



Irish Grassland Association

Newsletter Issue No. 27 April 2015

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



Follow us on



Irish Grassland Association IGA



@IrishGrassland

CONTENTS

Presidents address	4
Student conference review.....	5
Lifetime Merit Award Luncheon for Matt Demspey.....	8
A year in my wellies.....	10
A year in my wellies.....	11
The role of micronutrients in grass	12
View point: Grassland farming in Ireland, where we have come from and the road ahead.....	15
Grass and white clover recommended list varieties 2015	17
New pasture profit index proof in 2015.....	22
Improving the reproductive performance of Irish suckler cow herds.....	24
Farmer focus: Margaret Lehane.....	27
Will it pay to reseed in 2015	29
Don't delay - manage the weeds in your reseed.....	30
Building resilience to help cope with stressful times.....	32
Preview: Irish Grassland Association sheep farmwalk 2015.....	34
Preview: The Irish Grassland Association beef conference 2015.....	34
Preview: The Family Farm – looking to the future	35



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

Cookstown, Kells, Co. Meath, Ireland. Tel: (087) 96 26 483
General Information: secretary@irishgrassland.com www.irishgrassland.com

Irish Grassland Association President's Address

Dear Member,

I am delighted to bring to you the spring 2015 edition of the Irish Grassland Association newsletter. We are committed to providing the best technical information to our members and so, as calving progresses and the grazing season gets into full swing, this issue has a number of very timely articles.

The early stages of the grazing season refocus attention on our most important national farming asset. We have a series of articles on best practice and recent developments in grassland management. As well as an important source of energy and protein, Jan Jensma describes the role of grazed grass in providing micronutrients to cattle (page 12). Rosalyn Drew looks at the importance of reseeding (page 29) while David Cummins presents the recommended grass and clover variety list recently published by the Department of Agriculture, Food and the Marine (page 17). A new feature of the recommended listing is the Teagasc Pasture Profit Index. This index enables farmers to identify the economic ranking of alternative varieties. An overview of the Pasture Profit Index is provided by Michael O'Donovan from Teagasc (page 22).



Paul Crosson
President of the IGA 2014/15

In this issue of the newsletter, we introduce two new features. The Irish agri-food industry is currently undergoing a period of great change particularly in the context of policy reform and technological advances. Therefore, in each issue we will run a "Viewpoint" article featuring the views of key opinion-makers in the sector. Given the seismic shift in milk policy, the first Viewpoint article is from Pat Dillon, (page 15) who heads up the animal and grassland research programme in Teagasc. In this issue we also introduce "A year in my wellies", a series of articles where we follow younger members of the farming community throughout the year in their farming endeavours. These are the farmers and industry leaders of the future, and in this edition, Denise Weeks (page 10) and Barry Reilly (page 11) describe their farming and college experiences.

There is a sense of anticipation among many dairy farmers at present, a feeling that was palpable at the Irish Grassland Association dairy conference in Cork in January (reviewed by Emer Kennedy on page 5). This is understandable when one considers the impact that the milk quota straightjacket has had on the sector. The opportunities are great but as John Roche pointed out at our dairy conference, "skill before scale" is the key to progress. On many farms, there is much greater scope for increasing efficiencies rather than expansion. Additionally, attitudes to health and safety are critical and in this issue we address the importance of positive mental health. It is well worth paying close attention to the advice of Mairead Leonard (page 32) who provides a professional view on the challenges facing farmers at this time.

While the focus on the dairy sector is understandable at present, it is important to consider that dairy farms represent approximately 15% of the total farmed area and a smaller percentage of farms. Is there sufficient attention paid to the remaining farms and land area? Levels of profitability in the beef and sheep sectors continue to remain low. In the absence of direct support payments, most beef and sheep farms are operating at a net loss. Farm business planning is inadequate in many cases and levels of technology adoption are low. Given the widespread nature of beef farming in particular throughout the country and its contribution to rural economic activity, there is a clear need to provide and incentivise best management practices. The formation of the Beef Roundtable in 2014 is to be welcomed as it brings together the main stakeholders in a sector where a joint approach is critical. It is to be hoped that rather than an ad hoc forum dealing with price and carcass specifications, it uses the opportunity to address broader issues within the sector. The forthcoming 2025 Agri-Food Strategy Report also provides an opportunity to put forward solutions. There is huge scope for improvements in efficiency. For example, reproductive performance in our suckler beef cow herd is poor. On page 24 David Kenny sets out the key breeding targets and gives advice on how to achieve these targets while Margaret Lehane (page 27) tells us how she manages her replacement heifers to calve at 24 months of age. Equally in the sheep sector there is enormous scope for efficiency improvements including increasing output, better grassland management and improved animal health, all of which be covered at our forthcoming sheep event on 19th May (previewed by Phillip Creighton on page 34).

Our Regional Development Officers are currently planning events that will be of interest to members. Noreen Begley previews the regional event to be held in west Cork on 5 May on the farm of Geoffrey Wycherley (page 35). Geoffrey is in a family partnership and the opportunities for this type of farming arrangement will be discussed in addition to an overview of grassland, breeding and cash flow management on the farm. Our Regional Development Officer in the northeast, Donal Callery, is also busy preparing an event in that region; details will be circulated to members as they become available.

The council of the Irish Grassland Association were delighted to be joined by friends and colleagues of Matt Dempsey who was presented with the Irish Grassland Association Lifetime Merit Award in a function on 20 January (page 8). This well-earned award is public recognition from the Irish Grassland Association of the very significant contribution that Matt has made to the agri-food industry over a long career. We are seeking nominations for the 2015 Lifetime Merit Award. Please forward nominations to secretary@irishgrassland.com.

Paul Crosson

Paul Crosson
President of the Irish Grassland Association 2014/15

Any views or opinions presented in this or any Irish Grassland Association publication are solely those of the author.



Review: Irish Grassland Association 2015 Dairy Conference – 'Pathways to Success Post-Quota'

Emer Kennedy
Irish Grassland Association
Council and Teagasc, AGRIC,
Moorepark, Fermoy, Co. Cork.



The annual Irish Grassland Association 2014 Dairy Conference which took place on Wednesday 8th January at the Radisson Blu Hotel, Little Island, Cork was a very successful, sell out event. The conference was sponsored by Yara.

On the morning of the conference, a breakfast meeting took place with guest speaker Dr. Patrick Wall. Dr. Wall is Professor of Public Health in UCD and the Deputy Director of the UCD Institute of Food and Health. He trained as both a vet and a medical doctor. At the breakfast meeting he spoke about how good the future is looking. With the attraction of such an interesting and motivational speaker the breakfast meeting sold out very quickly. A large number of corporate members of the IGA attended and heard how although we may think we are in the business of agriculture we are actually in the business of human health. The breakfast meeting delegates also heard how the future is looking good once we can avoid adverse publicity – i) food safety, ii) animal welfare, iii) health and nutrition and iv) adverse environmental impact are areas which need to be focussed on. The food chain is only as strong as its weakest link; therefore it is essential that we source safe food for our animals. The other very important take home message from Dr. Wall's presentation was that people in all areas of the dairy sector need to look after themselves and their own health, as without them we will not have a successful vibrant industry.

The main conference was divided into four different sessions. The first session dealt with grassland management, the second session discussed dealing with the last three months of quota and also practices that can be put in place during a low milk price year to try and overcome volatility issues. The third session discussed creating win/win scenarios for dairy farmers with a particular focus on share farming as an option to enter the dairy industry. During the final session international guest speaker Dr. John Roche, Dairy NZ, New Zealand spoke about which route to take post quota.

Dr. Brian McCarthy from Teagasc Moorepark gave the first talk of the conference, he spoke about influence of perennial ryegrass cultivar, ploidy and the incorporation of white clover into grassland swards to increase performance from grazed pasture. Brian reported that no effect of ploidy has been observed in terms of milk production or herbage production to date. Milk production and herbage production benefits have been observed when white clover is included in grass swards. At Clonakilty Agricultural College, in 2014, grass clover swards grew 2.5 t DM/ha more than grass only swards. Milk production benefits of grass clover swards have been observed at Moorepark and Clonakilty with 33 to 55 kg MS/cow extra produced from grass clover swards compared to grass only swards.

