milk products if and when the allergy subsides. It involves having baked milk products in increasing amounts (e.g. biscuit crumbs, 1/8 biscuit, 1/4 biscuit etc), progressing to less extensively baked products until the child can tolerant unheated milk. The baking process changes the stability and structure of different milk allergens, reducing their ability to cause a reaction. The milk ladder is often preferred as a management strategy, as it is home-based and uses readily available milk products. However, research shows successful progression requires a high level of support for parents, through education and reassurance, especially if mild allergic reactions occur at steps in the ladder. Studies show maternal anxiety has been strongly linked to success rate, with poorer outcomes for children whose mothers had higher levels of anxiety.

IMPLICATIONS OF THIS RESEARCH

As the prevalence of allergy rises worldwide, including in Ireland, in the future more children may be managed for CMPA using the milk ladder. In the next phase of this study, the researchers will compare cohorts of paediatric patients diagnosed with CMPA from three hospitals. Retrospective analysis will be used to compare the effectiveness of each management strategy. The researchers hope that the results of this study will help guide the future management of CMPA in Ireland.

For more information on this research study see: Cronin et al. Nutrients 2023,15(6),1397; https://doi.org/10.3390/nu15061397
For information on research at the NDC see https://ndc.ie/ndc-research/

Tirlán



THURSDAY 7TH SEPTEMBER 2023

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09:00 - 10:15 Welcome: Mr. Damien O'Reilly, EU Affairs with ICOS

Opening Address: Prof. Tommy Boland, ASA President

Plenary Speaker: Mr. Jack Bobo, Director of University of Nottingham Food Systems Institute

10:45 - 12:00 SESSION 1: DEFINING AND ADDRESSING THE CHALLENGE

Chair: Mr. Damien O'Reilly, EU Affairs with ICOS
Ms. Tara McCarthy Global Vice President of ESG, Alltech
Mr. Jim Bergin, CEO of Tirlán Co-Operative Society Ltd

12:00 - 13:00 SESSION 2: CONNECTING THE CONSUMER AND PRODUCER - THE ROLE OF THE PROCESSING SECTOR

Chair: Bill Callanan, Chief Inspector at Dept of Agriculture, Food and the Marine Dr. Jeroen Dijkman, Head of Nestle Institute of Agricultural Sciences

Ms. Margaret Berry, Head of Sustainability, Kepak Group

14:00 - 15:15

SESSION 3: ACTION AT FARM LEVEL TO DELIVER A
SUSTAINABLE FUTURE FOOD SYSTEM
Chaire Dr. William Minchin CEO of The Agricultural Trust

Chair: Dr. William Minchin, CEO of The Agricultural Trust

Mrs. Gillian O'Sullivan, Dairy Farmer Mr. Barry Larkin, CEO, Acorn Dr. Stan Lalor, Director of Knowledge Transfer, Teagasc

15:15 - 15:45 MINISTERIAL ADDRESS

Mr. Charlie McConalogue, Minister for Agriculture, Food and the Marine









WITH TEAGASC RECENTLY ANNOUNCING AN UPDATED MARGINAL ABATEMENT COST CURVE, OUTLINING HOW IRISH AGRICULTURE CAN REDUCE GREENHOUSE GAS (GHG) EMISSIONS BY 25 PER CENT FROM 2023 TO 2030, THERE IS MORE PRESSURE THAN EVER ON FARMERS. BUT THERE ARE HIGHLY PRODUCTIVE, CLIMATE-SMART GRASS AND FORAGE VARIETIES THAT CAN MAKE THE DIFFERENCE IN YOUR AUTUMN RESEEDING PLANS, GRASSLAND EXPERT DR MARY MCEVOY OF GERMINAL EXPLAINS

Grazed grass is the most important component of livestock diets, so will have a major impact on the carbon footprint of milk and meat production.

Building homegrown feed systems around climate-smart grass and forage varieties will ensure farmers are productive while reducing greenhouse gas (GHG) emissions. By helping to drive efficient food production, these grass and forage varieties lower the carbon footprint and production costs of milk or meat by reducing the need for inputs. There are sustainable forage options that can improve soil structure and fertility while better tolerating the climate challenges in our changing environment.

USING CLOVERS TO REDUCE APPLIED NITROGEN

Red and white clover deliver homegrown forage, which is highly digestible, high in protein, and drives meat and milk production. Clover's nitrogen (N)-fixing ability is a fundamental strength – with input costs rising compared to years gone by, clover provides a nitrogen source for swards once established, reducing the dependency on artificial N, and resulting in lower nitrous oxide emissions.

Clover has been specifically highlighted among the recommended MACC measures for its ability to fix free N from the atmosphere in your soils. Increased use of red and white clover has the potential to reduce fertiliser use to 285,727 tonnes of N by 2030. Grazed grass-clover swards can achieve high levels of intake and increase animal performance compared to grass-only swards, making it both financially and environmentally sound.

THE POWER OF MULTI-SPECIES

Multi-species mixtures bring the benefit of superior sward performance through complementary plant species providing high-quality livestock feed throughout the summer. The performance of multi-species swards during dry periods has received particular attention as the benefits of including a variety of species with diverse root structures have been realised. Different species will also bring the benefits of improving soil structure

and fertility and increasing biodiversity, while including legumes will reduce the requirement for artificial nitrogen. The incorporation of clovers and multi-species swards has been highlighted as one of the most cost-effective and impactful measures in the MACC measures for reducing nitrous oxide emissions.

THE IMPACT OF MULTI-SPECIES ON BEEF FINISHING

The MACC also highlights a significant potential to reduce agricultural emissions by achieving a high level of adoption of protected urea, the Economic Breeding Index (EBI) and reduced age to finish. Additionally, there is potential for feed additives that inhibit methane production to have a significant role in the future. After supporting

REDUCING EMISSIONS WITH HIGH SUGAR GRASSES

Germinal's Aber High Sugar Grasses (Aber HSG), according to Dr McEvoy, bring significant production gains, with research quantifying a 6 per cent increase in milk production and a 20 per cent increase in liveweight for beef and sheep. Used at scale, Aber HSG are also scientifically proven to reduce emissions from livestock," she adds. The high water-soluble carbohydrate content (sugars) feeds microbes in the rumen, resulting in more of the plant protein being converted into amino acids, which are the building blocks of meat and milk. With more efficient protein use, less is wasted in urine and faeces and GHG emissions of ammonia and nitrous oxide are reduced. High sugar grasses represent another valuable measure for farmers seeking to be productive and sustainable.

multi-species research at University College Dublin (UCD), we saw in the grazing trials that steers were achieving an average growth of 80kg more than steers grazed on grass only over two years. The research also found that multi-species silage outperformed perennial ryegrass silage. Livestock fed indoors over the winter period achieved an average daily liveweight gain (DLG) of 0.89kg, representing a 39 per cent increase compared with 0.64kg DLG for stock fed on perennial ryegrass silage.

AUTUMN RESEEDING ADVICE

With all that in mind, it's important to revisit reseeding best practices as autumn approaches. Timing is important with autumn reseeding. Earlier sown seed will benefit from warmer soil conditions, giving quicker germination and establishment. This means spraying off by mid-August and having your seed sown by the first week of September, but the earlier the better. Any delay can risk germination being harmed by worsening weather conditions and reduce the ability of the plant to withstand pest burdens.

Soil fertility: Before taking any action, it's

important to perform a soil test to determine

your requirements. For an effective reseed,

especially when establishing clover, target a pH of 6.2-6.5 and phosphorus (P) and potassium (K). Having optimal soil fertility will ensure that vital nutrients are available to grasses and clovers.

Sowing methods: Ploughing can help correct soil compaction and achieves reliable results. However, farmers in derogation cannot plough grassland after May 31. So, the alternative options of min-till or direct-drilling must be considered by those farmers for an autumn reseed. Min-till is a light cultivation method that creates effective seed-to-soil contact. Achieved via discing and one-pass, min-till is well suited to rocky soils but allow up to three weeks after spraying off your old sward for weeds to break down and sods to break up. You should remove the trash 10 days post-spraying and, subsequently, apply lime to break down your decaying sward. A second option is direct-drilling and you can start by spraying off your old sward before cutting tightly and liming. You can use a tine harrow to remove thatch and maximise seed-to-soil contact. A broken forecast will ensure you have enough moisture and rolling post-sowing will further improve contact. Applying a fertiliser compound with P and K is recommended at

sowing, as they are essential nutrients for root and tiller development. All chemical fertilisers must be applied prior to September 15.

Pest and weed control: By preparing your seedbed properly with the advice above, you can reduce the risk of pests and weeds damaging your reseed. Post-emergence weed control is an important aspect of reseeding. For grass-clover swards, ensure you use a clover-safe herbicide. There is no option for post-sowing weed control in multi-species swards.

First grazing: You should aim for first grazing once plants withstand the pull test, assuming ground conditions allow. Grazing is essential to help tiller out the sward and increase sward density.

MIXTURE OPTIONS FOR AUTUMN RESEEDING

When reseeding in autumn, it makes more sense to focus on grass and clover mixtures, with multi-species establishing better if sown in spring, as determined in trials by Germinal Horizon, our research and innovation division. Reseeding with a grass and clover mixture will ensure that you're combining production with sustainability benefits that align with MACC.





Thomas Ryan, Tirlán.

FARM SAFETY: 'IT'S ESSENTIAL THAT FARMERS ACT WITHOUT DELAY'

IRISH FARMERS MONTHLY EDITOR, MATT O'KEEFFE, RECENTLY CHATTED TO SENIOR SUSTAINABILITY MANAGER AT TIRLÁN, THOMAS RYAN ABOUT A HOST OF AGRI-RELATED TOPICS, HERE ARE SOME OF THE HIGHLIGHTS

When I spoke to Thomas Ryan, Tirlán's senior sustainability manager, recently on KCLR's Farm Show, we agreed that the recent Moorepark Open Day was an extremely impressive event with only one caveat – not meant in a negative way – that it was a case of information overload. Thomas set the description in context: "Such was the volume of information available along

Thomas set the description in context: "Such was the volume of information available along the way that it took several hours to arrive at the Ornua pavilion down at the Moorepark farmyard."

In addition to the information and educational remit, the social aspect of Moorepark makes it worth the visit, he says. "There are opportunities to discuss the latest research and advice with Moorepark staff, but also to interact with fellow farmers and friends to gauge the impact of the messages being conveyed on the day. The first four boards set the scene and the various workshops and exhibitions really dug into the detail involved in adopting different practices ranging from clover incorporation to breeding strategies." And the hard questions, of which Thomas is well aware, were being asked. "They mirror many of the questions I get asked regularly in my role with Tirlán. How are we going to manage cow banding without damaging

our production model and impacting on profitability? How many cows would I have to reduce by if the Nitrates Derogation were to be reduced to 220ka?"

PRIORITISING FARM SAFETY

During our conversation, attention turned to farm safety, with Thomas welcoming the additional funding that is available under the Targeted Agricultural Modernisation Scheme. "Sometimes we hear about the tragedies as reported in the paper or on the TV news headlines. Often, we don't hear about the near misses or about the people who are to maimed for life. I welcome the new additional funding to encourage the wearing of quad-bike helmets and for ensuring that all PTO-shaft covers are in good working order. The 60 per cent funding [under TAMS] is well worthwhile, and it is time limited so it's essential that farmers act without delay. Purchase the helmets and check all PTO covers to make sure that they are in full working order before the closing date for applications in September," he advises. "In terms of general farm safety, I think it's useful to get a fresh pair of eyes to walk around your farm and look at all areas and activities where there are potential safety issues.

