



FARMERS
MONTHLY

FMM



@farmersmonthly

/irishfarmersmonthly

farmersmonthly.com

OCTOBER 2021



Herd Health Management:

Best practice on farm

PROFESSOR GERRY BOYLE REFLECTS ON
HIS ROLE AT TEAGASC AS HE STEPS DOWN

ICMSA'S DENIS DRENNAN ADDRESSES
KEY ISSUES IN THE NITRATES REVIEW

M-Hale

SILAGE FEEDER &
STRAW BLOWER
RANGE

CALL TODAY

Finance*
Available

Up to
40%
Straw Savings**

* Offer Available in Ireland Only.
**Based on User Experience. For Full Details Contact Mchale.

Designed to Blow Straw & Feed Wet Silage & Haylage

AS STANDARD



900 Degree
Swivel Chute

AS STANDARD



Independent Rotor with
Hydraulic Activation

AS STANDARD



Control Console
with Joystick Chute Control

- + Self Loading Tailgate
- + Joystick Chute Control
- + Twin Speed Gearbox for Different Crops
- + External Loading Controls
- + 56 Blade Feed Rotor

2.2m³



C430

3.65m³



C460

4.65m³



C470

6.85m³



C490

CALL TODAY

For The Best Deals Contact - James Heanue - 087 247 2399

M-Hale Superior Forage Solutions

**Based On User Experience    www.mchale.net



Where is the logic?

Political momentum is building to introduce a ceiling on the number of cows we can have on our farms in the coming years. Less than six years after the abolition of milk quotas we are heading towards another restricted production system, whether that is in suckler beef or milk production. We can have all the placatory language available to persuade farmers that there will

be opportunities to add value within restricted herd sizes, such as higher milk solids or premium priced beef. Those options in no way change the fact that restrictions on cow numbers will severely hamper productivity both on existing livestock farms and for potential new entrants to dairy or suckler production. The illogicality of capping cow numbers is clear under a range of headings. Our stocking rates, on average, are amongst the lowest in western Europe. Our outdoor grazing production systems in both beef and dairy carry both animal welfare and environmental benefits compared to any confined system of livestock production. The well-worn argument about carbon leakage clearly carries no weight with the political decision makers who want a quick, blunt fix to the perceived difficulties of meeting our climate change mitigation targets. This stance flies in the face of science and scientific advancements which are already offering incremental improvements in reducing carbon emissions and promise much more over the coming decade.

We need only look at our confused and hypocritical approach towards peat production to get a perfect example of how carbon leakage works in practice. Thousands of tonnes of peat have been imported in recent weeks while we have closed down our native production facilities. On a global basis that solves nothing in terms of reducing carbon emissions. It simply shifts the responsibility from our country to another. The same will be true of dairy and beef production. Putting a ceiling on livestock production in Ireland where welfare standards are high and where our carbon footprint per kilo of beef and dairy are very low by international standards, merely shifts production to a country or region with lower standards on both of those criteria. We are told that dairy and beef production and consumption must be reduced worldwide. Whenever the consumer makes that decision, there will be some rationale for reducing cow numbers. In the meantime, production should be encouraged in those countries that have the most carbon-efficient qualifications. Clearly, Ireland stands out in that regard. Putting carts before horses is nothing new and recent decisions across a variety of climate change mitigation proposals and decisions lend credence to the view that nothing has been learnt from past experiences. The approach to running down fossil fuel-based energy production pre-emptively is a prime example. The peat burning stations are closed, yet we will burn more imported coal in Moneypoint than ever this winter to keep the lights on. Our reliance on gas, another fossil fuel lest anyone forgets that fact, will continue indefinitely. It is apparently better to import it from across the pond or further afield rather than encourage native exploration and exploitation. An over-reliance on wind energy renders us particularly vulnerable to the vagaries of importing gas at a time when that commodity is becoming increasingly expensive and its availability subject to political whims as far away as Russia.

Back to the capping of cow numbers. There is great interest in quoting the science of climate change. There is not nearly enough acknowledgement of the science of climate change mitigation strategies, short of the crude mechanism of halting an industry in its tracks, half a decade after it emerged from an equally crude quota imposition.



- 4 Upfront
- 14 Business News
- 16 Interview: Professor Gerry Boyle
- 18 Interview: Denis Drennan
- 20 Feature: Know Your Carbon Emissions
- 48 Management Hints
- 54 Machinery
- 66 Rural Life
- 68 Farm Safety
- 69 ICMSA
- 70 Very End

Focus: Herd Health Focus

- 29 Welfare benchmarks
- 32 The once-a-day option
- 34 Effective dry cow management
- 41 Getting it right for weaning this autumn
- 43 The right time - Charles Chavasse

Editor: Matt O'Keeffe Editorial Director: Miriam Atkins Sheep Editor: Gerry Murphy Machinery: Noel Dunne Motoring: Bernard Potter

Production: Ciaran Brougham Martin Whelan Barry Sheehan Niall O'Brien Advertising Manager: John Sheehan

Commercial and Advertising Manager: Anna Douglas Accounts: Tricia Murtagh Administration & Subscriptions: Sue Nolan

Chief Executive: Rebecca Markey Printing: W&G Baird Publishers: IFP Media Subscription: €40 per annum

Irish Farmers Monthly, Castlecourt, Glenageary, Co. Dublin.

Tel: +353 1 7096900 . e-mail: miriamatkins@ifpmedia.com . www.irishfarmersmonthly.com

Copyright IFP Media 2021. No part of this publication may be reproduced in any material form without the express written permission of the publishers.



FRS Network success story

Communications and PR veteran Michael Miley was on hand at the Croke Park conference centre recently to guide retiring FRS Networks CEO Peter Byrne through a conversation outlining the forty-year development of the €100 million revenue Cooperative. The occasion was the launch of a book on the history of the organisation compiled by Peter himself. As Peter steps down next January from his role he can be well pleased with his legacy which saw him build a national organisation from a standing start to the diverse human resource and services business it is today. Macra initially developed the idea of establishing a national coordinating body for the fledgling Farm Relief Groups then being established on an ad hoc basis around the country. Using a Dutch model, Macra CEO's Peadar and John Murphy, along with national presidents Sean Eustace, Seumas O'Brien and Seamus Hayes, among others, were pivotal in moving the concept from discussion topic to practical reality. It is fair to state that the initial appointment of Peter Byrne as Development Officer for Relief Milking Groups, was inspired. Working at the start from his own home, Peter, in his eventual role as FRS CEO, oversaw the development of FRS Network to its position today as an invaluable and essential part of the economic and social structure of rural Ireland.



A-la-carte coupling

The somewhat a-la-carte national approach to the new CAP is taking EU states in different directions. The Germans are set to introduce a coupled payment for suckler cows and sheep, provided they are grazed animals. While a coupled payment proposal was not well received when suggested by Derek Deane and Co. it has not gone away. If Deane could only manage to stick to the subject matter and desist from taking pot-shots at the IFA hierarchy, past and present, he might get better traction for a coupled payment dedicated to suckler cows and financed from CAP funds. As it is, the current IFA Beef Committee Chairman Brendan Golden seems gung-ho in favour of a coupling type payment for sucklers, though preferring funding to come from the national exchequer. The cost is significant, with the IFA Beef Chair advocating a payment of €300 per cow. With around 900,000 suckler cows at last count, the Government would have to cough up an impressive €270 million annually to finance the scheme. Brendan insists that Government policy needs to be focused on bringing suckler farming to viability. If there is a flaw in the IFA representative's argument, apart from the cost, it is around the definition of viability. For its merits, and it has many, suckling, on average, is not a viable proposition based on any production cost criteria. It does deliver valuable contributions to the Irish economy, Irish exports and to rural Ireland. Further subsidisation, however, does not indicate a move towards viability. The top 15 per cent of suckler farms reach the threshold of one calf per cow per year. Overall, calving interval improved this year, moving from 396 days in 2020 to 395 days in 2021. One quarter of suckler heifers calve under 24 months, another critical statistic for performance and profitability. ICBF figures suggest that the national suckler herd is making marginal improvements, at best, in achieving Key Performance Indicators.

HEALTHIER COWS PREGNANT SOONER!



MooMonitor+))

CALL US
TODAY
FOR A
QUOTE



"Previously, I would walk around the sheds checking up on cows, the MooMonitor+ now does it for me. It detects cows in heat, picks up on sick cows and I can check the app to see if she is improving. The app allows me to keep a close eye, even when I am not on the farm."

-Daniel & Odhran Callaghan



Experience the difference

Call 1890-500-24-7

www.dairymaster.com

DISTRIBUTORS NATIONWIDE 100% IRISH

Milking - Feeding - Cooling - Manure Scrapers - Health & Fertility Monitoring

UNTOUCHABLE

NEW

DORAMAX[®] protects against reinfection for weeks after use

NO OTHER POUR-ON OFFERS LONGER PROTECTION



Lice
5-7 weeks



Stomach Worm
5 weeks



Lungworm
6 weeks



★ **Less treatments and handling required**
(8-10 week dosing interval)



FARM HEALTH FIRST By **chanella PHARMA**

www.farmhealthfirst.com



ASK YOUR ANIMAL HEALTH SUPPLIER ABOUT DORAMAX[®] AND OUR NEW APPLICATORS

Use medicines responsibly. Doramax 5mg/ml Pour-on solution for cattle. Contains Doramectin. Target species: Cattle. Refer to product packaging and leaflets for full indications, side effects, precautions, warnings and contra-indications. Further information can be found on the data sheet, SPC or at www.farmhealthfirst.com. Distributed by: Chanella Pharmaceuticals Manufacturing Ltd, Loughrea, Co. Galway, Ireland. E: POH.VYA.109871366/001 Copyright © Chanella 2021 All rights reserved.

WE'RE HANDING DOWN A 15%* SAVING TO FARMING FAMILIES.

Get a 15% discount on a new policy when you or a family member have an existing policy with FBD.

Visit fbd.ie or call 01 7617 617 to find out more.

*15% multisaver discount applies to new farm, tractor, special works vehicle, agricultural motor or growing trees policies when an existing policy is in force. Customer must be a farmer, 5 years claims free (except glass/windscreen claims).



SUPPORT.

IT'S WHAT WE DO.



FBD
INSURANCE

Terms and conditions and normal underwriting criteria apply.

FBD Insurance Group Ltd trading as FBD Insurance is regulated by the Central Bank of Ireland. Farm insurance is underwritten by FBD Insurance plc.

Carbon commentary

The recent launch of a survey to measure baseline soil carbon levels has raised a few eyebrows. Not for the initiative itself, which has great merit, but for some of the accompanying commentary. The €10 million pilot Soil Sampling and Analysis Programme, along with the recently established National Soil Carbon Observatory, should provide valuable data around the carbon storage capacity and potential of our soils and the differences in sequestration ability depending on individual soil types and land and crop management practices. In welcoming the programme Minister of State Pippa Hackett stated that our soils are currently net emitters of carbon. She may well be correct, though, since this is the first comprehensive analysis of our soil carbon status with the stated aim of establishing a national baseline of soil data across Irish farms, her statement would seem a little premature. Minister Hackett presumably bases her comments on the Tier 1 methodologies contained in the 2006 IPCC (Intergovernmental Panel on Climate Change) guidelines to estimate carbon stock changes in living biomass, dead organic matter/litter and soils. The 2013 Wetland Supplement to the 2006 IPCC guidelines is used to derive estimates of emissions associated with the drainage of grasslands on organic soils. Overall, according to the IPCC

estimates, Irish grasslands are a source of emissions. The overriding effect of emissions from the drainage of grasslands on organic soils is estimated to more than compensate for potential carbon sinks associated with grasslands on mineral

soils. Of the 4.15 million ha of Irish grassland, approximately 330,000 ha are on organic soils. That suggests that just over ten percent of Irish soils have an inordinate impact on our grassland carbon retention/emission ratio. In the coming

years data from the SSA Programme and the NSC Observatory should be able to definitively establish the true value of Irish grassland as a carbon sequester, instead of relying on the estimates of the IPCC.

GET YOUR CATTLE READY TO PERFORM!

Ask your vet about injectable trace mineral supplementation at high demand periods:

- Pre-Breeding
- Weaning
- Transportation
- Pre-Calving
- Vaccination

Shaping the future of animal health **Virbac**

NDC &
Kerrygold

Quality
Milk
Awards



Congratulations

to all our 2021 finalists and overall winners,

The McCarthy Family, Limerick
Kerry Agribusiness

#Madeforthis

qualitymilkawards.ie



Essential reading

This month's Dairy Management Hints compiled by Matt Ryan are essential reading for anyone wanting to counteract the black propaganda being circulated about Irish dairy. Matt gleaned some extremely positive messages on his tour of the Moorepark Open Day stands. Here is a taste of what you can read in Matt's Hints on page 48.

We have a carbon footprint of 0.99 kgs CO₂ per kg MS (milk solids) compared with the world average of 2.4. In the last 12 years Ireland has produced an extra 3.358 billion litres of milk – all of it sold on the world market. If that was produced by the average cow in the world, then CO₂ in the atmosphere would have increased by 4.7 million tons of CO₂. Ireland's GHG (greenhouse gas) in 2018 were the same as that of 1998, with 2019 declining by 4 per cent. In 2020 average cattle numbers were 800,000 below the 1998 figure.

Dairy cow numbers are more or less the same now as they were in 1984. The value of dairy exports in 2020 was €5.17 billion, accounting for 40 per cent of total food and drink exports, up from €2.29 in 2010 (29 per cent increase). Of every €100 of dairy exported €90 is spent locally while of every €100 of multi-national exports only €10 is spent in Ireland. Irish dairy supports 60,000 jobs with every 138,000 litres a farmer produces on his farm supporting one person in a job. Emission intensity of milk production declined between 2012-2019. Calf mortality up to 28 days of age is 3.6 per cent compared with 6 per cent and 7.8 per cent for UK and Netherlands, respectively.

Irish dairy uses 6 litres water/kg MS while Australia uses 108 litres and America uses 125 litres. Dairy farms in Ireland have a total land area of 7.5 per cent devoted to natural or semi-natural habitats. The ruminant sector produces more edible protein than if there was no ruminant sector. Dairying has the best land-use ratio of 0.47. This means that for every 1 kg of human edible protein produced by the dairy sector, only 0.47 kg of crop sourced human edible protein could be produced from the land used. The average of the ruminant sector in Ireland is 0.69. The figure for Irish dairy-beef is 1.08, while dairy-beef in America is 3.4!



Using silage analysis to guide feeding strategy

Maeve Regan, Head of Ruminant Nutrition

As the end of the grazing period begins to loom ever closer, it is important to know the quantity and quality of silage available in order to make informed decisions on your winter feeding strategy.

Winter feed plans will ultimately depend on the animal type, whereby youngstock/dry cows will be stored/maintained over the winter (target average daily gain of 0.5 - 0.7 kg/head/day youngstock), or cashflow animals will be targeted to achieve optimum performance, be it winter milk herds or finishing cattle.

Expected performance, coupled with current rising feed costs, re-emphasise just how important harvesting sufficient levels of high-quality home-grown forages can be, and that careful planning must be completed at farm level.

Silage Analysis – The Decision Maker

Silage analysis results will often signal to us the level of fermentation that occurred which can be used to predict the stability of the pit and therefore dictate feed-out management. However, the importance of completing forage analysis centres around allowing us to make informed decisions regarding feed plans dependant on stock type.

For example, weanlings/replacement heifers offered national average 67% DMD well-preserved grass silage - underweight heifers will typically require 1.5-2 kg of concentrates/head/day. This can be reduced by 1 kg/day (0.5-1 kg/head/day) if silage digestibility is 5% higher or where heifers are at or above target weight. For dry cows or winter milkers, silage analysis will also dictate feed plans (see tables below).

Dry Cow Feeding Guidelines:

Silage DMD%	BCS 2.5 12-14 weeks dry	BCS 2.75 8-10 weeks dry	BCS > 3.0 < 8 weeks dry
>72 %	Silage + 1 kg	Silage ad lib	Silage restricted/diluted
68-72 %	Silage + 2 kg	Silage + 1 kg	Silage ad lib
64-68 %	Silage + 3 kg	Silage + 2 kg	Silage + 1 kg

Winter Milk Herd Feeding Guidelines:

DMD %	75 % DMD	70 % DMD	65 % DMD
Concentrate (kg) required for 27 litres	6.5	7.5	8.5
Concentrate (kg) required for 32 litres	8.5	9.5	10.5





Teagasc Podcasts

Teagasc offer a full suite of podcasts covering the latest news, information and advice to improve your farm performance. Subscribe to hear the latest tips, advice and leading research for farmers!

How do I listen?

Teagasc Podcasts are available on:



iPhone Android Spotify

Open the camera on your phone & scan the QR code to listen!



Sacred cows

Paddy Browne brought wrath on his head when he made some critical comments about the suckler sector as he headed out the door from Teagasc a few years ago. Despite noting Paddy's suckler tribulations in a pre-retirement interview last month, Gerry Boyle seems to have succumbed to the same vocal liberation of imminent retirement. In a Q&A session at the Dublin Economics Workshop just two weeks later Gerry clearly enunciated his preference for dairy calf to beef production as a more viable alternative to suckling and indicated that Teagasc policy, based on research, favours a move away from suckler production. In previous commentary, the former economist has highlighted the fact that there are areas of the country, soil types and fractured farms where suckler farming is the only logical animal production enterprise available, apart from sheep. That didn't stop a wave of criticism from suckler farmer representatives. The IFA and ICSA were particularly forthright in their condemnation of the retiring Teagasc's director's remarks with IFA describing Professor Boyle's clearly well thought out words as showing an appalling lack of respect for the suckler sector. During his 14 years as Teagasc Director, a lack of respect for individuals, organisations or farm sectors is not something we have ever associated with Gerry Boyle. We wish him well in his retirement and trust his clear-headed approach to the challenges facing Irish agriculture will continue to be well utilised in the years ahead.

FBD competition winner



Fiona Geoghegan, winner of the FBD Farm Support Pack competition, is pictured receiving her prize at the Cavan FBD branch from branch manager Conor McGovern.

Visit hsa.ie/farmsafety

When you get hurt,
the farm feels it.

 A photograph of a man in a wheelchair, looking down. The background is a rural landscape with a 'FARM FOR SALE' sign. The man's face is partially obscured by a semi-transparent image of a farm landscape.

HSA
HEALTH AND SAFETY
AUTHORITY

An Roinn Talmhaíochta,
Bia agus Mara
Department of Agriculture,
Food and the Marine



We are early risers,
we are tax advisors,
we are tillers, planters,
bakers, makers, we are
financial planners, we
are wet weather scanners,
we are accountants, farmers,
foresters and forecasters.
We are ifac.

Find out how our National Team of Advisors can help your farm business to plan for the future.

Call us on 1800 33 44 22 or visit www.ifac.ie

Larry Sheedy – RIP



Recently I received the sad news that my good friend and mentor Larry Sheedy had passed away after a short illness.

I first had the pleasure of meeting Larry in 1977, after he had set up the PR agency Farmlink – the first specialist agricultural PR agency to be established in Ireland.

Larry had worked for many years with the Irish Farmers Journal and was Deputy Editor. He worked alongside journalistic stalwarts Michael Dillon and Paddy O’Keeffe and they all became lifelong friends.

Larry was also a founding member of the Guild of Agricultural Journalist of Ireland, which was set up in 1961. This year, the Guild celebrated its 60th birthday and Larry made a major contribution to a celebratory video, which was launched in June. He spoke about the early years of agricultural journalism in Ireland with great enthusiasm and discussed how the Guild was set up.

Larry travelled the world and, when the opportunity presented itself, via former Irish Farmers Journal editor Paddy O’Keeffe, the young Mr. Sheedy took the bull by the horns and joined the executive committee of the International Federation of Agricultural journalists (IFAJ). He represented Ireland at delegate meetings and in 1981 he became the first Irish man to be elected World President. This was an incredible honour for such a small country.

Larry was a very resourceful man and created strong partnerships for the IFAJ, which others were able to build on. At that time the IFAJ had 8 member countries, totalling 100 journalists: today it has 70 member countries across the globe and 5,500 members. Larry was an early pioneer, and helped put the structure in place to create such a successful international organisation. He has left his mark both nationally and on the world stage.

At the same time, he and his wife Annette set up Sheedy Communications. By this stage, Larry had built a reputation for himself as one of the best PR professionals in Ireland. His client list was a ‘who’s who’ of Irish agri-business, entertaining the media was a major priority and he was adept at forging key relationships. He was extremely personable and enjoyed the social aspect of his work.

In the early eighties, I developed a close friendship with Larry and he took me under his wing. He always had time to discuss business or family and he helped me understand the agricultural industry. He nominated me to join the Guild of Agricultural Journalist of Ireland in 1977 and he encouraged me to get involved with the IFAJ, which resulted in me becoming the second Irish man to be elected World President in 2004.

He loved radio and in the ‘60s he had a promising broadcasting career with RTÉ on both radio and TV. Later, in the ‘90s, he was a regular contributor to Sunday Miscellany on RTÉ Radio 1. He produced a travel book, regaling his trips both during his time as IFAJ President and on his family vacations. He also wrote: The Law of the Land and Milestones and Memories: The Life and Times of Joseph Bruton. In his business life, he helped shape many careers of people who cut their teeth in the PR business under Larry.

A great storyteller and singer (like all of us, he had his party piece), he loved entertaining his friends, in the early years in his home in Dunboyne and, later, when he moved to Ballsbridge in Dublin.

My wife, Mai, and I spent many wonderful evenings in the company of Larry and Annette. For years, we used to go to lunch on Christmas Eve with the Sheedys and our old friends Betty and Steve Treacy: sadly, Betty and Steve have passed on. They were great days! Over the past few years, Mai and I brought Larry and Annette to the RDS members club. My abiding memory of those lunches is that, despite his advancing years, Larry still loved his food and his wine and his memory was still as sharp as ever when he recalled guild events over the years that we both attended. I will miss his dry humour and his friendship.

A true family man, he was so proud of all his children, and grandchildren. Larry is survived by his wife Annette, and his children Finn, Niall, Tina, Orla and grandchildren Laurence, Carla, Jonathan, Daniel, Áine, Johnny, Daire, Aislinn and great grandchildren Annie, Conn and Fiadh Rós.

May he Rest in Peace,
David Markey

Agri Aware launch Dig In! webinar

Agri Aware is bringing their Dig In! educational resource to life with added modules and new series of in classroom webinars.

Dig In! is a primary school curriculum-linked resource to help children learn about agriculture, life on the farm and in the countryside.

The new 'Fun Fridays' webinar series will run from October to December with ten episodes covering a range of topics including dairy, the environment, horses, farm safety and pigs.

Dig In! is available to all schools through the Agri Aware website www.agriaware.ie and schools can also sign up for the Fun Fridays webinar series there.

Welcoming the opportunity to re-launch Dig In! Minister of State at the Department of Agriculture Martin Heydon said: "I want to commend Agri Aware for its tireless work in ensuring all of our primary school students have the opportunity to learn about life on Irish farms. Some will go on to be farmers in the future, producing food for all of us and protecting the environment, while others may work in our vibrant agri-food sector. All of them will be consumers of Irish produce. Dig In! is therefore an important initiative that can help tie all these different elements together. As



Alan Jagoe, Agri Aware Chairman, Minister Martin Heydon, Aimee Gray, Agri Aware Education Officer & Marcus O'Halloran, Agri Aware Executive Director.

Minister of State with special responsibility for Farm Safety I particularly welcome the focus on keeping children safe on farms. Creating a culture of safety starts at a young age and must go hand in hand with everything we do on our farms."

Alan Jagoe, Chairman of Agri Aware said: "We are delighted to launch Dig In! once again this year. The new digital element is a reflection on how education and delivery of education has changed since start of the pandemic. Agriculture has remained a crucial and constant supply of high-quality food and produce and those are all highlighted in our Dig In! resources for Primary Schools. Dig In! has been so important in maintaining a connection between young consumers and where their food comes from."

Call our farm insurance experts today.