Donal Patton, from Teagasc Ballyhaise spoke about the importance of grass budgeting on Irish dairy farms and how we need to create and maintain resilient pasture based systems post-quota. Donal clearly pointed out that in the absence of grass budgeting increases in stocking rate will reduce grazing season length and grass proportion in the diet resulting in increased variable and fixed costs of production. He identified key benefits to using a grass budget:

- Timely response to surpluses and deficits in grass supply
- Medium term planning – course of action for next week

- Long term planning – especially when expanding
- Helps to identify problem areas – early spring
- A very useful way of communicating with staff
- Reduced feed costs

Donal finished by reminding the audience that a grass budget is the most important decision making tool for 6 months of the year. It helps make timely decisions and avoid severe feed shortages but it needs to be altered and adapted to suit your farm/system.

The final speaker in the first session was Michael Doran, a new entrant to dairy farming from Co. Wexford. Michael spoke about maximising the amount of grass he grows on his farm. In 2014 he grew over 16.5 t DM/ha, he said it is impossible for him to grow a grass based farm and to manage his farm without measuring grass. One of the key elements of this is maintaining soil fertility as its optimum. Michael was adamant that measuring grass is child's play once you know how, his 6-year old daughter is already well able to do it and she will question him on paddocks where he hasn't hit his target post-grazing height! Michael asked the audience a very simple and effective question "If I offered you €100,000 to jump out of a plane with no parachute, would you do it?.....I bet you would say NO!.....But what if I told you the plane was on the ground.....Moral of the story.....Know your facts before you make your decision!" The same applies to measuring grass; you can't make an informed decision about grazing unless you know how much grass you have available.

The second session 'Planning for the next three months and beyond' really got farmers thinking. Matt Ryan, a consultant from Nenagh in Co. Tipperary, offered his thoughts on managing the last three months of the last quota year and milk price volatility. Matt said the objective for the last three months of quotas was to minimise any impending super-levy bill while not compromising animal health or long term cow performance. He offered four main suggestions to achieve this objective i) leasing quota, ii) once-a-day milking, iii) feeding low levels of meals and iv) leasing out cows. Matt also spoke about knowing your costs and trying to get yourself into the low cost producer category as high cost producers have a competitiveness problem, medium cost producers need to manage price risk but low cost producers can ride out the volatility. He suggested that farmers should try to get all their milk quality bonuses but should also try to increase the fat and protein potential of the herd through breeding. Matt's message was clear 'be brilliant at the basics'!

Joe Leonard, a dairy farmer from Co. Meath, spoke about his approach to the last three months of quota. He will also be using once-a-day milking and calf feeding to reduce milk output but also as strategies to reduce labour on the farm. Joe listed his positives and negatives for spring 2015, the negatives were that he had no quota and a potentially low milk price but as his positives he listed: cow numbers, calving pattern, grass availability, 2014 milk price, herd genetics and his experience. With an impending low milk price year it is very important to maintain a positive attitude, Joe was very clear that even in a low milk price year three costs which could not be cut were:

- Fertilizer
- Breeding
- Family budget

He also stressed the importance of looking after yourself and your health.

In the third session of the day there was lively discussion about creating win/win scenarios. Thomas Curran, Teagasc Farm Structures Specialist, spoke about collaborative farming and providing options to improve the structures of Irish farming. He outlined that collaborative arrangements should benefit all parties involved. It is essential that strong working relationships are built – respect, trust and good communication are key to this. A previous working relationship is a big help and a written agreement should be put in place. The areas Tom covered included:

- Collaborative Arrangements are Business Arrangements
 - Trust, flexibility and good communication are critical to success
- Registered Partnerships:
 - Family – Ideal way to get your successor involved in the business

- Non-Family – Better labour efficiency – better lifestyle, expansion
- Share Farming: Incentivised Operation of the farm
- Long-term Land Leasing: Retire and avail of tax incentives
- CGT Restructuring Relief: Fragmented Farms – Consolidation of holdings
- Contract Dairy Heifer Rearing
 - May facilitate expansion on dairy farms
 - Potentially more profit for rearer if technically efficient

Austin Finn, from the Land Mobility Service gave the second presentation in the third session. Austin described the land mobility service and spoke about the options available for landowners and those wanting to enter into share milking agreements. Currently the client profile of the service is 33% new and potential operators, 24% expanding operators and 43% land owners. Those seeking more information can contact Austin on 086 2541425 or at info@landmobility.ie.

The final session of the day held everybody's attention right to the very end. Dr. John Roche from Down to Earth Advice and DairyNZ asked the question 'Post-quota, will you make money from milk or milk from money?' Although John is living and working in New Zealand he is originally from a dairy farm in Co. Kerry so had a fantastic perspective when comparing and contrasting the Irish and New Zealand systems. John said that in New Zealand the average farmer is producing ~ 40% more milk and making no more money! During his presentation John outlined two of the key lessons that can be learned from the New Zealand dairy industry:

1. Increased milk production through intensification has not returned value to the average farmer
2. Increased milk production through intensification has
 - a. reduced nitrogen-use-efficiency and increased nutrient losses
 - b. accelerated the drop in milk price through providing significant traded product

One of the startling pieces of information which John presented was the number of cows required to achieve an income equivalent to the average national wage. It depends completely on your level of technical efficiency! An average spring producer will require 177 cows compared to 114 for the top third of milk producers.

John concluded by telling the audience they need to set goals, expansion won't necessarily increase profit, efficiency and pasture utilisation are key.



**We would like
to thank our
sponsor YARA**



Lifetime Merit Award Luncheon for Matt Dempsey

Paul Crosson,
President of the Irish
Grassland Association,
2014/15



The 2014 Irish Grassland Association Lifetime Merit Award was presented to Matt Dempsey at a function at the Heritage Golf and Spa Resort in Killenard, Co. Laois on 22 January 2015. Matt was joined by his wife Mary and colleagues from the Irish Farmers Journal. Matt was also joined by council members of the Irish Grassland Association and Sean and Madeleine Flanagan, both former secretaries of the IGA.

In presenting the award, IGA President Paul Crosson outlined the considerable contribution that Matt has made to the agri-food industry over a long career as a leading opinion-maker and advocate for the farming sector. Matt's career began with RTE in 1969 as Producer of Agricultural Programmes before moving to the Farmers Journal in 1973 as EEC correspondent. He became editor of the Farmers Journal in 1988, a post he held for 25 years until his retirement from this position in March 2013. Matt continues to have a significant involvement in the agricultural industry; he is currently chairman of the RDS, the Irish National Stud, IdentiGEN and The Agricultural Trust. In addition, Matt runs an intensive beef and tillage farm in Co. Kildare. Matt Dempsey is a past president of the Irish Grassland Association (1998/99).

In a wide-ranging and thought-provoking address, Matt thanked the IGA for the awarding of the Lifetime Merit Award and urged the IGA to continue to challenge industry and encourage the development of new grassland technologies while helping to expedite the transfer of profit-enhancing knowledge. He described his time with RTE when the national broadcaster was based in the GPO on O'Connell Street, Dublin. In particular his memories of seminal moments in the industry at a time when Ireland was newly acceded to the EEC were revealing – such as the EEC-driven move to abolish the multi-tier milk pricing structure that had been a feature of Irish Government agri-food policy and the consequences of this policy change. The current policy to increase milk output in the aftermath of quota abolition, and the ultimate effect of this on farm profitability, was also referred to. Matt discussed the motivation of Irish primary producers; to produce a high-value niche product for the growing global upper-middle classes or the produce a commodity product for a much larger consumer-base. Matt referred to the opportunities that have arisen from developments in molecular biology – specifically he alluded to the huge potential of epigenetics to manipulate genes and improve animal productivity and efficiency. However, he also expressed frustration at the slow rate of breed improvement in grass breeding, which underpins the Irish livestock sector, when compared to alternative crops such as maize.

The event and presentation of the IGA Lifetime Merit Award is a recognition by the IGA of the contribution that Matt Dempsey has made to the Irish grassland farming sector. We would like to congratulate Matt and wish him the very best in his future endeavours.

