Irish Grassland Association

Members' Information Booklet Issue No. 50, 2022 "To advance the knowledge of good grassland management in Irish farming"



CORPORATE MEMBERS 2022



CORPORATE MEMBERS 2022



































































































































































Want to have your company logo on this page? Contact the Irish Grassland Association CLG office today...

Any views, images, graphics or opinions presented in this or any Irish Grassland Association CLG (IGA) publication are solely those of the author. Care has been taken by the authors to ensure accuracy of content and the information is intended as a general guide. The IGA and its editor does not accept responsibility for any unforeseen errors, copyrights or omissions howsoever arising. Photographs will be taken at all events and occasionally published.

Kells, Co. Meath, Ireland. Tel: (087) 96 26 483 General Information: office@irishgrassland.ie www.irishgrassland.ie

Corporate membership commences on the 1st January annually. Standard membership is deducted from all IGA members via direct debit on an annual basis.

Contents

SECTION 1:	
Editorial	5
Retired council members	6
IGA Charity AGM and wind up	7
IGA CLG Formation AGM	8
Meet the Team of the newly formed IGA CLG Council	10
SECTION 2: IGA EVENT REVIEW AND PREVIEWS	
IGA Sheep Event Review	14
IGA Beef Event Review	16
IGA Dairy Extravaganza Members Event Review	18
IGA Dairy Extravaganza Conference Review	20
IGA Dairy Extravaganza Farm Walk Review	22
IGA Student Conference Review	25
IGA Dairy Conference 2023 Preview	28
IGA Members Spring 2023 Event Preview	30
SECTION 3: YEAR IN MY WELLIES	
Lauren Claffey	31
Edel O'Connor	32
SECTION 4: TECHNICAL INFORMATION	
Managing body condition score this winter to minimise feed costs	34
Spring grazing management on grassland farms	36
Establishing and maintain white clover on commercial grassland farms	38
IGA CLG Membership form	41
Identification and treatment of bloat in animals	43

Follow us on



Irish Grassland Association IGA



@IrishGrassland



@irishgrassland

Editorial



Michael Egan Editor and IGA Council Member

Welcome to the IGA Winter 2022 Information newsletter.

Welcome to our final issue of 2022 and reviewing a full year of in person events after a 2 year break! Since our last publication there have been big changes within the Irish Grassland Association; at the AGM in 2021 a motion was put forward by the members to move the IGA from a registered charity to a Company Limited by Guarantee (CLG), this motion was passed, and at the AGM in September 2022 the IGA formally registered as a CLG. The IGA will continue to serve our members as it has done for the past 75 years, and we would like to thank all the council members who put a huge amount of work into the process of registering as a CLG. As well as the change to the association there have been large changes to our council, with the retirement of some long term faces, they have been replaced by vibrant and exciting new members, see their profiles in our AGM report.

The past year, saw a return to our in person events, and the year was kicked off in May with our Sheep conference/farm walk, then the beef farm walk, and the two day dairy extravaganza in Co. Tipperary and our student conference brought to a close a packed year of events. Read the detailed reviews form all our events across the year. Meanwhile in Section 3 our

'Year in My Wellies' we hear an update from our two contributors – Edel O'Connor and Lauren Claffey, on how the dry summer and farm work have gone and now both students are in their final year of their PhD and college, respectively, and how they continue to balance their student and farming life.

They are many challenging's facing famers over the past year, however as we now entire into the final few months of the year and over winter, managing animals over the coming months to ensure that they lamb/calve in optimal condition is a critical to increase performance in the coming year. New council member Declan Marren outlines to key principles in ensuring animals achieve these targets over the winter. However in addition to having animals in optimal condition, we must have and utilise grazed grass in spring to reduce costs and increase output, we hear from Joseph Dunphy (Teagasc Grass10 advisor) on how to successfully set up and manage your farm in spring.

There has been a renewed focus on white clover due to environmental concerns and ever increasing fertiliser prices, and in our spring newsletter we highlighted how to best establish and management grass/clover swards. We now have an update from an on farm study where white clover has been established over the past 2 year's, and how these farmers are getting the best from these swards. Like with everything, there needs to carful management in grass/clover swards, and bloat is one such potential issue that needs cartful management, read when there are risky periods, and how to prevent and treat cases.

Finally, Alan Kelly, current IGA president and Christy Watson, outgoing IGA President would like to thank all members for any and all information submitted to the office for our 75th anniversary. The Editorial Committee thanks everyone who contributed to this Information Booklet.

Michael Egan, Editor IGA publication.

SUGGESTIONS & FEEDBACK PLEASE!

If you have any suggestions for the members information booklet or any particular topics or features you would like us to include in our forthcoming issues, please send them via email to office@irishgrassland.ie. We would love to hear from you!

Huge thanks to these council members who retired recently



IGA Trustee and Dairy Farmer



Stan Lalor IGA and Past President 2020 / 2021 IGA Trustee and Teagasc employee



Aoife Feeney
Past IGA Council Member
Netherlands Embassy

Beef Farmer and Dept Ag



Laurence Sexton
Past IGA Council Member
and Dairy Farmer











Irish Grassland Association Charity AGM and wind up

Maura Callery
IGA Office Manager



The 2022 AGM of the Irish Grassland Association charity took place on Thursday 15th September in the Horse and Jockey Hotel Tipperary. A presentation of the year's activities was presented to all in attendance by the outgoing President Christy Watson before he retired from the Presidency and IGA charity council.

This was then followed by the formalities to close the charity as no further business was required for the entity.

Since 2014, Irish Grassland Association had operated as a registered charity, in compliance with the Charities Regulatory Authority and all relevant charity law. Following legal and financial advice by solicitor's, our accountants and a consultancy firm that specialise in charity governance, a motion was passed at the 2021 AGM to dissolve the Irish Grassland Association charity and set up a new legal structure: a Company Limited by Guarantee.

At the 2022 IGA Charity AGM, the final part of this process was completed on behalf of the members by the three IGA trustees, who were on the current council at that time, Stan Lalor, Paul Hyland and Ciaran Lynch, all of whom were Past Presidents. Following a vote by all the members in attendance, it was decided that the funds that remained in the charity would be donated to Embrace Farm.

The meeting then concluded as all relevant paperwork was signed by the 3 remaining council members / trustees and the charity was officially dissolved.

Christy Watson received a presentation upon his retirement as IGA President from outgoing Vice President Alan Kelly at the recent AGM of the IGA Charity.



Irish Grassland Association CLG formation AGM

Maura Callery IGA Office Manager



Above: Some new faces to the Irish Grassland Association who attended the AGM of the newly formed CLG along with our Presidential Team. Back row L-R Declan Marren Irish Farmers Journal, Ciaran Mulligan Dairy Farmer, Karina Pierce UCD, Philip Cosgrave Yara, Ken Graham Beef Farmer and Eamon Sheehan Dairy Farmer. Front row L-R Christy Watson IGA Past President 2021-2022, Maura Callery IGA Office Manager, Alan Kelly IGA President 2022-2023 and Bryan Hynes IGA Vice President 2022-2023.

Alan Kelly held the formation AGM of the new Company Limited by Guarantee at the Horse and Jockey Hotel in Tipperary on the 15th September 2022. He introduced himself as the Director and President of the newly formed entity. He welcomed Maura Callery as Director and Office Manager and Bryan Hynes as Vice President. Alan Kelly has appointed Ciaran Mulligan Dairy Farmer, Karina Pierce UCD and David Lawrence Brett Brothers and Beef/Sheep farmer as his three Co Opted council members.

The following people now form the new council of the Irish Grassland Association CLG for 2022/2023.

Alan Bohan	Eamonn Sheehan	Mary McEvoy	
Alan Kelly	Ed Payne	Michael Egan	
Bryan Hynes	Fiona McGovern	Niall Claffey	
Christy Watson	John Farrell	Paddy Casey	
Ciaran Lynch	John Pringle	Patrick Gowing	
Ciaran Mulligan	Karina Pierce	Philip Cosgrave	
David Lawrence	Ken Graham	Terry Carroll	
Declan Marren	Liz Duffy	Vincent Griffith	

The plans for upcoming twelve months were discussed at the meeting. The following council members were appointed as chairpersons and Vice Chairpersons for the year ahead.

Editorial committee:	Chairperson: Michael Egan	Vice Chairperson: Philip Cosgrave	
Sheep committee:	Chairperson: John Farrell	Vice Chairperson: Terry Carroll	
Beef committee:	Chairperson: Niall Claffey	Vice Chairperson: Paddy Casey	
Dairy Conference:	Chairperson: Vincent Griffith	Vice Chairperson: Liz Duffy	
Dairy Summer Tour:	Chairperson: Ed Payne	Vice Chairperson: Patrick Gowing	
Student committee:	Chairperson: Mary McEvoy	Vice Chairperson: Karina Pierce	



Michael Egan **Editorial Committee** Chairperson













Chairperson

Alan Kelly said, I am very honoured to be the President of the Irish Grassland Association functioning as a CLG. We are all looking forward to streamlining our processes now that we have followed the advice of our legal and financial experts in forming a CLG for our organisation. We look forward to a very exciting calendar of events in the new year and hope that we will achieve record numbers attending events in 2023.

Meet the Team of the newly formed IGA CLG Council 2022/2023



IGA President 2022/2023,

Lecturer UCD

Dr. Alan Kelly holds an honours degree in Animal Science (2006) and a PhD in Cattle Nutritional Physiology (2009) from University College Dublin (UCD). Since 2011, he has been employed as a Lecturer in Animal Science at the UCD School of Agriculture and Food Science. He lectured and coordinated modules mainly in the areas of advanced beef production and ruminant nutrition and is the current director of Animal and Crop Science Degree Programme in UCD.

His research area of interest include the development of blueprints for sustainable pastoral based beef production systems. His research work has an innovative focus with the objective of improving economically important traits (feed intake, growth, feed efficiency, fertility and ruminal methanogenesis) through strategic nutritional intervention or discovery of underlying physiological or molecular mechanisms. He has published extensively on these topics and has presented the findings of this research at national and international conferences. Additionally, he also has developed a significant extension role having provided continuous professional development (CPD) courses to Veterinary and Agricultural Science graduates, industry representatives along with regularly writing technical articles in the agricultural press.

Alan is also Secretary of European Federation of Animal Science (EAAP) Animal Physiology Commission and is the current acting President of the Irish Limousin Cattle Society. He also is a member of the DAFM Food Vision 2030 Beef Stakeholder Group.



and Teagaso



































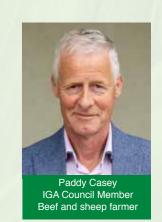








and Teagasc





Welcome to our new council members



Dairy Farme

Ciaran is a dairy farmer from Cavan, farming with his wife and two sons. He milks 150 cross bred cows in a low cost, high grass utilisation system, on a platform of 60 hectares owned and 40 hectares leased of drumlin soils on the Cavan, Longford, Leitrim border.

Ciaran is a member of the IGA since returning home to farm in the early nineties. Ciaran has gained invaluable knowledge and lifelong friendships through been a member of the IGA and would be glad to give back in return.

Ciaran won the IFJ young Farmer of the year in 1996 and was involved in a trial for once-a-day milking in the early 2000s. He is a member and past chairman of South Teffia purchasing Co-Op. Having completed the FAB training and obtaining an advanced diploma in agriculture, he understands first-hand the importance of education and continues to host students from Ballyhaise Agricultural College Cavan on his farm.



Karina Pierce is Professor of Dairy Production in UCD's School of Agriculture and Food Science. She graduated with a Batchelor of Agricultural Science in 2001 and completed her PhD in animal nutrition in 2005, both from UCD. She currently serves as Director of External Relations in the School of Agriculture & Food Science at UCD and also coordinates the UCD degree programmes in Dairy Business.