WILLIE PHELAN
086 074 6780
EAST MUNSTER



JP AHERNE
086 411 3797
MUNSTER



MIKE O'DONOGHUE
086 831 2441
WEST MUNSTER



BILL MEANEY
086 143 6343
MIDLANDS/WEST



PAT MAHER
086 047 5422
MIDLANDS/EAST



TOM BYRNE
086 047 7234
NORTH WEST



JOE NOLAN
086 022 0519
SOUTH EAST



ZURICH

We've always got your back.

Last year we paid 99%* of claims, so you can feel confident that we'll be here when you need us.



Farm Insurance

Zurich Insurance plc is regulated by the Central Bank of Ireland.

*From January to December 2020, on average we paid out on 99% of motor, home, van, farm and windscreen insurance claims.

Origin Green Members Report Emission and Carbon Footprint Reductions



Kevin Cahill,
Managing Director
of ABP Ireland,
with the company's
Origin Green Gold
Membership Award

Origin Green members are continuing to make progress across a range of sustainability initiatives, according to Origin Green's Progress Update Report 2021 launched recently by the Minister of Agriculture, Food and the Marine, Charlie McConalogue. At the virtual event, Bord Bia also announced that 50 Irish food, drink and horticulture companies had achieved gold membership status based on exemplary performance in reaching their sustainability targets. This marks a 100 per cent increase on last year, reflecting raised ambition in the programme and sustainability from industry members. Since its inception in 2012, Origin Green has grown to collaborate with 55,000 farms and over 300 leading Irish food and drink companies to prove and improve their sustainability practices to meet the evolving needs of global customers and consumers.

The Progress Update Report presents an overview of the latest developments within the Origin Green programme and highlights the significant and ongoing efforts of its members to impact positively on greener ways of farming and the adoption of more sustainable food production methods. Speaking at the event, Tara McCarthy CEO of Bord Bia, said: "Bord Bia is delighted to share the important results and industry leading achievements outlined in the Origin Green Progress Update Report 2021, as proof and progress continue to be trademarks of our world-class, national sustainability programme. This evidence of environmental improvements compiled from our members, and verified by international auditors Mabbett, highlights that the programme's vast scale across the Irish food and drink industry are what makes Origin Green unique and effective. Our recent Global Sustainability Survey of over 11,000 consumers and 125 trade buyers across 13 key markets demonstrated, not only the increasing importance of sustainability, but also the growing importance of evidence and data to back up sustainability. Our members are responding to this, by setting and achieving meaningful sustainability goals in their businesses. Origin Green will continue to evolve and adapt to best support our members to drive positive and lasting change across the supply chain."

InTouch

Extending your autumn gains

Cathal Bohane, Head of InTouch Nutrition

The arrival of autumn brings with it shorter days and colder nights. Fewer sunshine hours deplete grass quality and feeding value, contrary to it looking fantastic. As growth rate reduces and fertiliser season ends, the focus now is to extend the rotation to get as much time, as possible, at grass. This is all based on ground conditions. Using strategic supplementation over the next few weeks can help us achieve this, as well as maintain yield and solids production. Now is the time to look at body condition score (BCS), as cows should be consuming more energy than they need, making it an ideal opportunity to get cows to a BCS of 3–3.25 for drying off. Cows can utilise energy and feed better during lactation to replenish this BCS rather than when they are dry. The quantity of concentrate that we use from now on will depend on milk yield, and there is a level where we start to introduce silage. Using 0.1–0.15 kg of concentrate per litre of milk on grass full-time can be a guide for this. Beyond this, we need to introduce silage to the diet. Otherwise, concentrate supplementation will get expensive, as we are using it as dry matter intake. Introducing minerals is also beneficial to begin alleviating any deficiency created during the year. Waiting to feed the best dry cow minerals can sometimes be too late to avoid this.

Bulls for feeding will also be entering the houses now and, for other dry cattle, this will depend on grass availability and 'underfoot' conditions in the fields. For the same reasons expanded on earlier, bulls will struggle to thrive from now on at grass. Reviewing how the finishing period went last year is a good start to bringing about improvements this year. A lot will have changed as there are many potential differences — cattle, weather, feed, prices, thrive at grass, housing weight. All of this should lead to a plan for the coming season. The main areas you should focus on are:

- Health/vaccination plan.
- Nutrition — analyse your feed and formulate your diet. Feed prices will be more expensive this year — look at alternatives and get advice from a nutritionist. Do not forget a good mineral.
- Housing (feed space, pen numbers, ventilation).
- Water availability, positioning and hygiene
- Rumen health — avoid acidosis through a balanced diet delivered consistently. The use of the correct additives will alleviate issues and drive performance when the diet is powerful.
- Feed hygiene — avoid moulds and heating.

Autumn's arrival brings with it an element of planning to continue the gains we have achieved over the last number of months and trying to keep the winter as short as possible. This does not happen by chance and needs to be planned out to achieve maximum results.

A Gerry Boyle

retrospective

Professor Gerry Boyle stepped down as Teagasc Director on the first of October. After 14 years at the head of the organisation, Gerry reflected on his role and the current state of the organisation in a recent conversation with Matt O'Keeffe.



Even as he anticipated his departure, Gerry was noting important events in the Teagasc calendar: “Our Dairy Open days at Moorepark were very important, especially in disseminating our latest research findings and in advising milk producers on managing the economic and environmental sustainability of their enterprises. Our recently opened National Food Innovation Hub is also a very important development for Teagasc.”

A time of change

The Tipperary man said he was looking forward to another phase in his working life: “There have been so many changes in Irish agriculture over the past fourteen years. A stand-out event for me was the abolition of milk quotas. I have had a huge interest in the role and potential of Irish dairy farming throughout my career. In the years leading up to the abolition, the anticipation of growth and then the actual expansion in milk production were exciting and positive periods. We now have to deal with some of the impacts

of that development in terms of environmental challenges. Nevertheless, it has been a phenomenal achievement for the entire agricultural industry and I believe Teagasc played a huge role in that development. Meanwhile, the beef sector continues to face challenges, though in recent times prices have improved, thankfully. I can recollect a crisis in the sector when I was still a young student in the 1970's. That crisis has been replicated over the years. So, the beef industry and its ongoing travails does stand out in my reminisces of my experiences of Irish agriculture. The fodder crisis we faced almost ten years ago, along with recent droughts are perhaps portents of the future for Irish agriculture in relation to the potential impacts of climate change."

An ideas facilitator

Within Teagasc, there have been major developments over Gerry Boyle's tenure as Director: "My role was to facilitate the good ideas of others. We drove on our research programmes. I'm very proud of the leadership we have shown in that regard. Our team has set ambitious and achievable targets across a range of topics. We are right up there with the best in Europe in terms of research performance. Our advisory service is also recognised as extraordinary in European terms and one of the main reasons is because it has remained as an objective and independent public service, during a period when privatisation across the globe was in vogue. Our colleges went through a huge expansion in numbers over the past decade while at the same time Teagasc has fully facilitated part-time education for our young agriculturalists. This reflects well on my Teagasc colleagues at a time, in the aftermath of the recession, when employment/promotion moratoriums were in place. The spirit that embodies the organisation came through during that period."

Influencers

People who greatly impressed Gerry Boyle include Dr. Tom Walsh and TK Whittaker: "You couldn't but be impressed by them. They left a huge legacy across Irish society and the Irish economy. I often look back to TK Whittaker's contribution to Irish economic expansion. It was primarily about agriculture, in reality. There were a range of other mentors and influencers in my career. The late Bob O'Connor, for instance, encouraged my academic progress. Roy Geary was another important influencer. I have worked with a variety of people who were supportive, including members and chairpersons of the various Teagasc Authorities, the Department of Agriculture and other State Agencies. Without positive support and cooperation for the common good, nothing is possible."

Reflections

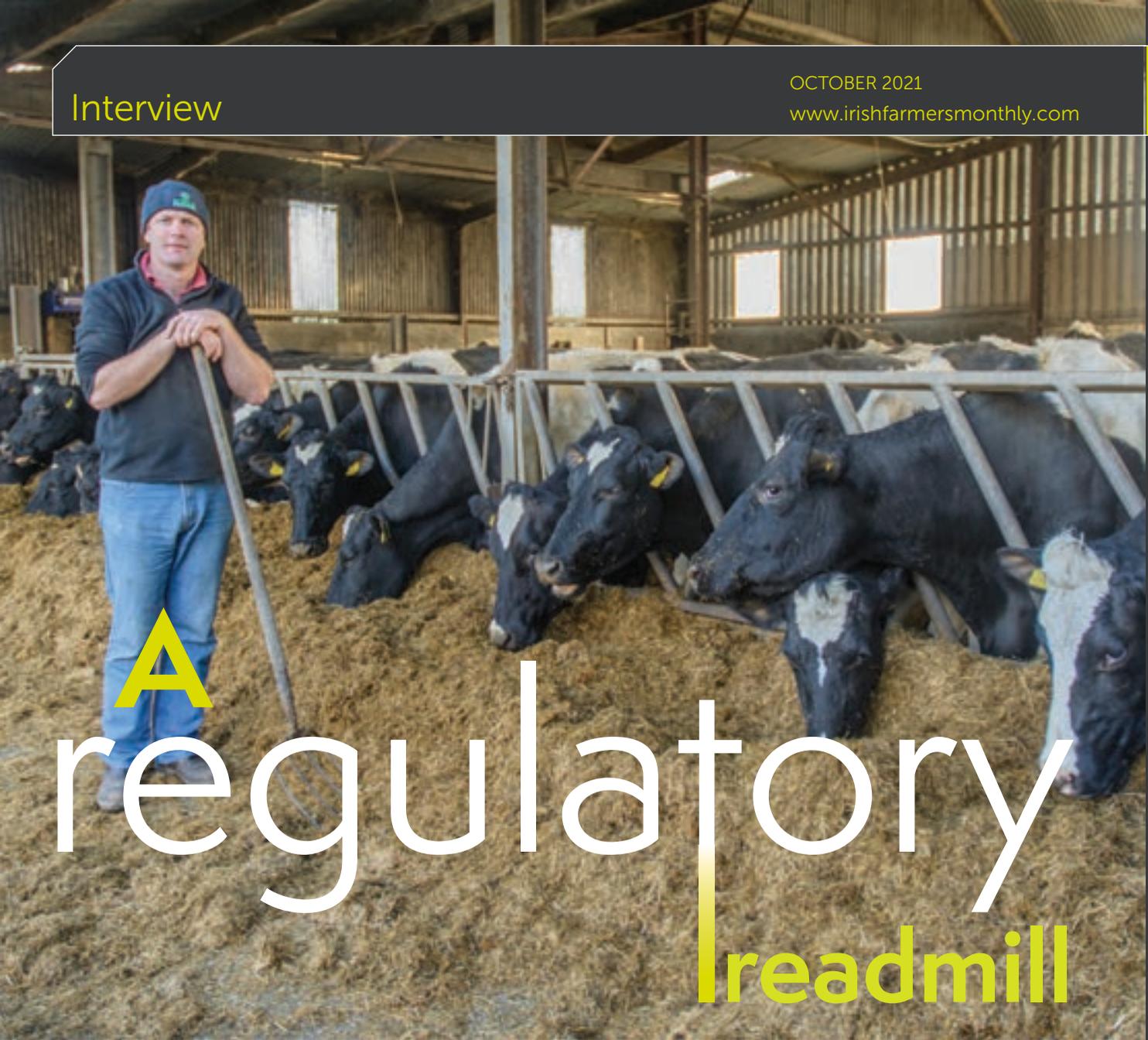
Reflecting on statements and speeches he made over the years espousing the value of Irish agriculture, a few stand out for Professor Boyle: "I worked in the Central Bank in the 1980's and my belief in agriculture was a minority one at the time. That attitude is long gone and the role and importance of agriculture in the Irish economy is well understood now. One outcome of the recession was the resurgence of agriculture and a recognition that it is a very important economic driver and worth taking pride in. Previously, there was an under-appreciation of the contribution the sector makes right across society and the economy." "The abolition of milk quotas and the extraordinary expansion of milk output on our farms was extremely positive for Irish agriculture. If a similar achievement was made in any other sector there would be nothing but a constant stream of praise. That in no way downplays the challenges facing the Irish dairy sector. I believe the same energy that drove increased milk production will be harnessed to drive the sustainability challenge. This is where research is so important. There will be a necessity to radically reduce the use of chemical nitrogen on our farms. We have alternatives, even if they are challenging. Our focus is now on the problems and we will find solutions."

The appliance of science

Professor Boyle's commitment to science as a problem solver is unwavering: "The scientific reality is that ruminants produce methane gas. Again, if we focus on that issue, substantial research is already being conducted to develop novel technologies and farm and animal management practices to reduce those methane emissions. Genetic research is an area where we have achieved tremendous improvements across a range of animal traits. I believe, in time, we can harness genetic science to breed animals that produce less methane."

"Our new Signpost Programme is an example of collective scientific, advisory and educational efforts being brought to bear to provide practical remedies to particular challenges. Ultimately, the key to success will be the transfer of research findings to on-farm practice and management. That's what the Signpost initiative is all about. Teagasc's job is to demonstrate to farmers how they can make practical changes on their farms that will enable them to reduce their carbon footprint. There is no other sector in the economy that is as committed to addressing the climate challenge as the agri-food sector."

The ongoing ambition and enthusiasm of Teagasc is a reflection of Gerry Boyle's directorship of the organisation over the past fourteen years. We wish him well in his future endeavours.



A regulatory readmill

Denis Drennan describes the Nitrates Review as a “major bone of contention” between the Department of Agriculture and farmers.

The ICMSA’s Farm and Rural Affairs Committee chairman farms in the Glanbia milk catchment area and highlights the proposed reductions in nitrogen use and changes in stocking rates as additional impediments to dairy farm productivity alongside the restrictions in peak milk production imposed by his Coop: “The extension of the closed period for slurry and waste-water spreading will add further to the challenges facing farmers. It is all coming at a time when input costs are skyrocketing. Given the number of restrictions and regulatory changes coming down the line, it is difficult to even keep fully informed on everything that is happening.”

Calculations, calibrations and data production Denis is conscious of the complexities involved in farming under ever stricter criteria: “Farmers will have to spend more and more time calculating, calibrating and producing data on stocking levels, fertiliser inputs, yields, spreading dates and slurry storage capacity, all

available for immediate inspection. There will be a big difference between the numbers of cows a farm is capable of carrying and the number actually allowed under regulations. Add on carbon credits and carbon emissions on top of all the other issues and farming becomes very complex and difficult. Soil type and geographical location are and will increasingly be additional criteria which will determine your farming practices, whether that is spreading dates, fertiliser limitations or stocking rates.”

A new quota

Denis says farmers are facing huge extra capital investment costs because of the proposed increases in slurry storage capacity alongside the need for segregated dairy washings storage and longer closed periods for spreading those washings: “From a farmer’s perspective it looks like higher productivity is going to be badly penalised with higher

yields being essentially penalised.”

The former Macra vice-president agrees with the young farmer organisation that the proposed new yield-related restrictions amount to a new quota on milk production: “It is certainly heading quickly in that direction if you add in all of the other restrictions being contemplated on stocking rates and fertiliser application. The reality is that the amount of grass that can be grown is directly related to nitrogen application rates. The research around offsetting those fertiliser reductions with increased reliance on clover and other measures has not been developed enough to be rolled out on farms to the extent that productivity will not suffer.”

The spread of LESS

Parlour washings storage was highlighted in a recent ICMSA submission to the Department: “If a farmer has sufficient overall storage capacity it makes it makes no practical or financial sense to have to build extra segregated capacity. All these proposals do is add another capital cost to the milk producer. Extending the LESS (Low Emission Slurry Spreading) requirement to any farm with a stocking rate over 100 kgs nitrogen per hectare, means that more than two thirds of all slurry in the country will be subject to that rule. There is no point in insisting that dairy washings be isolated and then having to draw in water to dilute the slurry in order to make it suitable to be spread using LESS equipment. These are the practical issues that are being ignored in these proposed regulations. The washings storage tank must hold four weeks washings but the farmer cannot spread for an eight week period. There are a lot of anomalies that do not add up to practical solutions to the challenges we face. My impression is that the Department wants to remove any possibility that rules are being flouted by a small minority. A farmer can claim that he or she is legally spreading washings during the slurry spreading closed period. Strict enforcement of the existing regulation would make far more sense that imposing a blanket requirement on all law-abiding farmers which will add significant cost and cause a lot of disturbance in terms of farmyard layout in many cases.”

Unfeasible timescales

Even the timelines for introducing many of these measures is questionable, as Denis Drennan confirms: “If the intention is to force the majority of livestock farmers to adopt LESS by early next year, where is the equipment going to come out of? There is a delay of six to eight months to facilitate existing demand. Double or treble that demand and you are looking at an equipment deficit

running into two years at least. Not only is the machinery not available in sufficient quantity, there is a scarcity in fabrication facilities to produce it. The current worldwide steel scarcity will take time to rectify and the cost of steel has gone through the roof, again adding additional cost to the farmer. The ICMSA has repeatedly engaged with the Department over the cost issue, especially in relation to TAMS grant aid, which is not keeping up with increased equipment purchase costs. After a long delay the Department did increase costings by ten percent about four months ago. I can only describe that increase as a joke compared to the reality farmers are facing in inflated equipment purchase costs. The same cost inflation is reflected in building costs where material prices have gone up by thirty to forty percent to build anything around a farmyard. The Department increase was out of date before it was even introduced.”

“The €80,000 ceiling on capital expenditure qualifying for aid under the last CAP has been reached or exceeded by most dairy farms long ago, so the reality is that farmers will have to, in many cases, fully finance increased expenditure to meet new regulatory requirements that had not been planned for and cannot be budgeted for retrospectively. Many are now in limbo. They have a huge amount of work to do to meet the proposed regulations and there will be no TAMS available to them to assist with the cost.”

A race to the bottom

On the unrelated issue of Dairygold and Glanbia competing with Ornua on the US dairy market, The ICMSA representative had this to say: “It seems to be a race to the bottom. Rumours abound that Glanbia spent millions of euros promoting their Grass-Fed butter product in the US. Then Ornua is said to have spent more millions counteracting the Glanbia marketing spend in order to keep the Kerrygold brand in premium position. Whatever millions were spent it is all farmers money. If Dairygold are now getting in on the act, who is next? All I can see is that the premium price for Irish butter on the US market will become a commodity price. That is not where we want to be but these recent developments of Irish dairy processors competing with each other can only lead in one direction. Grass fed dairy is a minority product and becoming more so across the globe. Demand for the product at a premium price is increasing. Why are we risking dumbing down that advantage through internal competition? We have cooperation in processing and we need full cooperation on marketing as well to safeguard a premium product and return as much as possible to the primary producer.”

Know Your Number – Carbon Emissions



Dr Eleanor Murphy, Sustainability Data and Analytics Manager, Bord Bia, and Dr Siobhán Kavanagh, Communications Manager, Signpost Programme, offer an update on the Signpost Programme and highlight the importance of the Sustainability Survey

At the recent Moorepark '21 Dairy Forum, Marie Donnelly, Chair of the Climate Change Council gave farmers one piece of advice – “Know your number (carbon) and on that basis make the decisions and choices that are relevant to the actions that you can take and the benefit you can bring”. Farmers are expected to reduce greenhouse gas emissions over the next number of years. The exact extent of the reduction is not yet known but with an overall reduction in greenhouse gases of 51% required for the country by 2030, it is to be expected that the reduction for Irish farmers will be significant.

For farmers to reduce their emissions they need to know what their emissions are. You cannot change what you don't measure. A new key performance indicators (KPI) for farmers is the greenhouse gas emissions per kg of fat and protein corrected milk or per kg live weight.

Close to 54,000 farmers across the country have access to their carbon footprint figure from the Bord Bia Farmer feedback Report, following a Quality Assurance audit. As part of the Bord Bia audit process, farmers must complete a Sustainability Survey. The data gathered from this survey enables Bord Bia to assess the environmental performance of Quality Assured farms using a carbon footprint calculation, a model developed by Teagasc. Over 290,000 carbon assessments have been conducted on Irish beef and dairy farms since 2011. Carbon footprinting on Quality Assured sheep farms commenced this summer.

The survey data is also used to generate a Farmer Feedback report, which farmers receive following their audit. The report provides the farmer with the carbon footprint calculation for their farm and demonstrates how their farm inputs and activities contribute to greenhouse gas (GHG) production. It also contains advice and feedback on how to mitigate against these emissions and improve production efficiencies.

How is the carbon footprint calculated?

The carbon footprint is the ratio of total greenhouse gas emissions (GHG) to total outputs of the farm enterprise. The carbon footprint is measured as kg CO₂ equivalents per kg of unit output. The unit output for dairy is kg fat and protein corrected milk (FPCM) and kg live weight gain for beef and lamb.

There are four sources of data required for a complete and accurate calculation of a carbon footprint. Bord Bia

have data sharing and transfer arrangements in place to reduce the burden of data collection on the farmer. The sustainability survey is the only data source required for the carbon footprint calculation collected directly from the farmer.

1. Animal Identification and Movements Database (AIMs) – DAFM – Beef and Dairy
2. Daily Live Weight Gain - Irish Cattle Breeding Federation (ICBF) – Beef Only
3. Milk Production Data – Dairy Processors - Dairy Only
4. Sustainability Survey – Scheme Member

How does the information provided in the Sustainability Survey relate to the carbon footprint?

The sustainability survey captures data related to farm inputs and farm management. The main farm activity data collected via the survey is outlined below.

Turnout and Housing: required to calculate the grazing and housing periods of animals on the farm. This data influences the calculation of manure storage emissions, grazing related emissions and can influence the grass-fed status of a herd.

Manure Management: calculates the emissions from the application and storage of manure on the farm, this is influenced by the timing of manure application and the method by which manure is applied to the land.

Concentrate feeding rates: calculate the emissions from the production of individual concentrate ingredients. Milk replacer feeding rates are also captured in this section under calf management.

Fertilizer application data are required to track the emissions from the production of fertilizers and minerals and the emission related to the application of fertilizer to the land.

It is important to note that inaccuracies in the data provided via the sustainability survey can result in an inaccurate carbon footprint and grass-fed result, and farmer feedback report.

What information is contained in the Farmer Feedback Report?

The first page displays the farm's carbon footprint (Figure 1), introduces farmers to the report and explains how to read it. This information allows a farmer to track his /

Parameter	Unit	Current assessment (Production year 2019)	%Change from previous (Production year 2018)	Average for 125-150 cow farms
Carbon Footprint - Dairy Enterprise	kg CO ₂ /kg FPCM	1.10	.3%	1.15

Figure 1. Carbon Footprint for a Dairy Farm

her progress since the last audit but also to benchmark emissions relative to other farmers of a similar scale. On page three, the carbon footprint is displayed again along with the percentage share of farm carbon emissions by source (Figure 2) i.e. animal digestion, manure, fertiliser use, forage/feed production, and general farm emissions. The productivity summary and the GHG data is compared to the previous audit and to typical values for similar production systems.

Each page focuses on a different management activity: nutrient management; grassland management; animal feeding and farm safety.

For example, the nutrient management section of the report shows what fertilisers were used, the chemical rates of nitrogen per hectare (N) that were applied and how that influences the share of emissions on-farm. Management decisions can be made based on these results and using the advice section located at the bottom of the page. Advice could include completing a soil test; a nutrient management plan; or applying lime to balance out the pH to improve the nutrient availability in the soil.

In the information and advice section, there are green and white-shaded bullet points, what do these colours indicate?

The advice is broken down into two levels of activity. The green leaf is related to actions specifically set out in the Teagasc Marginal Abatement Cost Curve (MACC). These actions are provided to encourage farmers to engage with the Climate Action Plan and make farmers more informed on those types of actions.

The white leaf relates to more general information. For example, on the Grassland Management section, advice includes grass measuring and the use of PastureBase Ireland as decision support tools.

What is the target GHG intensity for dairy and suckler farms?

The target for dairy GHG intensity is 0.74 kg CO₂-eq / kg FPCM (fat and protein corrected milk). The target for suckler to beef systems is 13.2 kg CO₂-eq / kg live weight. It is important to note that reducing the intensity of CO₂ emissions for every unit of output (milk, meat and cereal) is just part of the story. Farmers need to reduce total emissions from the farm. Therefore, the intensity figure needs to be examined in tandem with a total emissions reduction.

How will farmers reduce emissions?