NOMINATIONS SOUGHT FOR THE IRISH GRASSLAND ASSOCIATION LIFETIME MERIT AWARD 2015

The Irish Grassland Association Lifetime Merit Award was established in 2009 to acknowledge the unique life contribution of an individual to the understanding and application of grassland husbandry and technology. This prestigious award is a public endorsement on behalf of our Association and its members, to the great and important contribution made by the recipient to our industry and lives. Previous winners of this award are Paddy O'Keeffe, Sean Flanagan, Padraig O'Kiely, Norman Bateman, Seamus Hanrahan and Matt Dempsey.

We are now seeking nominations for the 2015 Lifetime Merit Award. If you would more information on this Award please contact Maura on 087 9626483.

If you would like to nominate a person for the award please email your nomination to secretary@irishgrassland.com before 30th April 2015.



Paddy O'Keeffe
Award Winner 2009



Dr. Sean Flanagan
Award Winner 2010



Dr. Padraig O'Kiely
Award Winner 2011



Norman Bateman
Award Winner 2012



Dr. Seamus Hanrahan
Award Winner 2013



Matt Dempsey
Award Winner 2014

A Year in my Wellies

Denise Weeks,
Dairy Business
Degree Student, UCD



Calving season is one of my favourite times of the year but also one of the busiest. Trying to juggle my final semester in UCD and help out at home has meant a lot of late nights and early starts to try and get everything done.

Calving kicked off at home a few days before our planned start date of the 3rd of February. As of today (27th of February) we have 141 cows calved (72%). We have been lucky with heifer calves this year and have 71 heifer replacements ready and waiting to be brought into the herd in 2017. This is in excess of what we will need and we are currently debating whether or not to sell heifer calves. In the past we have always kept extra calves to give us more options but as we are currently maxed out on our current land base this policy may need be readdressed.

Cows went to grass on the 3rd of February. Grazing has been challenging over the last week but we are lucky to have a relatively dry farm and at present have 25% of the farm grazed and are on target to finish our first rotation on the 4th of April.

This semester in college we are studying a mix of practical and theoretical subjects. Project work and continuous pieces of assessment make up a big part of the work load in UCD. This year I am lucky to only have three final exams which will take place in the early weeks of May. In previous years I have always had 5 or 6 exams so this should make a nice change.

The annual UCD Agriculture, Food Science and Human Nutrition Careers day was held on the 25th of February. There were over 40 exhibitors present on the day with a strong presence from the meat factories and feed companies. It was an excellent opportunity for final year students to meet with prospective employers and discuss career opportunities. My plan after graduating is to work as a farm manager or in a share-milking position so there was little on offer that interested me employment wise.

I often get asked do I think it was a waste to spend 4 years in college given that I plan to go dairy farming. For the first two years of my degree I would probably have said yes but now coming close to finishing I am glad that I went with Dairy Business after my leaving cert. In my 4 years I have learnt in depth about animal nutrition, breeding, reproduction, health, nutrient management, business management and financial planning. I have learnt a lot of theory but I have also had the chance to implement what I have learned, both at home and during my work experience in New Zealand. I'm lucky in that I've always been encouraged to bring ideas to the table at home and to try new ways of doing things. My latest idea revolves around a family discount on some yearlings I want to milk next year but as of now this idea has yet to be implemented!



A Year in my Wellies

Barry Reilly,
Professional Diploma in Dairy
Farm Management student



My name is Barry Reilly and I am currently in second year of the Professional Diploma in Dairy Farm Management. This Level 7 two year Professional Diploma is spent for the most part working with a host farmer, but also includes discussion groups with host farmers and some days in the new Paddy O'Keffe Innovation Centre at Moorepark. I completed my Level 6 Green Cert in Ballyhaise 2 years ago. I choose this course because I feel, given that I will be going home to continue the dairy business that my father has built up, that the practical experience I will gain from this course will be extremely beneficial to me. My home farm is situated between Kingscourt and Bailieboro in County Cavan on a small mountain called Lough an Leagh. We are a relatively high farm at 880 feet above sea level. We have a split calving system with roughly 30% of the herd calving in October and November, while the remaining calve between February and May.

My host farmer for this current year is Patrick Stratford from Virginia, Co. Cavan. He was a suckler farmer until the end of 2008, at which time he converted to dairying and has never looked back. The rest of this article is focussing on Patrick's farm and the work I am involved in there. At present (1st March) we are exactly four weeks into calving with 67% of the herd calved. We calved 50% of the herd (195 in total) in 19 days and so we feel we have the busiest part of calving over us. The scan last August predicted that 82% of the herd would calve in the first six weeks and with current patterns it appears we will most likely achieve this figure. On the farm everything calves outside in a sacrifice paddock and to date all calves have been delivered healthy. The procedure once a calf is born on the farm is that it gets 3 litres of colostrum via stomach tube and will be feed colostrum again at the next feeding. The ratio of bulls to heifers at presents is 60:40, respectively.

The cows on the farm are out fulltime since we started calving on 1st February. Rain and sleet on Sunday (1st March) made grazing conditions a bit more difficult but thankfully no damage has occurred due to the varying weather conditions. Patrick has the farm very well set up in regards to roadways and multiple entry points to paddocks so it makes life much easier for me. We are back fencing paddocks to prevent damage and we are constantly hitting residuals of 3.5 cm. We are allocating cows two 12 hour breaks with the diet made up of 14 kg of grass and 3 kg of concentrate. By the 1st of March we had 30% of the milking platform grazed. Most of the lighter paddocks are grazed off, and now that the cows appetite is up, we will face into the heavier covers with the aim of having at least 60% grazed by St Patrick's day. In terms of fertiliser, 33% of the farm has received 2500 gal of slurry/acre and the whole farm has received 23 units of Nitrogen through a half bag of urea. In relation to milking, the cows are producing 17 kg of milk at 5.25% fat and 3.73% protein.





The role of micronutrients in grass

Jan Jensma,
Irish Grassland Association
Council and YARA



Unlike many crops, growing grass has two components to consider when it comes to crop nutrients. Rather than the single focus on managing nutrients for crop yield and quality, grass has the second dimension of helping to meet the needs of the animals that are either grazing it or consuming it in its conserved form. Grass will generally be the main route from which the dairy cow achieves its intake of minerals with approx. 40-50% of copper, zinc, manganese, magnesium, calcium and phosphate coming via the grass. With it being the cheapest form of feed then its feeding value should be maximized in order to meet as much of the daily nutrient requirements as possible. Achieving high levels of the important nutrients in the forage for animal health is also important from the fact that daily dry matter intake peaks at around 25 kg/day. The only way therefore to increase intake at this peak is to raise the concentration in the grass. In terms of grass growth and development there are thirteen nutrients that are considered to be essential (Figure 1), all of which have specific roles in many of the plant functions. A deficiency of any one can then be the bottle neck for further yield or quality.

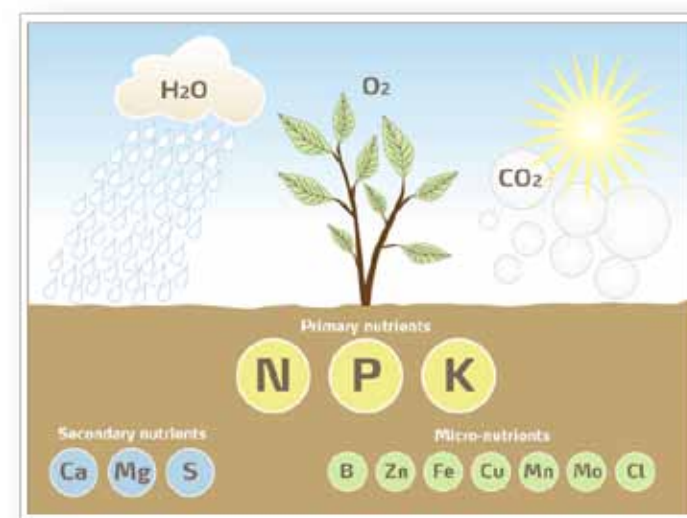


Figure 1 Nutrients for grass growth and development.