Karina's research focus is on the sustainability of dairy production systems and the role of dairy cow nutrition as a means of reducing the environmental impact of dairy production and improving milk composition and quality.

Karina is a Board member of Nuffield Ireland and of the Dairy Subsidiary Board of An Bord Bia and is a member of the Food Vision 2030 Dairy Group. She is a past President of the Agricultural Science Association, a former member of the Teagasc Authority and a 2019 Nuffield Scholar.



Ken Graham Beef Farmer and Engineer

Ken Graham is a suckler beef farmer from Laois. He's married to Cathy with two small children.

They run a spring calving herd with everything finished before two years of age. Replacement animals come from within the herd and first calve at two years old. Ninety percent of all feed consumed on their family farm is from grazed grass or grass silage. The farm is split over three blocks as it has grown over the years. The farm is run on a part time basis as Ken has worked off farm in industrial maintenance since 1995.

Kens background in engineering has helped him to focus on time management and achieve critical KPI's. In 2004 Ken was a regional winner of FBD Young Farmer of the Year Awards. In 2016 Ken was a finalist in the Origin Green Sustainable Beef Producer Awards. In 2019 the Graham family were delighted to host the Irish Grassland Association Beef Farm Tour.



Philip Cosgrave

Yara

Philip Cosgrave lives in Rathmolyon, Co Meath. He is married to Fiona and they have three children. Philip grew up outside Enfield in Meath on his parent's beef and sheep farm. After studying agriculture in Aberdeen, he returned back to Dublin to complete an MSc in UCD.

On finishing up in college, Philip worked as a trainee manager in Kildare Chilling and as a Research Officer in Teagasc, before setting of travelling for a number of years. Philip was very lucky to have had the opportunity to work in agriculture in a number of countries including New Zealand, Saudi Arabia and Australia, before returning home in 2011 to work for OCAE and IAS laboratories.

Philip took up his current position with Yara in 2016 as the company's grassland agronomist for both Ireland and the UK. Philip's role in Yara sees him providing training to distributors and farmers, coordinating field trials and working on new product development.



Dairy Farmer

Eamon Sheehan is a dairy farming in Cuffesgrange, Co. Kilkenny alongside his wife Lois and their 3 children. Eamon is originally a suckler farmer. They began dairy farming in 2013 and has built their herd up to 200 spring calving pedigree Friesian cows today.

In 2017 Eamon received a Nuffield Ireland Scholarship. He studied Microbial Management and its Importance in the Dairy and Beef Industry. Following on from that, he was awarded the MSD Animal Health "Prevention For Profit" national champion award in 2018, which was based on key performance areas around nutrition, animal health, breeding and management.

Eamon has recently undertaken further studies in the University College Cork Sustainable Farming Academy, which is run in conjunction with Tirlán, Eamon is currently studying modules in the Environment, Sustainability and Climate. Outside of the day to day of dairy farming, the Sheehan Family are also breeders and produces of Irish Sport Horses.



ninant Support Specia

Brett Brothers Ltd

David Lawrence graduated from UCD with an Honours degree in Animal and Crop Production (B.Agr.Sc) in 2011. Following this he completed a PhD in 2014, under the Teagasc Walsh Fellowship programme at Teagasc Moorepark in conjunction with UCD. He examined late season and early season grass sward productivity and concentrate feeding strategies with autumn calving dairy cows.

Upon completion of his PhD, David joined Brett Brothers Ltd. as a Ruminant Support Specialist. David's role offers technical advice to dairy, beef and lamb producers on grass management, sward establishment, animal nutrition and technical aspects of animal husbandry. In this role David is in direct contact with farms and farmers and has a hands-on practical approach to improving sward and livestock productivity.

David also farms with his brother Peter in Tullow, Co. Carlow where they keep a herd of Limousin cross suckler cows and a flock of Llyenn ewes.



Terry Carroll is a Teagasc Business & Technology Drystock Adviser covering the north half of Kilkenny. He previously worked in Dundalk, Cavan & Navan before moving to Kilkenny in

Terry is the lead Drystock Adviser in Kilkenny and has a client base of 350 farmers comprising equally of suckling or weanling/store to beef enterprises as well as a cohort of large sheep farmers. Increasing Farm profitability & sustainability through adoption of the key Efficiency factors is his primary technical focus.

This is delivered through 4 to 5 Farm Walks at key grassland/reseeding/breeding/nutrition times of the year along with 3 Discussion groups where extra meetings are held.



Declan is from a beef and sheep farm in Co Sligo which runs a 20 cow suckler herd as well as a 200 ewe mid-season lambing flock, he completed a B.Aq.Sci in UCD graduating in 2011. Declan joined the Irish Farmers Journal in 2016 based in Aberdeenshire working as the beef and sheep advisor on the Farm Profit Programme and regularly contributed to the Farmers Journal Scotland publication.

In 2020 he returned to Ireland where he is now the Livestock Specialist with the Irish Farmers Journal covering all aspects of the Irish beef and sheep industry. He is also the programme manager of THRIVE, the Irish Farmers Journal's flagship dairy calf to beef programme.



IGA Sheep Event Review



Over 150 farmers and industry delegates attended the Irish Grassland Association sheep conference and farm walk in the Hudson Bay, Athlone, Co. Westmeath on Thursday 19th May.

The morning session featured presentations from Ryan Duffy, HIPRA, Philip Creighton, Teagasc Sheep Enterprise Leader and Roger Bell, sheep farmer, Northern Ireland. The afternoon session incorporated a farm walk on the farm of Peadar and Aoife Coyle, Curraghboy, Co. Roscommon.

Conference

Ryan Duffy, a technical services vet with HIPRA, gave an insight into the causes, treatment and ultimately preventative measures for mastitis in sheep flocks. Mastitis is one of the predominant infections encountered by sheep farmers each year with spread common between infected animals, especially when housed indoors for lambing. The knock on effects result in reduced ewe longevity, poor lamb performance due to a decline in milk

yield with more severe cases resulting in an increase in orphan lambs or death of the ewe. High levels of mastitis often occur after weaning, which can go unnoticed initially but result in larger numbers of ewes marked for culling pre-mating. Ryan spoke about the prevalence of mastitis and the reality that mastitis incidence is much higher than is often reported. Our second speaker at this year's conference was Dr. Philip Creighton. Philip gave an overview of his research programme in Athenry focusing on the valuable role of clover in sheep systems. Philip outlined the benefits of incorporating white clover into your grassland sward including improved animal performance, which we were lucky to see in practice on the farm walk in the afternoon.

Wrapping up the morning session was our final speaker, Roger Bell. Roger and his wife Hilary are beef and sheep farmers based in Kells, Co. Antrim. Roger gave an overview of their farming system, which includes a flock of 550 Texel x Mule ewes.

This year they had a scanning rate of 2.20 lambs per ewe joined. Roger and Hilary breed all of their own replacements and aim to finish all lambs from grass each year. They are strong advocates for technology adoption emphasising that for them grass measuring and budgeting is an invaluable tool on their farm.

Farm Walk

A beautiful sunny afternoon set the scene for an exciting and thought provoking farm walk on the farm of Peadar and Aoife Coyle. This father and daughter team farm 230 acres (93 Ha) near Curraghboy in south Co. Roscommon. The farm consists of 80 acres (32 Ha) of owned land in one block while the remaining 150 acres (61 Ha) is comprised of rented land, all of which is within a 10km radius of the home farm. The Coyle's have a flock of 575 mid-season lambing ewes in addition to a suckler enterprise and a dairy calf to beef enterprise. The first stop gave an overview of the farm system, highlighting the scanning rate of 1.9 and weaning rate of 1.7 lambs per ewe joined to the ram. Grazing infrastructure is a priority for both Peadar and Aoife which clearly came across on the day. A well placed farm roadway gives access to all paddocks thereby enabling good grassland management and reducing the labour required for moving groups of animals from paddock to paddock or to the handling facilities in the yard. Peadar highlighted the importance of maintaining soil fertility, which was clear to see with over 80% of paddocks on the home farm index 3 or 4 for P and K.

All lambs are finished on farm with grass making up the majority of the diet. Lambs are weaned at 14 weeks of age at an average of 32 kg. Lambs remain on grass until they reach 40 kg+ with heavier lambs receiving concentrates to finish for slaughter. All lambs are weighed fortnightly which allows for frequent drafting across the summer months until



Peader and Aoife Coyle, host farmers.

October when all remaining lambs are housed and offered ad lib concentrates until drafting for slaughter. As part of their replacement breeding policy, all potential replacement ewe lambs are ear notched at birth and the best performing 150 ewe lambs are retained each year. Uniquely, these 150 replacement ewe lambs are moved off farm to a contract rearer who looks after them until they return the following august as hoggets and are ready to join the ram. The contract rearer has full responsibility for the replacements, with Aoife stating that this was only possible due to a good level of trust, understating and good will from both parties involved. The final stop of the day included a demonstration of clover establishment whereby clover had been sown in early April and was emerging on the day. Peadar and Aoife were keen to include clover in their swards and since sowing had been managing the area in order to introduce light to the base of the sward thereby encouraging good clover establishment.

We would like to thank our sponsors Mullinahone Co-Op for their continued support



IRISH GRASSLAND ASSOCIATION CLG - MEMBERS' INFORMATION BOOKLET

IRISH GRASSLAND ASSOCIATION CLG - MEMBERS' INFORMATION BOOKLET

15



IGA Beef Event Review

from the extensive soil N reserves present on farm – noting that the use of lime plays an influencing role.

took place in Ballyhale, Co. Kilkenny, on the farm of Jimmy Madigan, on Tuesday, June 14th, 2022. This was the first year the event moved away from the traditional conference format, and the complete event was held on-farm - kicking off at the later time of 6:00pm. A large crowd attended the event and they were treated to some food before the walk

commenced.

The 2022 Irish Grassland Association Beef Event

After hearing about Jimmy's system of production at the first station, the second stand was located in a newly-reseeded paddock, which was being grazed by the spring-calving suckler herd. This 5ac reseed had a high proportion of clover – something the Kilkenny native now incorporates into the reseeding plan. While reseeding – along with keeping soil fertility at optimal levels – has always played a pivotal role on the farm over the years, this is the first time a clover mix has been used.

Teagasc Research Officer, James Humphreys, was flooded with questions on how beef farmers can reduce their dependency on purchased chemical nitrogen (N) with the use of clover – given fertiliser prices witnessing unprecedented highs. James highlighted establishment and management practices of both red and white clover on beef farms and discussed how to maximise the release of N

The farming system

The farm consists of some tillage land, forestry and 76 ha of grassland - home to a herd of 100 autumnand spring-calving cows and their followers. Jimmy and his wife - Ann-Marie - are the only labour units on the holding, with plenty of help coming in the years ahead from their children: Hannah; Jim; Kate; and Eddie. The cows and heifers calve from December to March, and from August to September each year. Replacements - sired by a maternal Charolais stock bull - are chosen from the crop of heifers from cows that calve in autumn, and the remainder are aimed to be finished at 19-20 months. Males are brought to beef in a 16-month finishing system; additional bought-in bulls are





also finished in the same system. The Kilkenny-based farmer moved away from steer beef in 2017 in order to grow the breeding herd on the farm – as the under 16-month bull system leads to bulls been wintered for one season only.

Furthermore, a good relationship with a dairy farming neighbour allows Jimmy to purchase several Limousin dairy-cross yearling heifers each year, which he calves down in the autumn time to the maternal Charolais stock bull; heifers obtained here will enter his spring-calving herd. He also uses Limousin AI on his home-bred heifers, and these calve in the springtime all going to plan. Two terminal Charolais stock bulls are run with the spring herd during the breeding season. While this breeding strategy may differ from the norm, it is something that has worked well for Jimmy down through the years. In 2021, Jimmy's calving interval stood at 369 days with an impressive 0.9 calves/cow/year.