Often, we don't see a problem ourselves because we are there every day and just don't recognise a danger. We take things for granted sometimes but it's too late when there is someone missing from the dinner table. We have feed and fodder budgets, maybe we also need a farm safety budget or audit," he says.

TIME FOR SUSTAINABILITY ACTION

Tirlán initiated a sustainability payment last year, which was heavily subscribed to by the co-op's farmers and Thomas is expecting an equally positive response this year: "There is a 0.5c/L payment available to milk suppliers for actions taken on their farms to improve the overall sustainability of their enterprises. There is a menu of 18 options, of which seven should be chosen for action and adoption on the farm in order to lock in that payment next year.

"At a time of reduced milk prices there is significant money – €3,000 – at stake for the average supplier. The measures are pragmatic and relatively straightforward to adopt on farms. They include clover incorporation, multispecies adoption, milk recording, a nutrient-management plan, low-emission slurry spreading, fencing off watercourses, the use of sexed semen. These are all practical measures and in most cases are economically positive for farm profitability."



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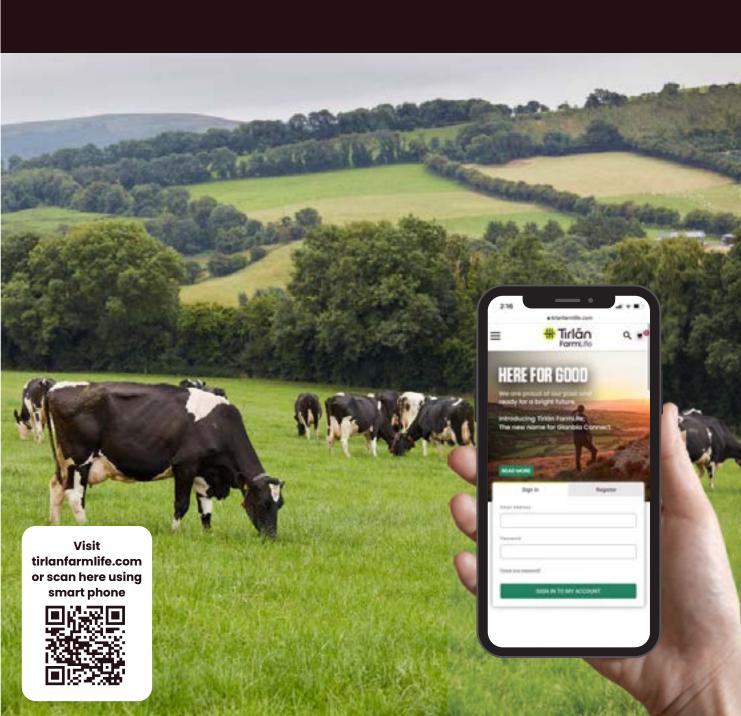
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WORLD-CLASS BREEDING PROGRAMMES

Thomas said he was delighted with the positive response of dairy farmers to the option of adopting sexed semen in their breeding practices: "Farmers have been very proactive in that regard, together with utilising the carbon breeding sub-index, as part of their overall Economic Breeding Index (EBI) choices.

"Our breeding programmes are the envy of many dairy sectors across the world. That fact really came home to me when I met farmers, researchers and advisors from several countries who were attending the Moorepark Open Day. They are very impressed by the

science and expertise involved, which is allowing farmers, as they are selecting bulls, to make objective selections around the Dairy Beef Index (DBI), carbon, and all the other traits of importance contained in the breeding index. All of this is happening because of the close collaboration between ICBF, Teagasc and others. The genotyping scheme, introduced recently, has a good take-up and that should facilitate further breeding progress to be made quickly."

ANIMAL-WELFARE STANDARDS

Animal welfare is a critical issue for Tirlán and Thomas is adamant that farmers must maintain the highest standards: "The Department of Agriculture, Food and the Marine finances 99 animal-welfare groups every year, spending €5.8m in support. It is an issue of the highest importance for everyone involved in the farm sector. The Twenty20 Beef Club is an example of the commitment that Tirlán has to high animal

welfare standards. Dairy-calf-to-beef is complementary to milk production. It is in all our interests that there is an ongoing flow of high beef potential calves available for this enterprise. While the retention of the calf live export market is hugely important, it is also critically important that we maximise the potential of the vast majority of calves that are retained in Ireland."

TIRLÁN ACADEMY

Tirlán's novel initiative last year to establish an academy of influencers was also fully subscribed and will be repeated this year, Thomas confirmed: "The Sustainable Farming Academy is a collaborative initiative with Baileys, which allows 20 fully funded places to be made available to Tirlán members to study for an Environment, Climate and Sustainability Diploma at UCC. It is a combination of online lectures and project work over the course of a year. The next cohort will start the diploma course shortly."

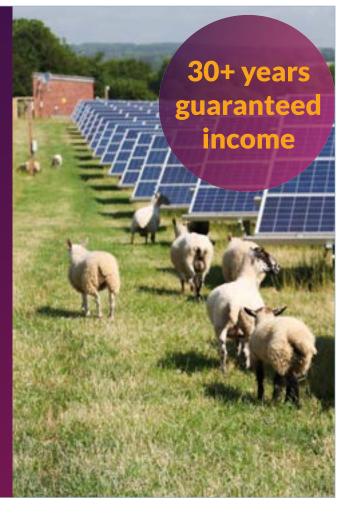
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BYNOVATION BYTHEPACKET

NORTH DUBLIN IS SOMETHING OF AN AGRICULTURAL HUB WITH SOME OF THE COUNTRY'S LARGEST POTATO AND VEGETABLE FARMS GROWING THERE. HERE, WE LOOK AT ONE SUCH FARM AND THE INNOVATION THAT IT HAS INTRODUCED TO CREATE NEW PRODUCTS FOR NEW MARKETS WITH THEIR DELICIOUS POTATOES AT THE HEART OF IT ALL

Keogh's is a 200-year-old family operation, growing potatoes and, more recently, diversifying to create premium crisp and popcorn products. Tom Keogh, Keogh's Crisps managing director, explains: "We have 400 acres in the farming end of our business in Abbotstown, and we have about 30-40 growers around Ireland who supply to us," he says.

"After farming, area two of our business is the fresh pack [of potatoes]. We supply around 10 per cent of Irish potatoes into the Irish market, under the Keogh's brand.

"Lastly, it's snacks, and that's Keogh's crisps and popcorn. We have about 13 per cent market share in Ireland, supplying to about 20 countries internationally."

MOST IMPORTANT INGREDIENT

Generating fresh ideas is essential for continued success, and innovation plays a key role in this: "It is one of the core things

that got us here today," Tom says. "Innovation can start when you're ploughing a field in spring and can finish months later when you've harvested the potato and made the crisps. It touches every point of the supply chain.

"We control the supply chain, so we have a chance to implement ideas all along the process. Being in a family business, this innovative approach is something we grew up with. It stems from a natural curiosity and a want to do things better," he says. Innovating and improving are cultural elements that Keogh's has strived to spread throughout the business, from the top down; it's amazing what can be achieved, as a result, Tom says.

Ideas require formal implementation, and Keogh's internal reward system for staff helps nurture lateral thinking. "A pillar here is the Bright Spark award," says Tom. "Every half year, we gift the award to the team member who came up with the best idea [in the six months previous] and that idea is then implemented. It could be a new product or a design change that saves money, for example. The fact that they're recognised and [the idea is] followed up on is really important." One Bright Spark award idea that the company fostered involves using the latest technology in gas combustion to reduce the energy usage in the factory in the cooking process, Tom explains.

FLAVOURS OF INVENTION

The company is also very happy to put many of these ideas on the customer-facing side, in the form of new collaborations and crisp flavours. Its 'summer flavours' are becoming an annual tradition and this year's collaboration marries Keogh's and Irish whiskey brand, Teeling's, to create a smoked barbecue and Irish whiskey flavour crisp, Tom says. "We're already working on flavours



for next summer. And some of those are very exciting. I can't say too much, but we'll continue doing what we do, collaborating with local suppliers and using Irish products in our flavours.

"When people think innovation, they think new products. But the greatest driver to bottomline growth is process innovation. We've been focusing on that recently and it's led to system improvements, and quality improvements. That's doing very well for us now. And the last point is our people. We are constantly investing in our people. They enjoy the chance to develop their own skills, so they can keep up with the challenges in the business. It's growing fast and people need to grow within the business."

AT HOME AND BEYOND

The casual snack market is immensely competitive, but also lucrative. "At a basic level, the Irish market is worth roughly €100m and it grew by about 7 per cent over the last year," Tom says. "Then, there's an unmeasured market in crisps, and that market is arguably bigger than measured. I'm talking about crisps in small cafés, petrol stations, at work, in restaurants and so on. There's a lot that's not read from a data point of view," he says. Unsurprisingly, there are a few bites being taken from the market share but there are only three major players in the Irish market, according to Tom. This, he says, doesn't make it any less competitive. "It is very competitive, because there are so few powerful players in the industry," he explains. "In the Irish crisps market, 75 per cent is owned by one

company, Intersnack. And it owns almost every on-the-shelf brand you can buy, apart from ourselves, and Walkers. We have 13 per cent of the market, roughly.

"As a small Irish-owned business that manufactures in the Republic of Ireland, up against multinationals, that has its challenges. It can put a ceiling on things, but it drives the culture of innovation in the business, and it drives the quality of people working here."

USPS AND PARTNERS

Tom believes that Irish crisp companies, like Keogh's, have unique offerings. "The cheese and onion flavour, invented in Ireland, has a global recognition. No other market, globally, has one flavour like that." And, beyond Teeling's, Keogh's has 'lots of plans' to collaborate with other Irish producers, while several partnerships are already in existence. Tom elaborates: "Dave Llewellyn [Llewellyn Premium Irish Cider Vinegar] produces apple balsamic and cider vinegar for us," he says. "We work with Irish Atlantic Sea Salt; IPI Teoranta/Living Shamrock, which provides the shamrock for our Shamrock & Sour Cream crisps; Glenilen Farm makes butter for our popcorn; and Taylors of Lusk grows the chillis for our Sweet Chilli crisps.

"Last year, our summer season flavour was Cashel Blue Cheese. We developed an amazing seasoning. That product is our thirdbiggest-selling flavour in America."

INTERNATIONAL MARKETS

Keogh's is, unsurprisingly, performing well

around the world. "We export to about 20 countries with about a quarter of volume exported. Of those, America is number one, and we've several distributors across the US. It's growing quickly.

"We do a lot in the Middle East, selling to several countries there and to Emirate Airlines. In the Middle East, Europe, the UK, and beyond, we've opened up the airline side. The last six months alone have seen new business with Ryanair, Singapore Airlines, Lufthansa, and Delta.

"Overseas opportunities are substantial, and we need to invest in overseas markets. That'll be our growth strategy in the next five years: building an export team and marketing the brand. The US market will be top of the list. Overseas sales can be quite erratic – someone could put in a tariff overnight, or the price of logistics can treble, or there are currency fluctuations. You're open to more threats in overseas markets, so it's important not to put all your eggs in one basket."

BUSINESS NETWORK

Irish companies rise or fall based on their networks, so Tom is happy to be involved in Ernst & Young (EY) Entrepreneur of the Year programme. As part of this, the EY Entrepreneur of the Year awards will take place in November and Keogh's Crisps is shortlisted. "There are about 24 finalist companies," Tom says. "We recently went on the CEO retreat to Singapore. It was a fantastic trip that introduced us to a lot of alumni. It's amazing to be part of such a group of people and see what they've achieved."