To highlight a few of them, copper is critical in the early stages of photosynthesis as the water molecule is split, whilst manganese and zinc play a role in the nitrogen metabolism in the plant as the nitrogen is taken up and converted through to dry matter and protein. Magnesium is the central element in the chlorophyll molecule, which is like the 'blood' of the animal as it traps the incoming energy that is then fixed as chemical energy in the plant to be used in plant growth, BUT also as energy value for the feed.

There are of course two nutrients missing from this list that should be considered when discussing grass – Sodium (Na) and Selenium (Se). These are not listed as essential nutrients for growth, but are of course key nutrients for the grass feeding value. Sodium is associated with improving palatability, giving higher daily intakes and improving the grazing efficiency of a sward. Trials have shown that sodium applied with fertilizer increased the minutes spent grazing per day, with a subsequent lift in milk yield and weight gain (see table). Sodium (Na) content of grass should be 0.15-0.2% DM to meet animal demand.

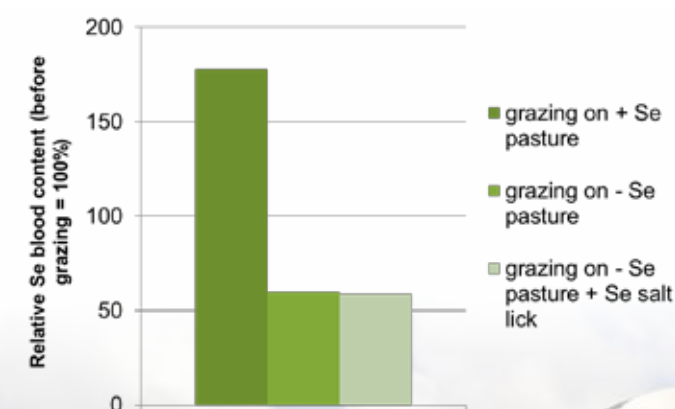
Selenium is an essential nutrient for animals, necessary for the formation of glutathione peroxidase, an antioxidant, but is not widely recognised as a plant nutrient. For many years after the discovery of selenium in 1817 interest concentrated on its toxic effects. Only later were the essential biochemical roles of selenium identified. Today, deficiency is recognised as a serious problem in many regions, notably the cool temperate parts of New Zealand, USA, China and northern Europe.

Table 1 Effects of sodium (Na) on grazing time, milk yield and weight gain.

	- Na	+ Na (applied as fertilizer)
Grazing (minutes/day)	521	544
Milk yield (kg/day)	17,5	20,1
Weight gain (kg/day)	-0,09	0,22

A study on grass samples by Rogers and Murphy revealed approximately 90% were either very low or low in their selenium status. In the Yara Grass Prix 2014 (<http://www.yara.ie/crop-nutrition/grass-prix/>) competition all samples were below the 0.1 ppm guideline, with the average below 0.04 ppm. Cows feeding on this would be unlikely to maintain their blood selenium content above the typical guide of 0.1 mg/g blood. Supplementation in the diet is thus needed to maintain the animals health. Plants take up selenium as the selenate (SeO4²⁻) or selenite (SeO3²⁻) ions. Selenate is the form more easily taken up and therefore its inclusion in fertilizer makes it an ideal method of fortifying grass to achieve the daily intake requirements. Following uptake it is incorporated into amino acids and proteins, in these forms, the selenium is available to the livestock. This is a very efficient way of transferring selenium into the blood of the animal:

Figure 2. Effect of selenium (Se) availability on blood Se content.



This increased selenium level then brings health benefits such as those observed by W. Klawonn et al. in 1996 (Table 2), whom reported a reduction in mastitis and fertility issues.



Total animal group 104 milk cows	Se deficiency group	Se supplied group
Cows with mastitis	22	12
Mastitis treatment	32	17
Fertility problems	41	19

Table 2. Effects of Se on mastitis and fertility issues.

A farm trial conducted in Kildare in 2014 also showed the effectiveness of this approach, taking Selenium levels in first cut up by 275% and second cut by 450%.

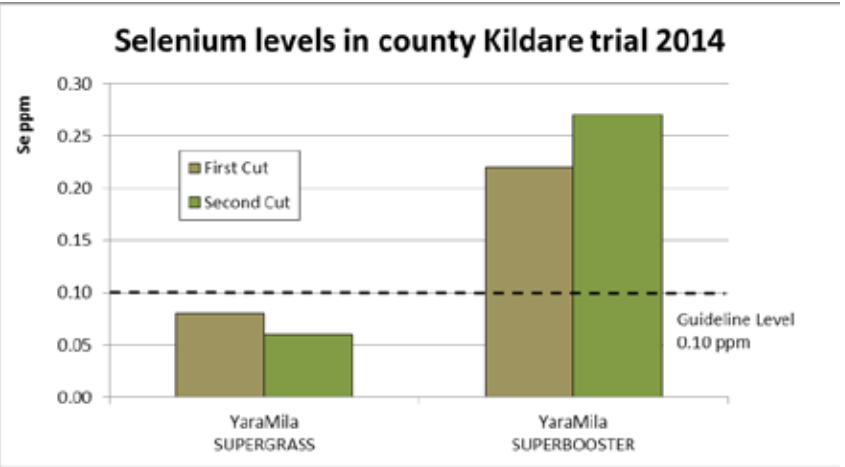


Figure 3. Se levels in grass for first and second cut silage.

Fertilizers containing both macro nutrients for plant growth and micro nutrients for improved animal health are available and should be consider when developing strategies to tackle these fundamental issues. This will ensure that the grass continues to be the best value feed available to the livestock farmer.



View Point: Grassland Farming in Ireland, where we have come from and the road ahead

Dr. Pat Dillon,
Head of Animal and Grassland
Research and Innovation Centre,
Teagasc, Moorepark,
Fermoy, Co. Cork.



Ireland's competitive advantage in animal production is based on the efficient production and utilisation of grazed grass. This is as true today as it was in 1960. This has increased in recent years with rising costs of concentrate feeds, labour and energy costs. It is also perceived that grass-based systems produce nutritionally superior dairy and meat products and are environmentally and are more animal welfare friendly. At present on Irish dairy farms the level of grass utilisation is approximately 7.5 tonnes DM per hectare. The Food Harvest 2020 report has set an ambitious target to increase milk production by 50% by 2020. If this increase in milk production is to be produced profitably at farm level then the vast majority must be produced from grazed grass. Grass utilisation at farm level will have to increase to approximately 10 tonnes DM per hectare if this is to be achieved.

In the early 1960's the first experiments carried out at Moorepark were stocking rate farmlet studies investigating the stock carrying capacity of Irish grassland. National stocking rates at the time were less than 0.8 cows/ha (3 acres/cow). The first experiments demonstrated that with some nitrogen for silage, it was possible to stock cows at 2 cows/ha (1.2 acres per cow). Over the next number of years other factors influencing output per hectare were investigated e.g. soil type, level of nitrogen, genetic merit, number of paddocks and rotation length, grass species and variety. By the mid 1970's a cow to an acre or better became a norm in dry soils on commercial dairy farms. This was facilitated greatly with the development low cost paddock infrastructure using electrified high tensile wire and a network of farm roadways.

The importance of pre- and post-grazing height, grass quality, grass cover estimation and budgeting were developed in the late 1980's and 1990's, which lead to the development of spring, mid-season and autumn grazing management guidelines in recent times. In spring the Spring Rotation Planner is used from turnout until pasture growth equates herd demand (late January until early April). The Pasture Wedge is used during the main grazing season (early-April until end of August) to control pasture supply taking into account herd demand, rotation length (i.e. regrowth period) and post-grazing residual. From the end of August an autumn grazing budget is used to maximise the amount of pasture utilized while at the same time to finish the grazing season in late-autumn with the desired farm grass cover so as to set up the farm for the following spring.

To maintain Ireland's competitive advantage in grass-based systems of animal production its essential that the following development in grassland technologies are put in place:

- In Europe, grass breeders have increased DM yield by 0.5% per year as tested in cutting trials in the Netherlands and Northern Ireland. However, there is little evidence that new grass cultivars have made a significant contribution to increased animal production from grazed pasture. Considerably greater gain has been achieved in breeding other crops such as maize g. There is considerable potential to increase the rate of genetic gain in perennial ryegrass, not only in annual yield but also in other traits such as improved winter/spring growth, increased nutritional value especially in mid-season and persistency. The recent development of the Pasture Profit Index (PPI) is a significant step towards linking breeding objectives, evaluation programmes and farmer's needs. The PPI provides a mechanism to enhance these linkages. Selecting grass varieties based on the PPI will

result in increased profit at farm level. Additionally, there is the possibility that biotechnologies similarly to those used in dairy cow genetics could increase the rate of genetic progress in grass breeding.