For Jimmy, focusing on cows that have an ample supply of milk to feed their calves and utilising as much grass as possible has always been the key to success. The herd is grazed in an 18-paddock system – operating in a 'grow in three weeks, eat in three days' system. The paddocks are serviced by excellent roadways which make the route to pasture as labour-free as possible. With an early turnout in spring, he takes advantage of the long grazing season prior to weaning. Pre-weaning, spring-born bulls are crept fed, while heifers are fed no meal. Bulls are then housed in November; however, heifers return to grass and are grazed until weather forces housing.



While grazed grass is Jimmy's number one priority during the growing season, excellent-quality silage is harvested to ensure high growth rates during the winter and finishing period. He maintains that without excellent-quality grass silage, the under-16-month bull system would be hard to operate. Last year's silage crop came back at 76% DMD when tested. Regular weighing complements the beef system and once bulls hit the target weight of 480 kg, they are then moved into the finishing regime. In terms of slaughter, the 2021-killed bulls had an average carcass weight of 425kg, while the heifers averaged 347kg - with 89% of the feed coming from grass or grass silage.

To achieve this top-quality silage, Jimmy harvests his own silage with a mower, tedder, baler and wrapper. The same land is never cut year-on-year and ground earmarked for silage is grazed off early in the year, with 2,500 gallons/ac of slurry applied. At the start of March, chemical fertiliser is applied, and once the weather allows in May, it is harvested.

Jimmy's message was simple - for suckler-tobeef farming to be successful, there are a menu of criteria that must come together - number one being grass and top-quality silage. He also highlights adequate facilities - especially with a bull finishing system; and a fertile, milky cow that can produce and rear a calf every year.

On the final stand of the day, Irish Farmers Journal Market Intelligence & EU Specialist, Phelim O'Neill, examined the changing marketplace for commodities in 2022 and what this means for the Irish beef market.

We would like to thank our sponsors Mullinahone Co-Op for their continued support



IRISH GRASSLAND ASSOCIATION CLG - MEMBERS' INFORMATION BOOKLET

IGA Dairy Extravaganza **Members Event Review**

The IGA Members event, sponsored by Yara and AIB, was held on the evening between the Dairy Farm Walks and Conference in the Talbot Hotel, Clonmel on Tuesday 19th July 2022. This pre-conference networking and social event was welcomed back to the calendar of events by the IGA Members. As in previous years the event was facilitated by lifetime member award winner Matt Dempsey. Matt expertly interviewed 3 panellists on the broad theme of 'Looking Back and Looking Forward'.



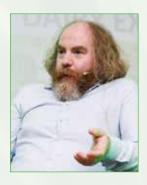
Seamus Quigley, Dairy Farmer

Seamus started in 1990 milking 30 cows on an owned block of land at Nenagh, Co. Tipperary. Since then Seamus and his wife Monica have moved to farm at Loughrea, Co. Galway (1999). They now farm in a partnership, milking 450 supplying 460 kg milks solids per cow in 2021 and are delighted to see their own family following their footsteps and entering the dairy business.



Ashleigh Fennell, Dairy Farmer

Ashleigh farms in Palatine, Co. Carlow and is milking 96 cows in a spring calving system. Ashleigh converted from beef and sheep to dairy in 2019. In 2021 the herd produced 549 kg milk solids per cow and she is feeding 1.2 t concentrate per cow. While farming on light, free-draining soil Ashleigh's major challenge is to deal with the more regular summer droughts she is experiencing.



Dr Joe Patton, Head of Dairy Knowledge Transfer, Teagasc

Joe is a well-known and popular figure within the Industry from his Ruminant Nutrition Specialist and Winter Milk Specialist roles in Teagasc, and know head of dairy knowledge transfer, which he commenced in 2021.

The panel interview and discussion opened with each of the speakers outlining their journey to where they are today and their motivation for conversion and expansion. The 'golden age for Dairy' has meant there have been fantastic opportunities for those

who wish to progress in the industry. Joe Patton was clear that profitability and sustainability will be possible as we move through the current and future challenges that face Agriculture. He stated that Teagasc research has clearly set out the measures that need to be adopted broad-scale on farms, while also realising that ongoing global collaborative research will be required, in particular address the GHG reduction targets. At a national level, the panellists discussed the impacts that mooted changes to Nitrates Derogation regulations could have, for example, a higher cost of compliance for farmers or perhaps a tightening-up of stock numbers would be a more viable option for others.

Discussions led to more specific challenges facing the Dairy Industry around calf quality and calf rearing. The point was made that Dairy farmers must improve calf quality and may need to keep calves longer. Ashleigh was clear that calf quality definitely gives an advantage when selling and also is particularly important when it comes to creating a relationship with the purchaser making it more likely they will become a repeat customer. Seamus said that he sells his calves to local farmers and through the local mart. Although sexed semen will



play an important role in the industry moving forward, he was uncertain as to whether sexed semen will help negate a potential calf issue, as there may be an over-supply of AA and HE calves. To counter this, Joe Patton was clear that the science behind the Dairy Beef Index (DBI) can confer benefits to the quality of the calf from the Dairy herd, similar to how the EBI has revolutionised Dairy breeding. To this end Joe stated that broader adoption of the DBI will be critical and farmers need to focus on carcass traits when selecting bulls. If dairy farmers improve the recording of beef sires used on the herd then beef farmers can have more confidence in the type of animal they are buying.

Labour is a perennial issue on many farms, the message from the panellists was that farmers need to be more proactive and flexible in their approach to managing labour. Seamus commented that he has found school and college students to be an excellent part of his team and weekend work, in particular, suits them. Seamus is happy with the team he has currently and finds the blend of full-time and part-time staff to be working well for him. Ashleigh on the other hand have found that contractors has and will continue to play a huge role in her farm business moving forward.

The broad topics of discussion covered at the event were picked up in greater detail throughout the Conference proceedings on the 20th July.

We would like to thank our sponsors AIB and YARA for their continued support







IGA Dairy Extravaganza **Conference Review**

The 2022 Irish Grassland Association Dairy

Conference, sponsored by Yara, was held as part of

Controlling the Controllable's

Attracting and Retaining People

Session 1: Controlling the Controllable's

The opening session, chaired by Vincent Griffith (IGA

Council Member and Aurivo) began with a presentation

from Dr Brendan Horan of Teagasc, Moorepark who

set the scene in terms of the current and future

pressures that will come on food production systems.

Brendan reiterated the key components of profitable

and sustainable pasture-based dairy systems. A

renewed focus is needed on-farm in the areas of; soil

fertility and nutrient management planning (including

use of protected Urea), incorporation of clovers in

swards will reduce the reliance on chemical fertilisers

and the adoption of LESS & GPS technology. Brendan

highlighted that the GHG challenges can be directly

targeted when the key areas of profitability are focussed

on. Central to the profitability of the grazing system

Creating Certainty

the two day Dairy Extravaganza Event in July 2022. The conference took place on Wednesday 20th July, in the Talbot Hotel, Clonmel, following up on a very successful summer Tour Event on Tuesday 19th. The theme of the Conference for 2022 reflected the main issues and challenges affecting Dairy Farmers as they navigate the landscape of unprecedented change in both National and International circumstances. This theme of "Doing the basics right to fulfil potential" encouraged all participants to focus on what happens inside the farm gate and to focus on the key elements of what make their business resilient and ultimately, sustainable. To fine-tune this focus the conference was divided into 3 sessions to address these topics:

> Laois gave a refreshing presentation on his major decision to reduce his herd size since 2019. Following on from the themes in Brendan Horan & Mary Kinston's presentations, Bobby gave a great example of putting sustainability into practice without any major impact on the bottom line. Bobby increased cow numbers from approx. 100 during quota times to 163 in 2019. Since then Bobby and his wife Val have taken the major decision to cut back to 114 cows in 2022. This decision was driven by; 1) labour issues: now very manageable number of cows for himself and relief milkers, 2) summer drought pressures & 3) lifestyle choices. Bobby cows are on target to produce over 550kgs milk solids with excellent fertility performance. The lower stocking rate has had multiple benefits to Bobby's system from grass available per cow, fertiliser savings

> are high EBI cows hitting the key reproductive KPI's, stocked appropriately on farms with high productivity grassland.

facilitator, presented her analysis of the 2021 accounts of the dairy farms she deals with. She outlined how the top 10% of the financial performers repeatedly generate an extra €1000/ha profit/year, achieved with a higher gross income combined with a tighter ratio of expenses to income. Mary's key messages focussed on: making every acre count, making every cent count and making every cow count. Assessing KPI's within each of these 3 areas is vital in determining the resilience and profitability of the system. Grass grown per ha and utilised per cow must be critically assessed in terms of setting the optimum stocking rate on farm and thus driving profit.

Bobby Hovenden, a dairy farmer from Durrow in Co. and herd average number of lactations per cow improving over time. Bobby emphasised the lifestyle benefits and is very content with the 'balance struck between money and stress levels on the farm'.

Session 2: Creating Certainty

The second session of the morning was chaired by Dr. Mary McEvoy (IGA Council Member & Germinal Seeds). Once again this session focussed in on the key technologies that are currently available to all farmers to address the major challenge of achieving National emission reduction targets. Prof. Laurence Shalloo, Head of Grassland Research in Teagasc, set the scene by describing the National Agricultural emissions situation, the Carbon Footprint of Irish milk and the systems we need to be targeting. He then highlighted ongoing research into the actions incorporated into the Teagasc Marginal Abatement Cost Curve (MACC) and how they can significantly contribute to achieving the targets. In-the-pipeline research (feed additives etc) has the potential to deliver on the remaining reductions required but ongoing research is essential. From an inside the farm gate perspective, he emphasised that widespread and ongoing uptake of these new technologies will ensure a robust Dairy system into the future. A lively Questions and Answer session followed and the session closed with a sense of positivity of the future of Irish Family dairy farms.

Session 3: Attracting and Retaining Labour

The final Session of the day, chaired by Paul Hyland (IGA Council Member & Dairy Farmer) opened with a very thought provoking presentation by Dr. Nollaig Heffernan, Independent Management Consultant. Nollaig outlined the science behind what successful businesses do to attract and retain the most talented people. The people who work in a dairy business are its most valuable asset. Nollaig stated that focussing energy on your capacity and skill as an employer as systematically as you must to be a good grassland manager or stock manager will create a level of control that not only feels manageable but provides the space to deal with problems if they do arise. Being an employer of choice is a dynamic situation and the skill and energy required does not end after the initial employment stage. Ongoing investment in yourself as an employer and in employees progression so that they are more valuable leaving your business is the hallmark of a great employer.

Paul Hyland then led an excellent panel discussion involving Nollaig and dairy farmers Mark Cassidy from Meath and TJ Kelly from Galway. Mark and TJ discussed how they create a positive working environment. Both are milking over 300 cows (TJ over 2 milking platforms), producing over 500kgs of milk solids per cow and achieving excellent 6 week calving rates. Their approaches are different in that TJ is actively involved in all the tasks over the 2 farms while Mark is at a different phase of his life where family commitments mean that he must meticulously plan

out and assign all tasks to allow him step back. Mark managed a team of 6 people in the spring of 2022 and central to this in careful planning and interaction so that 'everyone knows their role well before calving starts'. TJ has a team of 2 full-time staff and 2 relief milkers and contract rears out his replacements. Clear communication is critical to plan out the yearly workload and to highlight busy times and major jobs. The daily breakfast meeting amongst the TJ and his team maintains clear on open lines of communication. Both Mark and TJ are putting into play the key points highlighted by Nollaig. They both emphasised the need and importance of on-going staff engagement to ensure excellent relationships within the teams.