THE RECENT RTÉ INVESTIGATES PROGRAMME HIGHLIGHTING INADEQUACIES IN CALF WELFARE, BOTH AT SOME MARTS AS WELL AS DURING EXPORT, HAS ONLY HEIGHTENED THE URGENCY OF FULLY ENFORCING OUR STANDARDS OF CARE AROUND ALL ASPECTS OF CALF MANAGEMENT, WRITES MATT O'KEEFFE

Calf welfare was a topic covered during the 2023 Moorepark Open Day in July. With the pressure-release valve of calf exports coming under ever-increasing scrutiny, it is clear that much more needs to be done to ensure that calves remain an asset to our livestock industry and not a public-relations liability. When plans were being laid for coping with the expected surge in milk production, too little, if any, thought was given to managing the increased calf supply. In hindsight, promoting cow breeding almost exclusively based on the production of high milk solids was a grievous error. We are now playing catchup on one of the most critical aspects of livestock breeding and management. The science highlighted at Moorepark point us in the direction we need to go. The widespread adoption of sexed semen to provide us with replacement heifers while inseminating the remainder of the herd using beef-type bulls should be straightforward. The efficiency of sexed semen is increasing yearly. The development of native sexing laboratory facilities was an absolute necessity. So, too, is the increasingly widening choice of dairy-bull sexed semen. Allied to this scientific advance is the development of the Dairy Beef Index

(DBI). The two are critically linked and the benefits spread far beyond the dairy herd. Greater numbers of higher quality dairy-beef calves provide assurance to dairy-calf-to-beef producers that the calves they purchase from the dairy herd have, at least, the potential for profit. Speed of adoption is essential. The figures put forward at Moorepark suggest that adoption is accelerating exponentially. The number of sexed semen straws available in 2023 was approximately 300,000, which will result in over 100,000 fewer male dairy calves and provides a significant opportunity to increase the use of high DBI beef straws. This statement delivered by Laurence Shaloo, Siobhan Kavanagh and Deirdre Hennessy sums up our current position. The aim must be to at least double those figures over the next two breeding seasons.

THE NITROGEN CHALLENGE

Whether or not there is an imposed decrease in chemical nitrogen (N) in the coming period, there is a clear economic rationale for managing nitrogen use more efficiently. While fertiliser costs have reduced somewhat, there is little likelihood that prices will return to historical averages. That being the case, whether the limits are 250kg, 220kg, or lower,

it is in our economic and environmental interests to ensure that as much of the product used as possible stimulates grass growth. Much of what was being advised at the Moorepark event was well-proven grassland science. These concluding remarks point the direction we must travel: 'New grazing-management practices encompass improved seasonal grazing management, incorporation of legumes into grazing and silage swards and precision N management across the grazing season.' This is only a refinement of advice that has been given for the past 40 years and longer. That doesn't make it simple.

Clover management with a 25 per cent sward content is not straightforward. Maintaining grass/clover content equilibrium is challenging. The most profitable, pasturebased dairy-production model requires well-managed exploitation of grazing opportunities and milk production during the shoulder periods. Clover does not grow actively early in the year and ensuring that clover-rich paddocks are bared sufficiently to bring them over the winter period are only two of the challenges. Reading some of the assertions gleaned from Moorepark relating to on-farm research provides further recognition on the complexities involved: 'It is apparent that where sward clover content was greater than 20 per cent, a significant reduction in chemical N fertiliser application was achieved while maintaining high levels



FOUR KEY MESSAGES FROM MOOREPARK

- Ireland's mineral grasslands are a vast store of carbon, estimated to contain 30 years worth of carbon emissions (circa 1,800 million tonnes of CO₂).
- With careful selection of traits and appropriate breeding strategies, it is possible to optimise beef production while also optimising desirable dairy cow traits.
- Technologies must be developed to ensure feeding methane-reducing additives on pasture-based farms is practical.
- Optimising soil pH through lime application is the single biggest step towards productive and sustainable grassland swards.

of herbage production. Reducing chemical N fertiliser application when sward content was lower than 20 per cent, resulted in a reduction in the quantity of herbage grown, highlighting the requirement for careful planning of the N fertiliser application strategy, depending on the level of clover present in paddocks.' It should be noted that this is a movable and constantly changing situation. As clover content ebbs and flows in a sward, depending on season, growth rates and weather conditions, management must change accordingly. That's before we meet the other challenges including, critically, the management of the cow's diet in a clover-rich diet to avoid potentially catastrophic morbidity or mortality consequences.

THE APPLIANCE OF SCIENCE

A key component of the Marginal Abatement Cost Curve (MACC) is the widespread use of protected urea. Research into its efficacy through the grass-growing season is proving

that there is no difference in grass production at any rotation, at any site between NBPT-urea and CAN. There was an overall benefit of 424kg DM/ha detected over the 10 site years from using urea protected with NBPT versus urea. These statements delivered at the Moorepark Open Day to farmers should provide the necessary reassurance that using treated urea outside the traditionally advised spreading dates and climatic conditions has no adverse consequences on either growth responses or nitrogen loss. With trials conducted across several sites and soil types including Moorepark, Clonakilty, Ballyhaise and Athenry, the results are conclusive: 'Urea and NBPT grew the same amount of grass as CAN fertiliser.' Another equally important message was conveyed: 'There was a 2,148kg DM/ha difference in herbage production between the 150kg and 250kg nitrogen/ha treatments. In the event that there are enforced reductions in N applications, there will be significant reductions in sward productivity, all other

aspects of herbage production being equal. The retention of Ireland's existing Nitrates Derogation is the optimum outcome. Failing that, all other options are problematic, including cost, consistency and current cow and sward management protocols. Renting additional land is costly and disrupts the land rental market for all players. Clover has a role to play, though there are serious challenges around the management of clover-rich swards as well as grazing strategies to minimise health issues, most notably bloat. The potential of mixed-species swards on dairy farms is being explored. Their widespread use across a grazing platform is still at research stage with only pioneer adoption on farms. Persistency, optimum grazing stages, as well as productivity over a three-to-five-year lifetime are not fully researched. The advice must be to proceed with caution. Otherwise, any positive benefits could be outweighed by increased costs and decreased sward and/or milk production.







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MAXIMISE RUMEN PERFORMANCE

An energy-dense diet, maximising the use of homegrown and bought-in ingredients will help reach the desired market specs required by the processor. Farmers should also be aware of the importance of maximising the quality of homegrown ingredients. Producing high-quality grass silage with a high dry matter digestibility will have a huge impact on the overall diet cost.

KEVIN GRAHAM, BEEF SPECIALIST AT ALLTECH IRELAND, OFFERS ADVICE REGARDING NUTRITIONAL MANAGEMENT USING LATEST RESEARCH, TO ENABLE FARMERS REACH THEIR MAXIMUM POTENTIAL

The first quarter of 2023 was one of the best envisaged by beef farmers who were rewarded for their high levels of investment in purchasing animals and feed. Unfortunately, the positivity reversed as we moved into the second quarter, witnessing many upsets caused by reduced beef prices and high feed cost.

We are all aware of the finished specifications

required by meat processors. To achieve the best beef price requires hitting these specs. To protect profitability, it is crucial that farmers know their finishing systems, and planning is strongly encouraged. Know your system, the capabilities of your farm, and what has worked well for you in the past. In addition, think about how purchased animals will fit into your finishing system.





ALTERNATIVE CROPS SUCH AS
MAIZE SILAGE AND FODDER
BEET ARE ALSO EXCELLENT
SOURCES OF ENERGY AND
CAN BE VERY COST EFFECTIVE
IN FINISHING DIETS

THE IMPORTANCE OF NUTRITION

Breeding or purchasing animals with high genetic merit sets the scene for high performance. However, it is the level of management – but more importantly, nutritional management – that will allow farmers to reach their maximum potential. Farmers are now consulting with on-farm nutritionists to formulate specific nutritional programmes to achieve the best results from their system.

A well-balanced and energy-dense diet is vital, which means farmers must maximise the quality of their feed ingredients, putting special emphasis on homegrown ingredients. Management that produces high-quality grass silage with high dry matter digestibility (>70 per cent) will save hugely on overall diet costs. Alternative crops such as maize silage and fodder beet are also excellent sources of energy and can be very cost effective in finishing diets.

CONSISTENCY

Consistency is another important component. By feeding the same diet each day, we ensure a consistently healthy rumen environment. The rumen is often referred to as the 'engine' in beef production, utilising ingested feed and converting it to beef. It is well known that feed costs represent 70 per cent of beef production costs, so we must provide a consistent diet to maintain a healthy and stable rumen, maximising feed utilisation. Inconsistencies in feeding may lead to reduced animal performance. How can we unlock the benefits of maximised feed quality and consistency? There are various approaches, and many farmers today consult with on-farm nutritionists to formulate specific nutritional programmes that will achieve the best results. One constant, however, is that supplementation is key — and not all supplements are created equal.



KNOW YOUR SYSTEM, THE CAPABILITIES OF YOUR FARM, AND WHAT HAS WORKED WELL FOR YOU IN THE PAST

A SOLUTION

Optigen, from Alltech, is a unique protein source that improves feed conversion in beef and dairy cattle through the provision of nitrogen for the rumen bacteria. Feeding Optigen optimises protein production in the rumen for improved animal health and performance and greater feed utilisation. Optigen concentrates the nitrogen fraction of the diet, creating more dry matter space for energy and fibre sources. For instance, 100g of Optigen can replace up to 800g of soya bean meal. Optigen gradually degrades in the rumen, it meets the needs of the rumen bacteria more effectively and consistently than conventional protein sources. This results in increased microbial protein, enhanced fibre digestion of the animal's diet, and increased energy available for meat production, meaning that more meat will be produced from the same amount of feed. It has a direct and beneficial effect on feed utilisation. It acts to provide a very stable protein source in the rumen, providing consistent levels of

ammonia available over a sustained period of time. This ammonia can then be utilised efficiently by rumen bacteria.

When included in finishing beef diets,
Optigen can improve daily liveweight gains by 92g per head per day. The average improvement in feed efficiency has been shown to work out at +12g of liveweight gain per kilogramme of dry matter intake

DECEMBOL

per head.

A recently published meta-analysis on the research and trial data of Optigen in beef production confirmed this technology's ability to improve animal performance and profitability. The meta-analysis involved the extraction and comparison of the results obtained from 17 trials that involved the feeding of Optigen to finishing beef cattle. The original studies were conducted in nine countries: six in the US; two each in Uruguay, Brazil and Mexico; and one each in Italy, Egypt, Ireland, Portugal and

Argentina. The research and trial work covered a 17-year period, from 2002-2018. In addition to the specific liveweight gain and feed-efficiency benefits, the metaanalysis also confirmed the improved profitability that Optigen can offer, courtesy of the reduction in feed costs associated with beef production systems. Optigen benefits the planet as well. The Carbon Trust has certified that the inclusion of Optigen in a ruminant animal's diet can decrease the global warming potential of that diet. This leading environmental protection group has also validated that the replacement of highcarbon ingredients, such as soya, with Optigen significantly reduces the risk of having a high carbon footprint. Optigen feeding rates range from 50-150g per head per day. The product can be added directly to a TMR on-farm or included in the formulation for a blend or pelleted feed supplied by a commercial feed manufacturer.

Advantage Beef Programme





Sharing expertise and delivering better outcomes for both the dairy and beef sectors.

INTERESTED AND WANT TO FIND OUT MORE ABOUT JOINING THE ADVANTAGE BEEF PROGRAMME?