- The profitability of ruminant farming in Ireland is closely linked to the level of grass utilised per hectare. Greater adoption of pasture measurement and budgeting will be essential in lifting grass utilisation from its current level. Recent research has shown that at higher stocking rates both grass production and utilisation can be increased. This is based on the increased availability of green leaf in the grazed horizon. The development of web-based grassland management decision support tools such as PastureBase Ireland will be critical in increasing the adoption of best grazing management practices at farm level. The development of such reliable, easy to use decision support tools will encourage greater reliance on grazed grass and greater connection between researchers, extension advisor and grassland farmers.
- Since the late 1990's the levels of phosphorous (P), potassium (K) and lime being applied to grassland in Ireland has reduced significantly. As a result only 10% of the soils on dairy farms are optimal for soil pH, P, and K in 2013. It's not possible to have optimum grass production with this level of soil fertility. Recent research has shown that a soil with optimum pH has a replacement value of 72 kg/ha of N fertilizer. Similarly, soils with optimum P can deliver an additional 1 t/ha of DM in spring period. While it costs money to increase fertility levels in low fertility soils, the return in grass production more than doubles the annual investment in fertilizer costs.
- Marginal land occupies a large proportion (approx. 50%) of Ireland's total land area. This land is limited principally by its poor drainage status and farm profitability on such land is highly weather dependent. The Heavy Soils Research Programme has demonstrated site-specific land drainage design methods to ensure efficient drainage can be achieved regardless of variations in soil/site conditions. Land drainage and infrastructure improvement strategies will be critical in reducing income volatility and sustaining viable farm enterprises on heavy soils.
- There is renewed interest in forage legumes, particularly white clover, as it offers important opportunities for sustainable grass-based animal production systems by increasing herbage yield, increasing herbage nutritive value and raising the efficiency of conversion of herbage to animal protein, substituting inorganic nitrogen (N) fertiliser with symbiotic N fixation, and mitigating and facilitating adaption to climate change. Herbage intake and milk production have been shown to be higher in mixed perennial ryegrass-white clover swards compared to pure perennial ryegrass swards; this has been substantiated by recent results from research. Despite the clear advantages of incorporating white clover into ryegrass pastures its adoption on Irish grassland farms is low. Given its significant advantages this requires significant research over the coming years.



Grass and White Clover Recommended List Varieties 2015

David Cummins,
Irish Grassland Association
Council and Crop Evaluation
& Certification Division,
Department of Agriculture,
Food and the Marine



Perennial Ryegrass (PRG), Italian Ryegrass and White Clover account for nearly all of the agricultural grass/clover seed sold in Ireland. Of these, Perennial Ryegrass is by far the most important. Other species of grass and clover are not commonly used.

Crop Evaluation and Certification Division of the Department of Agriculture, Food and the Marine (DAFM) are responsible for evaluating new varieties of grass and clover in Ireland.

To market an agricultural crop variety in the EU, it must be registered in the National Catalogue of at least one EU Member State and the seed must be certified. These catalogues must be drawn up in accordance with uniform rules so that the varieties accepted will be distinct, stable and sufficiently uniform (DUS) and that they will be of satisfactory value for cultivation and use (VCU).

Each year DAFM test over 100 varieties of grass and clover for VCU in replicated trials at five locations throughout the country. All new candidate varieties are tested against existing commercial Recommended List varieties over a minimum of two sowing years, with each sowing harvested for two years, giving a total of four harvest years. Trials are grown on good quality soils in a manner conducive to selection of varieties most suited to good commercial farming practices.

Crop Evaluation and Certification Division of DAFM published the Grass and White Clover Recommended List of Varieties for 2015 in February. There are three new varieties of Perennial Ryegrass and one new medium-leafed White Clover.

New varieties of Perennial Ryegrass on the 2015 Recommended List

*Variety Name	Group & Ploidy	Breeder	Origin
Glenroyal	Late Diploid	Teagasc	Ireland
Astonenergy	Late Tetraploid	DSV AG	Germany
Solas	Late Tetraploid	Teagasc	Ireland

*Listed in order of Ploidy and Heading Date

New variety of White Clover on the 2015 Recommended List

Variety Name	Leaf Size	Breeder	Origin
Buddy	Medium	Teagasc	Ireland

The List is now available for free download from the 'Publications' section on the Department's website: <http://www.agriculture.gov.ie/publications/2015/>

Outclassed grass varieties removed from the List are the Late diploid varieties Denver, Soriento, Portstewart and Malambo and the Late tetraploid variety Glencar.

General Purpose and Simulated Grazing Data

Perennial ryegrass (Early, Intermediate and Late heading groups), Italian ryegrass and Hybrid ryegrass trials are sown in May/August and establish during for the remainder of that year. (In recent years, all the sowings were carried out in the May period). The trials are then assessed over the following two-year period under two different systems; a 6 cut system and an 8 - 10 cut system, using a trial-plot harvesting machine. Individual trials remain on one system for the two-year period. The 6 cut system is referred to as the General Purpose/2-Cut Silage system and involves one spring grazing cut, followed by two silage cuts and then three grazing cuts.

The 8 – 10 cut system is referred to as the Simulated Grazing (frequent cutting) system and involves that number of cuts taken at periods corresponding to normal commercial rotational grazing practice. This system was introduced by DAFM in its 2010 sowings. Its purpose is to provide variety performance data suitable for situations where grass is grazed throughout the growing season. Results from the 2010, 2011 and 2012 sowings of this trial are presented in the Recommended Intermediate and Late PRG tables below. Where a variety has data from only 2 harvest years, the results are provisional and this is indicated by brackets () on the tables. The dependability of this information will increase in coming years as the data for more varieties will be based on four or more harvest years.

Farmers should give preference to recommended varieties unless there is strong evidence that some other variety is more suited to their conditions.

Using Recommended List varieties to reseed old and degraded pasture, in conjunction with appropriate soil pH and fertility will:

- Increase grass dry matter output per hectare,
- Improve response to fertiliser, especially Nitrogen,
- Extend the grazing season in spring and autumn,
- Improve animal performance, and
- Increase profits.

This year, for the first year, the 2015 DAFM Recommended List for Grass and White Clover includes the Teagasc Pasture Profit Index 2015.

DAFM 2015 Recommended Intermediate, Late and White Clover varieties are presented in the following tables. For a complete list of Recommended List varieties please refer to the Department’s website: <http://www.agriculture.gov.ie/publications/2015/>



Recommended Intermediate Diploid & Tetraploid Perennial Ryegrass Varieties 2015

Variety Name	Heading Date	General Purpose (2-Cut Silage)						Simulated Grazing					*DMD %	*WSC %
		Total Rel. Yield GP	Ground Cover 1-9	Spring Growth	1st Cut Silage	2nd Cut Silage	Autumn Growth	Total Rel. Yield SG	Ground Cover 1-9	Spring Growth	Summer Growth	Autumn Growth		
Control Mean (t DM/ha)		14.4	6.4	1.0	4.8	3.8	3.1	(10.8)	(6.3)	(1.3)	(7.2)	(2.4)	82.7	21.5
Boyne	22-May	104	6.8	115	110	100	99	(98)	(6.9)	(98)	(99)	(93)	97.7	85
Solomon	23-May	100	6.7	122	104	92	96	97	6.8	109	96	94	98.6	89
Rosetta	24-May	101	6.6	123	104	91	100	(101)	(6.5)	(124)	(99)	(96)	99.3	92
Rodrigo	27-May	98	6.8	106	102	93	94	-	-	-	-	-	98.6	85
Abermagic	30-May	100	6.8	93	95	102	107	105	6.6	100	104	111	100.8	113
Giant (T)	20-May	100	6.6	108	106	90	96	101	6.4	96	103	96	99.3	95
Magician (T)	22-May	100	6.1	110	105	97	96	99	5.9	106	98	97	99.6	93
Carraig (T)	24-May	102	6.7	115	108	95	98	98	6.3	98	100	95	99.5	97
Trend (T)	24-May	102	6.0	104	111	96	97	97	5.9	90	100	92	99.8	96
Seagoe (T)	29-May	101	6.0	108	109	99	97	(99)	(6.2)	(92)	(101)	(97)	100.3	99
Dunluce (T)	30-May	103	6.1	100	95	111	104	101	5.9	98	101	103	101.1	105

Data based on the mean of Diploid & Tetraploid Control varieties.
*DMD and WSC controls data is shown as g/100g on this Table and have been taken from both the GP and SG Trials.
Ground Cover values for Simulated Grazing are derived from Year 2 values in Appendix 3 of the DAFM Recommended List publication.
Intermediate Diploid and Tetraploid PRG variety descriptions can be found in the DAFM Recommended List publication.