Papers and presentations

All the papers from the conference are available on the website: www.irishgrassland.ie. Thanks to all our speakers and session chairs for their time in preparing their papers and talks and for such high quality presentations on the day.







Dr Mary Kinston, Independent dairy discussion group

IRISH GRASSLAND ASSOCIATION CLG - MEMBERS' INFORMATION BOOKLET

20



IGA Dairy Extravaganza Farm Walk Review



This year's Irish Grassland Association Dairy Summer Tour took place on Tuesday the 19th of July, and was part of the two day dairy extravaganza which encompassed the Dairy conference. The theme of this year's tour was 'Doing the basics right to fulfil potential'.

On a glorious summers day, close to 500 farmers turned up to hear from our two host farmers, Tom Walsh from Johnstown, Co. Kilkenny and Denis Cody from Templemore, Co. Tipperary. While two very different farms, the key themes of grass, cows and management were to the fore on both farms.

Tom Walsh

The first farm we visited was the farm of Tom Walsh. Tom with his wife Norma, and their children farm 64ha near Johnstown, Co. Kilkenny. Tom started farming full-time in 2003 milking 40 cows, and since then, he has grown the herd to 126 cows being milked in 2022 on a 48 ha milking platform at a stocking rate of 2.63 cows/ha. The remaining land area is used for rearing replacements and growing winter feed. In 2004 Tom became a Glanbia monitor farm until 2008, and this was his first introduction to grass measuring. It is fair to say that grassland management is a passion for Tom and is key to the production and performance on the farm. Tom's farm is a dry farm, which enables him to take advantage

of an extended grazing season. However, the farm is prone to summer drought and Tom has fed silage for each of the past ten years. Tom specifically cuts high quality silage in mid-May each year, which ensures that when he feeds silage during the summer, milk production will not be impacted. Tom has bred a high-milk-solids-herd producing, on average, over 600 kg MS/cow/year. The herd has consistently produced over 500 kg of milk solids since guotas were removed in 2015. In 2021, the herd supplied 640kg/cow (4.5% fat and 3.72% protein) to Glanbia. This was produced from a diet of approximately 1.6t of concentrate/cow, high quality grazed grass and grass silage.

Tom calved 86% of the herd in six weeks in 2022 with a calving interval of 364 days. A herd EBI of €182, puts the herd in the top 10% of herds in the country. Tom has been milk recording since 2003, and has put a big focus on breeding the right cow for his system. He actively culls low-performing cows from his herd each year and he only breeds replacements from his best performing cows. Cow selection is as important to Tom as bull selection, with Tom only breeding from his best cows which have proven themselves in his system. Tom only uses proven bulls on his farm and as such he knows the replacements he produces will be consistent with little range between them. Tom's breeding policy together with his excellent

grazing management, has resulted in a continued improvement in milk solids production over the

Tom's farm performances is underpinned by the milk solids production of his cows, the ability of his cows to achieve this higher level of milk solids production early in the year and maintain this higher level for longer is key. Tom maintains his production by focusing on grass and ensuring the cows are going into the right pre grazing covers - his ideal pre-grazing yield is 1,400-1,500 kg DM/ha.

While Tom fed 1.6t of concentrates in 2021, grass is the key to Tom's success, with the farm growing 15 t DM/ha in 2021. From this 15 t DM grown, 13.5 t was utilised. The herd consists of predominately Holstein genetics, with Tom noting the 1.3t of concentrates is what is needed to operate his system and the extra 300kg he feeds is drought related, Tom explained that although the level of concentre is high, grass is key to the system, achieving the level of milk solids production would not be achievable without exceptional grassland management.

It was very evident to all in attendance that Tom is running an excellent operation. It is a simple system, complicated by a summer drought in most years, maximising the use of grass and complimented by concentrates. Toms breeding policy is paying dividends with a mature, long lasting, fertile herd, delivering significant production and underpinning the overall farm performance. What we seen on the day was a farmer that has focussed on the key areas of cows and grass and perfecting a system to suit his farm.

Denis Cody

The second stop on this year's Dairy Summer Tour was to the farm of Denis Cody. Denis farms with his wife Carmel and his parents Eamon and Anne, near Clonmore, Templemore, Co. Tipperary. They are milking on two platforms, one 50% owned and the second 100% leased and farming 220 ha in total. Cow numbers have quadrupled since 2010, with 400 milking cows in 2022. Denis finished in Kildalton Agricultural College in 2010 with a level 6 diploma in dairying and set about growing the farm business. In reality Denis had been heavily involved in the farm operation prior to that, but the experience he gained when working on two farms as part of his placement in 2009 would result in fundamental changes to the existing farm operation over the next number of

Quota restrictions meant that Denis could not grow the existing farm operation any further and in 2012, he was successful in getting quota under the new entrant scheme. In 2013, Denis leased a 21 ha dairy block and parlour approximately 7 km from the home farm to start a second unit. Starting initially with 40 cows, two subsequent adjoining parcels of land have been leased to create a 48-hectare second dairy farm, which is currently milking 150 cows. Denis has tended to front load the investment on all his leased land to ensure he can get the ground up and running and growing as much grass as possible, as quickly as possible. On the home farm cow numbers have increased from 150 to 250 in 2022, facilitated by the lease of an additional 44 ha. The plan is to increase cow numbers to 300 cows on the home farm in the coming years. The overall farm stocking



The Walsh Family

rate is 2.5 LU/ha farmed, with the second milking platform stocked at 3.2 LU/ha and 2.8 LU/ha on the home farm. Similar to Tom, Denis puts a big focus on grassland management and last year the farms grew approximately 14 tonnes of DM/ha. The herd is a crossbred herd with an EBI of Đ174. In 2021 an average of 520 kg milk solids was produced per cow (4.63% fat and 3.78% protein) to Centenary coop, with approximately 750 kg meal per head. Milk solids production per cow is on an upward trend and is likely to increase further as the herd matures. In 2022, 90% of the herd calved in 6 weeks and Denis had a calving interval of 365 days.

From a management perspective Denis tries to keep thigs as simple as possible. There are two full time staff on the farm, in addition to Denis, both of whom have worked with Denis for over 10 years. In addition, Denis avails of relief staff at weekends, while contractors also play a very important role in the business, more so than on most farms. As well as slurry, silage and fertiliser, they are used for calf dehorning, tail clipping, hoof pairing and cattle weighing. All of the cows are calved on the home farm with 150 cows brought to the second unit by mid-February. This year Denis used fixed time Al and sexed semen on his heifers and the 150 cows on the second unit – as they calve earlier and are more likely his more fertile cows. All cows on the

home farm and any repeats are bred to beef AI or beef stock bulls and as such this will help eliminate the challenge of dairy bull calves for Denis.

Denis tries to keep grassland management as simple as possible and he does the grassland measurement on both farms. Denis says his ideal number of paddocks on a farm is 11. This means that cows will get four grazings in each paddock, and it results in fewer decisions having to be made each week about moving cows. Denis has grown his business significantly over the past number of years increasing from 100 cows to 400 cows today and has plans to go to 460 cows in 2023. The focus on cows and fertility is clearly paying off with 90% of the herd calving in 6 weeks and a calving interval of 365 days. Milk solids production is also on an upward trend and at 520kg, from 750kg of meal, is an excellent performance for a young expanding herd.

Summary

Both of this year's host farmers, had a number of things in common, not least their management, attention to detail and excellent performance. However underpinning the excellent performance on both farms was the basics of cows and grass. Both farmers had bred a cow to suit their farm system best and were maximising the use of our natural resource – grazed grass.



The Cody Family

We would like to thank AIB for their continued support #BackedbyAIB





IGA Student Conference and Farm Walk Review 2022

Aoife Feeney Former IGA Council Member and Netherlands Embassy



Sheppard and ABP farm

After a three year hiatus due to the Covid, the IGA Student Conference sponsored by FBD, was held on two farms in Co. Carlow and Co. Wicklow on Monday October 4th with over 500 students from colleges all over the country in attendance. The day kicked off on the farm of the James and Michael Sheppard and ABP Demo Farm in Co. Carlow looking at a sustainable beef system. Opening the event, IGA President Alan Kelly promised a very engaging day ahead for the students attending and encouraged them to listen, take notes and ask questions. Stephen Connolly, Sustainability Manager at ABP started out positively by telling students to "keep sustainability in the back of your minds, you are the next generation driving towards our sustainability goals and there are huge opportunities within the beef sector". Stephen then went on to give us an overview of the farm. Originally

a tillage farm, the farm was converted into a dairy calf to beef system in collaboration with ICBF and Teagasc to examine a sustainable dairy beef calving index, with good beef traits and with sustainability at the core of the system. The partnership set up means that the Sheppard family are contract rearing the cattle on behalf of ABP. It is a 280 acre farm rearing 400 beef calves on a grass based system, with heifers slaughtered at 19 months and 21 months for steers. The farm also runs a sheep enterprise with 580 store lambs annually to complement the beef system. The grazing infrastructure has been upgraded over the years to make the system easier to manage. Genetics have a huge role to play in this dairy-beef system and underpin the objectives of the farm. Stephen explained that in order to have two successful industries, "dairy and beef need to work together". When asked what actions the farm was

We would like to thank FBD Insurance who have sponsored our student conferences since their inception in 2010



IRISH GRASSLAND ASSOCIATION CLG - MEMBERS' INFORMATION BOOKLET

IRISH GRASSLAND ASSOCIATION CLG - MEMBERS' INFORMATION BOOKLET

24

taking in order to manage 400 calves in spring, "a proactive animal health rather than reactive actions to manage the workload is key to keeping it a simple and consistent operation to manage".

Grassland management is something that the farm has had to work towards improving as it is not what they were used to but is now a critical action on the farm. The farm targets a short finishing period feeding once a day and as a result, grass is critical to the system. It is a difficult system to manage as it is not always possible to hit the targets and ground conditions on this farm can be variable. The farm targets a total of 10 grazing rotation's in the year but to date there have been 6 grazing's with 50% of the silage last year coming from surplus paddocks. The farm hopes to grow 14 t DM/ha, with 11 t DM/ha grown to date. In order for this low-input grass based system to work effectively and meet its targets weekly grass walks are carried out and soil fertility is prioritised. Stephen explains that everything has not been done perfectly on the farm and that there is always room to improve. The farm historically was a low index farm so to address soil fertility, they targeted a number of actions stating that "lime is key". They soil tested the entire farm and had a nutrient management plan (NMP) drawn up. Stephen explains that it is no use to soil test the farm if you are not going to utilise the data so the NMP is key here. Slurry and farm yard manure is being used more efficiently with a more targeted application based on the NMP. The farms actions to reduce carbon emissions include improved feeding through balanced diets, reducing the reliance on soya and dropping the protein percentage with

minimal impact on animal performance. They have reduced the level of chemical fertiliser application on the farm and are incorporating more white clover into swards.

The final stop on the tour focused on animal breeding, health and sustainability which Stephen mentioned in his opening remarks as underpinning the system on the farm. Genetics underpins the success of the system and Stephen reminded students of the importance of integrated dairy and beef systems and that the bull selection within the dairy system is critical to the dairy-beef system. The farm aims for higher genetic merit animals that can be slaughtered at younger ages, heavier carcasses, and a high feed efficiency, with an aim to reduce the carbon footprint. This is combined with a rigorous proactive animal health programme. The Sheppard family and the ABP team meet regularly to discuss any health incidences and develop a herd health plan in conjunction with the vet for the farm. Touching on the sustainability targets set out for the sector including a 25% reduction in GHG's, Stephen says that they are focusing on the quick wins; integrated dairy and beef systems, soil fertility, technology and innovation and animal breeding. He reminds us that all three pillars of sustainability, social, economic and environmental need to be balanced for the system to work.