Please email advantagebeefprogramme@abpireland.com or contact Trish at 052 744 1444 for more information





TO BALE OR NOT TO BALE? THAT IS THE QUESTION. HERE, WE LOOK AT SOME OF THE PROS OF BALING YOUR SILAGE, AND WHAT TO WRAP IT WITH WHEN YOU DO

Hugh Carpenter and his father, Joe, manage an agri-contracting business, Carpenter Agri, from their farm at Old Leighlin on the Carlow/Kilkenny border.

They make 20,000 bales of hay, silage and straw each year for their dairy and beefsuckler customers, so you could say they know a thing or two about how to wrap a good one. In addition to baling, they also offer mowing and tedding services, as required by their customers. Their farm machinery includes three Valtra tractors, as well as a New Holland and a John Deere, two McHale Fusion 3 Plus integrated baler wrappers, a Kverneland tedder, two Kverneland mowers, as well as Claas and Kverneland rakes. Other machinery includes a Bredal 10-tonne (t) lime spreader and three slurry tankers two from Conor Engineering and one from HiSpec.

The Carpenters are also dairy farmers with a herd of 130 British Friesian cows, supplying milk to Tirlán co-op. On their farm they keep an Angus and a Hereford bull and their dairy X beef calves are sold to local beef farmers. They also rear 30 replacement heifers.

DUAL-WRAPPING SYSTEM

As farmers, the Carpenters are well aware of the standard of silage required for optimum milk production and liveweight gain. They offer customers who opt for baled silage a choice between using net wrap and the new system which uses Baletite net replacement film. The Film & Film (F&F) system is an innovative dual-wrapping method, which combines the use of SilotitePro1800 bale wrap and Baletite net wrap replacement film. This results, the Carlow contractors say, in better shaped, denser and more compact bales which can better withstand handling. Hugh charges his customers slightly more per bale, depending on operating conditions, for using the F&F system, while endorsing the benefits in terms of sealing, transport and storage.

He also insists that the bales are easier to feed out.

BALE OVER CLAMP

One of Carpenter Agri's long-term customers are Peter and Jane Brophy who have two dairy herds (a Holstein/Friesian and a crossbred herd) in Kilkenny with an average yield of 550kg of milk solids. The Brophys make around 180 acres of first-cut silage and 80 acres of second-cut - mainly bales - and they bale and wrap up to 1,200 bales each year. Peter says he prefers baled rather than clamped silage, as it eliminates the cost of building silage pits. He points to lower storage losses with baled silage, adding that his cows prefer the longer-chopped grass. Further endorsement includes perceived improvements in fermentation and ease of feed out compared to other wrap systems. There are strict protocols around baled silage storage. Under good agricultural practice conditions to safeguard water, such bales are only permitted to be stacked two bales high, and on hardcore.

BALE POPULARITY

According to Larry Coogan, sales manager for Quinns of Baltinglass, most beef and sheep farmers are now making baled silage,





adding that dairy farmers are baling their surplus grass. Quinns is regarded as being an innovator in the agricultural economy, with a team of 12 technical advisors to assist farmers on a range of agri activities. It purchases over 180,000mt of grain, annually, and its mill in Baltinglass produces 50,000t of coarse animal feed, annually.

COMMERCIAL TRIAL RESULTS

While assertions around the comparative advantages of one silage bale wrap system over another are often anecdotal, some trial work carried out in Wales provides evidence of benefits for the film and wrap system. Dr Dave Davies of Silage Solutions Ltd, acts as an independent silage consultant and is a former senior research scientist at the Institute of Grassland & Environmental Research (IGER) at Aberystwyth in Wales. On a trial he conducted on a commercial farm in Wales, Dr Davies found that there was 7.5 per cent less dry matter (DM) losses when compared to net wrap bales, due to an enhanced fermentation process. He found that that there was 80 per cent less DM losses due to mould formation, when compared to net wrap bales.

The physical gains for the farm included an additional average 7.35kg DM weight increase per bale using the F&F wrapping system. All things being equal, that could deliver 15L of additional milk production, while for a cattle farmer the equivalent would be an increase

of 1.9kg of live weight gain per bale. The value of the extra silage conserved is around €5/bale. Those calculations are based on data supplied by Dr Tom Butler of FBA Laboratories.

It is important to note that the above trial was undertaken under commercial farm conditions and not on a research institution farm where bales are carefully handled and stored under ideal conditions by well-trained research staff.

FARM RECYCLING

The Irish Farm Film Producers Group (IFFPG), a not-for-profit body, has recycled over 400,000t of farm film waste since its establishment in 1998. The scheme, which is funded by both industry and farmers and approved by the Department of the Environment, Climate and Communications, is an excellent example of what can be achieved when all the key stakeholders in a sector come together to work for the environment.

Irish farmers achieved a record 90 per cent recycling rate for farm films in 2021 and in doing so recycled the equivalent of film from 18 million silage bales. The majority was collected at 200 bring centres, held during the summer at locations such as livestock marts, coops and agri-merchant premises. Over a third of collected material was supplied to

Irish recyclers for processing into a range of new products. In total, 37,000t of silage wrap and silage covers were recycled in 2021, that is 3,000t more than in 2020 which was also a record year. For the average farmer who makes 300 bales of silage, the total recycling cost is approximately €60, while average distance to the local bring-centre is only 11km. These factors, as well as a desire by farmers to be environmentally responsible, have resulted in the recycling rate for farm films being consistently the highest for any recycling stream in the country.

DID YOU KNOW?

Useful products manufactured from recycled bale wrap and silage covers include: calf pens, fencing posts, floor slats, garden furniture, gates, pet housing, rubbish bags, and water piping.

Berry bpi, which manufactures an extensive range of flexible packaging films across various industries including agriculture and horticulture, is a recycler of bale wrap products and other packaging with the scope and expertise to recycle over 150,000t annually. Every tonne of polythene recycled saves 1.8t of crude oil, reduces energy usage by two thirds, entails 90 per cent less water and cuts sulphur dioxide emissions by 33 per cent.

MESSAGES

- How do you financially manage from now?
- · Adequate winter feed must be a priority now? Check it out!
- · What are your winter-feed options?
- · Advice on fertilisers and grazing targets.
- Grass build-up starts now.
- · Clover must be actively managed and prepared for next year.
- You will find Mark Cassidy's 'cop-on' list interesting and challenging.



Bv Matt Rvan

HOW TO FINANCIALLY MANAGE FROM NOW!

- » Profit in farming is dependent on the relationship between sales and cost - the wider the gap the greater the profit!
- » Over the years, I have been trying to get farmers to do the Cost Control Plan, but I have failed miserably.
- » At a recent discussion group, Sean O'Donnell outlined his simple system as follows:
 - "The financial management I do is pretty simple. I never really
 had the discipline for doing budgets so I found this worked best
 for me. I take the milk litres sold each month and multiply it by
 my target cost figure, ie. 100,000 x 30c/L. That means I have
 €30,000 available to pay my bills, repayments, wages, etc. for the
 month. I leave that money in the trading account and I run that
 account pretty tight.

"The balance of the milk cheque is then transferred across to a deposit account and remains there until needed or saved. If we ever get really tight or something unexpected comes up, then we know we have money there to deal with it. My aim is to accumulate as much as possible into the deposit account. This might not suit everyone, but I have found it works for me. It is a mental thing/discipline."

- » Try this for the remainder of the year.
- » Address the big costs that will accrue for the remainder of the year:
 - Now, to give you peace of mind, set aside, money to pay:
 - Your tax bill.
 - · Your loan repayments.
 - Don't put yourself in a position to have big meal bills by being over-stocked:
 - Sell off, without sympathy, cows that will be culled later in the year, R2s not in calf and other 'non-productive' animals.
 - R2s that you will not want.
 - This will allow you build up grazed grass for grazing in late November; thus, shortening the winter.

ADEQUATE WINTER FEED MUST BE A PRIORITY?

- » That is the question, and you must methodically take steps to answer.
- » The first thing to do is estimate the amount of feed you have and are likely to get between now and September, if any.
 - I think everyone is able to estimate the amount of silage in a pit and count the number of bales available – do this calculation.
 - If silage was dry at cutting it would be advisable to get it analysed – do that now.
 - I suggest, until you know exactly, that you use 20% DM for pit silage and 35-40% DM for bales, unless you have reason to

- believe otherwise.
- If you have a pit of 300t that is 22% DM, then you have 66,000kg DM (300x1,000x0.22).
- If you have 60 bales (600kg each) that are 35% DM, then you have 12,600kg DM (60x600x0.35).
- Therefore, there is a total of 78,600kg DM of feed available. Maize, straw, hay, kale etc. should be added in the same way.
- » Then, list out all the cows, weanlings and in-calf heifers plus other stock that will be wintered, decide on your length of winter, allowing 15-20 days extra to risk manage for a longer winter, as per Table 1.

Table 1: Calculating the kg DM required on a farm for winter.

Numbers	Winter (days)	DM/hd/day	Planned meal (DM/hd/day)	Net roughage (kg DM/hd/day)	Total (kg/DM)
50 cows	120	11	0	11	66,000
7 in-calf heifers	120	9	0.5	8.5	7,140
7 weanlings	120	5	1.0	4.0	3,360
2 1.5-yr males	100	9	0	9	1,800
Total					78,300

- » In the above example, the farmer has adequate silage, but a reserve of 10% would be advisable.
- » From what I have seen so far, some overstocked farmers are 10-20% short while many ordinary farmers are tight. The question is what can and should farmers who find themselves in a deficit do now?
- » There is a computerised programme to do this calculation for you – talk to your Teagasc adviser, or I can send it to you.

OPTIONS IF SHORT OF FEED?

- » Several options are available at this point in time:
 - Sell off cattle/cows between now and winter that will save grass now for other stock and reduce winter feed needs.
 - Some farmers who are short of grass and silage are planning to milk once a day. There will be a few benefits and costs:
 - Feed requirement will be reduced by approximately 2kg DM/hd/day, saving 50c, but milk yield will be reduced by 25% approximately 2-4L, valued at €0.90-€1.80.
 - The big payoff will be in terms of improved body condition score (BCS); therefore, worth doing with thin cows.
 - Forward buy meal and straw now for feeding next winter (buy barley off combine).
 - Sow redstart, rape, early in month, for feeding with straw or silage to dry cows or cattle.
 - Buy maize or grass silage, being careful not to pay too much.
 - Westerwolds, Hybrid Italian or Italian ryegrass will also

- contribute both in autumn and in spring yielding 12-16% more grass. Therefore, shortening the winter. I favour Hybrid Italian.
- Any of these forage crops or Italian ryegrass could be sown on some badly damaged dry grass field or fields burned up by drought, to give extra winter feed.
- Rent dry grazing fields now and build up grass to 2,500kg DM/ha for feeding from November onwards.
- As a general principle now, if short of grass for grazing, try to avoid feeding large quantities of pit silage. Use meal, 4-6kg, zero graze grass from outside farm or buy from local farmer, graze second cuts, etc.
- » Forage crops could be considered in tillage area:
 - Rape must be sown in early August and it should yield 3-5t
 DM per hectare. The maximum feed per cow per day that can be fed in November-December is 2kg DM. The seeding rate is 3.5-4.5kg per acre.
 - Stubble turnips yield expectations are 3.7t/ha and can be fed ad lib. The seeding rate is 2kg/acre.
 - Kale could be sown in early August but yield will only be 4-8t/ ha. The seeding rate is 3.5-4 kg/acre.
 - Redstart will yield 4-6t DM/ha. Some tillage farmers in GLAS
 have to sow a 'nurse crop' and a dairy farmer could do a deal, at
 low or no rental cost, with them for this venture.
- » Winterage represents an option for most farmers with some dry land on an outside farm block:
 - It involves building up grass from August-September.
 - High stocked farmers might rent land nearby for this purpose (€30-50/acre).
 - The fertiliser required should not be more than 20 units of nitrogen (N) per acre, because these fields will not be grazed until November, and we do not want more than 2,500kg DM/ha cover.
 - If there is more, too much decayed grass results.
 - The daily allowance for a dry cow should be 13-14kg DM/cow per day.
 - Therefore, one hectare will feed 50 cows for 3-31/2 days.
- » Silage (grass) could be bought.
 - Get it analysed first (do not buy a pig in a poke!).
 - But it should not cost more than €45-€60/t (72% DMD)
- » Maize and whole crop silage purchased at €85/t and €110/t, respectively, represent an option also.
- » Green barley could be bought off the combine and stored using propionic.
 - Easy, but a corn roller is required during winter.