Recommended Late Diploid Perennial Ryegrass Varieties 2015

Variety Name	Heading Date	General Purpose (2-Cut Silage)						Simulated Grazing					*DMD %	*WSC %
		Total Rel. Yield GP	Ground Cover 1-9	Spring Growth	1st Cut Silage	2nd Cut Silage	Autumn Growth	Total Rel. Yield SG	Ground Cover 1-9	Spring Growth	Summer Growth	Autumn Growth		
Control Mean (t DM/ha)		14.1	6.4	1.0	4.5	3.8	3.1	10.2	6.4	1.1	7.0	2.1	82.7	21.3
Stefani	01-Jun	99	6.8	99	101	98	98	(101)	(7.0)	(105)	(100)	(100)	99.5	93
Majestic	02-Jun	100	6.8	101	97	96	103	(104)	(7.3)	(115)	(102)	(107)	98.7	91
Glenveagh	03-Jun	99	7.4	87	101	97	102	(103)	(7.4)	(111)	(102)	(103)	99.2	96
Piccadilly	03-Jun	100	6.9	98	107	94	101	(102)	(7.2)	(108)	(102)	(98)	98.6	90
Tyrella	04-Jun	97	6.6	116	101	90	95	98	6.7	114	96	97	99.7	101
Glenroyal	05-Jun	100	7.0	92	96	103	103	(104)	(7.3)	(104)	(103)	(108)	100.1	99
Clanrye	06-Jun	102	7.0	92	98	111	98	-	-	-	-	-	99.2	96
Mezquita	06-Jun	97	7.1	93	97	101	96	99	7.5	103	99	97	98.8	91
Drumbo	07-Jun	98	6.7	104	92	102	102	102	6.8	105	101	104	100.7	107
Aberchoice	10-Jun	102	6.7	98	93	112	105	107	6.6	104	107	109	101.6	121

Data based on the mean of Diploid & Tetraploid Control varieties.
*DMD and WSC controls data is shown as g/100g on this Table and have been taken from both the GP and SG Trials.
Ground Cover values for Simulated Grazing are derived from Year 2 values in Appendix 3 of the DAFM Recommended List publication.
Intermediate Diploid and Tetraploid PRG variety descriptions can be found in the DAFM Recommended List publication.

Recommended Late Tetraploid Perennial Ryegrass Varieties 2015

Variety Name	Heading Date	General Purpose (2-Cut Silage)						Simulated Grazing					*DMD %	*WSC %
		Total Rel. Yield GP	Ground Cover 1-9	Spring Growth	1st Cut Silage	2nd Cut Silage	Autumn Growth	Total Rel. Yield SG	Ground Cover 1-9	Spring Growth	Summer Growth	Autumn Growth		
Control Mean (t DM/ha)		14.1	6.4	1.0	4.5	3.8	3.1	10.2	6.4	1.1	7.0	2.1	82.7	21.3
Delphin (T)	02-Jun	104	5.9	108	105	102	103	102	5.6	98	103	100	100.5	101
Astonenergy (T)	02-Jun	100	5.7	93	103	98	103	103	5.7	96	103	107	102.0	113
Abercraigs (T)	04-Jun	103	6.2	107	102	104	102	101	6.3	98	102	98	100.5	106
Abergain (T)	05-Jun	107	6.3	125	106	106	109	107	6.1	114	106	107	102.1	116
Aspect (T)	05-Jun	(102)	(6.7)	(107)	(96)	(107)	(102)	(104)	(6.7)	(105)	(104)	(101)	101.2	106
Navan (T)	06-Jun	102	6.3	89	96	107	109	104	6.2	98	103	110	100.7	106
Twymax (T)	07-Jun	101	6.4	89	98	110	100	(101)	(6.1)	(84)	(105)	(97)	100.7	107
Kintyre (T)	08-Jun	104	6.0	101	97	110	110	105	6.5	107	102	113	101.0	104
Aberplentiful (T)	08-Jun	106	6.2	105	98	108	110	(104)	(6.5)	(99)	(104)	(109)	100.9	107
Solas (T)	10-Jun	105	6.4	100	96	112	109	-	-	-	-	-	100.9	104

Data based on the mean of Diploid & Tetraploid Control varieties.
*DMD and WSC controls data is shown as g/100g on this Table and have been taken from both the GP and SG Trials.
Ground Cover values for Simulated Grazing are derived from Year 2 values in Appendix 3 of the DAFM Recommended List publication.
Intermediate Diploid and Tetraploid PRG variety descriptions can be found in the DAFM Recommended List publication.

Recommended White Clover Varieties 2015

Variety Name	Total Yield	Leaf Size*	Clover %	Year 1 st Listed	Breeder	Origin
Control Mean: (t DM/ha)						
Barblanca	103	Large (0.78)	50	2009	Barenbrug	NL
Alice	102	Large (0.76)	49	1995	IBERS	UK
Chieftain	100	Medium (0.68)	47	2005	Teagasc	IRL
Buddy	101	Medium (0.63)	45	2015	Teagasc	IRL
Avoca	103	Medium (0.61)	47	1995	Teagasc	IRL
Iona	96	Medium (0.59)	47	2014	Teagasc	IRL
Crusader	96	Medium (0.57)	44	2009	Barenbrug	NL
Aberherald	98	Medium (0.55)	45	2003	IBERS	UK

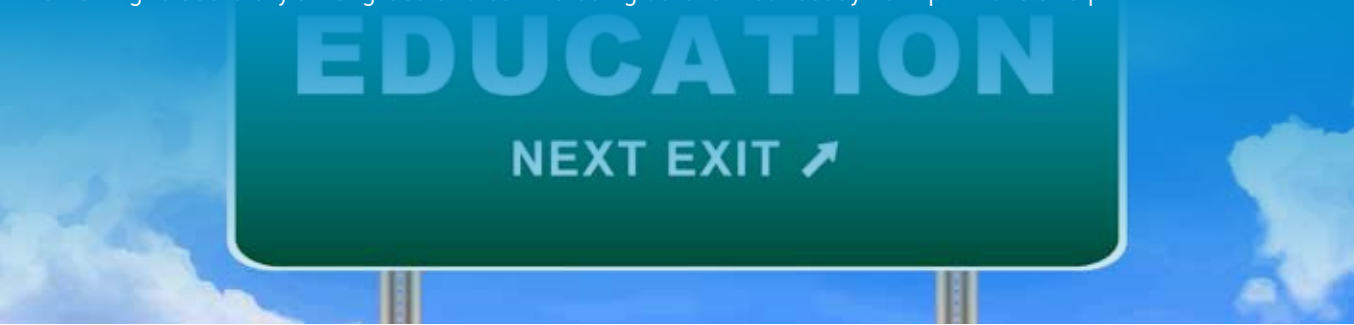
In the table above varieties are listed in order of decreasing leaf size.
*Values in brackets indicate leaf size compared to the variety Aran (i.e. Aran = 1.00), based on data from UK D.U.S. tests.

Irish Grassland Association Student Bursary

Since its foundation, councils of the Irish Grassland Association have worked alongside the most progressive individuals in the farming, research and business communities for the betterment of Irish grassland farming. This relationship has been significant in bringing Irish grassland technology to the forefront as an international science.