The basis for the key actions that all farmers are being asked to take to reduce emissions is the Teagasc greenhouse gas (GHG) marginal abatement cost curve (MACC). This curve shows the realistic potential for reducing agriculture’s GHG emissions using a range of actions (technologies and management practices) on farm. For each of the technologies and management practices in the GHG MACC, an assessment was made as to the level of practice change that could be realistically achieved and from this a calculation of the level of mitigation that is possible. The cost of achieving this was also assessed. The Teagasc GHG MACC is broken down into 3 separate categories of actions.

1. Agricultural mitigation
2. Land use mitigation
3. Bioenergy based mitigation

The GHG MACC ranks the mitigation measures on the basis is cost from the cost-beneficial measures (below zero cost on the left of Figure 3) to the high cost measures (towards the right hand side of Figure 3). The width of each bar indicates the magnitude of the abatement potential of each measure.

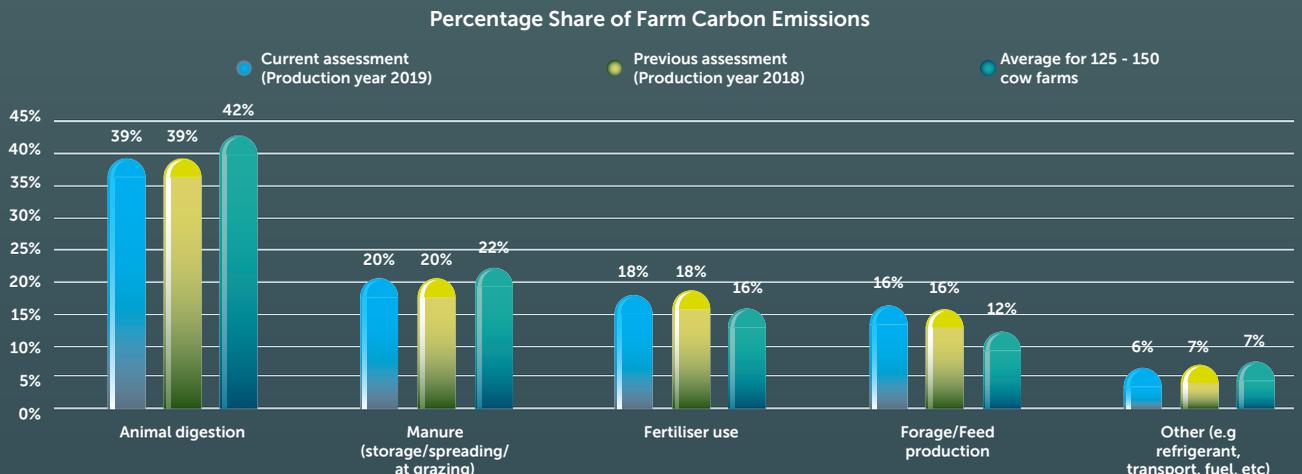


Figure 2. Percentage Share of Farm Carbon Emissions

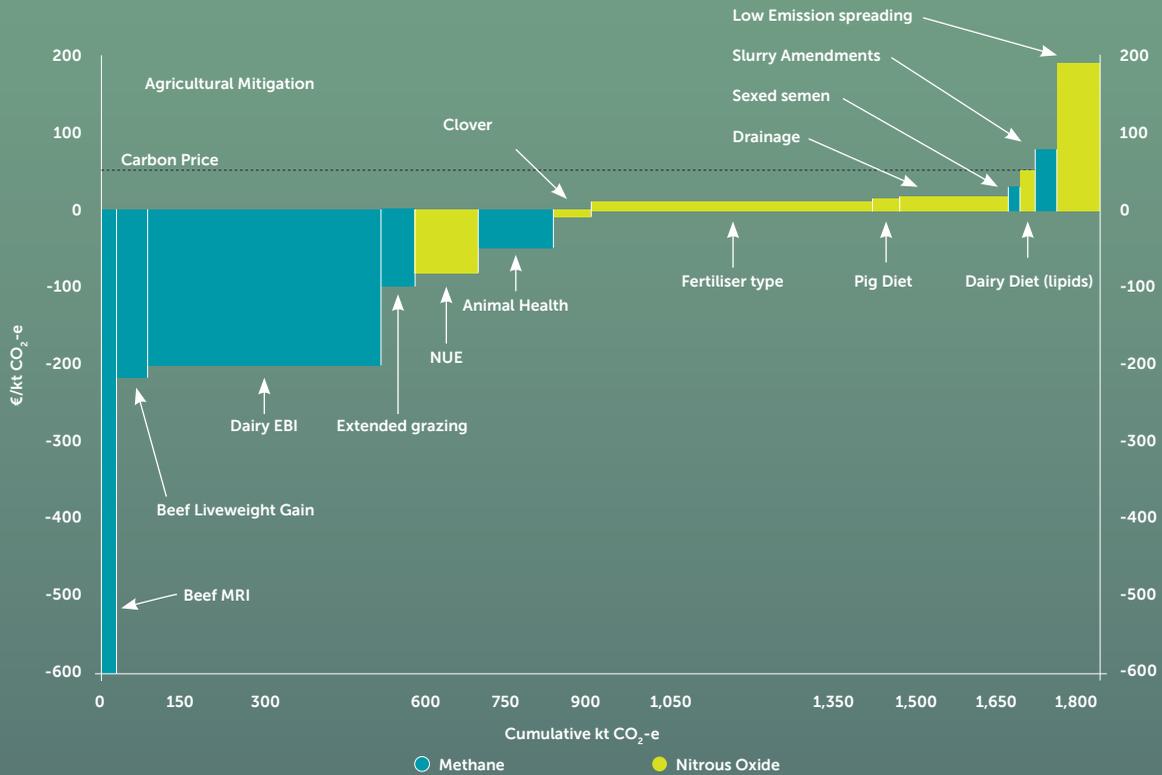


Figure 3. The Teagasc Greenhouse Gas Marginal Abatement Cost Curve



For example, in Figure 3, Dairy EBI has a negative cost of €200 / tonne of GHG (meaning it would save the farmer money) and could mitigate more than half a million tonnes of GHGs. Fertiliser type, referring to the replacement of CAN with protected urea has a small associated cost and a significant mitigation capacity. Low emissions slurry spreading has a high cost and a relatively small impact on GHG emissions (but a significant impact on ammonia emissions). However, the cost is significantly borne by the state in the form of grants for equipment purchase. A number of emerging technologies are not currently included in the MACC. Such technologies once their efficacy, cost effectiveness and safety are established, will be included in the new version of the MACC. Therefore, MACC is not a static tool, it's a road map that will evolve as new technologies and management practices emerge that will contribute to reducing GHG emissions.

What areas will the Signpost farmers be focusing on?

There are over 100 Signpost farmers across the country covering all the main enterprises. The target is to reduce total emissions by 15 per cent on the Signpost farms by 2025 and all farms by 2030. This programme is just the starting point to reducing our GHG emissions. Policy, regulation and incentivisation will all play a part to meeting our challenging targets. Signpost farmers will focus on implementing the key measures outlined in the GHG MACC. Signpost farms will prepare a Sustainability Plan for their farms in the next few months which will set out the roadmap to improving environmental sustainability on their individual farms. Progress on the programme will be reported annually through an annual Sustainability Report, completed by the National Farm Survey.



To learn more about the actions that Signpost farmers are taking, receive technical articles, videos and podcasts as well as research and policy updates, sign up for the Teagasc Signpost monthly e-newsletter at www.teagasc.ie/signpost/ or using this QR code on your phone

Finding the right balance

Rob Gladwin, Head of Technical Management at BASF, discusses the challenges for the tillage industry ahead, with the targets set out in Food Vision 2030.



Following the latest CAP reforms, Ireland's government has published a 10-year agri-food strategy, 'Food Vision 2030'.

As one of the most carbon-efficient sectors, the government hopes increasing tillage will help agriculture reduce its environmental footprint and improve biodiversity, while taking advantage of potential growth opportunities by increasing the production of high-value outputs such as malting barley, wheat, oats and rye, high-value food markets like oils, oats and potatoes, as well as domestic protein crops for livestock.

Soil management, nutrient-use efficiency and soil quality, effective pesticide management and investment in precision technologies are also areas of focus.

Aspirations like these are highly commendable but it's a big ask of an industry which is already facing many hurdles.

"At BASF we whole-heartily agree with the underlying concepts and ambitions," says the company's Head of Technical Management, Rob Gladwin. "The challenge is 'how'. How do we, as an industry, meet these objectives without compromising others, or reducing viability of farms?"

"It's a delicate balance," he says. "Whether you're looking at it from a field or from a regulatory level. Putting more land into production, here or abroad, is not an option, so we have to do more with less. Technology will play an important part in that - from seed and biologicals, to chemistry and digital solutions."

In 2020, BASF spent €840 million in R&D in the Agricultural Solutions segment; representing around 11 per cent of the segment's sales. In 2021, the company continues to invest in R&D of agricultural innovations at a high level. "This investment has been the foundation of innovations, many of which are already helping Ireland's growers 'do more with less', and we've more in the pipeline.

"xarvio®'s SCOUTING app, for example, already helps growers and agronomists more accurately assess nitrogen status, recognise disease and analyse emergence," explains Mr Gladwin. "Looking ahead, xarvio®'s FIELD MANAGER has the potential to put more information at the fingers tips of farmers, enabling more targeted use of inputs through variable rate applications, as well as more accurate decision-making at farm level."

On chemistry, Mr Gladwin uses Caryx® as one example of a product that contributed to crop resilience. "It increases rooting, helping crops better withstand wet winter conditions. Caryx® also regulates canopy growth,

helping to optimise timings and efficacy of spring inputs. "Revysol®, our fungicide which effectively targets septoria, has proven to be critical in protecting yields, especially in a wet growing season like 2021. Weather extremes are predicted to increase in severity and frequency and this sort of technology will be critical to the ongoing sustainability of tillage farms. But chemistry is only one part of the jigsaw. In these conditions, protecting chemistry with genetics will become increasingly important."

Earlier this year BASF introduced the seed brand name Ideltis™ for its future hybrid wheat. Intended to provide farmers with higher and more stable performance in yield and quality.

"Hybrids, while conventionally bred, inherently bring more genetic diversity and tolerance to the biotic and abiotic changes we're likely to face in the future. With more durable disease resistance they can help protect chemistry too."

Mr Gladwin feels BASF could do even more to help growers and agronomists 'do more with less' but says it needs a regulatory environment that supports it. "This too is a balance," he acknowledges. "The EU commission has talked about being more open to gene editing, for example, and we welcome any steps they take to recognise the difference between gene editing and genetic modification. It gives the industry the confidence to invest in new technologies that will, ultimately, help the EU's agricultural industries achieve its aims for long term sustainability."

The regulatory environment is also pertinent to another technology in BASF's portfolio: urease inhibitors. The combination of fertiliser production and losses post-application are one of the biggest contributors of the tillage sector to climate change.

"Trials show Limus® can reduce nitrogen losses by up to 98%, reducing ammonia emissions and improving nitrogen use efficiency (NUE) on farm. It's a great example of a technology which contributes to optimising inputs and has been welcomed in Ireland by both tillage and livestock farmers."

"Despite the challenges, AgBalance® - our Life Cycle Assessment tool - shows how growers in Ireland are already doing so much to reduce their environmental impact and finding that delicate balance," notes Mr Gladwin. "It's also very encouraging to see that the government understands the challenges and is willing to come forward and work in collaboration with the research community."

ESG considerations take centre stage

The 4th annual ifac Food & AgriBusiness Report was recently published. Environmental, Social and Governance (ESG) is the thread running through this year's Report. While ESG considerations have been part of the conversation with asset management companies for over a decade, the rate at which ESG is impacting the SME sector is accelerating, writes ifac's David Leydon.



Minister for Finance, Paschal Donohoe TD, launching the annual ifac Food and AgriBusiness Report with David Leydon, head of food and agribusiness and John Donoghue, CEO of ifac

Recent reports, including the IPCC Climate Change report and the Department of Agriculture Food Vision 2030 strategy, highlight that sustainability is core to the food and agribusiness sector. According to our research, ESG factors are on the senior leadership agenda of 37% of SMEs in the sector. This will increase as the emphasis on all facets of ESG develop in importance. 9 out of 10 businesses interviewed are taking environmental action so it's clear that a higher level of ESG activity is happening but is not being interpreted within an ESG framework.

From our own consultancy engagements, daily mentions in the media, influence from the investment community as well as a hyper-focus from large players in the food and agribusiness sector means it's time to engage with what ESG means for SMEs.

In the report we have considered the question - does ESG matter to an SME food or agribusiness? The answer is an overwhelming yes:

1. Your customer will judge you on your ESG credentials.

2. Your position in the supply chain can benefit or be disadvantaged by your ESG profile.
3. Your banking relationship will be impacted by your ESG commitments.
4. Investors will assess your ESG behaviours as part of their decision-making process.

ESG requires taking a rounded view of your business to decide how it serves both its internal and external stakeholders. The pace of change will keep accelerating across all three metrics. For food companies, your retail partners will have an ESG agenda which you will need to meet. This is driven by consumer expectation. For agri companies, the sector is going to be judged intensely on our food production sustainability credentials and activity.

Some benefits of ESG for food and agribusiness SMEs:

- Improved financial performance, both revenue growth and cost reduction, by taking ESG related actions, for example, reducing waste, investing in renewable

energy, improving brand image with consumers or enhancing diversity for improved decision-making.

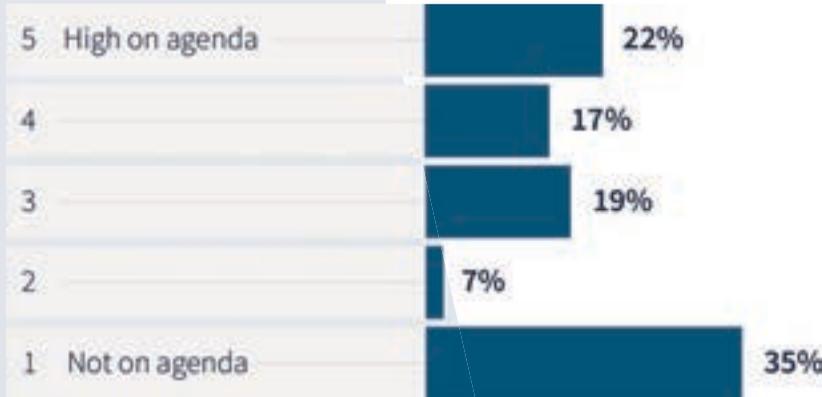
- Increased understanding of risks inherent in your business model over the long term.
- New supply chain opportunities as larger companies actively seek more sustainable suppliers.
- Improved employer branding, helping to attract diverse talent and retain existing talent.
- Great communication opportunities with all stakeholders – team, suppliers, customers and the wider community.

ESG and Greenwashing

Greenwashing, the act of making misleading claims about your environmental actions, has long been an issue. The Financial Times, recently commented that, ESG has long been “blighted by hype and woolliness”. From an SME perspective, we suggest that the focus is on tangible, impactful actions as opposed to rhetoric and 100-page glossy reports.

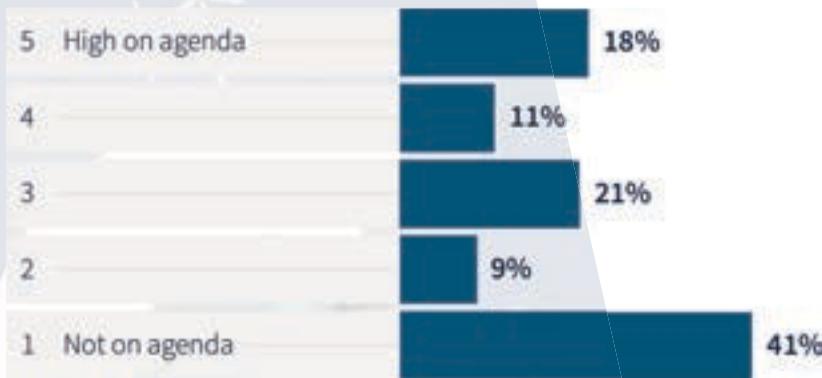
Are ESG factors on the senior leadership agenda?

ESG factors are high on the senior leadership agenda for 39% of SMEs. ESG is higher on the leadership agenda for medium sized businesses (61%) in comparison to small businesses (38%). Family businesses are less likely to have ESG on their agenda (35%) than non-family businesses (58%).



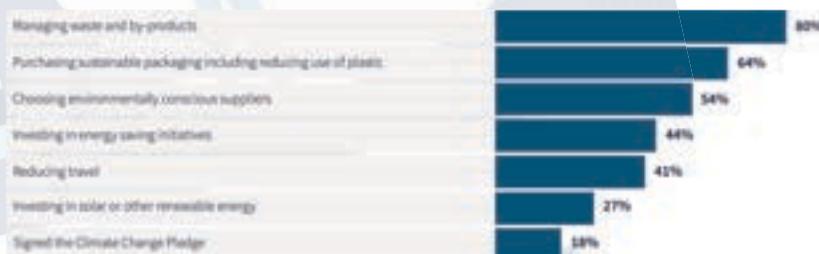
How important are ESG considerations when making investment decisions?

ESG factors feature alongside financial factors when making investment decisions. Medium sized businesses are most likely to include ESG factors when making investment decisions (54%). 41% of non-family run businesses take ESG factors into account in comparison to 27% of family-run businesses.



Environmental actions

Food businesses and agribusinesses continue investing in initiatives associated with climate change, with the majority managing waste and purchasing sustainable packaging. 87% of businesses are taking climate change action. This is seen across all types of businesses (small, medium, family owned, non-family owned).



OPTIMISM INCREASES



The ifac Food & AgriBusiness Report is a sentiment report for the SME sector. This year it is encouraging to see that optimism levels have bounced back strongly with 77% of companies optimistic about the coming 12 months. However, trends to monitor include rising costs, recruitment challenges, negative impacts from Brexit, a lack of succession planning and lower than ideal R&D investment. Some of these challenges can be partially tackled by accessing the range of supports that are available from Enterprise Ireland, your Local Enterprise Office and LEADER. Included in the report is a comprehensive supports guide and for Enterprise Ireland clients, we advise that the Digitalisation Voucher should be accessed immediately.

Our keynote interview with Arama Kukutai, who is at the forefront of venture investing in agtech globally since he co-founded Finistere Ventures in 2006, highlights the level of investment going into agtech and foodtech. This is a sector where the opportunity to make a significant impact is real. Arama makes some interesting observations about Ireland, alternative protein, and building an agtech business.

You can download the full 52 page report on www.ifac.ie/ifacreport.

7 in 10 report an increased cost base

Specifying a generator for farm use

With many predicting power cuts this winter, some farmers may be interested in purchasing power generators. **Matt Ryan** outlines the requirements and options that a farmer should consider.

The most cost-effective option to supply back up power to a dairy farm in the event of power outages is a tractor driven PTO generator. These are available in large capacities in both single and three phase configurations, at relatively low costs, and are compact for storage purposes. Standby generators that come equipped with their own engine, fuel storage and auto-start functions are also available. However, these would be much more expensive. One important aspect of sizing a back-up generator is the power demand that will be required to run all the necessary components, without overloading the maximum kVA rating of the generator. Working in collaboration with an electrician, the milking equipment supplier and the generator supplier to ensure an adequate capacity generator is fitted is critical to a successful purchase. Table 1 shows the total current demand that would be required for four different facility sizes. These are approximate and represent a worst-case scenario where all equipment runs together. Many farms are using a 16 kVA back-up generator which would allow for a current demand of 70 amps, this would be inadequate for all sizes of facility presented in Table 1. However, if the water heater and the scrapers are not operated during milking, then the current demand for the 10 unit would drop to 59 amps, allowing operation on a 16 kVA generator (see Table 2).

Table 1: Approximate current draw (amps) for dairy farms with different size milking parlours operating on a single-phase supply (230V)

Unit Number ¹	10	16	24	30
Vacuum (A)	17	26	35	35
Cooling (A)	22	30	43	61
Heating (A)	13	26	26	39
Lighting (A)	5	8	13	15
Scrapers (A)	13	13	26	39
Air compressor (A)	4	7	9	11
Milk pump (A)	4	4	9	9
Water pump (A)	7	7	9	13
Total ²	85	121	169	222

1. Number of units in the milking machine.
2. Total represents a worst-case scenario where all listed items operate simultaneously.

Table 2: Commonly available 230-volt generator sizes

Generator Size (kVA)	16	20	40	70
Current (A)	70	87	117	304

Similarly, the 24 and 30-unit facilities would exceed the maximum allowable current draw for the 16, 20 and 40 kVA generators but could be safely operated using the 70 kVA option. It is advised to opt for a three-phase electricity supply for installations greater than 24 units. An additional consideration is the starting current

required to get each motor moving. This starting current (also called locked rotor amps, LRA) can be three to six times the running current, hence the generator needs to be sized to allow for starting the largest load on the farm. For example, a 4-kW vacuum pump motor will draw approximately 20 amps when running but could require up to 120 amps for a very short time in order to start. Important equipment to factor into the cost

It is essential to employ an electrician to ensure the farm is prepared for the connection of a generator. It is also a good idea to consult with your electrician prior to purchasing a generator to ensure correct sizing and to obtain a quote for installation. In addition to the cost of the generator, a change-over switch will be required to isolate the farm from the national grid while running the generator, this must be installed by a qualified electrician. When sourcing a generator, look for one with a voltage indicator that can be monitored while the generator is running. Automatic voltage regulation is desirable if the generator will be used to run sensitive electronic equipment.

The following considerations apply when starting the generator and connecting the loads.

- Ensure the farm is disconnected from the national grid supply
- Only connect the generator to the milking parlour once the generator is running at the desired voltage.
- Loads should be turned on one at a time, starting with the largest.
- The supply voltage of the generator should be checked after each load has been added.

Generators are specified according to the maximum amount of kilo Volt Amps (kVA), which they supply. It is possible to translate this figure to amount of kiloWatts that you need to run on the farm in the event of a power-cut (1 horse power = 0.75 kW). Before we can do this we need to understand how to calculate power in an alternating current (AC) system. We need to use the formula: $P = V \times I \times PF$ Where P = average power in kiloWatts (kW), V= Volts, I = current in Amps (A) and PF = power factor. These properties can be found stamped on a plate on each motor. Induction motors use electromagnets to produce magnetic fields for their operation. Their magnetizing inductance results in lagging power factor, where the consumed current lags the applied voltage. PF is a property of the load downstream of the electric source, rather than a quality property of the voltage source itself. Rated PF of efficient electric motors used to drive a vacuum pump can be up to 0.85. Hence, multiplying the kVA value of a given generator by 0.85 gives an indication of how many kW can be driven by the machine, so a 50 kVA generator will drive 42.5 kW of motor load with a power factor of 0.85 and will supply 217 amps at 230 volts.

HERD HEALTH FOCUS





UCD School of Agriculture
and Food Science

GRADUATE TAUGHT PROGRAMMES 2021 ENTRY

- Agricultural Extension and Innovation
- Environmental Resource Management
- Food Business Strategy
- Food, Nutrition and Health (online)
- Food Regulatory Affairs (online)
- Food Safety and Regulatory Science (online) **NEW!**
- Horticulture
- Humanitarian Action
- Sustainable Agriculture and Rural Development
- Wildlife Conservation and Management

Full-Time,
Part-Time
and Online
opportunities
available

www.ucd.ie/agfood



Welfare benchmarks

Benchmarking is a good way of comparing performance in any activity from sport to work. The paper presented by Moorepark researchers Robin Crossley and Muireann Conneely at the September Open Days outlined a range of herd welfare indicators including lameness, BCS (Body Condition Score), nasal discharge and human avoidance response that they had surveyed across a large cohort of dairy farms. **Matt O’Keeffe** reports.

The latter trait is quite intriguing and indicative of the calmness or otherwise of the animals when approached, often a telling sign of whether animals are comfortable around their human managers. The researchers, after carrying out a welfare assessment across 82 Irish dairy farms, summarised their findings with the statement that good animal welfare is essential for a sustainable and productive herd. Conducting a simple assessment of these welfare indicators, the researchers say, will allow farmers to use these benchmarks as a tool for comparison to identify areas for improvement of dairy cow welfare on their own farms.