Burgess and O'Grady farm

In the afternoon the students visited the Burgess and O'Grady dairy farm enterprise just over the border in Co. Wicklow. Tom Burgess a dairy farmer and Joe O'Grady a sheep farmer formed The Burgess and O'Grady farm partnership in 2019. This the success of the system and also to the cheese farm shows huge opportunity to the young audience attending for alternative ways to enter in to dairy. The milk on the farm is sold to Strathroy and Coolattin 17 ha per year and clover has been incorporated Cheddar. Tom founded Coolattin Cheddar in 2003 as an alternative way to add value to his farm and product. This requires time and effort and the cheese is produced from April to November, with a total of 20% of the milk from the farm is sold to Coolattin at the same price as Strathroy. Given the time and effort required to run this business, a farm partnership was an ideal way for Tom to focus on the cheese business while Joe could focus on dairy farming which he has always wanted to get into. Patrick Gowning, IGA council member asked what the key to success of the farm partnership is and Tom and Joe both agreed that trust is number one, clearly defined roles, good communication and a written agreement are what make this partnership a huge success.

The total farmland owned is 85 ha and all the land from both parties is leased into the partnership. They lease a further 44 ha of land, 99 ha forms the milking plat form and 30 ha out block for silage. The stocking rate is 2.69 LU/ha on the milking platform and they are milking 267 cows at the moment. Significant investment has been put into the farm to improve efficiencies. The milking parlour and surrounding infrastructure resembles a New Zealand system, influenced by Tom's time spent there. An underpass was installed to streamline parlour access and slurry storage was increased also. There is room to grow the cow numbers but for now they are happy with the current set up. As with any grass-based dairy enterprise, grassland management is key to

production as the cheese gets its yellow colour from the beta-carotene found in grass. The farm reseeds into over a quarter of the farm with plans to further increase this. The farm dries out quickly in dry weather so this can be a concern over the summer period particularly. In order to combat poaching in wetter weather, particularly in autumn, the first paddocks are closed in early October. The goals in the grazing system for Joe are to make better use of the slurry and continue to build soil fertility. The herd is a cross-bred system of Jerseys and Holstein Friesian. Sexed semen was used as a trial in 2022 with good success so they plan to further expand this use in 2023 as far as is needed. Hereford and Belgian Blue straws are used on the remaining cows and the majority are proven bulls. Cow type is important to Tom and Joe and they target a 480 kg live weight cow, the current herd EBI is £167 with milk and fertility prioritised.

The Burgess and O'Grady partnership shows the ample opportunity out there for alternative ways into dairy production that it is important to have trust, communication, KPI's and clearly defined roles for it to be a success.

The IGA would like to thank FBD Trust for their sponsorship of the event, the Sheppard family and ABP Demo Farm and staff for hosting a stimulating and informative discussion on dairy-beef systems and finally to Tom Burgess and Joe O'Grady for hosting and sharing their journey of a successful dairy farm partnership.

27





The annual Irish Grassland Association National Dairy Conference, sponsored by Yara, takes place on Wednesday the 18th of January 2023. The theme of this year's event focuses on the changing practices required at farm level to farm successfully in a rapidly changing world. Dairy farms have been given ambitious targets to meet both from a water quality and green house gas emissions perspective. Addressing these challenges is an excellent line-up of speakers who will share with us the latest research, insight and expertise on how dairy farms can navigate this new era.

The world that dairy farms are now operating in, is rapidly changing, to succeed our dairy farmers must rapidly adapt to new farm practices and technologies. The conference will focus on the key areas that farmers need to focus on around environment and grassland management practices. The conference will also examine the financial implications for dairy farms to meet new regulations.

Session I-Where to from here

This session will focus on the ambitious targets set out for the dairy industry. New regulations around the nitrates directive and climate change targets will impact farms both in terms of additional costs and day to day farming practices. David Fennelly from County Laois will present a paper on how his farming practices will change over the next five years. David will discuss key areas where he and his family will focus on to ensure their family dairy farm is well positioned to deal with these new challenges.

Noreen Lacey will present the financial costs of new

environmental regulations in terms of lower stocking rates and increased infrastructure costs. Noreen will examine the scenarios facing dairy farms. In a time of increasing input costs are some farms financially better off with less cows?

Session 2 - Technologies to future proof dairy farming

Technologies will play a key role in the future of dairy farming, however with a growing number of technologies available, this session will focus on which technologies offer the highest rate of return in terms of improving farmers bank balances and their environmental sustainability.

Dr. John Upton will present a paper on energy efficiency on Irish dairy farms. Soaring electricity costs have pushed energy efficiency centre stage on dairy farms. John has more than a decade of work completed on energy consumption and efficiency on Irish dairy farms. John will discuss the findings from his work. The paper will also examine the options to reduce energy costs through on farm renewables, particularly solar power.

Francis Nolan a dairy farmer from Kilkenny will present a paper on his approach to on-farm investments. Francis has made some key investments on his farm over the last five years including improving infrastructure and embracing cutting edge technologies such as his heat detection system.

Session 3- Productive Swards in a low Nitrogen era Dairy farmers will use significantly less chemical nitrogen in the next 10 years. This reduction in chemical nitrogen usage must not come at the expense of productive swards. This session will examine the grassland management practices needed to succeed in a low nitrogen era.

Dr Michael Egan will present a paper on the management of grass in spring in terms of grazing management, nitrogen fertiliser and animal performance. Record nitrogen prices have given renewed focus to the best way to manage spring grass, Michael will discuss the latest results from Teagasc grazing trials.

Dr Michael Dineen's paper will examine the role of red

clover in intensive dairy systems. Red clover has the potential to grow large quantities of dry matter without the need for chemical nitrogen inputs. His paper will look at managing these swards and the feeding value of forage produced from these red clover/grass swards.

Robert O'Dea a dairy farmer in Co. Limerick will present a paper on how his grassland management will change over the next 5 years. Robert was an early adopter of grass/clover swards and has significant amounts of clover present on his farm. The paper will examine the benefits of clover in swards but also the disadvantages including increased bloat risk and lower spring growth.

Programme

riogiallille				
9.00am	Registration			
10.00am	Opening Address Alan Kelly, IGA President and UCD			
SESSION I	Where to from here? Chairperson Patrick Gowing IGA council member and Teagasc			
10.15am	Noreen Lacey IFACDavid Fennelly Dairy Farmer, LaoisDiscussion			
SESSION 2	Technologies to future proof dairy farming Chairperson Matt Dempsey IGA Lifetime Merit Award recipient and Irish Farmers Journal			
11.45am	Dr John Upton TeagascFrancis Nolan Dairy Farmer, Kilkenny			
12.45pm	Lunch			
SESSION 3	Productive Swards in a low Nitrogen era Chairperson Karina Pierce IGA council member and UCD			
2.15pm	 Dr Michael Dineen Teagasc Dr Michael Egan IGA council member and Teagasc Robert O'Dea Dairy Farmer, Limerick 			
4.00pm	Conference Close Vincent Griffith, IGA Dairy Conference Chair and Aurivo			



ACCOMMODATION

Single Rate B&B €85 / Double or Twin Rate B&B €95

Bookings can be made by calling reservations on 063 33700 and quote IGA Conference

Speaker Biographies

Noreen Lacev

Noreen lives and farms in Kilkenny with her Family. She holds a Degree in Ag Science from UCD and a Degree in Business Studies from IPA. She is a past council member of the IGA. Noreen has a wealth of agri-business experience, having previously worked for Glanbia, ACC Bank and AlB. In 2018 Noreen joined IFAC as Head of Business Development and is now Head of Banking for their new Banking Services Division.

David Fennelly

David farms in Laois in partnership with his parents. His farm has a strong focus on reducing environmental impact and it is also a Signpost demonstration farm. He is a 2020 graduate of UCD with a Bachelor of Agricultural Science in Dairy Business. David is also completing a Nuffield Scholarship in 2023 on "Diversity in Irish grazing swards and systems. Solutions to our challenges may be under foot?"

Dr John Upton

Dr John Upton is a Research Officer in Teagasc Moorepark. John has a PhD from Wageningen University and his research interests include energy consumption on dairy farms, smart metering networks, renewable energy integration and management, water consumption on dairy farms and milking machine performance and milking management.

Francis Nolan

Francis farms in Kilkenny and is a new entrant to dairying. He farms 70 ha, of which 4 ha is rented. In 2021 he milked 151 cows, and he had 30 replacement units. The overall stocking rate on the farm is 2.7 Lu/ha. The farm grew just over 12 ton of grass DM/ha in 2021. The EBI of the herd is \in 161 & the younger stock have an EBI of \in 203 - \in 230. The calving interval is 371 days with 81% calving in 6 weeks. The soil fertility of the farm has increased over the last 3 years with over 90% of the MP now index 3 or 4 for both P and K.

Robert O'Dea

Robert is a dairy farmer in Limerick, in partnership with his brother and nephew, Bernard and Denis. The O'Dea's are milking 259 cows on a 116 ha MP with an additional 16 ha out farm, and this has grown in recent years since the formation of the partnership. Robert joined an on farm clover study in 2020 and in that time he has reduced chemical nitrogen fertiliser from 234 kg /ha in 2020 to 137 kg /ha in 2022.

Dr Michael Egan

Michael completed a PhD in grass / white clover swards in conjunction with Teagasc and UCD in 2015, and has since been working as a Grassland Research Officer in Teagasc Moorepark, where his main area of research has been optimising grassland management with particular focus on optimising spring and autumn grazing management for intensive grassland farms, and also the role of white clover on commercial grassland farms.

Dr Michael Dineen

Michael is an animal nutrition and physiology researcher at Teagasc Moorepark. His research work focuses on increasing the productive efficiency of pasture-fed lactating dairy cows in an environmentally benign manner. He obtained a BSc in Animal Science from UCD before completing a M.Phil at Teagasc Moorepark in collaboration with Queens University Belfast. Michael completed his PhD at Cornell University USA. His doctoral work focused on describing nutrient supply and animal requirements in pasture-based systems. Michael is also an adjunct lecturer in UCC.

IRISH GRASSLAND ASSOCIATION CLG - MEMBERS' INFORMATION BOOKLET



The Irish Grassland Association are hosting a free members event at 8pm in the Charleville Park Hotel. The theme of this year's event is getting succession right on your farm.

The event is kindly sponsored by Yara and is being hosted by former IGA President and Dairy Farmer Paul Hyland. Paul will have a chat with Aisling Meehan a solicitor with significant experience working with dairy farming families.

Aisling is originally from a successful farming family in Co. Clare, as well as running her own business, she is also farming with her husband in Clare and has helped develop many successful agreements and succession plans on farms. Paul and Aisling will tease out what makes some agreements work both within families and outside a farmer's immediate family.

As with all arrangements there can be challenges in setting up and following through on agreements, and this event, as well as showcasing how to set up agreements, Aisling will look at the common pitfalls that farmers and business can fall into when developing a partnership agreement or a successful succession plan.

This event will give IGA members a unique opportunity to engage and contribute on an often complex but important topic.

30

This event is open to all IGA Beef Sheep and Dairy members. No registration required.

This free event is kindly supported by Yara



A Year in my Wellies



My name is Lauren Claffey, I'm a 4th year Dairy Business student and I work alongside my Dad and brother milking 220 cows. For the summer months, I split my time between relief milking for two local farmers and helping out on the home farm, and for the winter months I will do 1-2 milking's for my uncle and help out as much as possible at home! The herd is currently averaging 18 litres at 5.09% butterfat and 4.11% protein on 3.5kgs meal in early October, and have produced 445kg MS per cow to the end of September.