This year the Irish Grassland Association set aside a sum of money to support travel to conferences or events deemed to be of benefit to students undertaking a postgraduate degree in grassland research in Ireland. Attendance at relevant conferences and events is an important aspect in the development of a postgraduate student's career and provides an opportunity for Irish research to be presented to international audiences. A maximum of two bursaries of up to €500 each will be available in 2015.

Postgraduate students can apply by completing the application form available at www.irishgrassland.com and emailing to secretary@irishgrassland.com. Closing date is Wednesday 1st April 2015 at 5 pm.



Deirdre Hennessy Irish Grassland Association council member with the previous student bursary recipients Sarah Vero and Marion Beecher.

New Pasture Profit Index proof in 2015

Michael O'Donovan,
Teagasc, AGRIC,
Moorepark,
Fermoy, Co. Cork



The Pasture Profit Index was published in the Department of Agriculture, Food and the Marine (DAFM) 2015 Recommended List. The purpose of the Pasture Profit Index is to assist grassland farmers identify the most appropriate perennial ryegrass varieties(s) for his/her farm. The Pasture Profit Index comprises of 6-sub-indices: spring, mid-season and autumn grass DM production, grass quality (April to July, inclusive), 1st and 2nd cut silage DM production, and persistency. The economic merit of a variety for each trait was calculated by determining the difference between the performance of each variety and the base value for that trait.

This was then multiplied by the economic value for that trait using the Moorepark Dairy Systems Model. The economic value of an extra kg of grass DM in spring and autumn was higher than mid-season because it supported an extended grazing season. The relative emphasis on each trait was as follows: grass DM yield (31%), grass quality (20%), silage yield (15%) and persistency (34%). The performance values included in the Pasture Profit Index are based on data collected from the DAFM grass evaluation trials. Varieties are evaluated over a minimum of two separate sowings, with each sowing being harvested for two years after the sowing year. The two harvested years include a 6 cut system involving one spring grazing cut, followed by two silage cuts and then three grazing cuts; and an 8 – 10 cut system corresponding to normal commercial rotational grazing practice. Pasture Profit Index values range from €54 to €208 /ha per year for the varieties where sufficient data are available. All varieties on the Recommended List excluding three have a PPI value calculated.

The sub-indices present the opportunity to select varieties for specific purposes. For example, if selecting a variety for intensive grazing, the emphasis would be placed on seasonal DM yield and quality with less importance placed on the silage performance. If selecting a variety specifically for silage production, then the greatest emphasis would be placed on the performance of that variety within the silage sub-index. Further research is continuing into developing the index further with the end objective of linking data from the on farm grass variety evaluation studies taking place within Pasturebase Ireland into the work.

Teagasc Pasture Profit Index (PPI) 2015 – Notes and information

The Pasture Profit Index (PPI) should be used in conjunction with good grassland management practices. The Pasture Profit Index is designed as a guide to assist in variety selection when planning to reseed. Variety selection may depend on the intended grazing management to be practiced (e.g. grazing, silage, etc.).

All data used in the compilation of this Index has been generated from data within the Simulated Grazing (frequent cutting) protocol in the Department of Agriculture, Food and the Marine (DAFM) Recommended List Trials. Only varieties that have completed a minimum of 2 harvest years in the DAFM Simulated Grazing Protocol have a PPI value assigned to them. It is advised that the PPI should be used in conjunction with the DAFM 2015 Recommended List to ensure selection of the most appropriate perennial ryegrass varieties to meet particular enterprise requirements.

Varieties marked with (*) have only one sowing year data available (two harvest years data), therefore this is provisional data. Data for Aberchoice, Kintyre, Carraig, Solomon and Drumbo were obtained from 2 different sets of trials in the same sowing year, which was a total of four harvest years. No Simulated Grazing data is yet available for Solas, Rodrigo and Clanrye, therefore, no PPI can be calculated.

Guide to reading the table:

Variety details: Variety, Ploidy (T= tetraploid; D= diploid), Heading date
PPI details (Total €/ha per year): indicates relative profitability difference when compared to the base values. www.agresearch.teagasc.ie/moorepark/PastureProfitIndex/index.asp for more details on the PPI. Persistency is modelled over 12 years which is in line with industry practice (Creighton et al., 2012)

PPI sub-indices: DM yield (spring, summer and autumn), Quality (April, May, June and July), Silage (1st and 2nd cut), Persistency. This indicates the economic merit of each variety within each trait, summed together this provides the overall PPI value.

Varieties with no PPI values - Varieties listed with no PPI values do not have simulated grazing data available to determine a PPI value. These varieties should also be considered for variety selection given that they are present on the Recommended List.

Queries regarding the Pasture Profit Index can be directed to margie.egan@teagasc.ie



Teagasc Pasture Profit Index (PPI) 2015



Variety Details			Pasture Profit Index Sub-indices (€ per ha per year)						Total €/ha/year
Variety	Ploidy	Heading date	Spring	Summer	Autumn	Quality	Silage	Persistency	
Abergain	T	June 5	42	50	43	58	26	-11	208
Dunlce	T	May 30	43	45	58	35	24	-11	194
Aberchoice	D	June 10	24	52	47	57	9	-5	184
Abermagic	D	May 30	47	53	78	21	13	-28	184
Kintyre	T	June 8	29	40	58	25	14	0	166
Rosetta (*)	D	May 24	97	40	39	-2	19	-28	165
Astonenergy	T	June 2	10	41	43	54	12	0	160
Seagoe (*)	T	May 29	30	45	43	13	38	-11	158
Aberplentiful (*)	T	June 8	15	44	48	30	15	0	152
Magiean	T	May 22	59	37	42	-5	28	-11	150
Giant	T	May 20	39	50	39	-2	22	0	148
Trend	T	May 24	25	41	30	3	38	0	137
Navan	T	June 6	14	41	50	21	10	0	136
Aspect (*)	T	June 5	26	45	29	30	10	-5	135
Carraig	T	May 24	42	40	38	-19	31	0	132
Solomon	D	May 23	66	32	35	-30	22	0	125
Drumbo	D	June 7	27	35	35	36	-4	-11	118
Delphin	T	June 2	13	42	27	10	21	0	113
Abercraigs	T	June 4	14	38	21	17	18	0	108
Glenroyal (*)	D	June 5	25	41	46	-2	6	-11	105
Majestic (*)	D	June 2	43	38	43	-23	0	0	101
Boyne (*)	D	May 22	42	39	33	-56	41	0	99
Glenveagh (*)	D	June 3	37	39	34	-22	7	0	96
Twymax (*)	T	June 7	-11	48	20	27	17	-5	95
Stefani (*)	D	June 1	25	34	27	-9	9	0	86
Piccadilly (*)	D	June 3	31	38	22	-30	16	0	77
Tyrella	D	June 4	41	23	19	-1	0	-11	71
Mezquita	D	June 6	22	30	18	-22	6	0	54
Solas	T	June 10							
Rodrigo	D	May 27							
Clanrye	D	June 6							



Improving the Reproductive Performance of Irish Suckler Cow Herds

David A. Kenny,
Animal and Bioscience
Research Department, Animal
and Grassland Research and
Innovation Centre, Teagasc,
Grange, Dunsany, Co. Meath



Good cow fertility is central to the profitability of suckler cow herds and although potentially influenced by a multitude of factors these may be principally summarized under the following four headings:

- **Puberty and age at first calving in heifers**
- **The postpartum interval or length of time it takes cows to resume normal cycles after calving; influenced mainly by cow-calf bonding and pre-calving nutrition**
- **Efficiency of heat detection, where AI is use**
- **Bull fertility in herds using natural service herds**