Chasm between best and worst

The central reason for any benchmarking exercise is to measure your own performance (herd performance in this instance) against best and worst practice or outcomes. As regards lameness, there is a huge gap between the ‘worst in class’ and the top percentile of Irish farms, as confirmed by the Moorepark researchers in their survey results. In terms of lameness prevalence in their herds, the bottom or worst 20 per cent of farms surveyed showed lameness levels of over thirty percent, or one in every three cows. While the average across the farms was a respectable nine percent, the top twenty percent had lameness levels down at five per cent. Quite clearly the farm infrastructure across roadways, milking parlours, collection yards, slatted areas and cubicles all impact on lameness levels. A board display at Moorepark was devoted to farm roadways and distances being walked by cows. There is a direct link between walking distance/roadway quality and lameness levels.

Prevention

In addition, one of the research papers presented at the Open Days, another collaborative effort involving Muireann Conneely and a colleague, Natasha Browne, delved into various strategies to reduce lameness on farms. Regular mobility scoring is recommended as is footbathing, also on a regular basis. Selecting cows with a negative PTA (Predicted Transmitting Ability) for lameness is evidence that genetics has a role to play in minimising the risk of lameness susceptibility in the longer term. Lameness PTA is a trait in the EBI health sub-index. Further recommendations for minimising the risk and occurrence of lameness include reducing stones around

paddock entrances, avoiding slats on roadways and avoiding acute angled turning points at exits to milking parlours. That last point highlights the benefits of broad-based planning in the construction of facilities, to avoid necessary reconstruction and disruption later on. ‘A stitch in time’ come to mind with the recommendation that lame cows should be treated promptly and, where necessary, provided with pain relief. Regular checking of cow mobility, preferably on a daily basis, should ensure that early intervention prevents an acute lameness issue in a cow becoming a chronic problem, potentially resulting in the culling of the cow.

Tóg go bog É

It almost goes without saying, at this stage, that rushing or hurrying cows must be avoided. Adequate time must be given to cows to pick their steps and walk at their own pace both leaving the yard after milking and returning for milking. While quads and other herd collection vehicles are both popular and useful, it is critical that they are not used at a speed faster than the cows walk under their own volition. It is important that such vehicles are kept at an appropriate distance from the herd when bringing them to and from paddocks. Apart from the risk of causing physical damage to a cow’s leg or foot if she stops suddenly causing a collision, too close a proximity can also cause a fear factor, making cows move faster than they should. No matter how well maintained a roadway is, the cow must be allowed, as is her nature, to pick her steps.

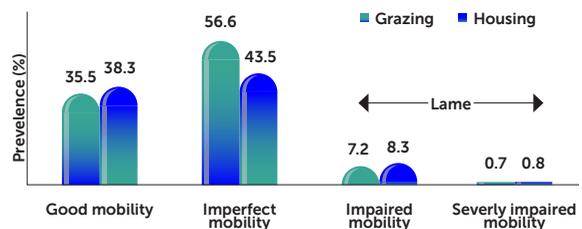
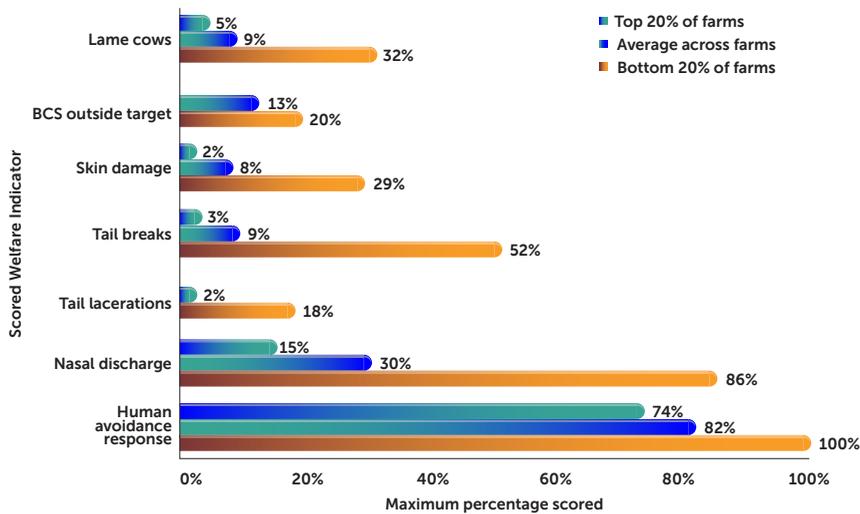


Figure 1. Average lameness prevalence during the grazing (99 farms) and housing (85 farms) periods on Irish pasture based dairy farms
Source: Teagasc

Welfare indicator scores

A cursory examination of the Scored Welfare Indicator graph throws up some positive results. Having cows in the optimum Body Condition Score is of critical importance, especially at key times in the cow’s life cycle and the



Source: Teagasc

survey indicates that the vast majority of the herds had their cows within the preferred BCS target zone. The average numbers outside the zone accounted for 13 per cent, with the worst scoring twenty per cent of herds hitting 20 per cent. Turning that figure around to a more positive light, 80 per cent of farms had their cows within the BCS target zone.

Identifying problems and solutions

Notably, three welfare indicators that were surveyed on the farms stand out as problematic. Skin damage, tail breaks and tail lacerations were quite prevalent on many farms. The issue of tail breaks, in particular, is apparently a widespread phenomenon in dairy herds, if the surveyed farms are taken as a fair barometer of prevalence across Irish dairy herds. It may be useful, if this has not already been investigated, to explore the reasons for these occurrences. If two or three factors could be identified as being the main causes of tail breaks, for instance, then it should be possible for preventative measures to be put in place, to at least reduce the problem.

Practical research

The research involved in compiling these welfare indicators, as well as outlining critical factors around lameness, is strong, practical work and closely aligns to solving problematic welfare issues on dairy farms. It also aligns closely with the running Sustainability theme for this year's Moorepark Open Days. Sustainability has many facets. Animal welfare is an important part of overall farm and herd sustainability. Not only has it got financial implications, it is also a critically important aspect of our 'license to farm'. Nothing except the highest standards of animal welfare are acceptable and farm and cow-led research outcomes are critically important if we are to identify and then resolve practical difficulties and welfare challenges that arise on farms.

HIPRA The Reference in Prevention for Animal Health

In Mastitis Control
PREVENTION
is
PROFESSIONALISM

Take the next step with Mastitis Vaccination

Ask your vet about your mastitis prevention plan

HIPRA UK and IRL Ltd
Fulford Business Centre, Fulford Lodge, Fulford Road, Wakefield, WF1 3LX, United Kingdom
Tel: +44 (0)1924 640 848 | uk@hipra.com | ir@hipra.com | www.hipra.com

FREE Hook Drencher
with every 10L purchased

EMBRACE THE HOOK

TREATING DRY COWS FOR PARASITES?
Switch to a white drench like Albex Gold®



*Rotating active ingredients
helps to prevent resistance*



Hook drenchers available while stocks last contact your animal health distributor for more details.
Albex Gold 200 mg/ml oral suspension for cattle. Contains: Albendazole 20% w/v. R: LM, VFA 10987/123/001.
Use medicines responsibly. Refer to product packaging and leaflets for full indications, side effects, precautions, warnings and contraindications. For further information can be found on the datasheet, SPC or at www.farmveterinary.com. Distributed by: Chanelle Pharmaceuticals Manufacturing Ltd, Enniscorthy, Co. Wexford, Ireland. Copyright © Chanelle Pharma 2020. All rights reserved.



**FARM HEALTH
FIRST** By **chanelle**
pharma

The once-a-day option



Is once-a-day milking (OAD) an answer to peak supply management, asks **John Tobin**, Systems Manager Ireland, LIC.

Farming is full of challenges. For some, this new challenge means managing milk supply in 2022 during the peak months of April, May and June. These farmers are in expansion mode, taking on more land and cows and growing their business.

Farmers are looking for options, however many options are hard to swallow as they go against the blueprint of calving your cows to match grass growth. According to Teagasc, an autumn calving cow will only be half as profitable as a spring calving cow. It is important to avoid change for the sake of change especially if it leads to an increased workload and less profitability.

32 Milking frequency

One option farmers are considering is altering milking

frequency during the peak months. This means going OAD for April, May and June only. The current limit is on volume only and not milk solids. OAD will likely reduce volume over this period, potentially by 20 per cent or more, and reduce milk solids by less. While OAD regimes have been studied at Moorepark by Emer Kennedy and her colleagues, the analysis has been mainly focused on early, late and all-season OAD options. Once-A-day milking for spring block-calving herds to manage the specific problem of flattening the seasonal peak of milk arriving at the processor in April, May and June needs further investigation. Meanwhile, we must extrapolate from existing research and rely on farmer experience. We do know that an Irish study on 13 milkings in 7 days saw no impact on production. '3 in 2' (or 16-hour) regimes

in NZ did see a slight drop in volume (10 per cent), accompanied by only a 4 per cent drop in milk solids. Ten milkings in seven days can be expected to decrease solids and volume slightly more, perhaps by 0.1 kg MS/ day, as cows are milked OAD at weekends.

A simpler system to implement on farm would be milking once-a-day (OAD) over part of the lactation. With OAD, volume will drop more than solids. Volume could drop in the order of >20 per cent, (trials range between 14-30 per cent) immediately, but the percentage solids drop should be lower. It varies depending on the individual cow and farm situation.

At the September Open Days, Moorepark reported an initial 22-24 per cent reduction in milk yield and 20-23 per cent reduction in milk solids yield (MSY) from early season OAD and no difference in total lactation MSY with up to six weeks of early lactation OAD. Another, non-Teagasc, trial looked at changing frequencies at 110 days into the lactation and reported little difference between the treatment groups, with the OAD cows bouncing back to TAD (twice-a-day) production levels once put back on TAD.

New Zealand experience

NZ trials, on the other hand, saw reductions of around 19 per cent for both volume and solids when cows were milked OAD for three or six weeks post-calving, and a 7-8 per cent residual reduction in solids production after reverting to TAD.

The relative difference between OAD and TAD on commercial farms can be less than those reported on research farms, with the impacts of going OAD varying widely due to farm specific factors. Cow suitability to OAD is important, particularly with respect to udders and cell count. If you have been consistently breeding for good udder support, you should expect fewer problems when those cows carry 24 hours' production to the parlour. High yielding cows are likely to experience a greater drop than lower yielding cows but a good cow on TAD is likely to be a good cow on OAD. High cell count cows and herds may experience problems with both OAD and 10 in 7 milking.

OAD milking has positive effects on fertility, cow condition and liveweight and can also help reduce lameness. All three main breed choices are considered suitable for OAD in NZ, with some cow variation within breed. The general preference in NZ for OAD herds is FR x JER or JER cows, with their naturally lower milk volume and higher solids percentage.

Potential production outcomes

Extrapolating from NZ experiences of using OAD in early lactation, the scenario on farm might look like this. Production-wise, if your cows are producing 2.2kgms on 31st March and you go OAD, you might expect the cows to drop to approx. 1.8kgMS in Apr, 1.7kgMS in May and 1.6kgMS in June. When the cows come back on TAD on the 1st July, you could expect the cows' production to

increase to 1.8kgMS, similar to what the cows already on TAD would be doing.

In the second half of lactation, the cows should produce the same as if they were on TAD since the start of lactation. The overall production loss of going OAD for three months, in this scenario, will likely be 30kgms over the whole lactation.

It is important to note that there is a considerable difference between full lactation OAD and going OAD for a block of the lactation. If you decided on the 1st July to keep milking OAD for the remainder of the lactation, you would expect a significant impact on the annual production.

How will the cows cope with transition?

If your SCC is under control, the cow should cope. If you think SCC is going to be an issue, milk record and identify the problem cows before you transition the herd to OAD. You could exclude these cows from the milk tank temporarily and gradually return them over time. It is best to talk to your vet about the best options to manage this in your herd. It is advisable to avoid milk recording for a few days after you transition to OAD, as the cows will still be adjusting.

Most cow's udders during the transition should be okay, however a few may not adjust. Screen the cow's udders for suitability before putting them on OAD and again after the peak is past to see how they held up.

If you wish to utilise OAD regularly, it is important to focus on udder traits in sires and it is worth considering specific breeding options for cows with poor udder strength. There should be lower empty rates and a tighter calving pattern through better reproduction performance achieved by OAD during breeding, so you may have a few more selection options available.

Total management package

While cows will likely be producing 20 per cent less volume, you still need to feed them their TAD allocation. Maintaining pasture quality is of utmost importance to keep production up. It is still best to strip graze and feed the cows morning and evening. This means the cow will experience the second grazing that is associated with TAD.

The biggest challenge in changing milking regimes is often for the farmer to adjust. The cow will adjust more easily. Variable milking frequencies can unlock a world of potential for many farmers as they apply it to their specific situations.

John Tobin is a Systems Manager with LIC Ireland. He has worked with farmers on both the financial and physical transition to OAD and other milking frequencies and can be contacted through the LIC website. LIC will host an in-depth OAD webinar on Wednesday 17th November 2021.

Effective dry cow management

Eddie Phelan, Regional Manager, Alltech, examines the key issues surrounding effective dry cow management

Successful transition from the dry period into lactation is one of the most crucial moments for dairy cows. It will directly impact milk production, cow health and reproductive performance during the subsequent lactation.

A successful transition can be achieved by getting the management and nutrition of dry cows right. This successful transition revolves around four key pillars: body condition, nutrition, minerals and management. During the dry cow period, these four pillars will prepare farmers for easy, stress-free calving and set their herds up for successful lactation by reducing metabolic issues around calving, including milk fever, retained placenta, displaced abomasum and ketosis.

Body Condition Score (BCS)

The BCS of cows at the different stages of the lactation cycle needs to be monitored and is the most crucial of the four pillars. A scale of 1–5 is used (1 being skin and bone, 5 being over-fat). The three most critical stages to monitor BCS at are drying off (BCS 3), calving (BCS 3–3.25) and breeding (minimum of BCS 2.75). If 90 per cent of the herd is within this range at each stage, there should be few issues at calving and high conception rates at breeding.

While the three most critical stages are outlined above, body condition should be monitored throughout the lactation, and any significant issues identified at 200–250 days in milk should be dealt with from that stage (late lactation) and not in the dry period.

There are different issues associated with high and low BCS at calving. High BCS can negatively affect non-esterified fatty acid (NEFA) levels, beta-hydroxybutyrate (BHB) concentration and blood calcium levels. NEFA levels are a good measure of negative energy balance post-calving leading to metabolic disorders such as ketosis. Studies show that the ideal condition post-calving (BCS 3.25) produced less NEFA than fatter cows (BCS 4). This meant that cows in ideal condition lost less weight post-calving. Further research shows that these cows will have a longer interval from calving to first service and depressed peak milk yield.

On the opposite side, cows in low BCS (less than 2.5) are less likely to go back in-calf, have reduced milk yield and are more inclined toward lameness.

Management

At farm level, management can be an issue when implementing the correct dry cow system. Seasonal

calving and compact calving are ideal, but not without flaws. In a spring calving system, the blueprint is to have 90 per cent of the herd calving in six weeks. The herd goes completely dry around Christmas week and are all going to get around 60 days dry. This does not happen in most cases, with the average six-week calving at 68 per cent. If the herd is all dried off together, then there will be some cows getting up to 100 days dry. These are the cows that will become over-conditioned and have issues when calving.

Best practice should always be followed where possible, and always bear in mind that changes made in the dry period can have a knock-on effect throughout the lactation. Group changes can have a negative impact on dry matter intake. Dry cows should be moved to the calving box no closer than 14 days pre-calving (where possible, as this would require a large amount of space due to the compact calving system). If movement is required immediately, then pre-calving as late as possible (water bag, feet showing) is the correct procedure. Dry cows need one cubicle per cow, one feed space and 90 per cent of a stocking rate three weeks pre-calving. An adequate feed space would be considered at around two feet per cow, so 100 dry cows would need 200 feet of feed space. This often seems to be an oversight on farms when deciding how many cows they can house.

Clean water should always be available for dry cows. A rough guideline of five centimetres of trough length should be available. Cleaning troughs is essential, as faecal matter will build up. This should be done weekly.

If cows are at grass, then, preferably, they are housed for a month pre-calving and are stocked at 25 cows per hectare and given a dry cow diet including minerals. There should be very little grass on this paddock, and dry cows should not be used to clean up after milkers.

Management of dry cow feed is essential. Pit face and forages used should be monitored carefully for moulds. Moulds can cause many issues in dry cows that might not come to the surface until post-calving, such as abortions or metritis. Mouldy silage should not be fed, and if there is a suspicion of mould, a mycotoxin binder, such as Mycosorb A+®, should be used.

Where there are no feed troughs, feed should be pushed in four to five times per day. Weekly cleaning of feed troughs is required, as feed will build up and become mouldy, depressing intakes. If feeding a TMR to dry cows' feed troughs does not guarantee intakes, there can often be unobserved sorting. If feeding for two days, heating can occur.



Maximising feed utilisation is key to reducing feed costs

OPTIGEN®

Feed represents up to 70% of beef and dairy production costs. OPTIGEN® provides a consistent supply of protein in the rumen, helping increase feed utilisation, creating more energy for performance and reducing overall costs.

Why not see for yourself?

Alltech nutritionists offer on-farm analysis, assessing diet utilisation and its effect on animal performance. From there, we can advise you on optimum diet reformulation, helping you maximise feed utilisation.

**Speak with your feed supplier or
Alltech nutritionist on 059 910 1320
to find out how.**



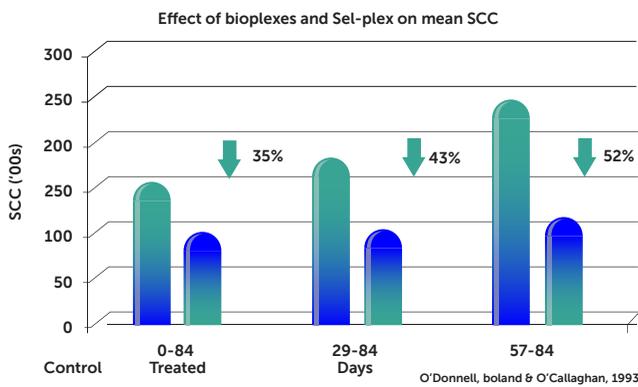


Figure 1

Nutrition

Feeding the dry cow is fundamental to InTouch Nutrition. There is ongoing research and many ways of implementing a dry cow diet, all of which should have the same outcome: The cow calves down by herself with no metabolic issues and reaches her peak yield, maintains this and goes back in-calf as quickly as possible.

The InTouch Dry Cow system is a controlled-energy, high-fibre diet (CEHF). It is a simple system that provides a single diet throughout the dry cow period. The use of a controlled-energy dry cow diet is beneficial for peripartum health, DMI and productivity.

To put this into practice, the BCS of the herd is determined, as is her maintenance energy requirement, based on the silage analysis, which is 100 MJ, or 8.6 UFL. DMI should be set and monitored at around 11 kilograms DM and under 12 kilograms DM for large Holstein herds with adequate protein levels. For further information, contact InTouch. We can advise on best practice and can even monitor DMI.

There has been a lot of silage made this year, and while the temptation is to feed silage alone, this will have a detrimental impact on BCS and DMI. Intake will not be controlled, as a dry cow can eat 13–15 kilograms DM from silage alone. Silages are good in general this year, so feeding a 70 DMD silage for 60 days could give more than 130 MJ of energy per day. This will result in a high BCS at calving, as mentioned above.

To control intakes and dilute the quality of silages while maintaining rumen fill, straw is used. This can vary

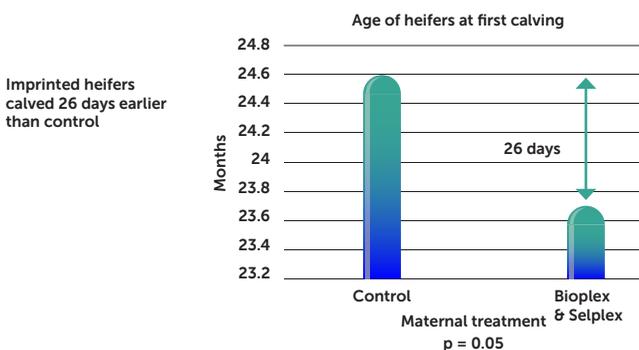


Figure 2

between 2.5–5 kilograms, depending on forage quality. Straw will also help to dilute the potassium, which is commonly over 2 per cent in Irish forages. Straw has returned to normal prices this year, so availability should not be an issue. This straw should be chopped from four to five centimetres, and care should be taken when processing. Over-processing will promote intakes, and under-processing will encourage rejection of the ration, sorting and suboptimal intakes.

It is also recommended to include a small amount of protein in the form of soya. This promotes good rumen function, meaning the dung is not excessively stiff. Studies also show that an increase in the protein content of the diet will increase the quality of colostrum. Some form of concentrate is also desired to allow the rumen bacteria to adapt quickly to consume high amounts post-calving.

Survey results from 277 farms and 24,470 cows showed that implementing this diet correctly led to a 60 per cent reduction in metabolic events, such as milk fever, afterbirths and displacements (Colman et al., 2011).

Minerals

Minerals are often overlooked in a dry cow diet in terms of quality and quantity. It is important to note that the mineral status of our forages can vary significantly. A mineral analysis is the only accurate way to know the mineral status of your forage to allow you to make an informed choice of an appropriate mineral supplement. Mineral labels can be difficult to interpret, and farmers may not fully know what minerals are being supplied. To ensure the cow is getting what she needs, ask your supplier what the daily mineral supply is, as well as what form the minerals are in.

On many farms throughout the country, producers use minerals containing inorganic salts of trace minerals, such as sodium selenite and copper sulphate. However, this form of trace mineral is not what the animal has evolved to use. The soil contains inorganic minerals, which are then taken up by the plant (e.g., grass) and converted to organic forms of minerals. The animal then eats the plant containing minerals in this organic form. The animal cannot store inorganic minerals and, therefore, do not allow mineral reserves to be built up for times of stress, such as calving or disease. Feeding trace minerals in their organic form, such as Bioplex® copper and zinc and Sel-Plex®, an organic form of selenium from Alltech, lead to these minerals being absorbed at higher levels, stored and utilised by the animal. This helps build the cow's immune system, offers her greater protection from metabolic diseases during stressful times and helps improve overall cow performance, such as supporting udder health and reproductive function (Figure 1).

Feeding Bioplex and Selplex minerals are also shown to reduce the age at calving for first-lactation heifers whose dams were fed these minerals during the dry cow period by 26 days, compared to dams fed a control (Figure 2).



Longevity and Health a Major Focus for Irish Dairy Farmer

By Richard Halleron

The number of Irish dairy farmers committing to making more of a focus on welfare and overall herd health is growing at an exponential level – and they are reaping the benefits for doing so. Undoubtedly, this momentum has gathered pace on the back of the regulation changes that will be introduced next January, where the future of the dry cow period is concerned. But above and beyond this there is a growing recognition, at farmer level, that management options are now available that are working alongside and helping boost the animal's own immune system.

If dairy cows, for example, are subject to a higher standard of health then they are less likely to succumb to challenges or can recover from episodes better and return to full health and production. And this principle extends to all other categories of livestock.

Many dairy farmers also believe that there are alternative solutions that are proving more effective on farm in terms of dealing with these challenges.

AHV'S MISSION TO IMPROVE ANIMAL HEALTH

Anthony Slattery, who milks 85 spring calving Holstein/Friesian near Ballyporeen in Co Tipperary, is a case in point. The Dairygold supplier explained: "In my opinion, the current protocols are not making the same impact as would have been the case in the past. In any event, I have been committed for some time to improving my cows' immune systems and ability to recover from health challenges using alternative methods."

Anthony is quick to confirm the role of AHV and the company's solution range and service over the past 12 months in helping to make this happen.

He explained: "I was aware of the company's activities on the back of news features that had appeared in the farming media. It had been my intention to make contact with the company directly.

However, everything fell into place when AHV's Mick O'Sullivan called into the yard



just over a year ago."

Anthony admits that it took some time to get a full grasp of how the AHV solution range worked in practice. "But I was given all the one-to-one advice that was needed when required and AHV advisors have been regular visitors to the farm. The level of service that I have received from the company has been second to none."