ADVICE ON FERTILISER AND GRASS TARGETS?

- » August is a key month to build up autumn grass by achieving grass targets and judiciously using fertiliser to grow grass as growth rates decline.
- » Table 2 outlines the nitrogen recommendations for various stocking rates, but be guided by your annual N allowance.

Table 2: Nitrogen recommendations (units/acre) for various stocking rates in August-September.

Cows/ha	August	September			
2.1 or less	None	14			
2.2-2.4	14	14			
2.5	26	14			
2.6+	28	20			

- » To maximise benefit from N, make sure Sulphur (s) is adequate and include potash.
 - Potash is deficient on many farms, so now is the time to apply 30-50 units/acre.
- » Rotation then would need to be 25-30 days.
- » Graze very tight, down to 4cm. This will have the effect of:
 - Slowing down rotation length (every ¼ day in each paddock adds up).
 - It will set up the swards for quality autumn grass and can make it easier to graze them out later on.
 - The effect on milk yield will be minimum if meals are being fed.
- » Table 3 indicates the approximate target grass covers for various stocking rates for August.

Table 3: Target grass covers for various stocking rates in August.

Cows/ha		n length lys) Aug 30	Target/LU (kg DM/ha) Aug 1 Aug 15 Aug 30		Avg. farm cover (kg DM/ha) Aug 15	Pre-graze cover (kg DM/ha) Aug 15	
2.0	25	30	180	200	300	400	950
2.5	25	30	180	200	300	500	1,162
3.0	25	30	230	250	330	750	1,375
3.5	25	30	200	220	310	770	1,590
4.0	25	30	200	220	310	880	1,750

- This table shows the cover we must aim for in August but
 if growth rates are higher than normal, it may provide an
 opportunity for farmers short of winter feed. With high growth
 rates, they should target a stocking rate of 3.3-3.8 cows/ha on
 the grazing area. And cut silage off the remainder.
- The table also shows that farmers can get by on no unnecessary meal expense at low stocking rates.
- For example, a farmer with 2 cows/ha only needs a cover of 1,070kg DM/ha on the next paddock if his overall average is 680kg DM/ha.

START GRASS BUILD-UP!

- » This sounds like a contradiction this year but must be the plan.
- » It must be done if you are to capitalise on the high milk output with low-cost inputs.
- » It starts now it should be easier than usual this year there are good moisture levels in most areas, thus, ensuring good growth rates.
- » However, you may still have to do some of the following:
 - Reduce stocking rates by selling (must be seriously considered from a winter feed point of view) or moving stock to an outside farm. You will not be able to build grass if you are stocked at greater than 2.9 cows/ha on the milking block.
 - Feed supplements, meals (soya hulls), or silage, to reduce daily grass demand (this is not a sin, but a good practice).

- » Close up ground for a third cut/graze.
 - Do this by grazing at 2.9 cows/ha (see above recommendations for this year's expected growth), staying on a minimum of 25 days' rotation.
 - This means, if you are stocked at 2.5 livestock units (LU) over the whole farm, you have 0.4ha/cow left for a three-cut-graze area.
- » This three-cut-graze area should get the following management:
 - It should be a clean-cut silage field or a severely topped grazing field
 - Apply 50-60 units/acre of N at closing with 2,000 gallons of slurry, if available.
 - Leave for 42 days before grazing.
 - If you are running short of grass on the grazing area during this
 period, then you can graze some of this before 42 days, so you
 lose nothing by this plan.
 - In fact, you grow more grass enough to feed 10-12 cows for one day for each acre devoted to this – because you have used 30 units/acre more N applied.
- » The big benefit of doing this is that the grazing season will be extended:
 - Therefore, the winter will be shortened.
 - Also, an extra profit of €2.80 per cow per day for every extra day a cow is at grass in autumn/winter (even for three to four hours).
- » Associated with this issue is getting into the correct 'lane' of grazing paddocks.
- » You are now on the third-last grazing rotation. What responsibility does that carry?
 - It means that paddocks being grazed first next spring will have to be grazed first in this rotation.
 - That means the first week of August.
 - Failure to plan this event will mean you won't have grass in the paddocks next spring where you want it, that is, nearest the milking parlour or dry fields.

ACTIVE CLOVER MANAGEMENT?

- » Continue to care for clover swards sown this year by:
 - Using a clover-safe spray to kill weeds if it not too late to do so.
 - Graze swards at a cover of 800kg DM down to 3.5-4cm, that is very tight.
 - Apply zero or little N (5-7 units/acre).
 - Apply one bag 0:7:30 per acre after every second grazing.
 - Increase rotation length to 42 days over the next 4-6 weeks.

- At closing, the paddock must be grazed down to 100-200kg DM cover.
- » Where red clover is grown on an outside farm block for silage, it should not be receiving any N but two to three bags 0:7:30 per acre after each cut.
 - Continue cutting for silage up to September, tedding, wilting and bailing for silage.
 - Thereafter, zero graze the grass because it would be impossible to preserve as silage, but it should never be grazed because of the damage done by animals' feet.
- » In late July/early August reseed pastures on the milking block by ploughing or, preferably by min-till, sowing ryegrass with 1-2kg white clover per acre.
- » It is imperative that you identify the field into which you intend sowing clover next year. Manage them as follows:
 - Spray with dock spray NOW because it cannot be used in the year of sowing clover as its residue kills the clover seedling – roundup doesn't have the same effect.
 - Apply adequate lime to bring the pH over 6.5.
 - Apply phosphorous (P) and potassium (K) to bring them to Index 3 or 4.
- Where clover is very plentiful feed Bloatguard through the water
 in water troughs and moving the container daily.

MARK CASSIDY'S 'COP-ON' LIST

- » At the Irish Grassland Association's excellent farm walk on his farm, Mark Cassidy outlined an interesting concept to help manage staff and relief milkers – his 'cop-on' list.
- You might know what to do, but that doesn't mean others do, so make sure to share your insights and tips.
- » I will share a few items from his list, which are set out under various headings:
 - General:
 - If you find slurry/water overflowing or flooding, try to fix it and let someone know immediately.
 - If you notice something out of place, pick it up and put it where it belongs. Everything has a place. Put things back where you found them.
 - Yard feeding:
 - Don't put fresh silage on top of old/stale silage.
 - Sick cows and calves:
 - If you see a cow or calf with 'sad cow disease' let someone know.



- Cold new born calves need to be moved to a hot box.
- Milking parlour & yard:
 - Check milk tank is cooling, and that water and lights are turned off before leaving the parlour.
 - If teat-spray gun is leaking, fix it if you can, or turn the teat spray off and tell someone.
 - Don't leave cows in crush/pen overnight, ask what to do with them.
- Water & grass:
 - If cows are bawling it means they are not happy, either food or water is missing. Let someone know.
 - Check that cows have water when letting them into and bringing them out of a paddock.
- · Electric fence & gates:
 - If you open a gate, please close it.
 - Gate handles need to be hooked onto the 'live' side of the insulator, not the post side.
 - If you see a fence down, fix it or write it down on the whiteboard or tell someone.
- Quad & fuel:
 - Quads have a reserve fuel tank, to use when main tank is empty.
 - If you put the quad on reserve fuel tank, remember to top it up or write it down on the whiteboard or tell someone.



 There are many, many more but this is a flavour of what you can/should do to help staff.

FINALLY:

- » Scan all cows and heifers in August to confirm pregnancy stock bull must have been out for last 30 days.
 - The value of this is that cull cows can be identified. Due to a shortage of grass and winter feed they can be dried off and culled.
 - As well as this, it gives you the information to review the success of your breeding season just ended. This is a vital chore so that you have a better year next year.
- » Meals for other stock:
 - The response of meals to R1s is probably 4:1 in August and definitely that when grass is scarce. So, 1-2kg/hd/day is justified.
 - Make sure R2s, particularly those under target, are not suffering.
 Palm kernel would be an ideal grass stretcher as it is easily fed.
- » Reduce your workload by:
 - 13-times-per-week milking.
 - Spreading nitrogen once per month.
 - Use a contractor (or neighbour) to spread slurry, do maintenance work etc.
- » Take a few weeks' holidays:
 - A neighbour, family member or discussion group friend could oversee an in-experienced relief person doing the work while you are away.
 - A few days away with the mobile phone on are no use to you.
- Dosing calves for hoose and stomach worms may be necessary:
- If calves start coughing it may indicate the onset of hoose.
- If calves exhibit sticky dung around the tail-head, it indicates the presence of stomach worms.
- Take a dung sample to check for parasites before dosing.
- » Change milk liner now to prevent mastitis/high SCCs, and reduced milk yields.
- » To avoid big tax bills this year, talk to your accountant now.
 - For sole traders income averaging will not be much of a help this year because the last few years were good
- » Some of the following might be considered:
 - Formally paying a spouse and family members a wage, a family member over 14 years can earn €16,500 tax free.
 - Increasing your own pension contribution.
 - Taking an agricultural education holiday/sabbatical.
 - DNA testing the whole herd plus the R1s and R2s the benefits would be huge in the long-term.
 - Repair work, fencing, electrical, building/machinery repairs, roadway repairs, upgrading water system, reseeding, small drainage works, batch latch, electronic heat/health detectors, etc., is tax deductible at the higher marginal tax rate.
 - Make judicious capital investments to help you achieve environmental requirements and make life easy for yourself and your family.
 - Consider investing in renewable energy where the tax write off could be 100%.

"There is no correlation between the amount of money one earns and the amount of money saved." That is an interesting statement!

'LURCHING TO THE FAR RIGHT' COMMENT LEAVES ME MYSTIFIED

I know that you will have been as surprised as the rest of us to learn, courtesy of a blog written by a prominent environmentalist commentator, that Irish farmers were 'lurching to the far right' and their representative bodies, including the ICMSA, were 'happy to spread conspiracy theories' and 'undermine scientists and their findings'.

I must confess that I was a little mystified myself to learn that I and the rest of the 16,000-odd farmer members of ICMSA were 'lurching' in any direction, but particularly one that is far right. And, full disclosure: I'm not entirely sure what 'far right' is beyond some kind of sinister set of beliefs covering a range of issues and all as uniformly wrong as they are obnoxious. But I'm a farmer, not a political scientist.

However, I am sure that it is not the business of anybody other than ICMSA to decide under what political banner – if any – the association belongs. If the writer had bothered to check – or ask – he would have learned that the association has been absolutely non-political since it was founded over 70 years ago when domestic political allegiances were a good deal more emphatic than they are now.