Grazing management

The farm cover at the moment is just over 800 kg DM/ha, this is slightly behind where we would have wanted it at this stage, but after the dry period we didn't get the build our peak farm cover. We are highly stocked on the milking platform, with a stocking rate of 3.58 LU/ha, with no silage ground available to come back into the rotation. We were fortunate that a small buffer of baled silage throughout the month of August was generally sufficient to hold cover during the dry period, with growth only dropping below demand in the last fortnight of the month! The rain was very welcome in early September and this has resulted in us not being able to build up the cover of grass for the final rotation, so silage will be maintained in the diet to extend grazing until housing, in order to achieve our target closing cover of 700 kg DM/ ha in December. We have opened a pit of silage in the past few days which was left over from 2021, and will continue to feed this as required.

The cows were housed by night around the 20th of October, as grazing conditions were challenging due to heavy rain fall received in first 2 weeks of October and we are on target to have 60% of the farm closed by the end of October for spring grazing. We hope to graze until mid-November by day, depending on farm cover and grazing conditions, aiming to house with an AFC of 600 kg DM in mid-November.

Breeding season

We were disappointed with the empty rate of 17% on the farm this year. The fertility of the herd is something we have been focusing a lot in recent years. In previous year we were split calving, however we moved away from this last year to 100% spring calving, this could have contributed to the higher empty rate this year. We are using high EBI bulls with good fertility figures and have shortened our breeding season to 12 weeks this year. This probably contributed to the high empty rate. Heat detection on the farm was a mix of tail paint and scratch cards. We completed 5 weeks of dairy AI followed by a week of beef AI and then we let 3 angus bulls out with the cows to mop up for the final 6 weeks.

Young stock

31

We are carrying a lot of replacement heifers on the farm currently. We had over 90 dairy heifer calves this year and we also have some beef calves still on the farm. These 119 calves are reared on an out-farm and therefore most will be housed by the end of October as this farm is stocked considerably heavier than usual. The heifers were weighed in late summer, and the majority were on target. We will use these weights to help group these in batches and feed on the lighter group to ensure they are on target for breeding. We have split the calves into 2 groups based on weight, the heavier group of calves are currently getting 1 kg of a 16% beef nut while the lighter group are getting 2kg meal. We also have 70 in-calf heifers on another out-farm. There was only 1 heifer empty with approximately 55% of the heifers in calf to sexed semen.

I am looking forward to finishing the Dairy Business degree program over the next months, which has been a great learning experience for me. Unfortunately, due to COVID I missed out on the opportunity to travel to New Zealand as part of the degree program. I hope to do some travelling when I finish my degree and look at farming systems in other parts of the world before returning to work here in Ireland.

IRISH GRASSLAND ASSOCIATION CLG - MEMBERS' INFORMATION BOOKLET IRISH GRASSLAND ASSOCIATION CLG - MEMBERS' INFORMATION BOOKLET



A Year in my Wellies

Blackface Mountain ewes. Our aim is to retain all of our own replacements so that we don't have to buy in any, thus lowering the risk of buying in any diseases from other farms.

sheep. On our home farm, I help my brother Aidan and mother Marie run a 200 ewe hill and lowland flock in Co. Kerry.

My name is Edel O' Connor. I am a final year PhD

student working on measuring methane output from

Lambing season

This year's lambing was very successful with 80% of the ewes lambing in the first two weeks. One issue we really tried to focus in on this year was to reduce lamb mortality at lambing; this comes with great difficulty as the majority of the ewes lamb outdoors. The target lamb mortality is less than 10% and thankfully, the weather was mild for the majority of lambing and the paddocks used had lots of shelter with stonewalls and trees which meant we were able to achieve this target. The one great advantage of having hill genetics even in the Suffolk cross lambs is they have a great ability to get up and suck on their own. There is only a small number of lambs that we would ever need to give assistance to help suckling and this is usually only when the ewe may have udder issues. Replacement ewe lambs are selected at lambing, with approx. 30 kept each year (replacement rate of 15%). This year the majority of ewe lambs kept are sired by the Cheviot x Leicester ram from Scottish

Store lambs

It has been a mixed year for our store lamb trade. The summer started well but with the drought in August and September it has been harder to sell lambs to customers from affected areas. We try to keep lambs going to the mart to an average of around 32 kg. Our local mart is Iveragh Co-op mart and we sell on livetrade. This means buyers come to the mart and lambs are weighed with a guaranteed price per kilo before the lambs are even brought in.

Breeding season

Mating is only around the corner now. We use five rams for mating each year. Our Scottish Blackface Mountain ram and Charollais ram were given new homes so we had to purchase two new rams. As last year's Cheviot x Leicester ram proved to be a huge success, we decided to purchase another ram from the same breeder. Many of our neighbouring hill farms have had good success with Dorset rams so we have bought one ourselves to see how he will get on.

Rams have started to be meal feed to build condition for the mating season, it is important to have the rams well covered, as they will have a lot of work ahead of them for the 5 weeks of mating. The rams are regularly given an NCT to ensure they are not lame or have any issues with their testicles prior to mating. We also vaccinate the rams with Covexin 8 for clostridial diseases prior to mating.

The ewes also get a NCT prior to mating. This allows us to cull any ewes not fit for mating. Ewes are vaccinated with Covexin 8 and are given a mineral drench. The hogget ewes, which will be going the ram for the first time this year, are vaccinated with Toxovax. In 2019, the farm had a very bad outbreak of Toxoplasmosis. It resulted in several abortions and weak lambs that were born alive but soon after died. It was a heart breaking time on the farm and from 2019 on, and now we vaccinate for Toxo every year.

All sheep on the farm are dipped in September, we have our own dipping tank and have only started dipping again in the last three years. We have found it is the most effective way to preventing numerous serious diseases caused by ectoparasites.

I have just started the final year of my PhD and all my experimental work has been completed. In my last article. I described the main method we use to estimate methane production in sheep, Portable accumulation chambers. In this article, I am going to talk about another method I used during my PhD called the sulfur hexafluoride (SF6) tracer technique. This method allows methane measurements to be taken from individual grazing sheep. It is based on a known release rate of SF6 gas from a permeation tube that is orally dosed into the rumen of the animal. Samples of exhaled breath are collected in an evacuated canister on the animals back and each animal is fitted with a halter, with an inlet attached which draws in the air from around the animal's nose. For my experiment, we used 60 two-year-old dry ewes. They were broken down into three groups of 20 to make it easier to obtain the measurements. The ewes had to be monitored constantly as equipment failure can easily happen. Methane measurements were taken over four consecutive days and coincided with dry matter intake (DMI) measurements. Dry matter intake is measured using the n-alkane technique. Ewes are orally dosed for 11 consecutive days with an n-alkane bolus and faecal samples collect from day



6 to 12. Intake is one of the main drivers of methane production so it is very important to measure both traits at the same time. Preliminary results from my study showed that on average ewes produced 38.21 grams of methane per day with an average DMI of 0.95 kg dry matter/day. This work is helping to validate techniques for measuring methane in sheep systems with the larger cohort of farm based data feeding into the development of breeding values for methane in sheep.



With increased costs associated with making silage, combined with fodder shortages in some areas of the country, managing what reserves are in the yard and making the most of cow body condition score (BCS) can go a long way to help to minimise the cost of winter this year.

Assessing BCS

Body condition scoring is an assessment of condition on the animal at three sites on the animal - the ribs. the loin and the tail head. It is scored on a five point scale where BCS 1 is a really thin and BCS 5 is an extremely fat. Typically, cows on farm will fluctuate between a BCS of 2.5 and 3.5 throughout the year. In the ideal situation we would maintain cows in a BCS of 3 every day of the year but due to varying nutritional supply and demand throughout the season, BCS needs to be carefully managed as it changes.

Depending on the farm enterprise, the management over the coming months will differ greatly but for the majority, the ultimate the goal is to have cows in the right condition at calving in spring. Cows in too good of condition at calving are at higher risk of calving difficulty and milk fever while cows that are under conditioned may struggle to calve, have low milk yield and are more likely to have issues getting back in calf for a 365 day calving interval.

Carrying out BCS on the herd should be carried out at the beginning of the winter period, but also, it needs to be constantly monitored and cows moved from groups as required or feeding regimes adjusted as necessary throughout the winter feeding period. Management over the winter varies greatly between dairy and suckler cows however, and so, each will be discussed separately.

Dairy cows

The target for dairy cows is to have them at a BCS of 3.25 at calving. Late November or early-December is the time to assess cow body condition ahead of the dry period. Most of the herd will be around the same BCS so you are looking to separate out the two extremes that may need alternative treatment.

Where cows are thin and below a BCS of 2.5, a longer dry period should be considered to allow them time to build condition. However, for the majority an eight week dry period on decent quality silage should be enough to reach the target BCS at calving.

Cows being fed 70% DMD silage over an eight week dry period will typically gain 0.3 of a BCS in

that timeframe. Fed silage that is 72% DMD over the same period, cows will gain 0.4 of a BCS while feeding a 68% DMD silage would still see a gain of 0.2 BCS. Therefore, the ideal situation where there is 72% DMD silage on farm, cows should be 2.85 BCS at the start of the dry period which will see them calve down at 3.25 BCS in spring.

If silage quality is poor and it will not meet animal requirements, the need for additional supplementation may be required (1 - 2 kg of concentrate). If supplementation is required, animals should be grouped and adequate feed space per cow available (600 mm per cow). Where silage is of higher quality, care needs to be taken that it is not fed to cows that are already over conditioned or those that only need to gain a small amount of condition. Where there is no poorer silage available, restricting intake slightly may be necessary. Any condition loss should be done 'slow and steady' and targeted over the first half of the dry period. Cows will automatically be restricted in the final few weeks of pregnancy due to the space the calf is taking up and so you do not want to restrict intake during this period.

Suckler cows

Often with spring calving suckler cows it is a case of bleeding some condition off the animal over the winter period as in most cases the calf has been weaned prior to housing and the cow has gained some condition in the final weeks of grazing. This approach can be very effective at lower feeding costs over the winter period as the cow mobilises energy reserves built up cheaply at pasture during a period of high feed costs indoors.

This is why in most cases silage quality on suckler farms does not need to be as high of quality as on dairy farms however having some high quality silage for productive stock and thinner cows is required.

The target BCS for suckler cows at calving is 2.5 to 2.75. This is lower than the target for dairy cows primarily to aid calving ease but also because there is not the same nutritional demand on the suckler cow post calving as there is for a dairy cow and so the suckler cow does not need as much reserves to meet demand during this period.

Where suckler cows are housed in a BCS of 3 she can afford to lose a half score which is a saving in feed equivalent to between 1t and 1.5t of fresh weight silage. Where cows are housed at BCS of 2.5 then they need to be maintained throughout the winter



period. Typically 66% DMD silage will be sufficient to do this is fed ad libitum. If the same quality silage is restricted a loss of between 0.3 and 0.5 of a BCS will be recorded depending on the winter length.

For thinner cows that need to gain condition before calving it will not be achieved with mediocre quality silage (66% to 68% DMD) either higher quality silage will need to be fed or where this is not available, feeding 1 kg to 2 kg of concentrates may be needed to increase BCS. Where this is to happen it should be done early in winter and care should be taken to not to overfeed in late pregnancy as it will increase calf birthweight leading to increased calving difficulties.