THE VEE VALLEY HERD

The Vee Valley herd, which is exclusively spring calving, is on target to average 540 kilos of milk solids this year. Half the animals in the milking group are first calves heifers, which means that some of Anthony's older cows will be producing up to 600 kilos of solids. "The cows started calving on 15th January with the season continuing through until the end of April. I am happy with their level of performance at the present time. There is a fair degree of Holstein genetics in

their make-up. And, on that basis, I am happy to offer them a fair amount of meal throughout their lactation. Also, to mention the improvement of the health side of things for the cows – and that's been a big focus of mine for some time."

HEALTH AND WELFARE ARE KEY TO PRODUCTIVITY

Anthony has been using the AHV product range strategically to boost the health and welfare of the cows. He commented: "All cows that have come through a difficult calving or have faced issues in any way are drenched immediately with the AHV Booster Drench Powder. It acts as a real pick-me-up and generates almost immediate results. It is now standard practice on the farm to drench any cow that is not presenting to be herself. The effects of drenching on the animal's overall health is outstanding. The added benefits of the powder helps to optimise rumen function, which will lead to the cow being more productive. I also give the AHV Booster Tablet to all first time calvers or any cow under condition after calving."

Anthony will use the AHV Extra Tablet, in conjunction with Aspi, to ensure the cow is as productive as possible during her lactation. "Aspi is a very important tool on-farm. It can be given to cows and calves. It supports the animal during periods of unrest, helps regulate temperature and optimises the animal's own immune system."

Anthony has also fed AHV's Calf Start powder for the first two weeks of life to all the calves born on the farm this year. He concluded: "My short-term goal is to change protocols for lactating cows on the farm. Long term, my aim is to optimise the longevity of the cows in the herd, making them as productive and healthy as possible. And AHV is helping to make this a reality." Anthony recently hosted an AHV workshop on his farm for local farmers in the area with a focus on education of the science behind the AHV solutions. Keep an eye out for future workshops in your area on social media.

Introducing Solantel Pour-On

Maura Langan, Veterinary Advisor, Norbrook, discusses the company's latest product launch: Solantel Pour-On... the first pour-on flukicide for cattle.



Solantel Pour-On is the first single-active, pour-on flukicide for cattle to be licensed in the UK and Ireland. Solantel Pour-on contains 200mg/ml closantel and is licensed for the treatment of late immature (>7 weeks) and adult *Fasciola hepatica* (liver fluke) infestations in cattle.

Liver fluke is a widespread problem

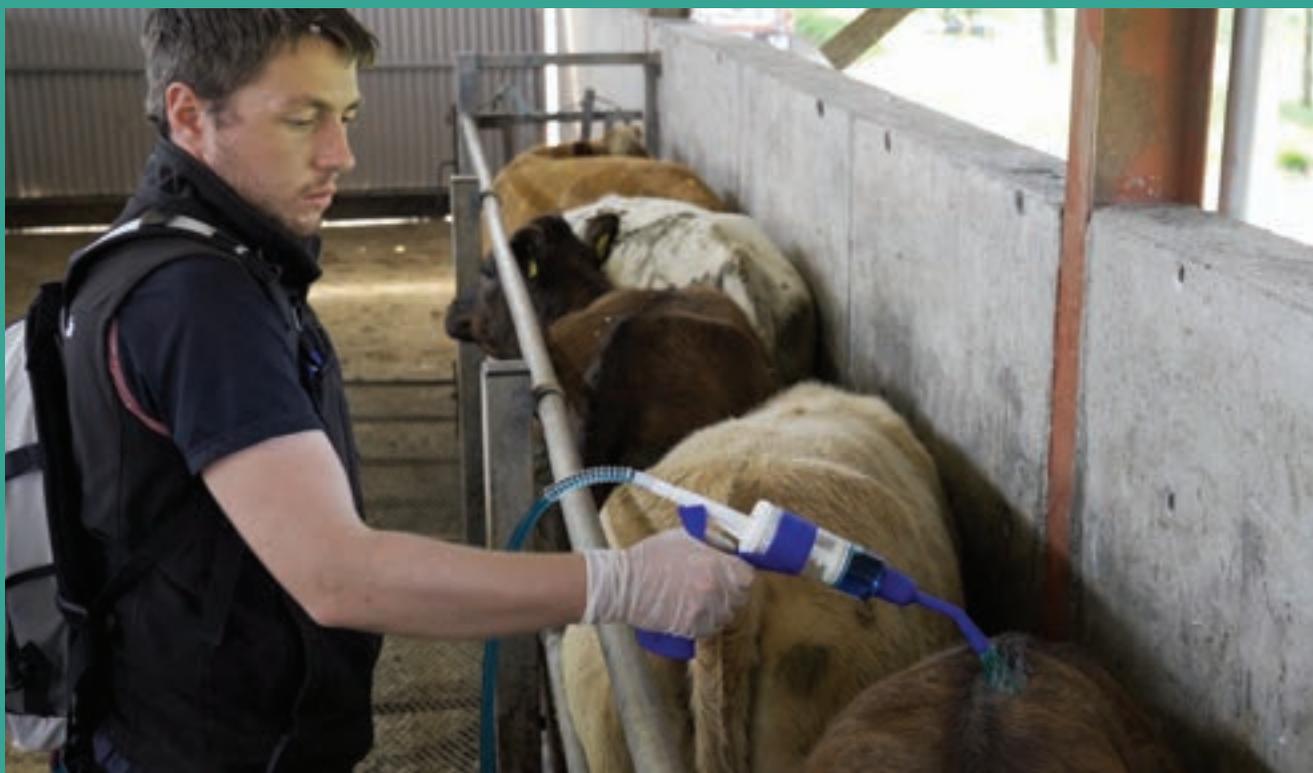
Liver fluke is a widespread problem in Ireland and has significant impact on the welfare and productivity of cattle. Advanced stages of liver fluke are easy to identify with cattle displaying symptoms of weight loss and scouring, but the subclinical effects are more subtle and generally responsible for reduced feed conversion rates, slower liveweight gain and poor carcass formation in growing cattle. Studies have also shown that subclinical liver fluke infection in breeding stock can result in reduced fertility, increased calving intervals and an increase in metabolic diseases post-calving. A recent study found that steers in Ireland with evidence of liver fluke at slaughter had an average liveweight of 36kg less than cattle with healthy livers at a standardised slaughter age. This resulted in an average loss to the farmer of €77 per animal.

The most definitive way to diagnose the presence of liver fluke on farm is through post-mortem examination, most commonly as feedback from the abattoir. Faecal egg counts will only identify adult fluke infection, so timing is critical. The risk of fluke is greatest from late summer onwards, so faecal egg counts taken earlier in the grazing season may not give an accurate diagnosis. Your vet may suggest other diagnostic tests from faeces or bulk milk samples that can identify earlier infection.

Responsible treatment

There have been reported cases of resistance to some flukicides, especially triclabendazole, so it's essential that as an industry we use these products responsibly. Rather than treating frequently at set intervals, farmers are being encouraged to treat less often and only where necessary. Individual treatment plans should be devised for the different management groups according to level of exposure and immunity.

At this time of year as we approach the housing period, many farmers will be thinking about treating their cattle for liver fluke. Housing marks the end point of exposure



to new fluke infection and can be a good time to treat cattle. There are a range of different flukicides on the market and they are generally classified according to the stages of fluke they are effective against. For this reason, it is important that the most appropriate product is used at the correct time in the fluke season.

A fluke-only treatment is likely to be the most appropriate treatment for adult cattle that have good immunity to gut worms or cattle that have received a persistent wormer, such as Taurador (doramectin), 5 weeks prior to housing.

Housing and fluke treatments

Generally, when treating cattle for fluke in autumn, two approaches are used. One option is to house cattle and delay treatment for a number of weeks. Treating cattle with Solantel Pour-On 7 weeks after they are housed will mean any fluke ingested just before housing will then be susceptible to treatment and therefore lead to a more complete fluke kill. Alternatively, if a heavy fluke burden is suspected, or if cattle are close to their finishing weights, then treating at the point of housing may be a more appropriate treatment option. Your vet will be able to advise you based on knowledge of your farm, its history and management practices. Pour-ons are a popular, convenient option for many farmers and a non-invasive treatment for cattle. Solantel Pour-On is easy to apply, however, care should be taken to

ensure it is applied along the midline of the back in a narrow strip between the withers and the tail head. Animals should be weighed and grouped according to bodyweight to avoid over or under dosing.

Solantel Pour-On has a meat withdrawal of 63

days but is not suitable for use in dairy cattle. It can, however, be used in youngstock and heifers up until the second half of pregnancy. Because there are limited flukicides licensed for use in dairy cows and concerns about triclabendazole resistance, this may be an opportunity

to introduce an alternative active ingredient as part of a whole herd parasite control plan.

For more information speak to your vet or SQP, read the product SPC or visit www.norbrook.com Use medicines responsibly. Legal category: POM

NOVEL PRODUCT INNOVATION

INTRODUCING THE FIRST SINGLE ACTIVE POUR-ON FLUKICIDE FOR CATTLE

1st

NEW Solantel[®] Pour-On Solution for Cattle

Norbrook
www.norbrook.com

USE MEDICINES RESPONSIBLY. Manufactured and Distributed in NI by: Norbrook Laboratories Ltd, Station Park, Strang, Co. Down, BT23 6AF. Distributed in ROI by: Norbrook Laboratories (Ireland) Ltd, Rossmore Industrial Estate, Monaghan, County Monaghan. Legal Category: POM (VET) (P) (S) Solantel[®] 200mg/ml Pour-On Solution for Cattle contains 200mg/ml Clofazone. For full details on this product please see the summary of product characteristics (SPC) available at: www.ema.europa.eu/FindaMedicine/Database/search (ROI) www.hpa.gov.au/therapeutic-interventions/therapeutic-products/information-for-a-visitor/ Advice on the use of this product should be sought from the medicine prescriber. | 1413-1417 | 14-NORB-249827



Storm. Powerful, fast and effective.



Pasta



Secure



Available in Secure and a new Pasta formulation.

- The fast way to eliminate rodent infestations
- Delivers a lethal dose in a single feed
- Effective even against resistant strains
- Save time and money in application

www.pestcontrol.basf.com

 **BASF**

We create chemistry

Getting it right for weaning this autumn

Suzanne Naughton, Veterinary Technical Advisor at MSD Animal Health, offers advice on best practice for weaning and how to reduce the incidence of disease.

Surveillance Report which collects information relating to animal health from all the regional veterinary labs around the country. Bovine respiratory disease is continuously identified as the biggest cause of death in cattle greater than one month old, well ahead of other causes of death such as gut infections or clostridial disease.

Weaning is one of the most stressful events an animal can go through in its life and as many have experienced, if pneumonia strikes during this time, the consequences can be devastating on the rest of that animal's productive life. Stress can have a severe effect on an animal's immune system and reduce its ability to fight off bacterial or viral infections. This increases the animal's susceptibility to disease as a result. Coupling the stressful weaning period with the changeable weather we experience in Ireland during the Autumn time can result in serious disease outbreaks. Correct management of weaning is crucial to reduce the incidences of disease occurring on farm. Weaning should always be a gradual process carried out over several days.

Concentrate should be fed for at least one month prior to weaning with the intention of the calf consuming 1 kg of meal per day at the time of weaning. Other stressful events such as castration should be avoided on the day of weaning. Castrating should ideally be carried out about one month before the date of weaning or two weeks after. Ensure there are adequate shelter facilities in the time period before and after weaning. Calves exposed to the elements are at an increased risk of stress and potential respiratory disease outbreaks.

Pneumonia is simply defined as inflammation of the lungs. BRD is viewed as a complicated process as many different factors can influence it, such as for example, weaning as already mentioned, mixing of groups of animals, housing and changes in diet or weather. The common thread linking these factors is stress. Cattle like routine and so any potential changes in their management or environment can cause stress, providing the perfect framework for bacteria and viruses to attack and cause disease. Generally, typical warning signs are stock off their feed, a watery or mucous discharge from the nostrils, panting or a cough. They might also have a fever with a temperature of greater than 39.5°. Once an outbreak of pneumonia occurs, it is important to consult with your attending veterinary practitioner to determine the cause of the outbreak and to consider potential treatment and control options.

In terms of control, vaccination can form an important component in reducing disease incidence along with good management and environmental procedures, particularly around weaning. By using a vaccine, we are trying to boost the immune system before it encounters a virus or bacteria and so reduce the development of

disease. As it takes a period of time from when a vaccine is administered to the time it becomes effective, it is essential that vaccines are administered well ahead of a known risk period such as weaning. There are many different types of vaccines available on the market depending on the viruses and bacteria you would like to cover or the method of administration.

Bovilis Bovipast RSP is one example which provides protection against two important viruses in the bovine respiratory disease complex, PI3 and BRSV but also provides the broadest protection available on the market against *Pastuerella* (Mannheimia) bacteria. *Pastuerella* is an extremely important bacterium which can cause severe respiratory disease, particularly in the weaning age group, often resulting in death despite vigorous antibiotic treatment. The primary course consists of 2 injections administered under the skin, 4 weeks apart with boosters recommended before the next risk period. The full onset of immunity occurs 2 weeks after the second injection. The two-part Bovipast primary course can be safely administered pre-weaning with the first injection starting 6 weeks out from weaning and the second injection administered two weeks before weaning.

Cover against IBR should be included in any vaccination programme against BRD. IBR is from the herpes virus family of viruses and approximately 75 per cent of herds in Ireland have been exposed to this virus. Herds which might routinely buy in cattle are at an increased risk of the disease, particularly if stock are coming from many different source farms. A once-off vaccination can be administered pre-weaning and repeated every six months thereafter. Bovilis IBR Marker Live provides the fastest onset of immunity against IBR where it starts to work after 4 days if given intranasally or 2 weeks if given into the muscle. Bovilis IBR Marker Live can also be conveniently administered on the same day as Bovipast RSP but at different injection sites.

A third option to consider is intranasal vaccination against the pneumonia viruses BRSV and PI3 virus. Bovilis INtranasal RSP Live provides the fastest protection available against these two important viruses with a 5-day onset of immunity against BRSV and a 7-day onset against PI3. As a result, the vaccine starts to come into effect 7 days after intranasal administration to an animal.

By following the correct vaccination protocols, you are allowing the animal time to respond appropriately to vaccination, ensuring better results and reducing the incidence of disease. Vaccination should always be used in tandem with good management procedures and environmental considerations. For further information regarding vaccination and deciding on a vaccination protocol most suitable for your farm, please contact your attending veterinary practitioner.

TONY NOW HAS HIS T-DAY FIRMLY IN PLACE

Tony Barrett runs a dairy enterprise just outside Mullinahone, milking 120 cows. During the winter cows are housed on solid floor cubicle sheds, where the slurry is scraped into a large outdoor tank. "My system of keeping the slurry out of the houses and filling the tank is pain free" explains Tony, "however, it feels like I am prolonging the agony when it comes to extracting it." For Tony his problem is the crusting that occurs in the storage tank. "Having the tank outside does make it easier in that I can mix it whenever I like, and it is quite deep so capacity it not a problem with

rain water. The problem I have is the amount and frequency of mixing I have to do." As slurry fills the tank the fibre will naturally float to the top and start to form crust. As months go by, this crust will increase significantly, causing a lot of extra work getting it mixed. "I spread slurry throughout the year", explains Tony, "which means I have to mix it each time. I would hope that after the first mix, it would be easier the next time, however I just end up back to square one". This was why Tony was interested in using Slurry Gold, after talking to a rep at the Ploughing in 2019. "It really sounded too



good to be true, I found it hard to believe something so small and simple could solve such a headache for me".

"I decided to give it a go and thankfully the rep very kindly called out to advise how to use it on my system. As the slurry is scraped daily, the treatment had to happen in my open tank, however as it is over 30 feet across, getting it treated across the whole tank took a bit of head scratching and a novel solution. We managed to get the product spread across the whole tank however at the time I couldn't help but feel I was throwing my money away. Thankfully the results said otherwise!".

When Tony came to mix his tank he couldn't believe it. "At first glance there was still a crust on the surface, but as soon as I started to mix it quickly disintegrated. Not only that, I had to hardly mix the tank for the rest of the year!" exudes Tony.

GRASS RESPONSE

Further benefits were witnessed when it came to spreading. "My father commented on there being less of a smell, and this was added to the improved grass response I got. Whatever was kept in the slurry, definitely did something in the ground." Tony is now keen to look further into getting even more from his slurry. "Last season I probably used it as trial and error. Now I know what to expect, I will be maximising what I can get from it in terms of savings from mixing and fertiliser use".

Tony sums up his experience, "I suppose it is like most new things, until you have done it, you don't realise how simple it is. I would advise all farmers to give it a go to see why."


SLURRY GOLD
 KEEP YOUR SLURRY HEALTHY, NUTRITIOUS
 & MORE ENVIRONMENTALLY FRIENDLY



			
Reduces Polluting Odours	Improves Nutrient Uptake	Minimises Crust Formation	Enriches Soil Fertility

NOW IS THE TIME
 TO PLAN YOUR T-DAY!



www.slurrygold.com
 Tel 01 437 6894 / 028 6634 8469

The right time

Charles Chavasse, Area Veterinary Manager at Zoetis, discusses the importance of getting your timing right when it comes to addressing herd health and how farmers' expectations of vaccines has changed since the Covid-19 pandemic.

Last year, when IFM interviewed Charles Chavasse, he was optimistic about the development of a vaccine to tackle Covid-19. Today, that vaccine is a reality and, according to Charles, its arrival has not only brought hope for the future but it has also affected how farmers view vaccines when it comes to herd health management. "With the pandemic, people's expectation of vaccinations is more realistic now. Certainly, farmers at one stage used to expect a vaccine to prevent disease and that is it – job done. I'm known for talking about my 'three-legged stool' analogy. I actually have a wooden three-legged stool that I wander around the country with. My point is: you can stand on a three-legged stool all day, but if one of those legs is dodgy you are going to fall off the stool. So, for example, at this time of year we've got weanlings that are about to be housed and we can get an increase in pneumonia. So, we need to have a control programme in place, which has three legs: firstly, you need to reduce stress and handle animals in a careful manner; secondly, we need to make sure we house them in a suitable place, in other words one with good ventilation, without draughts and that is dry; and thirdly we need to control the pathogens and that is where either dosing or vaccination at the right time can help you. If you decide 'I'm going to do nothing about my sheds but I will vaccinate, and my handling is ok' you are probably going to fall off the stool. There isn't one thing. We have learned this during the pandemic: yes, vaccination has made a huge difference here, but if you don't do face coverings, hand hygiene and these other things then unfortunately we will still keep getting cases. So, when we look at our cattle situation, vaccines make a huge

difference, but they don't prevent all disease. They mean that we get less disease and we have a better chance of treating the animal and the animal surviving."

Timing is everything

Talking further about animal medicines, Charles' key message is about getting the timing right. "There are a lot of good products out there that can work, but if you don't use them at the right time, you don't get the same good results. From a farming point of view, farmers know that you get returns on nitrogen, as long as you use it when it's warm and damp – you don't go out spreading fertiliser when you know it is going to be dry for the next week, you time it. The same is true for animal medicines. If we go and use worm doses at certain times of year- for instance after a dry spell early on in the season- there may not actually be much of a worm burden and the dose could be wasted. There is a real drive now to get dosing done when it is needed, at the right time."

This is significant, he notes, at this time of year when we traditionally dose animals as we house them. "This makes a lot of sense... if we dose them as we bring them inside then they won't be exposed again. However, if you have lungworm living in the lungs it can cause disease, blocking the airways and damaging the lining of the lungs. If you bring cattle in and dose them to get rid of lungworm, it is going to take 2-3 weeks for the damaged lungs to heal and the first 2-3 weeks of an animal's life in a shed is the most difficult and stressful period.

"Why don't we do something different? We know we get pneumonia at this time of year, so let's start thinking about dosing a month before you house cattle with a product that has persistency. You kill the worms and the lungs have a chance to heal outside in the fresh air. Their appetite will also increase so they will graze more efficiently. So, it is all about timing. This is what we call a Pre Housing Dose and it is not an extra dose"

Immune system

"The other thing we know now about vaccines, since Covid, is that when you get one it doesn't work immediately, it can take time. If you vaccinate as you are putting animals into the shed it can take anywhere from 5 days to a month for immunity to develop. So vaccine programmes need to be organised before the challenge arises so that immunity will be in place when it is needed." "In addition, immuno-compromised people don't respond to vaccines as efficiently as people in good health. The same rule applies to cattle: cattle in good health grazing quietly will respond better, than if they are dealing with a new environment with more 'argy-bargy' and more stress." Charles also notes that paying attention to timing even applies when you are bringing cattle back from the mart. "Farmers coming back from the mart now will often feel that they should vaccinate cattle immediately but this is not always advisable. The cattle will be stressed and this increases when being introduced to a new group of animals. It is much better to leave them stand for 1-3 days

and let everything settle down – then their immune system will respond better. Take things gently and reduce stress as much as possible."

The right product for the right time

Keeping with the theme that 'timing is everything', Charles points to Liver Fluke and how timing directly affects how to choose the right product. "We have some really good products out there for fluke – all of these kill adult fluke but very few control early immatures and only a few control the late immatures. A cow standing in the field on November 1st about to walk into the shed will carry a burden of early immatures, late immatures and adults which she will have picked up at different times during the summer and early autumn. If you choose a product that only kills adult fluke and eggs you will only be killing a third of the fluke in the liver. Fluke is a very local thing though – there are so many variables and it depends on where you are in the country – but you need to bear in mind the timing and the product. In drier areas of the country, if you haven't had history of fluke and not many issues, you could hold off until the end of December and take dung samples then to see if you have eggs present. But for those in counties with heavy rainfall, you may not have the luxury of waiting, as this would result in feeding animals with a fluke burden that are being inefficient with their digestion."

Welfare

Discussing the importance of the physical surroundings of housed cattle in health terms – e.g. space, ventilation, dry lying conditions, comfortable slatted floors, lack of draughts, access to feed and water – Charles explains that he believes farmers are more aware than ever before about these issues for healthy cattle. "Everyone is a lot more aware these days when it comes to providing the correct housing environment and reducing stress for the animals. The key for weanlings is that they need a well-ventilated shed and plenty of fresh air, but critically you can't have draughts. So ideally the cattle shed should be sealed to about 5-6 feet high.

"People need to look critically at their sheds and assess where the issues are. You might have a shed where there was never a problem with 40 cattle in it, but now you have 45 cows in there... it can be as subtle as that. There can be a temptation to get more cattle into the shed but in doing that we increase the demand on the area and also add to the stress for the animal."

"Also, I am not sure why, but we have a national disease where we hate to build walls! All across Ireland I see farmers build sheds onto sheds and by doing so they take away inlets from both sheds: please build four walls when you are building a shed!"

Concluding, Charles states: "Get vaccinating, get dosing, but make sure you are doing it at the right time. And look at your shed and make changes if needed – now, not in November. Your vet is there to help and advise on all of these matters."

USE DECTOMAX AS YOUR PRE-HOUSING DOSE MAKE THE MOST FROM AUTUMN GRAZING



DECTOMAX[®]

Doramectin

- + Increase liveweight gain
- + House cattle with clean lungs
- + No need for another worm dose at housing*



*If cattle are housed within 5 weeks of dosing. All Cydectin[®] products contain moxidectin. Cydectin[®] Tricidal[®] Pour-On Solution for Cattle contains 5 mg/ml moxidectin and 200 mg/ml trichlorfon. All Dectomax[®] products contain doramectin. For further information please check the SPC or contact Zoetis (01) 2669800, www.zoetis.ie. Legal category LM. Use medicines responsibly. www.apha.ie. PM-16095 (Aug 2020)

zoetis

Dr. Anne Marie Butler, ASA President,
Professor Laurence Shalloo and
Michael Berkery, FBD Trust



Science:

Driving innovation

The 79th annual Agricultural Science Association (ASA) conference was live-streamed from the Killashee Hotel in Naas. This year's event, sponsored by FBD Insurance, was officially opened by Minister for Agriculture, Food and the Marine, Charlie McConalogue and featured a keynote address from US Secretary for Agriculture, Tom Vilsack.