Political canvassing or overt expressions of allegiance are not just unwelcome – they are forbidden by rule. I don't want to

labour the point, but it's worth repeating; impartiality is not just 'an' aspect of ICMSA, it is in a very real sense 'the' distinctive characteristic that enabled the Association to spread into every area of every county in the knowledge that no other agenda was being pursued save the welfare and interests of family farms. That's as true in 2023 as it was in 1950 and it's a nonnegotiable feature of our association. Farmers are not apart from the wider community, much less in opposition to it. We are where we always have been - right across every political, social and geographic spectrum in Ireland. We are not 'lurching to the right' and if my own confusion is any guide then I doubt if there are 10 farmers in Ireland who would even know what this gentleman is talking about. I am not convinced that it's helpful to use terminology imported from ideologically polarised US politics to describe a polite enquiry from, say, a concerned Offaly farmer to Bord na Móna about the possible effects on his farm of their massive rewetting project happening just over the hedge. On the broader question of the Nature Restoration law (NRL), we did not engender confusion or 'conspiracy theories', we merely pointed out that the onus was on the Government to explain fully and in detail how the law would be applied. If that constitutes a 'conspiracy theory' then

it is one that is evidently shared by the Taoiseach who went on the record himself with his misgivings.

Regarding the equally curious accusation that bodies like ICMSA are undermining scientists, every single statement we have ever made on the interaction between the environment and farming has stated - upfront and bluntly - that we accept the science. The ICMSA has never - and will never - deny the science around climate change and challenge and, if I may say so, I think that that's the difference between us and those who think like this commentator. To us, it's a matter of specific science applied to a specific problem rather than a culture war between so-called 'goodies' (the enviromentalists) and 'baddies' (anyone who doesn't agree with them). This slur against ICMSA and others was never designed to explain or illuminate any point. It was designed, as these kinds of attacks generally are, to put us outside the debate, to expel us from any discussion, and to portray us as people whose beliefs and crazy theories mean that we can be safely ignored or disregarded. That, in my view, was the point of the slur. It ultimately failed, but the fact that it was attempted at all is as disappointing as it is revealing. There has to be respect and genuine willingness to listen, even when we disagree vehemently especially when we disagree vehemently.



NOEL DUNNE EMBRACED THE OPPORTUNITY TO SEE NEW HOLLAND'S T5 UTILITY POWERSHUTTLE AT THIS YEAR'S FARM TRACTOR AND MACHINERY TRADE ASSOCIATION (FTMTA) MACHINERY SHOW - ITS FIRST SHOWING IN IRELAND - AND HE WAS SUITABLY IMPRESSED

New Holland unveiled its upgraded T5 Utility Powershuttle at the end of last year, offering three models with rated power ranging from 100-120hp. It was described as a powerful, heavy-duty utility tractor and, on reviewing it at the FTMTA show, we found an impressive machine that would slot nicely into the dairy-livestock sector in Ireland. The expansion of the T5 Utility Powershuttle coincided with the expansion of the T5 range of tractors with two new models - 90hp and 100hp. The aim, according to New Holland, of these expansions, was to 'provide the 90-120hp segment with new, robust, powerful and easy-to-use machines that ensure the maximum level of performance and productivity to get the job done, in all conditions'.

Like the T5S, the T5 Utility Powershuttle is a versatile tractor with a wheelbase of 2,350mm and a weight of approximately 4 tonnes (t), offering high-performance and easy-to-use features. They have very high-performing engines in common, together with ATS and hydraulic systems. Both models feature a FPT F5 Stage V four-cylinder engine with 3.6L displacement. The optimised design of the turbocharger and pistons guarantees strong performance and fuel efficiency, with maximum power delivered at just 1,900rpm and best-in-class maximum torque - 506Nm for the T5.120 Utility Powershuttle - delivered at a low 1,300rpm, with excellent torque rise of up to 47 per cent for rapid recovery under

The T5 Utility Powershuttle incorporates an

exhaust after-treatment system that integrates a diesel oxidation catalyst, diesel particulate filter and selective catalytic reduction unit in a single, maintenance-free, compact solution that fits completely under the hood, ensuring perfect visibility and manoeuverability, high



ground clearance and easy loader installation. It has a 600-hour engine service interval, and all daily maintenance can be easily carried out only from left-hand side.

PERFORMANCE AND PRODUCTIVITY

The upgraded T5 Utility Powershuttle comes with a Powershuttle-only transmission that ensures smooth and rapid direction changes without using the clutch. It mounts a hydraulic system that features twin pumps: a 36L/min pump dedicated to the steering and a second one with up to 82L/min for the services. The new MegaFlow pump, is able to ensure faster loader cycle times and fast raising and lowering of implements. Complementing this is a 540/540E/1,000rpm electro-hydraulically engaged PTO with soft start activation, eco function and ground speed ability. Up to three hydraulic remote outlets can be specified, all with push-pull system for easy connection. It can be ordered with an integrated front loader-ready package from the factory and further options include factory-fitted front hitch and PTO.

The T5 Utility Powershuttle features a class 1.5 HD Large axle with a flange-to-flange width of 1,789mm, which makes the tractor ideal also for the heaviest jobs with loader. The maximum size of rear tyre the upgraded T5 Utility Powershuttle could mount is the R38 (SRI 800). It can be ordered with front loader ready from factory, in addition, front PTO and front linkage can also be specified. The maximum lift capacity for the T5 Utility Powershuttle is 5t.

UNRIVALLED COMFORT AND VISIBILITY

The T5 Utility Powershuttle has, according to New Holland, a comfortable 6-pillar VisionView cab. The main controls are very intuitive and easily accessible on the operator's right side for excellent ergonomics. The spacious cab offers easy access to the driving area, a quiet environment with just 76db, and the comfort of an air-suspended seat and excellent ergonomics. The design of the T5 Utility Powershuttle 6 pillar cab satisfies the requirements of customers working with space constraints, for example, inside the stables. It stays below 2.65m of overall height and represents a benchmark in the range thanks to the super low-profile roof, which guarantees an overall height below 2.6m with R34 tyres.







NOEL DUNNEMachinery editor

WEATHER WOES

Well readers, as I pen this month's column, we are preparing to wave goodbye to summer 2023. And, looking back over the last few weeks, we can see clearly how volatile this world of farming can be.

All over the country, the harvest has been stop-start. In certain parts, farmers are having to bring livestock to higher ground, fields are starting to get saturated, and second-cut silage is well back because getting the machines out into the fields is a challenge. This is, without doubt, going to have a knock-on effect on silage quality. Cows are slipping back in milk yield in some parts, animals are being housed, and pits of silage have been open in extreme cases. As per normal, we are farming between the showers, the never-ending July showers.

I was in Germany a few weeks ago and they were having similar weather to ourselves, with a stop-start harvest also. At the same time, Europe was experiencing severe heat waves, with many regions on red alert as temperatures reached record highs particularly in the Mediterranean. There is no doubt now that Ireland's climate is heading on a warmer and wetter trajectory. This will lead to changes in farming practices, the varieties of crops sown and in what regions of the country they are sown. As some farmers go down the organic route, we will see more multi-species crops grown, less farm manure and less chemical fertilisers being used as farmers look to farm in a more environmentally friendly and cost-effective way. Farming in the future will be a completely different landscape as prices of inputs and prices of commodities do battle. There are interesting and challenging times ahead, that is for certain.

On the machinery front, last month's Farm Tractor and Machinery Trade Association (FTMTA) machinery show in Punchestown was a well-attended event with stand numbers and visitors up year on year. The event fell foul of the wonderful July weather on the last day, but organisers and exhibitors were still happy. I spoke to a few farmers and contractors at the event and they were very satisfied with what they saw.

Plans for this year's Ploughing Championships are well underway with trackways and utilities being introduced as we speak on the site in Ratheniska, Co. Laois. This year's event will, it is expected, attract record crowds and stand numbers, and it is advised to book your tickets early online or by contacting the NPA head office.

Claas in Germany has significantly expanded its product recently in the compact tractor segment with the addition of three new series with horsepower ranging from 75-103hp. Along with two new Xerion large-scale tractors with horsepower from 585-653hp to complete the expansion, they have also launched new Claas Disco large-scale mowers. And finally, it has now completed its combine family with an all-new entry level combine ideal for smaller-scale farms. This new Claas Evion range will offer three new five-walker combines that are easy to operate and affordable. Claas feels that this segment is a very important one and the new range is designed to fit in to it. As we went to press news had just circulated that Hanlon Machinery in Co. Louth is to lose the John Deere tractor agency on October 31 after 42 years. I would like to wish Michael Hanlon and his family and staff all the best for the future.

Until next month, farm wisely, farm safely.



REAPING WHAT THEY SHOW

THIS SUMMER'S FARM TRACTOR AND MACHINERY TRADE ASSOCIATION (FTMTA) MACHINERY SHOW RETURNED TO PUNCHESTOWN, BRINGING WITH IT A VAST ARRAY OF MACHINERY FROM THE WORLD'S BEST BRANDS



Andy Miller, Paddy Cantwell and Kevin Kelleher from Valtra tractors.



Pictured at the Mastek stand, was Paul Quinn beside the new Mastek FlexiShoe trailing shoe.



Pictured at the Lemken stand beside the Lemken Solitair DT drill was Paul Creasey.



On the Fendt stand was Sean O'Gorman in front of the new Fendt 728 Vario, the 2023 Tractor of the Year.





John Doyle and Greg Tennyson pictured in front of the new mechanical weeder now on offer from Kverneland.



Ben Rickard pictured at the Cross Agricultural Engineering stand.



Pictured at the Mchale stand in front of the new McHale Fusion 4: Michael Walsh, McHale; Louise Carroll, Tullow; Ciara Kelly, Edenderry; and James Heanue, McHale.



Brian Magee, New Holland and Adam Hogan, Casey Agri pictured with the New Holland T5.100.



Robert Shine, Samco, with the new wheel extender that is now available directly from Samco.





Tom Murphy Professional Agricultural Contractors of Ireland



ONE MAN'S VISION

Even these days, it can be controversial to talk about the Anglo-Irish aristocracy, or even praise one of their number, but the pure grit and determination of one set the foundation of Irish agriculture as we know it. Sir Horace Plunkett, third son of Baron Dunsany of Co. Meath (1854-1932) was one of the great agricultural reformers and a pioneer of agricultural co-operatives. Founder of the Irish Agricultural Organisation Society (IAOS), the forerunner of the Irish Co-operative Organisation Society Limited, which continues to operate today, he also inspired the founding of the Irish Countrywomen's Association. IAOS also laid the foundations for our Department of Agriculture, Food and the Marine. Sir Plunkett was way ahead of his time, not only in relation to agriculture, but in his determination to help alleviate poverty and living conditions in the west and northwest regions of Ireland. During a period in America, he experienced the benefits of farmers coming together to sell their produce. Also having seen the success of consumer cooperatives in Rochdale (a small town in the north of England, now part of Greater Manchester), he set about persuading small farm holders to become self-reliant and support his efforts to replicate what he had seen in America and the Rochdale experiment. His first success was in Doneraile, Co. Cork and the first creamery in Dromcollogher, Co. Limerick, preparing the ground for Avonmore and Kerry Group and other large co-operatives. Today, sadly, in my

opinion, farmers have lost the control of Plunkett's vision set up to give producers a decent price for their produce. By selling their shares in the co-operatives they gave up any influence they might have had on the market price.