Summary

- Carry out BCS as early as possible in winter
- Divide cows out into three groups depending on BCS and feed accordingly
- BCS needs to be reviewed regularly and diets altered or cows moved from one feed group to another as required
- Having cows in correct BCS at calving will reduce other issues such as calving difficulty, milk fever and fertility issues later in the year
- Correctly managing cow BCS can help reduce the cost of winter feeding

IRISH GRASSLAND ASSOCIATION CLG - MEMBERS' INFORMATION BOOKLET IRISH GRASSLAND ASSOCIATION CLG - MEMBERS' INFORMATION BOOKLET 34

Setting your farm up to maximise spring grazing in 2023



When we look back on the grass growing year of 2022 - growth variability, drought and higher costs due to increased price of fertilisers will be the poignant reminder to many farmers, particularly in the south & east of the country. Farmers in the "BMW region" that escaped severe drought will look on 2022 more positively, with sufficient rainfall to keep farms green and growing throughout the key moments in July and August.

Looking at the PastureBase Ireland data up to 20th October 2022, 10.9 T DM/Ha of grass has been grown on Irish farms. When we compare this to 2021 and the 5 year average, 12.1 T DM/Ha and 12.4 T DM/Ha were grown respectively. This is an 11% & 13% drop in yield respectively. The 20% reduction in chemical N applications and 30% reduction in P & K applications up to the 1st August along with the drought will go a long way to explaining the drop in growth.

However, the grass year of 2022 is coming to a close and our sole focus should be on setting the farm up during the final rotation to grow grass over winter and maximise days at grass for spring 2023.

Autumn Management

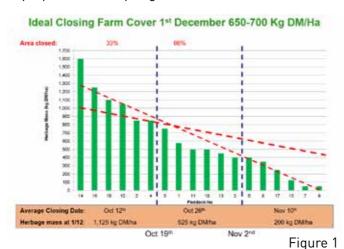
There may be a temptation on farms to "graze on" during November due to the fact that farmers who fed silage for large parts of the summer may be averse to feeding silage again so soon. This must be avoided at all costs. Due to the increase in costs apparent over the last 10 months, Teagasc estimate that Spring grazing in 2023 will be worth in the region of €4 per cow per day or €2.50/LU on beef and sheep farms in the spring so having an adequate supply of good quality grass in the spring time should be top priority for farmers.

70% of the grass available in the spring grows in October and November. Every day delayed in closing the farm will reduce opening Average Farm Cover in February by 16kg DM/ha. Using the 60/40 autumn rotation planner on PastureBase Ireland can aid in planning out the final grazing rotation during October and November.

The 60/40 autumn rotation planner plans to graze 60% of your farm by the 1st November (this can be 70% on wet or highly stocked farms). Example-: 40 ha farm-60% to be grazed by 1st November= 24 hectares or 0.8 hectares per day. The final 30- 40% will be grazed in early November.

Figure 1 below shows the ideal Closing Farm Cover on the 1st December of AFC 600-700kg DM/ha for a farmer stocked at 3 LU/Ha. This may need to be 750-800 Kg DM/Ha for farmers with higher stocking rate or with large early spring demand or <600 Kg DM/Ha for farms stocked at 2.0-2.5 LU/Ha or very heavy soils. Dates are a reasonable guide when it comes to closing the farm, however as no two years are the same farm cover targets are far superior.

By having a "wedge" of grass on your farm, you have set your farm up to grow quality grass over the winter in preparation for spring 2023.



Clover Management during the final rotation

Many farmers throughout the country have been incorporating clover over the last few years in order to take advantage of the animal performance, lower costs and emissions reduction that clover brings to the table. As a lot of the clover swards that farmers are working with are still in early stages of development, it is important to take note of the following tips in order to aid in the establishment.

- Light required to the base of the sward to aid stolon production and development
- Close in your "final 1/3" group of paddocks, preferably in early November
- When completing your closing AFC, aim for <700 Kg DM/Ha on your grass- clover paddocks and aim to graze early in Spring

Making a success of spring grazing

With a successful autumn closing plan and favourable winter growing conditions, farmers will have in the region of 900-1000 Kg DM/Ha AFC in early February

2022. On drier ground with high demand, the top farmers will target 11-1200 Kg DM/ha. Our challenge in spring 2023 is to maximise days at grass and the utilisation of the available grass we have on farm, while monitoring AFC throughout March and April that we don't allow it to go below 550Kg DM/Ha as this has a negative effect on growth rates. Research from Teagasc Moorepark estimates that every 3 Kg DM of grass extra that we get into the cows by displacing silage fed and having the correct opening AFC will deliver 1 litre of milk per cow per day extra on Irish dairy farms.

Every farmer should have the following in his/her "toolbox" for spring grazing-:

- ✓ Regular grass measurements on PastureBase Ireland
- ✓ Use of PastureBase tools such as the Feed Budget & Spring Rotation Planner
- ✓ Good grazing infrastructure i.e. spur roadways, multiple access points
- ✓ Farmer with positive mind-set to spring grazing & flexible attitude
- ✓ Knowledge of the rotation length & AFC targets as we move through Spring



Figure 2

In order to have sufficient grass cover back on paddocks for the start of the 2nd rotation it is vital to pick the paddocks strategically for grazing throughout the spring. This starts with the first 30% of the farm to be grazed.

As displayed in Figure 2, your 1st 30% to graze during February should have grass covers of between 800-1000 Kg DM/Ha on them, recently reseeded for faster growth rates and with good access.

The next 30% are paddocks closed the earliest from the previous October, which have heavy covers of \rightarrow 1200 Kg DM/Ha in order to slow down your rotation as demand increases.

From St Patrick day on - is when the PastureBase tools such as the weekly grass walks, Spring rotation planner & feed budget work together in order to manage the remaining 40% to be grazed on your farm in line with what grass covers are back on the 1st 30% of the farm

that has been grazed. Talk to your advisor or one of the Grass10 team if you require help setting up a feed budget for 2022.

Throughout the spring during challenging weather, grazing infrastructure such as spur roadways (Figure 3) and being prepared for the rainy day to ensure grass is kept in the diet as much as possible. On/off grazing can and must play an integral part in spring grassland management particularly during period of wet weather.

On/Off grazing

Approach: On/Off grazing: 2-3 hours & back fence

- 1. Milk cows at 7 am and 2 kg of meal
- 2. Cows out to grass at 9-11 am in the RIGHT paddock & strip graze
- 3. Cows return to the shed at 12-2 pm (no silage)
- 4. Milk cows at 3-4 pm & 2 kg of meal
- 5. Cows out to grass at 4-5 pm in the RIGHT paddock & strip graze
- 6. Cows return to the shed at 6-8 pm
- 7. Cows have access to adequate silage (not too much or too little) for the night



Figure 3

Summary

- ➤ Getting your Autumn closing plan correct will be worth €4 per cow/day or €2.50 per LU next spring
- Graze recently established grass clover swards last this autumn
- Complete a feed budget on PastureBase Ireland to help map out spring grazing
- ➤ A positive mind-set and flexible attitude is key to maximising grass in the diet during spring

Register for the Grass10 Newsletter

The Grass10 newsletter is a weekly e-newsletter focused on providing tips and advice for grassland farmers throughout the country. The newsletter contains weekly farmer profiles,

PastureBase figures, grass dry matter %, research updates, the innovative "clover reporter" and much more. To register simply scan the QR code below with your smart phone or table or visit the Teagasc Grass10 website.

ur 🕞 💮

IRISH GRASSLAND ASSOCIATION CLG - MEMBERS' INFORMATION BOOKLET IRISH GRASSLAND ASSOCIATION C

37



Introduction

White clover has an important role to play in reducing chemical fertiliser usage on grassland farms in Ireland. Recent research in Teagasc Moorepark has shown increases in milk (+30 kg milk solids/cow/year; Egan et al, 2018) and herbage production (+1100 kg DM/ ha/year; McClearn, et al., 2019) and reductions in N fertiliser by up to 100 kg N/ha from incorporating white clover into grass-swards in high stocking rate systems (Fitzpatrick et al, 2022). To date the uptake of white clover incorporation in grass swards on commercial farms has been low. There has been an increase in white cover use on farm this year with increasing fertiliser prices and environmental concerns. Reseeding an entire farm to introduce white clover into pastures is impractical and costly and as such there needs be a two pronged approach (reseeding and over-sowing) to introducing white clover onto grassland farms.

Establishing a white clover sward on your farm

Incorporating white clover in a full reseed is the most reliable method of establishing white clover and

provides the best opportunity for weed control (Brock and Hay 2001). Over-sowing is a simple and low cost method of introducing white clover into swards and can yield successful clover establishment; however, success is very much dependent on; soil fertility, soil moisture, post-sowing grazing management and competition from the existing sward (MacFarlane and Bonish, 1986). Suitable paddocks for over-sowing are those with good soil fertility (index 3 or 4 for P & K, and a soil pH of 6.5), high perennial ryegrass content and low weed content. When selecting clover cultivars to sow, use the DAFM recommended list. Small and medium leaved cultivars are best suited to intensive grazing systems, with large leaf white clover and red clover more suited to silagebased systems. White clover should be sown ideally when soils are warm and moist - ideally in April/ May. Sowing in the autumn can reduce chances of a successful establishment as soil temperatures are on the decline so it is more difficult for clover to compete with the grass. If Irish farms are to successfully establish clover as part of their grazing system, it will need to be undertaken over a period of time (3 to 4 years) and use a combination of methods.

White Clover Establishment Blueprint

A targeted multiyear approach should be used in establishing a white clover system- combination of reseeding and over-sowing

- Reseed approx. 10% per year
- Over sow approx. 20 % per year
 - Yr 1- reseed 10% & over sow 20% = 30%
 - Yr 2- reseed 10% & over sow 20% = 30% (60%)
- o Yr 3 reseed 10% & over sow 20% = 30% (90%)
- Yr 4 remaining 10% + any ground that clover didn't establish on (100%)

Paddocks for a full reseed should be identified as early as possible in the process to avoid over-sowing clover on these.

- **1. Direct Reseeding** (Key steps involved in a full reseed)
 - Take a representative soil sample for analysis of P, K and pH; if ploughing take sample after ploughing
 - Spray off the old pasture with glyphosate as per label recommendations; allow a minimum of 7 to 10 days after spraying before cultivating
 - Avoid ploughing too deep (15 cm) as it can reduce soil fertility
 - Prepare a fine, firm seedbed and apply lime, P and K as per soil test results
 - Sow grass (34 kg/ha) and white clover (2.5 to 3.5 kg/ha) seed mix
 - Avoid sowing white clover seed too deep; sowing depth approx. 10 mm
 - Ideally cover seeds and roll well to ensure good contact between the seed and the soil
- **2. Over-sowing** (Key steps involved with clover-sowing white clover)
 - When over-sowing, the white clover seed can be broadcast onto the sward or stitched in using a suitable machine
 - Best practice is to over-sow directly after grazing (≤ 4 cm post-grazing sward height; or after cutting the paddock for surplus bales – ideally only over-sow 3 to 4 paddocks at a time
 - Control weeds before you consider over-sowing clover - some herbicides have a residue of up to 4 months - always check the residual time on the label of the product or seek advice

- on a suitable weed control product
- A slightly higher seeding rate (5 6 kg/ha) is recommended for over-sowing compared to a full reseed, to overcome the issues with slugs and a lower germination rate
- Sow with a fertiliser that contains P as this will favour establishment particularly if soil fertility is poor
 - o 1 bag of 0-7-30 or 0-10-20/acre
 - If possible reduce N fertiliser post over-sowing
- Soil contact post over-sowing is one of the most crucial factors effecting germination
 - Roll paddocks post sowing to ensure soil contact
 - Apply watery slurry (if available) ideally around 2000 gallons/acre
- Ideally over-sow on well managed grassland not suitable on old 'butty' swards with a low content of perennial ryegrass – if this is the case a full reseed is best practice
- If broadcasting with a fertiliser spreader
 - Mix clover seed with 0:7:30 fertiliser and only add clover to the spreader when you are in the field, to avoid clover settling at the base of the spreader

On farm white clover study - Clover150

In 2021, an on farm study was launched by Teagasc Moorepark, the 'Clover150' programme, looking at establishing white clover on commercial grassland farms, with the programme currently in year 2 of a 6 year programme. A total of 36 farmers are involved in the project from across Ireland and a range of farming systems. The objectives of the programme was to; increase sward clover content (>25%); reduce chemical N inputs (approx. 150 kg N/ha/yr); and reduce N surplus (< 130 kg N/ha/yr), while maintaining herbage production. All farms were provided with a detailed plan for clover establishment and post sowing grazing and fertiliser management with clover establishment commencing in spring 2021. Sward clover content was visually accessed using the 'Teagasc Clover score card' 3 times per year (spring, summer and autumn); and farmers were then provided with tailored management guidelines for their farm. Newly established paddocks (reseeding or oversowing) a pre-grazing herbage mass of <1100 kg DM/ha was advised for up to 4 months and reduced levels of N fertiliser to reduce competition form the grass plant as well as maintaining a lower cover on these paddocks over the autumn and winter

period. Paddocks that had an established sward clover content of ≥ 20%, N fertiliser was reduced by 50% from mid-May onwards. Additionally to facilitate a broader adoption and group learning, a discussion group was established with the 36 monitor farms that meet 4 times a year, on member's farm to discuss shared experiences and improve their clover management. As part of this discussion group a survey of the participants were carried out in May to obtain information of the establishment and management of clover on farm.