Attendees heard from a host of global agri-food experts about the challenges facing the sector which included a major focus on how the industry must address, respond to and mitigate against the impact of climate change.

Opening the conference, Minister McConalogue said: "We have some of the best and brightest talent in our agricultural science sector who are playing a crucial role in one of the most pivotal and transformative times for Irish agriculture. There are undoubted challenges but with challenge comes tremendous opportunity. The key to unlocking these challenges and unleashing our potential is through the agricultural science sector which works hand-in-hand with our pioneering farmers to produce world-class, safe and sustainable food. I am confident that our sector is in safe hands given the depth and breath of talent in the area."

In his keynote address, Mr Tom Vilsack, US Secretary for

Agriculture said that the USDA and European Commissions Director General for Agriculture have discussed the possibility of formalising high level bilateral engagements to tackle the bilateral and global challenges facing EU and US farmers. "The US commends the high level objectives of the farm to fork and biodiversity strategy and shares the EU's commitment to sustainability, while recognising that while we share the same goal there may well be different ways to get to that goal. While the US supports trade-friendly sustainability and climate practises we continue to stress the need for appropriate assessment of risk and impact for science based regulatory frameworks and the importance of innovation and new technology methods to meet the EU's ambitious goals."

ASA Distinguished Member

During the event, European Commissioner, Mairead

McGuinness received an ASA Distinguished Member award. The award, sponsored by AIB, honours a member who the organisation believes has made a significant impact on the Irish agri-food sector in the course of their career. Speaking about the award, Dr. Anne Marie Butler, ASA President said: “Mairead was the first female graduate of University College Dublin’s Bachelor of Agri-Science degree in Agricultural Economics in 1980 and went on to carve a significant career in agri-journalism which saw her present RTE’s Ear to the Ground before taking on roles as a journalist with the Irish Farmers Journal and editor of the Farming Independent. Throughout her political career she has been a huge advocate for rural Ireland and the Irish agri-food sector and she is incredibly deserving of this award.” She has also had a distinguished career in politics and is Ireland’s longest serving MEP.

ASA FBD Fellowship

The event also provided the platform to announce the prestigious ASA FBD Fellowship Award. The inaugural recipient of this award was revealed as Professor Laurence Shalloo, a Senior Principle Research Officer with Teagasc, at the Animal & Grassland Research and Innovation Centre, Moorepark. The annual programme, which was launched last year, aims to contribute positively to scientific innovation within the Irish agri-food industry while developing Ireland’s next agri-industry thought leader. The €10,000 Fellowship award will be used by Laurence to further develop scientific knowledge in his chosen topic which will focus on “Strategies to achieve Climate Neutrality in Agriculture and the land use sector”. Michael Berkery, Chairman, FBD Trust said, “FBD Insurance has grown hand in hand with Irish farming over the last 50 years, and we are proud to be a partner to the Irish Agri-industry. FBD remains steadfast in our support of Irish agriculture and we are delighted to support the work of the ASA as long time sponsor of the ASA conference and now this exciting new fellowship initiative. We are proud to support a programme that aims to drive excellence in the agricultural industry. Congratulations to Professor Laurence Shalloo on being named the 2021 fellow and we wish him all the best with his research. We look forward to his conclusions on climate neutrality.”

Robust Debate

The conference featured three moderated sessions where speakers shared insights, offered recommendations and engaged in robust debate about the potential solutions to the challenges currently faced by the industry. Speakers included: Dr. Harry Clark, Director of the New Zealand Agricultural Greenhouse Gas Research Centre; Dr Alison Van Eenennaam, Animal Genomics and Biotechnology Specialist, University of California, Davis; Michael Scannell, Deputy Director General for Agriculture and Rural Development, EU Commission; Professor Frank O’Mara, Director Designate, Teagasc; Bill Callanan, Chief Inspector, Department of Agriculture, Food and the Marine; Ger Cleary, Glenisk, Matt Foley, Kilbush Nurseries and Nick Cotter, Cotter Agritech.

KEY QUOTES

“We are incredibly fortunate as a nation to have a proven track record in delivering world class scholars and experts and I believe through continuous commitment of our education and training bodies we will continue to produce scientific experts who collaborate internationally and will inform, guide and shape policy decisions in the future.” **Dr. Anne Marie Butler**

“In Europe we do recognize that we have to find a formula that allows us to seize on the huge potential that is biotech, but we also have to do it in a manner that is acceptable to our citizens. So we need to revisit the entire legislative frame work... to ensure that innovation, including innovation in biotech, plays a key role in tackling the huge challenges that confront us.” **Michael Scannell**

“I think we are in a very optimistic place – we can now see that there are technologies emerging, and very rapidly, that will be on the market in a few years that can make a substantial contribution, particularly to the reduction of methane.” **Dr Harry Clarke**

“If scientists can’t effectively communicate the benefits resulting from innovations in agricultural production systems then we will lose access to them to the detriment of agricultural sustainability.” **Dr Alison Van Eenennaam**

“Nationally, we have a very good story to tell in terms of our pasture-based system... but let’s be clear: the trends are in the wrong direction and that is not something that we can accept or that the general society will accept.” **Bill Callanan**

“The big initiative we have brought forward, in collaboration with all of industry, is the Signpost Programme. We know that the demonstration farm model works in terms of influencing other farmers – we will work with the demonstration farms in relation to the adoption of technologies and collect evidence in terms of the impact, and hopefully that will springboard the other 100,000 farmers in the country to adopt these technologies.” **Professor Frank O’Mara**

Messages:

- ▶ Messages from Moorepark Open day 2021:
- ▶ Knowledge is power to financial wellbeing.
- ▶ Get the Booklet “Irish Dairying – Delivering Sustainability”
- ▶ I have summarised key section.
- ▶ “Print off and learn them off”, the school teacher might say.
- ▶ The farming year starts in October – make the plan.

By Matt Ryan

MESSAGES FROM MOOREPARK OPEN DAY 2021

Environment & Sustainability:

- ▶ Good news:
 - ▶ We have a carbon footprint of 0.99 kgs CO₂ per kg MS (milk solids) compared with the world average of 2.4. It could be as low as 0.86 if sequestration is included in the calculation – one of the best in the world! This means: In the last 12 years Ireland has produced an extra 3,358 billion litres of milk – all of it sold on the world market. If that was produced by the average cow in the world then CO₂ in the atmosphere would have increased by 4.7 million tons of CO₂.
 - ▶ Ireland’s GHG (greenhouse gas) in 2018 were the same as that of 1998, with 2019 declining by 4 per cent.
 - ▶ In 2020 average cattle numbers were 800,000 below the 1998 figure.
 - ▶ Dairy cow numbers are, more or less, the same now as they were in 1984 when milk quotas were introduced.
 - ▶ The value of dairy exports in 2020 was €5.17 billion, accounting for 40 per cent of total food and drink exports up from €2.29 in 2010 (29 per cent increase)
 - » Of every €100 of dairy exported €90 is spent locally while of every €100 of multi-national exports only €10 is spent in Ireland.
 - » With 60,000 jobs being supported by dairy, it means that every 138,000 litres a farmer produces on his farm supports one person in a job in rural Ireland.
 - ▶ Emission intensity of milk production declined between 2012 – 2019.
 - ▶ Calf mortality up to 28 days of age is 3.6 per cent compared with 6 per cent and 7.8 per cent for UK and Netherlands, respectively.
 - ▶ Water use: Ireland has a very low water footprint:
 - » Ireland uses 6 litres water/kg MS while Australia uses 108 litres and America uses 125 litres.
 - » We could improve on the 6 litres by:
 - › Prompt repair of leaks,
 - › Recycling plate cooler water,
 - › Using high pressure washers, and,
 - › Collecting and storing roof water.
 - ▶ Biodiversity: Dairy farms in Ireland have a total land area of 7.5 per cent devoted to natural or semi-natural habitats. This compares well with our European compatriots. The quality of existing habitats should be maintained/enhanced before embarking on new habitats.
 - ▶ Feed – Food competition: This occurs when land is used to feed ruminants which could be used to produce human edible food.
 - » Overall, the ruminant sector produces more edible

protein than if there was no ruminant sector in Ireland because much of the land in Ireland is not suitable for cropping.

- » Activities including increasing pasture yield or removing ruminants from land suitable for arable production can significantly decrease the level of feed-food competition occurring.
- » Dairying is the best, with a land-use ratio of 0.47. This means that for every 1 kg of human edible protein produced by the dairy sector, only 0.47 kg of crop sourced human edible protein could be produced from the land used. The average of the ruminant sector in Ireland is 0.69.
- » The figure for dairy-beef is 1.08 while dairy-beef in America is 3.4 – grossly inefficient!
- » This is an important piece of information to remember, like all of it.
- ▶ Reseeding cost approx. €750/ha but that cost is recouped in 2 years – this makes reseeding one of the most effective on-farm investments.
- ▶ Protected Urea gives a 71% reduction in nitrous oxide loss component to CAN and a 70% reduction in ammonia loss compared with Urea.
 - » Therefore, use protected in the straight N and N+S slots on your farm throughout the year.

Challenging news:

- ▶ Ireland is responsible for 34% of Ireland’s GHG output.
- ▶ Ireland is responsible for 99.4 per cent of the ammonia (NH₃) emissions in Ireland,
 - » 47.1 per cent from manure housing and slurry storage; 30.1 per cent from slurry spreading; 12.3 per cent from manure deposits on pasture (urine & dung) and 10.6 per cent from N fertiliser.
 - » Hence the need to address each of these by reducing the % Protein in meal to 12-14% at grass, use 100% protected urea on your farm, spread all slurry by LESS. Achieving the latter two will reduce NH₃ emissions by approx 80%.
- ▶ Nitrate oxide (NO₂) loss is also an issue and it is reduced by:
 - » Reducing chemical N by 10 per cent
 - » Adhering to the Nitrate directives,
 - » Avoiding slurry spreading during the prohibited periods
- ▶ An EPA report shows that in period 1987 – 1990 3.6 per cent of rivers had “poor” quality water compared with 0.08 per cent I 2017-2020 period. However, 230 out of 575 rivers declined in quality – lot done and more to do!
- ▶ Only approximately 33 per cent of applied N is utilised.
- ▶ Emissions per hectare of GHG, ammonia and Nitrogen balances were 2-6 times higher on dairy farms than other Irish enterprises.

Performance Indicators for current and future dairy systems:

	Current	Target
Stocking Rate (LU/ha)	2.1	2.7
MS/ha	866	1222
Replacement Rate(%)	26	18
6-week calving Rate (%)	65	90
Nitrogen (Kg N/ha)	186	150
Grass Utilised (Tons/ha)	7.3	12.1

Meal Fed (kg DM/cow)	1025	450
% Slurry spread by LESS	10	100
Protected Urea		100
GHG (kg CO ₂ /kg(MS))	0.99 (0.82)	0.74 (0.62)
GHG (kg CO ₂ /kg/ha)	9,465 (7,862)	10,498 (8,832)

Technical Tidbits

- ▶ Farm debt has reduced from €3.08 to €1.93 per kg MS from 2007/09 period to 2020. Because greater efficiencies, increased output with little increases in overall debt, producing more MS/cow.
- ▶ EBI, continued to deliver profitability and low environmental hoofprint. The shock is that the national average EBI is only €126 and that doesn't take into account the sizable number of cows, by stock bulls, with no EBI.
 - ▶ Jersey crosses deliver approx €150/cow more than the H-F. Nationally, Jx herds had higher EBI (+€47), higher annual milk receipts/cow (+€63), and a higher 6-week calving rate (+13.7 per cent) compared with the average straight H-F herd - Source: ICBF)
 - ▶ Every €10 increase in hirs EBI was associated with 0.0074 kg decrease in milk carbon footprint.
 - ▶ We are basically short of individual data from farmer individual herds but mid- infrared spectroscopy testing of individual cows milk (through milk recording) and bulk milk samples offers vast potential. Traits such as, DM intakes, fertility and emissions could be predicted for individual cows – mind blowing technology!
 - ▶ Positive research is ongoing to identify bulls that are good at maintaining milk yield post peak and who will have lower SCC.
 - ▶ DNA test R1s and R2s – Why?
 - » Will ensure more accurate identification of superior replacements, embracing such traits as milk yield, fat, protein and fertility.
 - » It can also be used for DNA-based calf registrations (approx 8 per cent of all dairy calves born have a parental error), the monitoring of inbreeding, the % jersey in the animal and genetic defects. It only costs €22 with a net gain of €33/animal.
 - ▶ Progress is being made on selecting sires with greater genetic merit for disease resistance and this will enhance herd health, reduce costs and increase profits - more data is required from individual farmers
 - ▶ Next Generation Herd experiment shows:
 - » High EBI herds are more productive, more fertile and more efficient than the national average herd,
 - › % F and % P was 0.23 per cent and 0.09 per cent higher,
 - › The 6-week incalf rate was 82 per cent V 65 per cent
 - › Milk solids (kg/body weight) was 0.90 V 0.87
 - » MS/ha was 40 kg more.
 - » Jerseys, Danish and NZ, were better than the national herd on all these traits, and their ratio of MS/kg body weight was 1.03 and 1.10 respectively – impressive!
- ▶ Sexed semen is the future:
 - ▶ Because we will have a lab in Moorepark spring 2022 we will have sexed semen from the best AI bulls,
 - ▶ By using sexed semen to provide the necessary replacements to your herd, the calf crop profile will be close to 30 per cent female dairy calves, 3 per cent male dairy calves and 67 per cent beef calves.
- ▶ However, we may have to use in-vitro produced embryos to advance AI bull genetics – will occur because of reduced numbers of male dairy calves.
- ▶ Genetic gain is improved by breeding heifers with sexed semen. Timed AI protocols allow two inseminations within 24 days.
- ▶ Sexed semen has a shorter duration of viability in the female reproductive tract, 12-16 hours, compared with conventional semen, which is greater than 24 hours; hence delaying AI time improves pregnancy rate.
- ▶ Grassland:
 - ▶ Every extra day at grass in the autumn is worth €1.80/cow/day and €2.70/cow/day in spring.
- ▶ Being a participant in Teagasc's PastureBase is essential:
 - » You will have recorded grass measurements to:
 - › Help you make instant decisions as to when you have too much or too little grass ahead of cows,
 - › Field and variety comparisons,
 - › Manage N applications relative to available grass.
 - » You will have year to year data for comparison with yourself and with group members.
- ▶ See weekly growth rates and projected growth rates and much more.
 - ▶ Reseeding cost approx. €750/ha but that cost is recouped in 2 years – this makes reseeding one of the most effective on-farm investments.
 - » On-farm varietal trials show that the best varieties can be grazed 7.3 to 8.0 grazing's/year with another 0.45 to 0.77/ha silage cuts.
 - » Every extra grazing delivers 1300kg DM/ha.
 - » Work on “multi species” is ongoing at Moorepark but it, with white clover, is a no brainer for cattle farmers.
 - ▶ Clover is the future:
 - » A grass clover sward (22 per cent) getting 150kg N/ha compared with perennial ryegrass, getting 250kg N/ha, was €108/ha more profitable, because:
 - › It produced 20kg MS/cow more,
 - › N savings,
 - › Nitrogen use efficiency was 18 per cent better.
 - » Reseeding (3-5kg/ha) and over sowing (4-6 kg/ha), of white clover should commence as early in the year as possible (April – June)
 - » The first grazing should take place at 600-1000kg DM/ha cover.
 - » I am a big fan of Red Clover on outside silage ground with perennial ryegrass give yields of 12-15 tons DM/ha with 90kg N/ha. But in a mixed species grazing trial (one year) it's addition to the mix increased per hectare yield by 1006, 854 and 587 kg DM with 100, 150 and 250 kg N/ha. Because of its contribution in early reseeds with white clover it makes a big contribution before the white clover reaches max production,
 - ▶ Nitrogen: Because of the pressure coming on it's availability at farm level we must use it more efficiently than here-to-fore.
 - » We will get more out of our N (up to 30 per cent +) if soil fertility is optimum as highlighted in Table1. It shows:
 - › That where lime, P and K are all below optimum, only 35 per cent of applied N is used up.

- > Whereas 65 per cent is used up when all 3 are optimum.
- » Most farmers fall well short of optimum soil fertility.

Table 1. Percentage nitrogen use efficiency across grassland fields according to the status of soil pH, phosphorus (P) and potassium (K) fertility.

Mean grassland nitrogen use efficiency	Soil pH with optimum range	Soil P within optimum range	Soil K within optimum range
63%	✓	✓	✓
54%	✓	X	✓
57%	✓	✓	X
53%	✓	X	X
35%	X	X	X

Grassland nitrogen use efficiency was calculated at the percentage of the applied fertiliser and manure N recovered by the grass sward across the 446 fields on which measurements were taken over 2 years on commercial Irish dairy farms.

- » We have to make better use of slurry as Table 2 shows.
- » The available N in 1000 gallons of slurry is:
 - > Trailing Shoe: Spring = 9 kgs N
Summer = 3kg N
 - > Splash Plate: Spring = 6kg N
Summer = 3kg N

Table 2. Nitrogen (N) availability and value (€) using low emission slurry spreading (LESS) methods

Nitrogen Use Efficiency	Cattle Slurry Nitrogen Value when applied at 33m ³ /ha					
	Splash Plate		Trailing-shoe/Bandspreader (LESS)		Direct Injection (LESS)	
	Spring	Summer	Spring	Summer	Spring	Summer
N Recovery %	25%	15%	40%	30%	50%	45%
Available N /ha	20 kg	12 kg	33 kg	23 kg	40 kg	36 kg
N Value (€/ha)	€20	€12	€33	€23	€40	€36

- » I hope this is the last time I have to write the following:
 - > In terms of grass grown/ha there was no difference between CAN, Protected Urea and Urea with all averaging 13,326kg DM/ha.
 - > Therefore, use protected all year round.
 - > There was a difference of 1284kg DM /ha between using 150 and 250 kg N/ha.
 - > Extended autumn grass for profit:
- » Building herbage mass should begin in August,
- » Target AFC (Average farm cover) with a 40-day rotation for end September:

- > 2.5 cows/ha = 1000 kg DM/ha
- > 3.0 cows/ha = 1100 kg DM/ha
- > 3.5 cows/ha = 1200 kg DM/ha
- » The last rotation should begin in early October (late September for wet farms and very compact early calving herds) and end on 21st November, depending on soil type.
- » Over 60 per cent of the area should be grazed by 1st November – that should be 70 per cent for high stocked milking blocks.
- » Autumn closing date did not impact on late lactation milk yield,
- » Autumn closing date has a significant impact in grass availability in spring – every 1 day delay in closing results in 16 kg DM/ha/day less in spring.
- » Increased grass availability in spring is more valuable than autumn grazing. In the period 7-12 weeks post calving when high grass feeding was compared with low grass feeding milk solids (MS) per day were 0.2kg more at 2.4 kg MS/cow/day and methane emissions were 15 grams/day less.

- ▶ Expansion has caused most farms in a survey to be inadequately served by their infrastructures:
 - » Only 20 per cent of paddocks on the farms were deemed to be of adequate size for 36-hour grazing,
 - » Over 43 per cent of paddocks on farms with 150 cows were only adequate for 12-hour allocations,
 - » For a 150-cow herd, the cows walked on average 533 metres daily, hence the importance of farm roadways as herd get bigger.
- ▶ Winter feed budgets should be done on a dry matter basis:
 - » For instance, silages of 22 per cent, 25 per cent and 28 per cent Dm will have 0.163, 0.174 and 0.185 ton of DM per cu metre.
 - » Cows, incalf heifers and weanlings will require 12, 10 and 5 kg DM/hd/day for winter.
 - » Silage quality should be:
 - > 25-30 per cent dry matter
 - > 68-70 per cent DMD for dry cows and 73-78 per cent for milking cows. And 50 per cent of silage should be the latter,
 - > Preservation is important; dry silage should have a pH of 4.5 while wet silage must be less than 4.2 pH.
 - » Therefore, it is essential to get silage analysed for quality and mineral status.
- ▶ Once-a-day (OAD) milking has a part to play on some farms



ICMSA

THE FAMILY FARM ORGANISATION

John Feely House, Dublin Road, Limerick
Tel: 061 314677 Fax: 061 315737 Email: cathalmaccarthy@icmsa.ie Web: www.icmsa.ie

and particularly in spring:

- ▶ Full year OAD loses 28 per cent milk yield and milk solids (MS) by 21 per cent,
- ▶ OAD in spring for 4-weeks reduces yield by MS by 11kg and 10 kg MS in the year.
- ▶ OAD in spring for 6-weeks reduces yield by MS by 15kg and 17 kg MS in the year.
- ▶ Autumn OAD for 7 weeks had no effect on yield or MS,

▶ Animal Health:

- ▶ Johnes: Testing individual cows for it is unreliable but herd-level testing has merit.
- ▶ The use of chlorine-based products for cleaning dairy equipment has been banned since 1st January 2021 – based on random test 97 per cent of farmers are compliant.
- ▶ Lameness is a very painful disease that results in reduced milk yields, increased SCC's, reduced fertility rates and increased culling rates.
 - » It is present in 7.9 per cent of cows at grass and 9.1 per cent of cows when housed.
 - » On average, herds with a 19 per cent suboptimal level of mobility lost €2,138 per 100 cow herd.
 - » Regular mobility scoring, footbathing and selecting cows with a negative PTA for lameness should be the norm.
 - » Reducing stones on paddock entrances/roadways, avoiding slats on roadways and collecting yards, avoiding concrete roadways, and avoiding sharp turns both on entrance and exit to the milking parlour are key to preventing lameness.

Benchmark Indicators of Welfare in Ireland (Survey of all farms):

	Top 20%	Average	Bottom 20% of farms
Lameness	5%	9%	32%
BCS outside target	13%	20%	
Skin damage	2%	8%	29%
Tail breaks	3%	9%	52%
Tail lacerations	2%	18%	
Nasal discharge	15%	30%	86%
Human Avoidance			

Response 74% 82% 100%
If you don't compare well with the top 5% then you should strive to improve.

- ▶ Teat sealants, why, when, where and how?
 - » Why, because overuse of antibiotics can lead to antibiotics resistance in humans. (I know because I got a staph aureus infection in my knee and it took 12 weeks of antibiotics to get rid of 'him')
 - » When? Herd average must be less than 120K SCC and little or no clinical cases in previous lactation.
 - » On farms with good individual milk recording and clinical mastitis records who practice good preventative protocols.
 - » How? A high level of hygiene, proper teat end preparation and use of correct infusion technique.
- ▶ Calf rearing is a labour-intensive task and it is essential to do it well for farm profitability without compromising calf health, behaviour, growth and overall welfare.
 - » Automatic feeders are 39 per cent more labour efficient than manual feeding. There was no difference in calf health, behaviour or weight gain between the feeding systems.
 - » A calf housing survey showed that two-thirds of sheds had excessive wind speed and insufficient light while 90 per cent of pens had insufficient floor slope and were generally short of calf rearing space.
 - › Individual and group 'calf hutches' are a lot more labour demanding than indoor manual or automatic systems, while individual hutches may negatively impact on calf welfare.
 - › On average 10% of calves surveyed had pneumonia (range 0 – 80 per cent). Round roofed sheds with lean-to roofs had a significant higher percentage of pneumonia than other house-types.
 - » The key target date and weight periods are 6, 9 (housing), 14,15 (breeding), 24 (calving) months when the animal should be 30 per cent, 40 per cent, 50 per cent, 60 per cent and 90 per cent of the cow's mature weight.

Want to be rewarded for your low claims record?

Get up to 30% off AXA SMART FARM INSURANCE. Know You Can

axa.ie/farm • 0906 435070 • In Branch

Terms & conditions apply. Claims free on your farm for the past 3 years. Windscreen claims are excluded. AXA Insurance dac is regulated by the Central Bank of Ireland.