CONCERN FOR SMALL FARMERS

Those who read this column in the July issue will be aware of my concerns for small farmers who are being squeezed out of traditional farming and into environmental farming. Do they have the wisdom or courage to look at Plunkett's vision and turn to their neighbouring small farmers and form co-operatives to benefit from economies of scale and be better able to compete with the larger farmer holdings that receive the lion's share of CAP payments. Do we have amongst us a modern-day Horace Plunkett with the vision and charisma to lead a flock of struggling farmers to the promised land?

The good residents of Sixmilebridge in Co. Clare recently erected a statue in honour of former resident Brendan O'Regan, innovator of many industrial and tourism developments, including duty free purchases at Shannon airport (the first of its kind and taken up worldwide), Shannon Free Zone and the International School of Hotel Management to name but a few. Maybe we should look at renaming Agriculture House as Plunkett House? Maybe some of his vision might rub off on the policy makers as they decide the future for small farmers and agricultural contractors.

VISION OF CO-OPERATION

I remember the excitement I felt, as a youngster, on the day when all the neighbours descended on my grandfather's farm on their bicycles, with their scythes over their shoulders, ready to pitch in and cut the hay. The next day, we would all head off to another neighbour to do the same. Agricultural contractors, in many ways, have followed on with this vision of co-operation in the way they provide machinery services to multiple farms in their areas. The have become one-man co-ops, in a sense.

MORE FUNCTIONS FOR LEMKEN FRONT TANKS

The Lemken SprayHub front tank can now be used with the SprayKit application unit and a rear-mounted hoeing machine for band spraying during hoeing. The combination of both implements can help to reduce farmers' workloads by up to 60 per cent. For the upcoming season, the SprayHub and SprayKit have been equipped with new functions like an electrical single-row deactivation via Isobus, which enables row-by-row automatic section control by means of GPS. In addition, there is also a version of the SprayKit for under-root fertilisation with the Azurit precision seed drill. } The SprayHub front tank is equipped with its own controls, agitator and cleaning system. It is Isobus-controlled and can be operated via the 'iQblue spray' software. The SprayHub has a 1,100L or 1,500L tank volume and is fitted with a clean water tank, a hand wash

tank and a filling filter. There is an additional induction nozzle to help break up solid materials. A CTS connection for contactless induction is also available. Depending on the model, the SprayHub can be used for band spraying on up to 28 rows with EC-Weeder hoeing machines. It is possible to have two nozzles per row here so that the herbicide can be sprayed from the side and under the leaves of the crops. Another area of application is for liquid fertilisation with a duck-foot share done in the immediate vicinity of the crops. The SprayKit for Lemken Azurit precision seed drills with up to eight rows can be used for under-root fertilisation with a double disc coulter. The SprayHub front tank can be flexibly combined with a wide range of different machines. The SprayKit can be adjusted to any specific application.









NEW KID ON THE BLOCK

Argo Tractors Ireland, a subsidiary of Argo Tractors, the parent company of Landini and McCormick, has been launched in Ireland. This development 'marks a new phase in Argo Tractors' European strategy' and will be led by Kevin Phelan, country manager for Ireland. Argo Tractors is headquartered in Fabbrico in the

northern Italian province of Reggio Emilia, 60 kilometres northwest of Bologna.

Commenting on the subsidiary, Simeone Morra, business corporate director of Argo Tractors, stated: "This is a further significant confirmation of our global development strategy, which in recent years has seen us consolidate in the European, American and

African markets through the opening of new branches and the entry of new dealers and importers who support our strategy and appreciate our tractor's competitiveness. "Landini and McCormick share a common history, characterised by technological and digital development, efficiency, and environmental sustainability. These themes allow us to continue to be at the forefront of innovation and look forward to the future with an abundance of confidence

and awareness.

"We view the Irish market as strategic, which is why we have decided to create a new subsidiary, headed by an experienced and capable individual, Kevin Phelan, who will report directly to our Fabbrico headquarters." Responding, Kevin said: "I am honoured to be joining the Argo Tractors family.I'm excited about the role our team will play in the continued development of the Landini and McCormick brands, expanding the dealer network, market share, genuine part sale and, primarily, to be closer to Irish agricultural specialists who deserve our attention and dedication. We are currently recruiting a team of professionals in sales, technical service and spare parts to ensure that Irish customers receive the highest level of service."

PJ CALLAN: 50 YEARS IN BUSINESS

Noel Dunne recently visited Louth-based PJ Callan Farm, Garden and Landscape Machinery to mark a milestone of 50 years in business! Here, Noel shares a snapshot of the PJ Callan story, so far.

Paddy Callan is one of the gentlemen of the machinery business. He spent what seems like a lifetime serving on the Farm Tractor and Machinery Trade Association (FTMTA) Council helping and encouraging other businesses in the industry. When Paddy spoke, others listened. Paddy and his wife, Josie set up the company in 1973 and its beginnings were humble – a small shed on the Kells Road in Ardee town. Their first agencies were Teagle cement mixers and yard scrapers followed by Fiskars ploughs, which sold very well. Then, in 1976 they took on the agency for PZ mowers and haybobs, in the early 1980s they took on the Ford tractor agency – later to become New Holland – and they kept this brand until 1999. As the years moved on, Paddy expanded the business and the shop on the Kells Road site, and by the mid '90s, his son John joined the team.

Following a trip to a European show, Paddy picked up the agency for the South Korean tractor brand Kioti, which is very well known in the compact tractor market and has done very well for them over the years. Then came one of their flagship agencies, Einbock, which manufactures mechanical welders and hoes and much more besides. As the industry moves away from chemical usage on farms the Einbock range is now

coming more to the fore for PJ Callan.

The premises again underwent development in 2010 with extension of the workshop and modern store space. John now runs the business with a team of eight staff in one of the best-stocked stores in the country, attracting both agricultural and non-agricultural customers, alike. *Irish Farmers Monthly* wishes the Callan family a very happy business birthday.



FARMHAND – EXCLUSIVE DISTRIBUTOR OF FLEXXAIRE FOR IRELAND AND NI

Farmhand has recently entered into a new partnership with Flexxaire to exclusively distribute reversible fan systems for a range of agricultural, forestry and construction machinery in both Ireland and Northern Ireland. Canadian manufacturer, Flexxaire is a well-established smart airflow system specifically designed for use on tractors, loaders, self-propelled mowers, sprayers and harvesters. It's a complete dieselengine fan system that provides total control of airflow, keeps radiators clean, optimises engine performance, and reduces fuel usage. Some of the world's most wellrespected manufacturers feature Flexxaire reversible fans on their equipment such as Fendt, Cat, JCB and Komatsu. Keeping your radiator free and clear means

less downtime and increased efficiency. Fast reversing of blade pitch makes it possible for the cleaning cycle to quickly clear debris from radiators even in the most extreme conditions. The operator can trigger the fan to blow outwards manually by hitting a button in the cab, or can have it set to happen at time intervals. The cooling fan system can read the engine temperature from the engine control unit (ECU) and knows when and how to adjust the blade pitch at any fan speed to keep your machine cool and to prevent overheated fluids in engine, transmission, and hydraulic systems.

The fan hub is fully sealed to keep dirt and debris out so the Flexxaire reversible fan systems require no maintenance. Unlike other reverse fans, the Flexxaire turns the

opposite way so that the power requirement when it is in reverse mode is actually lower than it is when angled normally. This cuts down on diesel usage as well as any wear on the system. The size of every Flexxaire fan is comparable to that of a conventional fan and comes with everything you need to install it to your tractor/machine. Stephen Scrivener, sales and marketing director at Farmhand explains: "We are delighted to be working with Flexxaire. We installed a fan unit in our demo tractor earlier in the summer and have been impressed with the high quality of the product along with the effective job it does at clearing the tractor grill. Summers seem to be getting hotter and dryer each year, which makes this reverse fan a worth while upgrade to any tractor."

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FARM SAFETY LIVE

CIARAN ROCHE, RISK MANAGER AT FBD, HIGHLIGHTS THE RETURN OF THE 'FARM SAFETY LIVE' DEMONSTRATION ARENA TO THE TULLAMORE SHOW



The 'Farm Safety Live' demonstration arena is making a return to the Tullamore Show & FBD National Livestock Show on Sunday, August 13, 2023.

FBD Insurance is delighted to be continuing our partnership with Farm Relief Services (FRS), the Health and Safety Authority (HSA) and the Tullamore Show committee to bring Farm Safety Live's interactive farm safety demonstrations to the show for the eighth year. With quad bike/all-terrain vehicle (ATV) training set to become mandatory in November 2023, safe use of this important work vehicle will be front and centre at this year's Farm Safety Live demonstrations. In addition to quads, the Farm Safety Live demonstrations will also focus on safe operation of tractors and handling livestock. Practical tips that can be applied on the farm will be discussed and demonstrated by farm safety experts throughout the day. In this article, I am going to look at some key safety points to keep in mind around these topics.

SAFE QUAD OPERATION - KEY STEPS

New quad-bike regulations require that quad-bike operators in all workplaces must have successfully completed a quad bike training course provided by a registered training provider to a QQI Standard or equivalent. Additionally, all operators must wear appropriate head protection while operating a quad or ATV. Visitors to the Farm Safety Live demonstrations will find out all the information they need to know to be compliant with these new regulations.

- ► Quad-bike training is vital.
- Head protection is critically important while operating a quad. Helmets significantly reduce the number and

- severity of serious head injuries.
- Don't overload the quad or trailed implement.
- When towing implements, ensure that you are complying with the manufacturers' specification for weight and size.
- Safety checks and maintenance are key. It is essential that tyre pressures are checked regularly, and servicing should be undertaken in accordance with manufacturers' guidelines.
- ▶ Never carry a passenger on a guad bike.
- ► Remove keys and keep in safe place away from children.

SAFE HANDLING OF LIVESTOCK -KEY STEPS

- ► Always be vigilant and aware of the risks.
- Watch for warning signs of animal aggressiveness, especially in bulls and newly calved cows.
- ► Cull fractious and difficult bulls/cows as soon as possible.
- ► Ensure bulls are fitted with a nose ring and
- ▶ Always use safe-handling facilities.
- Always have an escape route for emergency situations while working with animals.

SAFE TRACTOR OPERATION - KEY STEPS

- Always maintain tractors in good condition, in particular the brakes, lights, mirrors and wipers. Special attention must be given to ensure that all brakes are serviced on tractors. Fatalities have occurred due to brakes not working effectively.
- ► Ensure that all controls are maintained in good working order and clearly marked.
- Make sure all moving parts, including



the PTO shaft, for example, are guarded properly

- ▶ Ensure that a cab or safety frame is fitted.
- ► Only allow competent, experienced people to operate tractors.
- ► Avoid rushing and always be vigilant.
- ► Always park the tractor safely and remove the keys.

ALWAYS BE AWARE OF BLIND SPOTS

Tractors are not a babysitting aid. *The Code of Practice on Preventing Accidents to Children and Young Persons in Agriculture* says that a child must be at least seven years of age before they are allowed to sit in a tractor and only then provided there is a properly fitted passenger seat, with a seat belt, inside a safety cab or frame.

FBD Insurance is proud to partner with FBD Trust to support safe farming practices and, as such, we are proud to be supporting Farm Safety Live and to see the question of farm safety being acknowledged at the Tullamore Show. We urge visitors to the show to visit the Farm Safety Live demonstrations at stand L100. We look forward to seeing you there. Remember, always think farm safety.