Results to date

Farm gate N surplus and nitrogen use efficiency (NUE) was carried for the year 2021 for all farms involved. The average N surplus for the group was 179 kg N/ha/ yr with a range of 131 to 262 kg N/ha/yr, with an NUE of 32%, a range of 20 to 43%. Sward clover content in spring of 2022 (carried out in March/April) across the 36 farms was 15%, (8 - 20%), with 40% of the farmed area had clover present. Within each individual farm there was a large variation in clover content from paddock to paddock, ranging from 5% to 45%. From this data all farmers were provided with a list of paddocks that had a sward clover content ≥ 20% and advised to reduce chemical N fertiliser. Another sward clover content was carried out in June/July 2022. There was a significant increase in the area of the farm with clover from 40% to 56%, and a sward clover content of 16% (12 - 35%). The last clover score on the farms for the year was carried out in September/October 2022. There was again an increase in the area of the farm with clover from 56% to 62% and the sward clover content increasing from 16% to 18%. The level of clover currently on farm is from a combination of over sowing and reseeding, with oversowing accounting for 50% more of the established area compared to reseeding. Previous studies have reported more success in established clover via reseeding compared to over-sowing, however in the current data set, there is no variation in average sward clover content of 19 and 18%, respectively, where the correct procedure and post grazing management was followed.

There was a significant reduction in the level of chemical N applied on farm from 2021 to 2022 (January to October), with 12 kg N/ha chemical N fertiliser less applied. The cumulative grass grown in the same period for 2021 and 2022 was similar with 12.0 and 11.5 tonne DM/ha grown respectively, despite the prolonged drought in the summer of 2022. On farms where <160 kg N/ha was spread in 2022 the annual tonnage grown

was 11.1 tonne DM/ha with a clover area of 71% (Table 1). Where reductions in N fertiliser are being targeted it is imperative it is only do so in paddocks with adequate levels of clover content (> 25%) without seeing a reduction in herbage production.

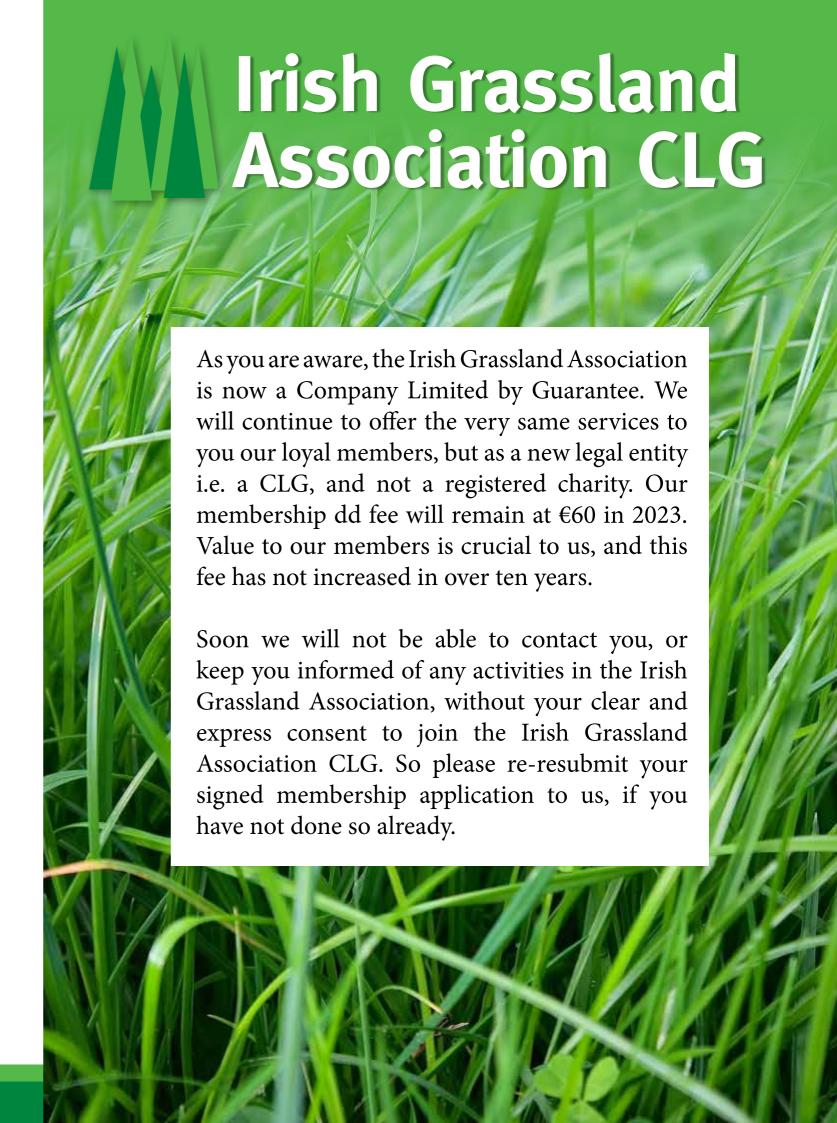
Results from the survey carried out among the group have highlighted results with participant's highlighting establishment as the most difficult aspect on farm, with grazing at the correct pre-grazing cover and managing your overall farm cover, two of the most difficult, yet most important, elements in establishing clover. Another key outcome of the survey was adjusting the area to be reseeded/oversown for individual farms to ensure that the correct management can be adhered too.

Conclusion

White clover is a vital element in grass based systems now and will continue to be into the future, a renewed focus on establishing clover swards on farms is required. The results from the current on farm clover study highlight that white clover can be successful established on farm by a combination of reseeding and oversowing with little variation is sward clover content between methods. There can be challenges in establishing successful clover swards, however ensuring correct sowing procedures and post grazing management are adhered to clover can successfully be established. The farms in the current programme have shown how this can be achieved in a relatively short period of time and attain significant reductions in chemical fertiliser application (12 kg N/ha January – October) without compromising herbage production. The 'Clover150 programme' will continue over the next number of years and follow how clover establishment and maintaining clover in swards can be achieved on commercial farms and reductions in N fertiliser and N surplus as well as investigating the role of red clover in silage swards.

Table 1: Cumulative herbage production from the 1st January to 10h October, clover area and content for October in 2022 for farmers who spread <160 kg N/ha and < 220kg N/ha respectively.

Chemical N	Annual Tonnage (YTD)		Score 3 Clover %
<160 kg N/ha	11.09	71%	17%
<220 kg N/ha	11.89	53%	18%



us on Instagram, Twitter

Note: Your rights regarding the a Please send this mandate to the

explained in a statement that you can obtain from your saland Association CLG, Cookstown, Kells, Co. Meath.

Address Mobile number Home number

wish to receive occasional updates via Text? No ≌. Dairy Beef Sheep

Yes Are you involved

0

0

lo **>** 0

0

0

R -

S

I

G R

s s

D

S

By submitting this form to us you are subscribing to the Irish Grassland Association CLG as a member and we will send

current payment

publications

Identification and treatment of bloat in animals



High risk times for bloat

Membership

Subscription

Form

Direct Debit Mandate

Grassland Association

© 5

PERSONAL DETAILS

(BLOCK LETTERS PLEASE)

Irish

Grassland

Association

CLG

- Turning animals to graze mixed grass/clover swards that have not previously grazed mixed grass/clover swards
- Swards with a high sward clover content >40%
- Turning hungry animals to graze mixed grass/ clover swards – tight post-grazing sward height on previous grazing
- Wet morning or heavy dew on the pasture
- Very lush grass low pre-grazing herbage mass, after grass etc.

Prevention of bloat

- Avoid switching from grass only sward to mixed grass/clover swards (as much as is possible)
- Keep post-grazing sward height to 4 cm
- Avoid turning hungry animals onto mixed grass/
- Provide anti-bloating agent in the water supply
- Provide a small area in paddock for the first 2-3 hrs after turn-out to prevent initial gorging process
- Provide some addition fibre to animals prior to grazing high risk paddocks
- Identify high risk paddocks and monitor cows closely when grazing these
- Check cows after initial turnout and regularly for first 3 hrs during the high risk period

All of the above methods will help reduce bloat they will not however remove the onset of bloat completely

Treatment of Bloat

Signs:

- Swollen left abdomen is the most obvious sign
- Ribs and hip bone are difficult to identify
- Usually associated with pain, discomfort, and bellowing
- Animal gets up and down frequently and kicking at its abdomen
- Death can occur within 15 minutes after the development of bloat

Treatment:

Dose:

 Cows should be orally dosed with 60 -100 ml of an anti-bloating agent

Puncture (Rumenotomy):

- Firstly call for veterinary assistance and discuss options and procedures with your vet. If a vet is unavailable to call, the following procedure call be followed under guidance of you vet.
- Identify the area on the left hand side of the cow (left looking from the back of the cow)
- Identify the triangle area in the left flank, behind the last rib and ahead of the pin bone
- The position to puncture is mid-way between these two points and one hand width down from the top of the triangle
- Once the position has been identified use a bloat Trocar and Cannula to puncture the cow
- Hold the Trocar carefully as it takes a lot of force to puncture through the skin, muscle and rumen
- If it is very difficult to puncture you can use a scalpel to cut the skin and muscle first in a X shape (be careful not to cut the rumen wall)

Aftercare:

- After treatment the cow should be returned to the paddock, unless in severe cases the cow may need to kept indoors
- The cow should be monitored closely after treatment
- If cow was treated by means of puncturing;
- o Inject cows with a non with-drawl drug to avoid peritonitis
- o Apply antiseptic spray to wound
- o Apply anti-fly repellent
- o Check wound regularly to identify any infection
- o If infected get veterinary advice

BLOAT

- 1. Be consistent (problems going from grass to grass clover swards)
- 2. Little and Often use a strip wire to control grass allocations
- 3. Oil use bloat oil during periods of high risk
- 4. All cows out after milking together; makes sure the first cows milked don't gorge on clover before the others get out
- 5. Target fibre in the diet



DATES FOR YOUR DIARY

IGA Members Event 17th January 2023

Dairy Conference 18th January 2023

Sheep Event May 2023

Beef Event June 2023

Dairy Summer Tour July 2023

Student Event October 2023







Kells, Co. Meath, Ireland. Tel: (087) 96 26 483 General Information: office@irishgrassland.ie www.irishgrassland.ie