- » Post rearing regime had a greater effect, by increased dry matter intake, on body weight than weaning age, and throughout the rearing life of a replacement unit. Jx heifers had a higher intake as a % of body weight compared with H-F throughout all stages of the replacement's life.
- » To vaccinate or not? Large expanding unvaccinated dairy herds are endemically infected with BRSV, BVD, IBR, Salmonella Dublin and Leptospira Hardjo.
 - » Contract rearing did not adversely affect the prevalence of these diseases.
 - » Farmers giving 3+ vaccinations compared with those giving 2 or less vaccinations had an extra €478/ha gross margin more.
- ▶ Uterine disease was not associated with the breed of cow, or EBI but with herd management, such as clean calving facilities, timely intervention when problems arise and knowing the risk factors, such as, calving difficulty and twins.
- ▶ Dairy calf-beef by way of contract calf rearing offers the dairy and beef farmer a profitable opportunity in dealing with male calves.
- ▶ Staff, time and working conditions:
 - » Family farms, 117 cows, can operate effectively with 3,000 hours/year and 1,500 hours between mid-January and June. Larger herd are more labour efficient than small herd (national av.size) 11.6 V 27.5 hours/cow respectively.
 - » The workplace of the future, 2030, as seen by students

- and staff, will have to be much more staff friendly:
 - » Time off and regular end of day (finish by 6pm) plans must be communicated well in advance,
 - » Most staff want 2-3 weekends off per month,
 - » Over 72 per cent want to work a 40 – 50-hour week,
 - » More staff will be 0 contract, flexi-time,
 - » They expect to be using improved technologies for managing fertility, calving, milking, drafting, moving cows to and from paddocks grass measurement/management, calf rearing and whole farm management programmes with more recording of data required. And expect to be trained in these technologies.
 - » To compete with their non-farming friends, they expect to work shorter hours, have good safe working conditions with comparable pay.
- » The application of LEAN principles does reduce working time and the physical workload.
- » Good communication relationships/skills by both manager and staff are essential.
 - » Induction programme for new employee; rarely done on 1 employee farms compared with 30 per cent on 3 employee farms,
 - » Probationary period for new employee – same result,
 - » Performance/review – very rarely done,
 - » Rosters – ranges from 18 per cent to 55 per cent from 1 to 3 staff employed,
 - » Regular staff meetings
 - » Training plans, rarely done, which is worrying,
 - » Career plans are as rare as “hens’ teeth”,
 - » Paid sick leave occurs on 20 per cent (1 staff) to 36 per cent (3 staff) of farms,
 - » Approximately one-quarter to one-third are paid over-time,
 - » This survey should alert farm employers how badly we generally manage staff; and it needs a lot of employer training/awareness as to staff needs.
- » Teagasc, through Emma-Louise Coffey, run an excellent training programme for ‘would-be’ farm managers and farm owners.
 - » There is unlimited opportunity for farm managers with a starting salary of €30,000 increasing, with experience, to €60 -70,000 working outdoors.
 - » Many of these managers have gone onto share-farming ventures and farm ownership.
 - » Parents need to explore this option when helping children decide on their futures during Leaving Cert years.

Purchase our 75th Commemorative Publication

Macra na Feirme 1944-2019
A History in Pictures

This special edition marks 75 years since the founding of Macra na Feirme and charts the course of the organisation's history as well as its contribution to Irish and rural society during that time.

Purchase a copy today and see who you will find in this fantastic look through the Macra na Feirme national and local archives.

For readers of Irish Farmers Monthly, Macra is pleased to offer free delivery on the purchase of the book using the following discount code. The book can be purchased on our website www.macra.ie. Use Code: IFM21 for free delivery

www.macra.ie/book

The Planning Year starts Now

- ▶ Many of the decisions and actions you take in October have a big influence on how profitable 2022 will be for you.
- ▶ What are the key decisions?
 - ▶ Body condition (BCS) of herd.
 - ▶ When and which cows to dry off in October,
 - ▶ Building and maintaining autumn grass until November,
 - ▶ Investment steps needed to minimise your 2021 tax bill.
 - ▶ Analysis of silage for DMD and mineral levels,
 - ▶ Soil analysis so as no field has a ph of less than 6.3 or below Index 4 for P & K.
 - ▶ Are replacement heifers on target?

“Contented staff reflect the personality of the employer.”



Growth through trusted partnership



Speak to us today about flexible competitive finance

For all your agricultural machinery
finance needs, please contact:

1. Chris Smyth 07860 367125
2. Jimmy Murphy 0879 059394
3. Martin Connaughton 0872 481740
4. Geoff O'Shea 0872 481739



www.agcofinance.com

Part of the AGCO Family

Challenger

FENDT



VALTRA



The new MF 7S Series

Massey Ferguson has announced the launch of its brand new MF 7S Series, which introduces four new models offering maximum powers from the 155hp up to 190hp. Designed for professional, discerning users these new tractors are equipped to a high specification as standard and come with a choice of transmissions, cab comfort, automation and control technology to suit all businesses and applications.

Maintaining Massey Ferguson's new, clear model designations, the numbers denote the maximum power of the tractors: the MF 7S.155, MF 7S.165, MF 7S.180 and MF 7S.190. All also deliver up to an extra 30hp with Engine Power Management (EPM) – depending on model. With a 2.88m wheelbase and six-cylinder, 6.6-litre engine, the new tractors form the perfect bridge between the new four-cylinder 135hp-180hp, MF 6S Series and the larger, MF 8S Series, powered by 7.4 litre engines.

“Massey Ferguson is extending our new era of straightforward and dependable tractors to the MF 7S Series,” says Thierry Lhotte, Vice President & Managing Director Massey Ferguson, Europe & Middle East. “At the same time we are introducing new levels of comfort, control, convenience and connectivity with the addition of new technology and features first seen on the award-winning MF 8S Series. “With its combination of strength, agility, automation and performance-enhancing technology, the MF 7S Series delivers the productivity that’s required for modern farming operations. And, to help operators maintain this performance over long hours the cooler, comfortable and quiet cab is equipped with new easy to use, convenient controls. The MF 7S brings big benefits to all your operations – whether that’s a contracting business, larger farm or mixed enterprise.” There is a choice of Essential, Efficient, Exclusive and Panoramic specifications, depending on model, which are designed to provide a range of comfort and output-enhancing features to boost productivity and

performance in the field and on the road.

The four new tractors in the MF 7S Series are built on a 2.88m long wheelbase for optimum stability and traction. Powerful six-cylinder, 6.6-litre engines deliver high levels of concentrated power and torque, while robust engineering enables the tractors to carry and haul heavy loads. Developed to deliver high performance in the field, on the road and in the yard, these high productivity tractors are also easy to use. To further help enhance performance in a wide range of work they are equipped with a range of automated features, straightforward controls and connected technology.

An advanced AGCO Power 6.6-litre, six cylinder engine delivers maximum powers from 155hp to 190hp, all models benefit from generous extra power and torque, which are generated automatically when required for transport, PTO work or the demanding hydraulic requirements.

Massey Ferguson continues to meet the latest Stage V emission regulations with its unique ‘All-in-One’ system, which combines a diesel oxidation catalyst (DOC), selective catalytic reduction (SCR) and a soot catalyst (SC) in one compact unit.

Massey Ferguson’s highly efficient and easy to use Dyna-VT ECO transmission offers seamless shifting and is available on all models. The Super Eco version of the Dyna-VT further improves efficiency by allowing the tractor to achieve 40km/h at just 1,450rpm. The Dyna-VT continuously variable transmission now has a new automatic mode. This allows operators use the Multipad lever or foot pedal to alter forward speed, while it automatically sets the optimum engine speed according to the load and speed. As well as delivering smoother operation, it also improves fuel efficiency. MF 7S operators benefit from significant cab improvements, which provide more comfort and better control. First introduced on the Tractor of the Year



award-winning MF 8S tractors, these include a new armrest, Multipad controller and enhanced connectivity. Thanks to a new air conditioning system the cab is now up to 4C° cooler than before and features a completely new, high quality trim with, for Exclusive and Efficient versions, a chrome steering wheel and black dashboard.

Operators benefit from a new, more comfortable, standard air-suspended seat. A heated seat option, with improved ventilation, is equipped with the DDS – Dynamic Damping System that responds automatically to the severity of the bumps with lateral stability suspension.

Outside, an LED light design, along with the bonnet lightbar, produce a bright signature, with the option to fit up to 16 LED worklights. For loader operations there is also the option to fit the useful Visio Roof, which provides a great view of load through the whole lift range. Further improving comfort is a choice of optional mechanical or active mechanical cab suspension, as well as the suspended front axle option. Efficient and Exclusive specification includes the new Multipad lever and comprehensive control armrest, linked to the seat. This easy to use, ISOBUS-compatible controller places everything conveniently to hand, including linkage control rocker switch, cruise settings, driving mode pre-sets and MF Guide activation. It also houses a micro joystick to operate two electric spool valves. A new, unique multifunction lever option provides easy control of a loader and front linkage. As well as operating the spool valves, this also allows operators to change direction and tractor speeds.

New for Exclusive and Efficient versions is an option that enables the radio and mobile phone and media be operated through the Datatronic 5 screen, with inputs via Bluetooth, USB or Aux lead. Operators are alerted to incoming calls by a pop-up on the screen – allowing them to pick-up, decline or mute. Datatronic 5 not only manages all the tractor functions but, also with ISOBUS connectivity and GPS signal, it runs the MF Technologies' Precision Farming suite. These include MF Guide, with its fast set-up 'Go-Mode' as well as MF Section Control to reduce overlaps and precisely target inputs with variable rate applications using MF Rate Control. Data gathered and recorded automatically on MF TaskDoc is transferred via USB memory card. The MF Task Doc Pro option, allows you to create application plans and wirelessly synchronises with farm management software. MF Telemetry is standard on all MF 7S models.



Gene-edited food

At the end of September we decided at home to give the staycation a miss and go abroad for a week. As my wife decided to go to the duty free

I said I would have a look in

the book section to see if there was anything that might be of interest to me. As I browsed in the shop a headline in a well-known UK newspaper stopped me in my tracks – 'Gene-edited food coming to UK plates'.

Now let's take a look at this. It has been revealed in the UK that ministers are set to give the 'go ahead' for gene editing in agriculture, which would result in alternative produce on supermarket shelves in the UK in five years (that's if they have drivers). Gene editing is the deleting or boosting and tweaking of DNA from the same plant. GMO is the inserting of DNA from one plant to another, in other words mixing DNA. In the UK, supporters of this system say the technique can make crops more nutritious and resistant to extreme weather conditions and pests. It also will make animals less reliant on antibiotics, which will help farmers to reduce their dependence on antibiotic use in dairy and beef farming. If this is a success on a world scale it might help with world hunger and feeding the growing population and possibly result in cheaper food.

Opponents to this system fear that it is not trialled long enough and animal rights groups have stated that it has welfare concerns. Countries using this system include Australia, Japan, USA and Brazil, but a few are still limiting its use at this point.

The reason the UK is going down this road is because of Brexit. The UK government's intention is to repeal EU laws governing the use of genetic editing under the term "Brexit opportunities". The EU has a long-standing ban on gene editing but things may be changing with a review now being put in place over the next while to look at opportunities and the loosening of the current ban. Any changes to UK standards in agricultural policy may well have knock-on effects in Europe and in Ireland. Gene-edited products have to be clearly labelled and are currently banned from sale in the EU, but this may change. Meanwhile, this month sees the start of the five-year trials in Hertfordshire in the UK where they plan to grow a new strain of wheat.

So, here are some of the questions that need to be answered: What does this mean for Irish farmers supplying the UK market with produce? Will the UK import more produce from countries outside Europe using gene editing? Will Europe change its policies on both GMOs and gene editing? If this is a success and is passed, is the aim to work with all farmers, big and small, or will it lean to more large scale and sustainable farmers? My friends, there are a lot of questions but very few answers...

Until next month, farm wisely and farm safely.

TOP-NOTCH TRACTION FOR A SUPERIOR FARMING EXPERIENCE



NEW MF 7S | 155-220 HP

FULL OF TORQUE AND NIMBLE CAPABILITIES

6.6 litre, 6-cylinder engine delivering power, efficiency and fuel economy

DYNA-6 AND DYNA-VT TRANSMISSIONS

Easy to use, efficient and comfortable

2.88M WHEELBASE FOR THE PERFECT POWER

Optimum stability with high levels of ground traction

SMART AND SUSTAINABLE FARMING TECHNOLOGIES

12% fuel savings, no overlaps and less fatigue

YOUR MF 7S COMES WITH

FINANCE 1+5 @ 0% (UP TO 50% RRP)

MF CARE 3 YEAR WARRANTY

& PRECISION FARMING BUNDLE

WORTH UP TO €1,500*

VALID UNTIL 31ST DECEMBER 2021

*T&Cs apply

* Finance is provided through our finance partner AGCO Finance. AGCO Finance Limited is authorised and regulated by the Financial Conduct Authority only in respect of agreements regulated by the Consumer Credit Act 1974. AGCO Finance Limited only lends business to business and on business assets. Terms and Conditions apply. All applicants must be 18 years of age. Any quotation is subject to formal credit approval. Alternative repayment profiles are available upon request should the advertised profile not meet the cash flow requirements of your business, an Admin fee will be payable on signing and an option to purchase fee (OP only) will be payable at the end of the agreement.

MASSEY FERGUSON® is a global brand of AGCO Corporation.

MASSEY FERGUSON
EXPERIENCE



WWW.MASSEYFERGUSON.CO.UK

Abbey Machinery LESS Applicators Support Emission Reductions and Add Value



According to Abbey Machinery, LESS Applicators are key to efficiently meeting emissions reduction regulations while saving money through the precise application of valuable, nutrient dense slurry. There are a few key steps farms can take to reduce nitrogen emissions (nitrous oxide and ammonia) to the air and the loss of nitrates to water. Most importantly is the better utilization of applied N sources through the efficient use of N in organic manures to improve the carbon footprint of the farm and food produced. N, P and K nutrients are fundamental to effective food production. Crops rely on balanced nutrition from N, P & K to grow. Healthy grass transfers the nutrients through herd consumption promoting the health and energy of the herd.

In developing a sustainability program, the operator must account for factors such as weather, soil type and local conditions when applying these nutrients to ensure nutrients are applied as efficiently as possible. Abbey Machinery LESS applications work with various technical controls such as NIR and ISOBUS to support slurry nutrient measurements and application control for optimal spreading. It is essential to consider the nutrients that are applied are delivered at the right rate at the right time and in the right place. Abbey Machinery

have a range of mounted and stand-alone low emissions slurry spreading applicators to meet new regulations. Slurry applicator models include a DM Band Spreader, Trailing Shoe, Shallow Disc Injector and Cereal Applicators in a variety of different sizes ranging from 6m to 24 meter depending on the model, all for efficient and precise slurry spreading. Abbey applicators are also built to support umbilical systems. Included in the Abbey Machinery range is the Trailing Shoe applicator. The Abbey Trailing Shoe technology distributes the slurry on the ground underneath the canopy of the grass. This ensures nutrients are absorbed faster, leaf contamination is reduced, and carbon emissions are reduced to the absolute minimum. As with all LESS equipment the timing and accurate placement of the slurry maximises the optimum nutrition and sustainable quantities of N, P, K to the leafy growing sward. The Trailing Shoe technology parts the grass while applying the slurry to the soil surface and minimise contamination of the leaf. The company notes that the Trailing Shoe results in up to 60 per cent reduction in N loss (as ammonia) to the atmosphere compared to traditional spreading methods. The Trailing Shoe applicator returns slurry to silage ground recycling nutrients efficiently and maximizing slurry fertilizer.

The new **CLAAS TRION** fits your farm.



MODEL RANGE

20 TRION models

HYBRID 750-720

STRAW WALKER 660-520

TERRA TRACS

Available on 750, 730, 720,
660, 650 and 530

MONTANA

Available on 750, 730, 720,
660, 650 and 530

SEPARATION SYSTEM

2 rotor on 750 HYBRID

1 rotor on 730/720

6 walker on 600

5 walker on 500

APS THRESHING SYSTEM

600mm threshing drum
on all models

CLEANING SYSTEM

JET STREAM on
all models

NEW MULTICROP CAPABILITY

Change from one crop
to another quickly
and simply

ENGINES

Cummins up to
435hp

GRAIN TANKS

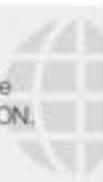
sizes up to
12,000L

NEW CAB

on all models



Learn more
about TRION.



Made for your unique challenges, your specific goals, your individual success
– the new CLAAS TRION comes with choices, not compromises.

Call your CLAAS dealer today for a demonstration.

claas.ie

CLAAS



Kverneland Dealer Open Day

A few weeks ago I travelled down to Clonmel where Kverneland Ireland hosted a dealer open field day. On display was a sample of the new tillage equipment available for the 2022 tillage season. Both conventional and min till equipment was on display. Dealers attending the event were upbeat and ready to do business but the key message was to order ASAP, as lead-in times for the delivery of new machines are now slower coming from Europe. Owing to Covid-19 restrictions still in place, this event was not open to the public but full details of all new equipment can be found at Kverneland Ireland directly or from your local appointed dealer. Below is a sample of some of the equipment that was on display.



The new U-Drill is designed for high speed high output drilling, it offers seedbed preparation, levelling, re consolidation, seeding and pressing in one pass. Up to 4350-litre hopper capacity, with a fully programmable headland management system.



The new E-Drill has a fully integrated drill and power harrow, up to 2100 litre hopper capacity and the coulter bar mounted directly to the packer roller by euro connection guarantees consistent depth control.



The new Qualidisc offers a Farmer & PRO Spec: Farmer spec – 520 mm discs and 15% lighter frame; PRO spec – 600 mm discs & heavier frame. The Actipack roller is suitable for all Irish conditions.



The new iXtrack Tracked Sprayer comes in iXtrack T3, T4 & T6 models - from 2600 litres up to 7600 litres. Full ISOBUS machine and full GPS section control as well as Boom Guide PRO – automatic boom height control system.



On display was the new McConnell Combi Press 3000. This machine is available in both 3m and 4m working widths and comes fitted with 700mm rings and has a hydraulically adjustable spring mounted levelling board.



The new Enduro 3000 Pro This machine is ideal for minimum tillage both the Enduro Pro model and standard models offer a 3-row tine set up across the 3m and 5m working widths. Both Enduro and Pro models can be fitted with levelling discs or levelling tine systems. All machines are either rubber buffer or spring loaded.

KEENAN[®]

an **Alltech** company

Handcrafted in Ireland
using cutting-edge
technology



Driving farm profits through precision nutrition

Alltech Farming Solutions Ltd
Clonagoose Road, Borris
Co. Carlow, R95 K223, Ireland

Tel: +353 (0)59 977 1200

keenansystem.com

[f KEENAN System](#)

[t @KEENANsystem](#)

Get yourself Covered



Tom Murphy
Professional
Agricultural
Contractors of Ireland



The question of what insurance cover a farmer should have was covered recently in this publication. The need for significant cover is brought home to us all when you read the statistics contained in the new 2021-2024 Farm Partnership Action Plan, of which PAC Ireland is a member. These show there were 100 fatalities on Irish farms during the last five years. With relation to non-fatal injuries it is widely accepted there is significant under reporting of farm related accidents. This is supported by the Teagasc National Farm Survey

(NFS), which indicate that "on farm" incidents causing injury occurred on 11 per cent of farms. When transposed, this means that approximately 3,000 injuries occur on Irish farms each year. Many of these injuries are serious and life changing, with devastating effects, often leaving the victims unable to work. I put all these figures forward to remind Agricultural Contractors that they too are part of the agricultural statistics. I am reminded of a meeting where the question of having the right level of insurance cover brought out the sense of humour in some contractors. When it was suggested that a contractor should have a €1 million cover in the event of his death, one laughed that she would be a "wealthy widow". However the smiles vanished after it was demonstrated how much would be left to invest to raise a family after all bills and debts had been settled and tax paid on any interest received. The remaining funds to raise the family were considerably less than imagined. If a Contractor is seriously injured and unable to carry on his contracting business, it makes a bad situation worse, if appropriate insurance cover is not in place. Money

isn't everything but there is no doubt that it makes it easier for a family to cope without the worry of debt and financial insecurity hanging over their heads. It also brought a smile when asked if any Contractor had insured their partner in the event of their death, serious illness or disability; not one even considered it necessary. Recently I witnessed a heartbreaking situation where a young couple in their 30s with two children under six. The wife was struck down and after months in intensive care, is learning to walk and talk again. She will have permanent disability and is unlikely to ever work again. With no personal insurance in place to help with household expenses, medical expenses and house modifications, things could not be worse for this little family. On a lighter note I read that, in order to help reduce greenhouse gas emissions, a German animal psychologist is training cows to go to an assigned area to do their business. If they comply they get rewarded, if they don't they get a blast of water. The vision of my neighbour Sean's 100+ herd rushing to the cattle loo and him armed with a rewards and a hose... it doesn't bear thinking about!



More success with PÖTTINGER

AEROSEM PCS, LION

- Innovative agricultural technology for 150 years
- PCS – Precision Combi Seeding – Integrated planting of maize

Paul Wilson, Tel: +353 87 3748785
Ben Stokes, Tel: +353 87 7645310

POETTINGER Ireland Ltd., Glenaleamy
Powerstown Road, Clonmel, Co. Tipperary, E91 D326
T: +353 52 6125766, info@poettinger.ie





SERIE 5.

EXCELLENCE EVOLVED.



SERIE 5

landini.it/en

THE NEW LANDINI SERIE 5. TRADITION REINVENTED, TIMELESS EXCELLENCE CREATED.

With performance comparable to machines in a higher category, the new Serie 5 Stage V is perfect both for working in the open field and on the farm, performing any task with maximum efficiency and offering excellent operator comfort. Designed and manufactured to meet the needs of every farm, with particular attention to the human factor and to style: a winning mix that has led to the Landini 5-120 Dynamic model being nominated as a finalist for the "Tractor of the Year 2022" award in the Best Utility category.

Landini

Passion for Innovation.

Complete new TRION combine range designed to 'Fit your Farm'



With the introduction of the new TRION range of combines, CLAAS has completed the final stage in the total replacement of its combine range, which started with the introduction of the new generation LEXION 8000/7000 combines in 2019. The TRION is a completely new range of combines, with a total of 20 models available including not only conventional 5- and 6-straw walker machines, but also single and twin rotor hybrids, plus the availability TERRA TRAC and MONTANA hillside versions.

The wide range of farms, crops and climates in which CLAAS combines work around the world, mean that combines of this size have to be versatile. This is reflected in the extensive range of variants, features and options to ensure that the new TRION provides customers, whether they be a small mixed arable farm looking for a simple, straightforward machine or a large arable unit looking for a more technically advanced combine to maximise output, with a TRION model that can be specified to truly 'Fit your Farm'.

While at its heart the new TRION relies on well proven CLAAS straw-walker and HYBRID threshing technology, it also incorporates many features that set completely new performance standards on combines of this size.

Extensive model range

Within the 20 models available, the base TRION range comprises of two 500-range 5-straw walker models, three 600 range 6-straw walker models, including the TRION 640 which provides a new entry point into the 6-straw walker market, and three 700-range HYBRID models, of which two have a single rotor and one has twin rotors. Common to all TRION models is the well-proven APS primary threshing system designed to thresh out up to 90 per cent of grains, leaving just the harder to thresh grains for the secondary separation system. For greater throughput capacity, TRION 500 and 700 range machines are fitted with a 1,420mm wide threshing system, increasing to 1,700mm for TRION 600 models. These are wider than on previous TUCANO models, which were either 1,320mm or 1,580mm wide.

For the TRION, the APS system comprises of a 450mm diameter accelerator and a 600mm diameter closed threshing drum, which again is some 33 per cent larger than the threshing drum on the TUCANO. As a result, the concave area is also greater, with the concave on TRION 600 models being 31 per cent larger than on the TUCANO 450, and the concave on TRION 700 models 9 per cent bigger than on the TUCANO

580. The front concaves are interchangeable and the speed of all three drums is synchronised and adjusted using CEBIS, which is also used for adjusting the concaves, which are also synchronised.

To keep maintenance downtime to a minimum, the completely redesigned and less complex drive system for the TRION means that there are now six less belts on HYBRID models and three less on straw walker machines compared to the previous TUCANO range. As on the new LEXION, the drive system is based on that used in the JAGUAR which ensures a more positive, smooth engagement of the threshing and auger systems.