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ONTHEGRID

AS BUSINESSES IN THE FOOD AND DRINK SECTOR LOOK FOR WAYS TO REDUCE THEIR ENERGY SPEND, TONY WHITTLE, MANAGING DIRECTOR, ENEL X UK AND IRELAND OUTLINES HOW PARTICIPATING IN FLEXIBILITY PROGRAMMES CAN GENERATE REVENUE WHILE REDUCING EMISSIONS AND SUPPORTING GRID STABILITY

Over the past century, the food and drink sector has produced sufficient food to sustain population growth while reducing its real price to improve affordability. Ireland, as a leading food producer, exports some of the most carbon-intensive food. So, Irish manufacturers face a significant challenge: to continue to export food and drink to a global population that is forecast to reach over 10 billion by the end of the century, while growing sustainably to meet the Irish Government's programme to achieve carbon neutrality by 2050. Achieving sustainable growth will require fundamental changes that address land degradation, biodiversity loss, changing consumer preferences, greenhouse gas (GHG) emissions and, of course, energy use.

PRODUCTION AND CONSUMPTION

Food production and energy consumption are intrinsically linked. The entire supply chain depends on having access to reliable – and increasingly low-carbon – sources of energy. With rising volatility in world-energy markets, growing pressure to decarbonise and questions over security of supply, the imperative to reduce energy use and seek more sustainable sources has taken on new urgency. It is more important than ever that large energy users in the food and bev sector deploy holistic energy strategies and work to reduce energy use and emissions – both in their own processes or facilities, and across their wider supply chain.

ENERGY USE AND EMISSIONS REPORTING

Emissions reporting is crucial for Ireland's food and drink manufacturers if they are to comply with Origin Green, Ireland's national food and drink sustainability programme.

Over 320 food and drink companies across

Ireland are already verified members of Origin Green, representing over 90% of Ireland's food and drink exports. Accurately measuring energy usage and reporting emissions is an increasingly complex task, especially for businesses that operate globally within extensive supply chains. Utility bill management (UBM) systems provide a detailed picture of utility expenses allowing bill checking, comparisons across sites based on number of staff, operating hours and facility size, as well as identifying opportunities to reduce energy consumption and reduce emissions. UBM data provides an effective baseline for further efficiency measures and data to facilitate supply chain disclosures for upstream and downstream partners.

ENGAGING WITH THE GRID -ASSET FLEXIBILITY

Demand side response (DSR) is the mechanism typically used to deliver flexibility to Ireland's grid operators, SEMO and EirGrid, at times of grid stress when there is an imbalance between supply and demand. Businesses can deploy strategies that suit individual operational requirements e.g. change heating or cooling temperatures, switch off machinery or shift to backup systems such as onsite generation or battery assets to support grid stability - typically for only a handful of hours each year. In return, participants in DSR programmes benefit from an additional revenue stream of up to €16,000 per megawatt (MW) per year over the next four years. They also reduce carbon emissions and improve business resilience through regular testing of backup systems. DSR programmes help to prevent local and regional power outages and are also an important tool to facilitate the integration

of higher levels of renewable generation on the system without increasing costs to consumers. Renewable generation by its nature is intermittent, fluctuating with weather conditions, which makes it harder for grid operators to keep supply and demand in balance.

With the cooperation of large energy users participating on the demand side, grid operators can manage fluctuations without the need to call on conventional fossil-fuel generators to increase output or pay for renewable generators to reduce their output.

BECOMING A VIRTUAL POWER PLANT

A virtual power plant (VPP) is a platform that consolidates and coordinates a range of distributed energy resources (DER), including equipment, infrastructure, storage assets, backup generators and so on. The VPP enables aggregation of a host of smaller assets to provide a larger asset with electricity, equivalent to what might be available from a large power generator - but without having to construct the physical asset. There is a host of equipment that businesses have invested in right across the food and drink value chain, which can be utilised in a VPP. For a food processor with cold storage, for example, those assets could include chillers, compressors and any DER that has flexible attributes, which can be harnessed to deliver value to the grid. In agriculture, water pumps can be used. Grocery stores typically have HVAC systems and refrigeration that have thermal mass and are ideal for flexing.

PLANNING FOR ENERGY FLEXIBILITY

Businesses and investors are increasingly informing their funding for new assets not just on how the asset will fulfil its

operational role, but also based on how it might be used as part of a VPP. In other words, flexibility becomes part of the business case for the new equipment. For example, a flour-milling company is looking to develop a new site. They are familiar with the concepts of flexibility and are prepared to change the operating model of that site to deliver real cost advantage. By using energy market signals as one of the key drivers for the design of the site, and by investing in control and automation, they can shift their energy demand to reduce costs and generate revenue by participating in the flexibility market. And this can be done without compromising production schedules. In another scenario, a business operating a cold storage facility could choose to specify higher capacity chillers and compressors, improved temperature control, regulation and insulation. Investing in these incremental features improves the tolerance for

more strategic energy consumption and increases the dispatchable capacity. These measures give the business more versatility to generate additional revenue while improving the stability of the grid.

PROCURE LOW-CARBON ENERGY

Measures that improve efficiency and optimise energy demand using flexibility can only go so far; the next step is to look at sourcing green electricity for power. Effective procurement of renewable contracts is a complex issue and can dramatically reduce emissions. A typical requirement is to make a longterm power purchase agreement (PPA) with an energy company that can guarantee to deliver a supply of clean electricity sufficient to meet an organisation's changing needs. PPAs guarantee supply, signify a long-term commitment to the zero-carbon agenda and help to reliably predict future energy costs.

ENGAGE WITH EXPERTS

As large energy consumers, the food and drink sector has the potential to have a tremendous impact on grid innovation and sustainability. Given the interdependence of the food and drink sector and the energy industry, the evolution of grid flexibility services and the rise of renewable energy, there has never been a better time for food and drink businesses to demonstrate support for the low-carbon agenda and become even better grid citizens. For most food and drink businesses, sustainable energy is not a core business competence. Implementing a comprehensive energy strategy takes knowledge and expertise, a current understanding of energy markets, and the ability to navigate regulatory and compliance issues. Engaging third-party experts to help plan and implement a holistic energy strategy will help to achieve the best outcomes.





MATT O'KEEFFE EDITOR

GLYPHOSATE REPRIEVE

Following an assessment of the impact of glyphosate on the health of humans, animals and the environment, the European Food Safety Authority (EFSA) 'did not identify critical areas of concern outside of the plants targeted for control by the user'.

There were concerns in recent times that glyphosate could be removed from the market entirely, or at least be subjected to such restrictions as to make it impractical for general use on farms.

While the EFSA vote of confidence is welcome, it is not entirely clear that the conclusions reached by the EU's food-safety guardian will see the end to doubts around glyphosate's continuing availability as an agricultural herbicide.

Farmers cannot be fully reassured that what has been a vital component of grassland and tillage-crop management will continue to be available for use. The EFSA's recent verdict comes after last year's findings from the European Chemical Agency that glyphosate poses no threat to human health. However, the EFSA assessment also concluded that some data gaps are reported in its conclusions – these are issues that could not be finalised, or are outstanding issues – for the European Commission and Member

States to consider in the next stage of the renewal of approval process.

IMPORTANCE

Glyphosate products have been used by Irish farmers since the product was brought to market by (the late) Monsanto in the 1970s. Its use is even more important today with the increasing popularity of min-till practices to prepare ground for grain and other crops. On grassland, the renewal of grass swards and the introduction of multispecies swards depends greatly on efficient eradication of existing grass and weeds. Because the EU continues to ban genetically modified (GM) crops, there is no potential for Irish tillage farmers to grow glyphosate-resistant grain crops. Most of the maize corn, soya and cotton crops across the world allow for glyphosate to be sprayed, removing weeds but not affecting the roundup-resistant plants. There is an element of hypocrisy in the EU's ban on the production of GM crops given the fact that thousands of tonnes of GM grains and cotton products are imported into the EU annually. But it doesn't end there. Banning peat production in Ireland while allowing it to be imported from other peatlands across the planet is inherently hypocritical. Campaigning to reduce Irish



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milk and beef production which have relatively low carbon footprints resulting in more milk and beef being produced in other countries with far higher carbon emissions and lower environmental standards, is also hypocritical. But let's not blame the regulators or politicians entirely for the hypocrisy that is rampant in the world. It spreads beyond those circles, too. Ultimately most people 'value value above values'. Value is too often equated with price, which is not a true definition of value. The adage still holds: some people know the cost of everything and the value of nothing. We expect the highest food safety and quality standards, and that's the way it should be. However, we don't want to pay more for the inherent additional cost of producing food to those exacting standards. We rarely wonder how a chicken can be so cheap or how a one kilogramme bag of carrots on a supermarket shelf costs one third of the price of a 180g bar of chocolate. Why? Because we value low cost over high values. That's hypocrisy too.

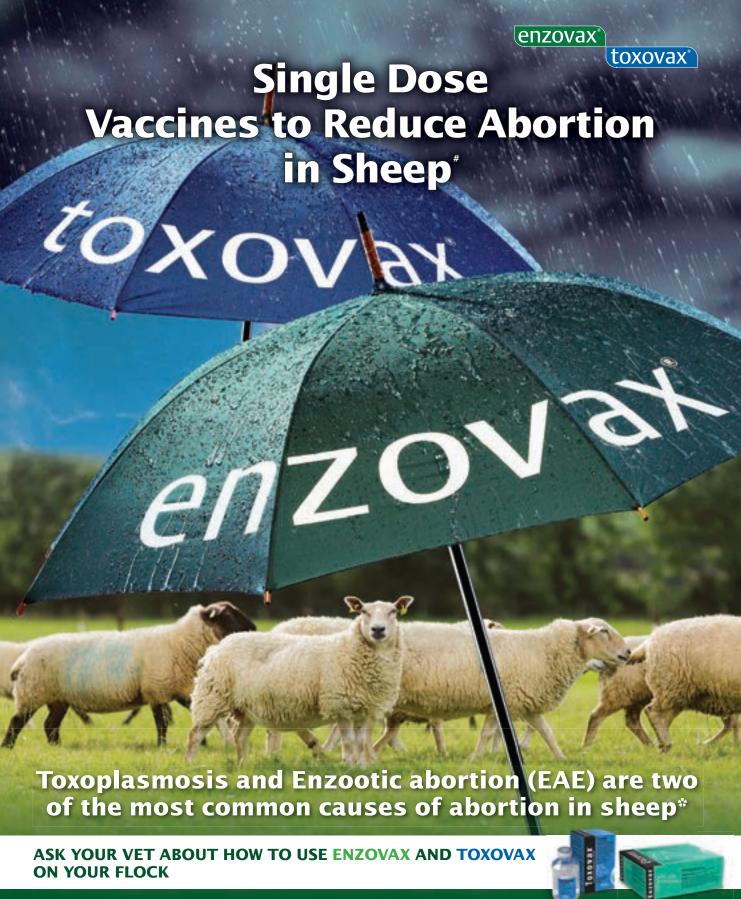


Never ignore the warning signs

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Use medicines responsibly

Legal categories ROI: POM NI: POM-V

Withdrawal periods: Toxovax - 42 days for meat and offal. Enzovax - 7 days for meat and offal. *Booster vaccinations are required occasionally. *Anon (2021) DAFM/AFBI All-island Animal Disease Surveillance Report 2020.

Further information is available from your veterinary practitioner, the product SPC or MSD Animal Health, Red Oak North, South County Business Park, Leopardstown, Dublin 18, Ireland Tel: +353 (0)1 297 0220 E-Mail: vet-support.ie@msd.com

Web: www.msd-animal-health.ie www.bovilis.ie/sheep/abortion



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