Secondary separation

All 5- and 6-straw walker TRION 500 and 600 models come as standard with the well proven CLAAS Multifinger Separation System (MSS), which CLAAS states evenly fluffs the straw for greater separation efficiency, especially in difficult conditions. TRION 730/720 HYBRID models come with a single 4.2m long and 570mm diameter rotor with 6 grates, while the larger TRION 750 has twin 4.2m long and 445mm diameter rotors with 5 grates. A new feature for combines this size is the hydraulic adjustment of four rotor flap 'bomb doors' and rotor speed is infinitely adjusted independently of the APS system using CEBIS. Another new feature on CLAAS combines of this size is the extremely efficient JET STREAM cleaning system using six or eight turbine fans, meaning this is now used across the complete CLAAS range.



Latest in cab design

Greater operator comfort is ensured in the new design of cab that is fitted to the TRION range. Its spacious design has both more leg and head room. The larger windscreen and narrower A-pillars give the operator excellent visibility over the cutterbar. Features include new seats that can swivel 30 degrees each way and footrests to ensure a comfortable seating position. The 12-inch CEBIS touchscreen colour monitor is easily adjusted independently of the armrest. As previously, in addition to using the CEBIS touchscreen, all the main combine functions can also be activated using buttons on the armrest. The CEBIS terminal also now accommodates the controls for CEMOS DIALOG and CEMOS AUTOMATIC when fitted. Four automatic steering systems are available for the TRION: LASER PILOT on the cutterbar, the cab mounted FIELD SCANNER, AUTO PILOT on maize headers or the satellite-based GPS PILOT, which is controlled using the new CEMIS 1200 terminal.

New Optum AFS Connect



The Case IH Optum CVXDrive tractor range – a strong seller for the brand since its 2015 introduction, on the back of its compact yet high-horsepower and high-specification design – has been re-engineered to create the new Optum AFS Connect range, with a new cab, interior and connectivity package designed to benefit both the operator and the owner. Key among the changes, the new cab brings with it more space, lower noise levels and improved vision. There is a new Multicontroller armrest, configurable controls to allow the tractor and its implement to be adapted to the operator and the task, and upgraded luxurious interior materials. All of the changes have been designed to ease the operator's workload,

enhance efficiency, raise productivity and ultimately boost the bottom line of the business running the tractor. The Optum AFS Connect range, like the line-up it succeeds, contains three models, with rated power outputs of 250hp, 270hp and 300hp, all featuring the Case IH CVXDrive continuously-variable transmission. However, many of the rest of the tractors' key design points are new. At their heart is a new cab in which a number of key areas of the interior have been completely redesigned. Many of these features are inherited from those established on the Optum AFS Connect's larger Magnum cousins, which were upgraded to AFS Connect specification in 2019. They include the Multicontroller armrest and its multi-function lever, larger AFS Pro 1200 touchscreen monitor with greater functionality, and A-pillar tablet instrumentation for engine/transmission information read-outs. Meanwhile, the new tractors are now equipped as standard with the Case IH AFS Connect telematics package, for instant-two-way data transfer between tractor and online management portal, real-time machine monitoring and much more. One of the most prominent features of the new Optum AFS Connect range is the cab. Here, operators will find a larger interior with a volume increase of 7.5 per cent, enhanced vision, courtesy of 11 per cent more glass, and a noise level of just 66 decibels, helped in part by the premium materials in which the cab is now trimmed.



Kverneland

NEW Model

Finance Available
*T & C's apply

WHEN FARMING MEANS BUSINESS
www.kverneland.ie

Kverneland - The Future of Grain & Fertiliser Seeding
e-drill maxi plus and S series power harrow

Leonard Hovenden: 087 1475137 | John Doyle: 087 101 3053 | Allan Hetherington: 0044 7826544630



Free Fertiliser Plan by Grassland Agro

Grassland Agro is committed to helping farmers meet the environmental challenges faced by agricultural industry by offering a free fertiliser planning service. There are considerable improvements that can be made in soil fertility. Recent Teagasc research shows that 90 per cent of fields sampled in Ireland are suboptimal for either pH, Phosphorus (P) or Potassium (K) or all combined. Improving soil fertility would allow for a reduction on the reliance of farmers on chemical fertiliser and improve overall productivity on farm.

To tackle the challenge, over the last three seasons Grassland Agro has recruited and trained a team of agronomists to deliver on farm fertiliser advice and plans. The fertiliser planning programme was developed using the latest research available from Teagasc Nutrient advice guidelines and specifies the rate, timing and product to be applied on each field in straight forward template. The old adage that each farm is 'different' is as true today as when it was first uttered in terms of different stocking rates, soil types, systems and objectives. Grassland Agro have a team of 24 professionally trained agronomists covering the entire island of Ireland. The agronomy team receive in-house training from Dr. P.J. O'Connor and Dr. John O'Loughlin. Each member of the agronomy team also completes the Teagasc Crop Nutrition Management course delivered by Dr. David Wall and Mark Plunkett.

The Grassland Agro fertiliser plan tackles the three key areas of sustainability.

• ECONOMIC

Each farm is unique, and often there can

be variation in pH, P and K status within a farm. The fertiliser bill is one of the largest variable costs on farm and warrants careful analysis. By targeting each of these issues as opposed to a blanket treatment, costs can be considerably reduced. The lost production of suboptimal soil fertility or pH will also be calculated for a farmer and each round of fertiliser will be included in the plan and costed so that a farmer can do a cashflow budget for the year.

• ENVIRONMENTAL

Nitrogen inputs can be reduced by rectifying pH, and suboptimal soil fertility. Nitrogen use efficiency is impacted by suboptimal soil fertility namely P, K and lack of Sulphur (S). The over application of nutrients on areas where soil fertility is high can also have negative environmental impacts and using the Grassland Agro fertiliser planning service will allow for a more informed decision to be made.

• SOCIAL

The bug bear of many Irish farmers is the increasing requirement to defend their "social license to farm". Irish agriculture is world class with respect to carbon intensity in the area of dairy, beef, lamb and grain production. It is something we should celebrate and be proud of. However, the advantage of this component is that it challenges all Irish farmers to further increase efficiency and increase profitability while maintaining the environment in which we live.

SOIL SAMPLING

The first step in devising a fertiliser plan is have soil samples available. Now is the

optimal time to conduct soil sampling. The Grassland Agro agronomy team can collect your samples or assist in soil sampling if you do not have up to date samples. If you have soil samples and would like to get a free fertiliser plan by Grassland Agro then please email your soil test results to: Hello@grassland.ie

When the results are received Grassland Agro can build a fertiliser plan bespoke to each farm and each field. Grassland Agro fertiliser plans are done on farm with the farmer with his/her budget, soil type, soil samples, production requirement and system in mind. The fertiliser plan is designed to be as simple as possible, while considering the challenges of a farm and the requirements of the farmer. When developing a soil fertility programme, fields are grouped together based on the soil results. This means that fields with a low P or K index can be targeted to rectify the issue. Additionally fields could be low in P and high in K or vice versa. This leads to the question of why we would treat all the fields on a farm with the same treatment.

Considerable savings can be made by optimising the rate, timing and fertiliser choice on farm. The organic supply of P and K on the farm (slurry/ FYM) can be tested for the farmer to analyse the NPK content. After the slurry is sampled the chemical fertiliser can be balanced and targeted to fields where it would be of most benefit. The fertiliser plan will also outline a liming programme for each paddock or set of fields based on the soil sampling program. The agronomy team can also assess soil structure and a soil health test can be conducted. The farmer will also have the support of Grassland Agro throughout the growing season as weather or growth rate could cause changes to the fertiliser plan.

Top Class

The McCarthy family from Limerick were recently crowned the winner of the 2021 NDC and Kerrygold Quality Milk Awards

In September, Ornua and the National Dairy Council (NDC) announced the McCarthy family as the winner of the 2021 NDC and Kerrygold Quality Milk Awards. The awards celebrate the highest standards of excellence in dairy farming. The winner was announced at a special awards ceremony at Moorepark Dairy Open Day following presentations to 12 farming families by Olympic gold medallist Kellie Harrington. Winners Michael and Alex McCarthy, supplying Kerry Agribusiness, received prize money and the coveted NDC and Kerrygold Quality Milk Awards perpetual cup. Father and son, Michael and Alex, have been farming together for the past four years, and live on the farm with Michael's wife, Mary Ita, and Alex's family, wife Siobhan and daughter Chloe.

John Jordan, CEO Ornua, congratulated the McCarthy family on their win, commenting; "Each year, the NDC and Kerrygold Quality Milk Awards celebrate the hard work and passion of Irish farming families. Their dedication to their craft that translates into the best quality milk in the world, off a grass-based system, are the key ingredient to Kerrygold's global success. The McCarthy family are incredible role models for sustainable, high-quality milk production, and we're delighted to be able to celebrate with them here today."

All farming finalists underwent a detailed assessment by an expert judging panel including Professor Pat Wall from UCD, Dr David Gleeson from Teagasc and Dr Jack Kennedy, Deputy Editor of the Irish Farmers Journal. All finalists were

judged on sustainable farming practices, milk quality, technical knowledge, and animal welfare on-farm practices. The NDC and Kerrygold Quality Milk Awards judges praised the impressive team effort from the family and the top-class results produced by the farm.

Commenting on the winning family, judge Dr David Gleeson, said; "Every year, we are incredibly impressed by the dedication and performance of the entrants to the NDC and Kerrygold Quality Milk Awards. In 2021, the commitment of family farms across Ireland to producing the best quality milk in the world is still clear. This year, we are delighted to announce the McCarthy family from Feenagh in Limerick as the winner of the NDC and Kerrygold Quality Milk Awards. The McCarthy family are innovating in all the right places, making data-driven decisions, and have succeeded in establishing sustainable systems in the environmental, welfare and financial activities of their farm. They are excellent ambassadors for the Irish dairy industry and are well-deserved winners of this year's award."

Speaking on the awards, Minister for Agriculture, Food and the Marine, Charlie McConalogue said; "The NDC and

TWELVE FARMING FAMILIES, REPRESENTING 12 DAIRY CO-OPS NATIONWIDE, REACHED THE FINALS OF THE NDC AND KERRYGOLD QUALITY MILK AWARDS.

- Overall winner and category award winner for Environmental Infrastructure – McCarthy Family Farm, Limerick – Nominated by Kerry Agribusiness
- Overall Runner up and category award winner for Best Milk Quality – Banville Family Farm, Wexford – Nominated by Glanbia Ireland
- Overall Runner up and category award winner for Business Innovation – O’Sullivan Family Farm, Cork – Nominated by Dairygold
- Farm Development – Fitzpatrick Family Farm, Longford – Nominated by Lakeland Dairies
- Farm Development – Hamm Family Farm, Westmeath – Nominated by Aurivo Co-op
- Farm Sustainability – Ormond Family Farm, Tipperary – Nominated by Centenary Thurles
- National Finalist – Barry Family Farm, Cork – Nominated by North Cork Creameries
- National Finalist – Hurley Family Farm, Cork – Nominated by Barryroe
- National Finalist – Keane Family Farm, Kerry – Nominated by Lee Strand
- National Finalist – Kingston Family Farm, Cork – Nominated by Drinagh
- National Finalist – McCarthy Family Farm, Cork – Nominated by Lisavaird
- National Finalist – O’Brien Family Farm, Galway – Nominated by Arrabawn Co-op



Kerrygold Quality Milk Awards are a unique way of celebrating what is truly special about Ireland. The passion and dedication of Irish family farms, together with our unique farming system, has helped build a strong reputation for Ireland as a high-quality, sustainable food producer. While we face significant challenges as an industry, it is important to celebrate our dairy farmers who are ambassadors for the industry, committed to maintaining exceptional standards in milk quality and sustainable farming.”

Zoe Kavanagh, CEO National Dairy Council, commented; “I am delighted to congratulate this year’s worthy winners who once again have demonstrated the excellence of Irish dairy farming. Dairy farming has been going on in Ireland for over 4,000 years, it’s a part of our national identity. Our grass-fed family farming system is ideally suited to the Irish climate and delivers world class produce. The farmers who have been awarded this year represent the highest standards as food producers delivering an exceptional product that is enjoyed at home and revered by consumers all over the world.”

The New Farm Safety Partnership Action Plan 2021 - 2024

Ciaran Roche, FBD Risk Manager, outlines the aims of the New Farm Safety Action Plan 2021-2024



The New Farm Safety Action Plan 2021-2024 aims to reduce the level of fatalities, serious injuries and ill health in the agriculture sector. Sadly, over the past decade, more people have died in agriculture compared with any other economic sector. Of the 495 work-related fatalities in Ireland during 2011 -2020, 208 occurred in Agriculture (42 per cent of all workplace fatalities), according to the Health and Safety Authority's Review of Work-Related Deaths in Agriculture in Ireland 2011-2020. Forty-seven per cent of the fatal accidents involved persons aged 65 years or older and 21 of the fatal accidents victims were aged under 18. 53 per cent of the fatal accidents involved tractors (45 per cent) and machinery (8 per cent), 18 per cent involved cattle and 10 per cent involved falls (40 per cent of the victims were doing repair work when the fall occurred). The review also noted that there was a notable increase in fatal accidents in the month of July (16 per cent of all fatal accidents).

As the figures suggest agriculture is a high-risk industry, that presents many challenges, and these have all been taken into consideration in the Farm Safety Action Plan. For example, for many, farming is a unique workplace setting compared to other sectors. Many farmyards are on the grounds of the family home and this in itself can present additional health and safety challenges. Farmers are potentially exposed to more dangers compared to other sectors, such as large animals, heavy machinery, slurry gases and construction and maintenance work. Most farmers are self-employed, predominantly working alone, and that also presents risks. According to the HSA's review of work-related agricultural fatalities during the past decade, almost half of all agricultural workers who died were aged over 65. With this in mind, it is imperative that farmers pay particular attention to their own health and

safety as they get older and to remember that their ability and mobility will change.

The Farm Safety Partnership Advisory Committee have developed the new Farm Safety Action Plan. This group has looked at the key findings and research from the sector, liaised with stakeholders in the sector and has identified five critical areas for attention. There are 5 goals and under each goal working groups have been set up to identify and develop high level objectives. The goals focus on:

1. Behaviour, Education and Training
2. Health and Vulnerable Persons
3. Tractor and High Risk Machinery
4. Livestock Handling
5. Buildings, Work at Height

Changing unsafe culture and behaviour is crucial if a sustained reduction in serious and fatal accidents is to be achieved. Culture and behaviour can be slow to change and establishing a new culture or way of doing things requires long-term, sector supported action. Family members and farmer peer groups are important groups in getting farmers to change their behaviour, in particular: spouses, partners, grandparents, children and farming organisations. Therefore, all of these key influencers have a significant role to play in reducing the number of serious and fatal accidents in the sector.

It is imperative that we never become complacent when it comes to health and safety on the farm and I would encourage all farmers to think safety first when on the farm and not to take unnecessary risks.

All Statistics references are sourced from "Health and Safety Authorities Review of Work-Related Fatalities in Agriculture in Ireland 2011-2020"

GET A 15%* DISCOUNT ON A NEW POLICY

WHEN YOU OR A FAMILY MEMBER HAVE AN EXISTING POLICY WITH FBD.

Call us on 01 7 617 617 or phone your local branch.

*15% multisaver discount applies to new farm, tractor, special works vehicle, agricultural motor or growing trees policies when an existing policy is in force.

Customer must be a farmer. 5 years claims free (except glass/windscreen claims)

FBD Insurance Group Ltd trading as FBD Insurance is regulated by the Central Bank of Ireland. Underwritten by FBD Insurance plc.

SUPPORT.
IT'S WHAT
WE DO.



Understanding Pillar I

ICMSA's position on both Ireland's CSP and the CAP reform that preceded and prompted it has been consistently critical. The aggregate of all these developments – CAP reform, the Green Deal and Farm to Fork – is the placing of unprecedented and potentially unbearable strain on our family farm system. Many farm families are facing substantial losses under CAP post 2020 and they are facing losses for no good reason. Farm families who received modest payments are seeing those cut to increase payments to other recipients – often of questionable farming credentials – who were already on higher totals.

Commercial family farms play the central role in the rural economy – they are the hinge around which much of the wider rural economy swings. The CSP needs to recognise this by minimising losses to farm families and by putting in place measures that will support commercial family farms in the coming years. With that principle as our guide, ICMSA has analysed the CSP closely and we'll look at some of the main or 'pillar' points of Pillar I that we think would advance the stated ambitions of the CSP while protecting the commercial family farms without which ICMSA argues we simply will not have a functioning rural economy.

ICMSA believe that capping should be fixed at €66,000. ICMSA believes that convergence should stop at 85 per cent and other measures adopted to counter losses being inflicted on farm families with high payments per hectare but a low overall payment. ICMSA is proposing that an analysis of those losing under convergence should be carried out in relation to the impact a CRISS payment would have for these farmers. A decision in relation to percentage allocated to CRISS above could then be made based on fuller information and a clearer picture.

The maximum allocated to Eco Schemes must certainly not go beyond 25 per cent but should be considerably lower given the severe losses under convergence suffered by some farmers. There is also a strong possibility of non or low take-up of Eco-schemes by farmers if the terms and conditions are too onerous. If a gender equality intervention can be introduced to encourage greater participation of women in agriculture, then it must be supported. Accordingly, ICMSA endorses the submission made by the Women in Agriculture Stakeholders Group.

How Does ICMSA Define Active Farmer?

ICMSA believe that an active farmer must have at least 0.15 livestock units per hectare on lands declared as forage. This would mean that the active farmer would have to have an annual stocking rate of 0.15 and hold stock for at least seven consecutive months as per ANC rules in place.

ICMSA defines an active farmer as a farmer who can provide evidence that they are engaged in farming



Pat McCormack
President, ICMSA

activity. This means they are actively managing their land and selling farm produce on a consistent basis. An active farmer should also have farm product output of at least 50% of the value of his/her own Pillar I payment from the previous year. This output includes the sale of livestock, milk, and crops. An active farmer under the conditions set out above would be able to draw down a Pillar I payment. A

non-active farmer includes a farmer who owns land or entitlements and leases all of it.

A non-active farmer should not be able to draw down a payment in Pillar I, but this non-active farmer would have the option to lease out entitlements to an active farmer. A clawback of 5% per annum should apply where entitlements are leased by a non-active farmer. This clawback does not apply to an active farmer who leases out entitlements. The funding available from the clawback would be used to compensate farmers negatively impacted by convergence.

How ICMSA Defines An Eligible Hectare

Every year, payments are lost or delayed due to issues relating to land eligibility. Areas of the farm deemed not eligible are often removed such as scrub, rushes, ponds and farm roadways. We think all these features should be deemed eligible for calculation and we think that such a simple act would represent real progress and improve biodiversity exponentially. It is to be welcomed that 30 per cent of a parcel can now be used for water protection, biodiversity, or climate measures and ICMSA is firmly of the view that scrub, rushes, ponds, farm roadways and other features fall naturally under this definition and should be recognised.

Eco-Schemes

In terms of design and effect, there will need to be a very considerable buy-in from all farmers if the ambitions behind the eco-schemes are to be achieved and we think it likely that the first year will decide whether or not the schemes are going to act and effect in the desired way for the next four years. ICMSA have published several options that we believe should be considered for inclusion as options for the Eco-scheme and we believe that a full debate must be afforded to each option. We believe, moreover, that the eco schemes must be amended and refined based on recommendations for the farmers who will be required to implement these options. The people in the schemes will know what works and what does not, and the schemes must be flexible enough to accommodate that.

The Terms and Conditions of these options must be easy to implement, so that, for instance, when applying for the BISS, a farmer can simply pick the options that they wish to deliver. ICMSA is proposing that top-ups should be applied using unspent monies to those who adopt additional Eco-scheme options.

Cost concentrates the mind

The sudden price shock in fertiliser is concentrating minds far beyond anything that our regulators and policy makers could manage. A doubling in fertiliser costs in recent months is hard to appreciate until one goes out to purchase supplies. The price increases have affected all three basic fertiliser inputs with N, P and K all subject to eye-watering price increases. An input cost increase at any time is difficult to factor into production costs. A doubling of fertiliser prices is particularly challenging. The reasons for the ongoing price increases include higher grain and gas prices. High commodity prices across the board are driving increased use of fertiliser to chase those high prices with higher volume output. There is always an end to that rainbow and it is rarely a crock of gold. In addition to high grain, dairy and beef prices, the demand for pig and poultry meat is also rising. Those latter sectors will often attempt to offset mediocre output prices with higher volumes and that in turn drives up grain demand, in turn driving up prices, in turn driving up output – well, you get the idea. The challenge for Irish livestock producers is particularly acute. We are heavily reliant on fertiliser, particularly on higher stocked farms, to drive grassland productivity. Much of the fertiliser we spread, whether we like to acknowledge it or not, does not directly result in higher sward productivity. This is particularly true of chemical nitrogen application. The development of Protected Urea products has helped lift utilisation efficiency. That does come at a cost and the price increase in Protected Urea products has been even greater than the doubling seen in other nitrogenous products. This does not bode well for the continuing increased use of Protected Urea as the nitrogen product of choice. Yet, its increased use remains a central plank in our strategy to lower waste and emissions and increase efficiency. Historically, high fertiliser prices have been a relatively short-term phenomenon. They are usually followed by a substantial price reduction. However, the timing and degree of this is very unclear right now, especially as the closure of several fertiliser production facilities in recent times further complicates the situation. Teagasc's MACC (Marginal Abatement Cost Curve) places much emphasis on Protected Urea use and the widespread introduction of LESS (Low Emission Slurry Spreading) equipment to curb ammonia emissions. These strategies were seen as cost-effective measures on farms. The fertiliser price increases significantly

diminish that cost effectiveness. The LESS strategy therefore becomes even more important. There are practical barriers to the use of LESS on many farms, including topography, soil type to carry heavier equipment and the cost and availability of the specialist slurry spreading equipment. Still, the intention is to have up to three quarters of all slurry production spread with LESS equipment within two years. At least in the short term the cost comparison advantage of chemical fertilisers as against organic manures including slurry and FYM has diminished. The higher productivity efficiency of LESS against conventional splash plate technology takes on an even greater importance as chemical fertiliser prices reach stratospheric levels. Ammonia losses, as outlined at the Moorepark Open days, using the Dribble Bar or the Trailing Shoe are reduced by 30 per cent and 60 per cent respectively compared to the splash plate. That benefits both the environment and grassland productivity. If we want the adoption of LESS to increase at the speed proposed, to deliver substantial progress in our ammonia reduction indices, every possible support, most especially financial and advisory must be brought to bear to encourage widespread adoption.



THE SWEET TASTE OF TRADITION

Ease of
handling
and high
palatability
makes
molasses the
ideal feeding
solution

t: 069-65311
e: info@premiermolasses.ie
w: www.premiermolasses.ie
Harbour Road, Foynes, Co. Limerick.



**PREMIER
MOLASSES**
Delivering Solutions



You Tube

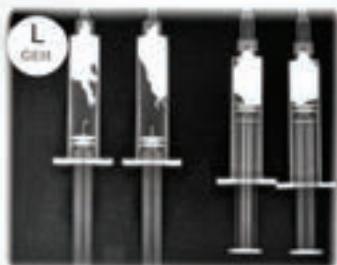
CEPRALOCK®



NEW
Teat Sealant

CeptraLock - Less Air, Easier Care

- ✓ Minimal air-pocket
- ✓ Shorter plunger
- ✓ Easier administration



Standard Teat Sealant **CEPRALOCK**



36 cow bucket (144 syringes)
6 cow box (24 syringes)

CeptraLock 2 g/g intramammary suspension for Dry Cows is indicated for the prevention of new intramammary infections throughout the dry period.

Legal category: M; Withdrawal period: Zero days

Use Medicines Responsibly

For further information see the individual product SPCs or contact MSD Animal Health, Red Oak North, South County Business Park, Leopardstown, Dublin 18, Ireland. Tel: +353(1) 2970220. E-Mail: [vet-support.ie@msd.com](mailto:veter-support.ie@msd.com) Web: www.msd-animal-health.ie

@msd_uk MSD Animal Health Ireland - Cattle & Sheep

For more information visit bovilis.ie



MSD
Animal Health