Despite its obvious importance to underpinning the financial sustainability of the enterprise, there is now clear evidence of a decline, in recent years, in the reproductive efficiency of Irish beef cow herds. For example, national statistics from the Irish Cattle Breeding Federation (ICBF) tell us that, on average, only 8 calves are born to every 10 cows on Irish herds per year, with less than 25% of cows producing a calf within a 12-month period. Over the past 5 years calving interval has averaged in excess of 400 days, when both spring and autumn calving herds are considered, and is in the region of 385 days for spring calving herds alone. This indicates that a large proportion of Irish cows fail to achieve the key target of producing a calf every 365 days. Indeed, Teagasc studies indicate that this inefficiency is costing farmers in the region of €2 per cow per day (mainly feed costs) for each day that the calving interval extends beyond the target of 365 days - equivalent to €100 per day for a 50 cow herd. Additionally, only 15% of heifers meet the target of calving for the first time at 24 months of age, with a current national average age at first calving of 32.5 months. Undoubtedly, while much of this inefficiency can be attributed to poor management practices, recent data from ICBF show that this decline in beef cow reproductive efficiency may also have a genetic dimension and is symptomatic, to some degree, of an emphasis for many years, on terminal rather than maternal traits within the national breeding herd

Reproductive targets for a suckler cow herd

Suckler cow herds, like any livestock enterprise, must set, and aspire to achieve, key targets upon which performance can be benchmarked. The following are the reproductive and related production targets for suckler cow herds in Ireland:

1. 365 day calving to calving interval
2. <5 % cows culled annually as barren
3. →95% of cows calving to wean a calf
4. Heifers calving at 24 months of age, on average
5. Compact calving with 80% of cows calved in 42 days
6. Replacement rate 16-18%; cow should have a minimum target of 6 calves in her lifetime
7. Sustained genetic improvement of the cow herd for economically important traits relating to reproduction, calving ability and calf weaning weight
8. Close alignment of calving date with pasture availability.

There are three key milestones that must be achieved in a timely fashion in order to meet the above targets. These are:

- i) Early onset of puberty and breeding of replacement heifers

- ii) Resumption of oestrous cycles post calving
- ii) Breeding and the establishment of pregnancy

Puberty and breeding of replacement heifers

The onset of puberty, or sexual maturity, is an important event governing the commencement of a heifers productive life within the herd. Recent studies at Grange show that in spring calving herds, delaying age at first calving from 24 to 36 months can reduce net margin per hectare by 50%. However, currently the average age at first calving for beef heifers is 32.5 months in Irish herds, and only in the region of 15% of heifers calve for the first time at the target age of 24 months. This represents significant economic inefficiency both at a herd and a national level. Breeding heifers to calve at 24 months of age is eminently achievable but requires excellent management and necessitates that the majority undergo puberty at least 42 days prior to the start of breeding. Indeed it is important that the heifer has at least two heats before she is bred, as conception rate apparently increases up to at least the third heat after onset of puberty.

It is widely accepted that nutrition during the heifers development is the main driver of the physiological changes necessary for puberty to occur. Although there is much debate over the recommended guidelines for target weights for beef heifers to ensure early onset of puberty and breeding it is agreed that these animals should be identified early and managed as a separate group from their contemporaries, destined for slaughter. In order to provide more clarity for farmer on the management of replacement heifers, a major new Department of Agriculture, Food and the Marine (DAFM) funded research project has been recently commenced at Grange which will examine the effects of nutritional management as well as breed type and genetics on the control of puberty in beef heifers. As well as generating clear management practices for different breed crosses, the project also aims to identify biomarkers for the early onset of puberty which could eventually be used, through the planned national genomically assisted selection programme, to select heifers that consistently reach puberty, and can be bred, at an earlier age.

Resumption of oestrous cycles post calving

Achieving a 365 day calving interval is a key target for suckler cow herds. As mentioned earlier, however, in Ireland, the calving interval for the average cow is currently well beyond this target. Despite this, Teagasc and ICBF data show that there is significant variation amongst herds for this key performance indicator.

The single most important factor influencing the reproductive efficiency of suckler cows is early onset of oestrous cyclicity (heat cycles) after calving. The main difference between a dairy cow which typically will be cycling by one month after calving and a suckler cow, which can take anything from 40 to 100 days to resume heat cycles after calving, is the presence of the suckling calf. The bond between the cow and calf prevents the early onset of heat cycles after calving so any strategy to advance the opportunity to breed the cow again after calving must consider this important factor. Indeed work conducted in the past by Prof. Michael Diskin at Teagasc Athenry has shown that short term restriction of suckling activity can significantly advance the onset of normal heat cycles in suckler cows. This latter strategy is being used on many autumn calving and early spring calving suckler farms with good success, where calves are restricted to once or twice daily access to suckle once they reach about 1 month of age. This can be achieved through locking calves out in a creep area thereby preventing constant access to the cows, or where facilities and weather conditions allow, turning calves out to a nearby sheltered paddock during the day. Where this is effectively practiced, many cows will typically be seen in heat two to three weeks later.

In addition to reducing the cow-calf bond, Teagasc studies have clearly established that energy intake of the cow in mid to late gestation, mediated through improved body condition score (BCS) has a positive effect on reducing the interval between calving and the onset of normal heat cycles. For example, calving the cow in moderate, as opposed to poor BCS, can advance the onset of cyclicity by 1-2 weeks. Overall, pre-calving nutrition has a much greater effect on the onset of heat cycles, through its effect on BCS and the general metabolic status of the cow, than level of feeding post calving. In other words, if a cow calves thin, then additional feeding after she calves will have limited impact on shortening the time to when she has her first heat after calving. The key is to calve cows in moderate to good BCS but not overly fat. Target BCS for cows calving at different times of the year are outlined in Table 1.

Calving season	Mating	Mid Pregnancy	Calving
Jan-Feb	2.5	3.0	3.0
March-May	2.5	3.0	2.75
Autumn	2.75	2.25	3.25

Table 1. Effect of Calving Season on target BCS for key reproductive events in beef cows.

Breeding of the cow and bull fertility

In beef cows, unlike dairy cows, there is no substantial evidence of a decline in conception rate and typical conception rates of 60-70% are achievable to either AI or natural service, unless there are problems with semen quality, AI technique or bull fertility. Conception rates reach a normal level in cows bred at 60 or more days after calving. Maintaining cows and heifers on a steady plane of nutrition is important during the breeding season, as even short term significant fluctuations in feed supply can have devastating effects on the conception rates for cows bred during that time.

In Ireland, currently, only ~20% of calves born to beef cows are sired by an AI bull. If using AI, heat detection efficiency is a critical component underlying its success. In order to obviate the requirement for heat detection, Teagasc is examining the efficacy of a number of heat synchronisation programmes to facilitate the use of fixed time AI and allow the mating of all or a proportion of the herd to AI. This is discussed further below. For the majority of herds which use natural service farmers need to avoid becoming complacent in relation to fertility of stock bulls, even mature animals. On-going vigilance for mating ability and fertility is recommended for all bulls but in particular for young bulls recently joining the herd. There is little doubt that there are significant differences in fertility among individual bulls. While the reported incidence of sterility is generally low ($\leftarrow 4\%$), subfertility, at a consistent level of 20-25%, is much more common in breeding bulls. Subfertility may be caused by low libido, sperm quality/quantity, defects or physical factors affecting bull mobility or mating ability. While a subfertile bull is capable of getting some cows pregnant it will result in low pregnancy rates, an extended calving interval, reduced calf weaning weights and higher involuntary culling of cows for barrenness, unless the bull is operating within a herd with a very low cow:bull ratio. Frequently, subfertile bulls go undetected and the suspicion of subfertility does not become apparent until much of the breeding season has elapsed or until such time that cows are checked for pregnancy. Furthermore, there is no guarantee that a bull will retain his fertility from season to season or even within a season. It is therefore recommended that farmers observe the mating ability of their bulls and particularly for young bulls, the first cows mated be pregnancy scanned as soon as possible (from 28 days onwards) after mating. Additionally, many veterinary practices now offer a Bull Breeding Soundness Evaluation (BBSE) based on an examination of a semen sample as well as a physical examination of the animal itself and some breed societies are now implementing this for bulls sold at their major annual sales.

On-farm research

Last year we commenced a large scale beef cow herd fertility research programme at Teagasc Grange which is funded by the Irish DAFM and involves University College Dublin, The ICBF, The Agri-Food and Biosciences Institute of Northern Ireland and the Irish Farmers Journal. The aim of one project is to examine the main factors affecting reproductive efficiency of beef cow herds across the island of Ireland. Particular emphasis will be placed on the role of specific minerals as well as the disease status of cows. This trial is planned to run over two years (2014-2015) with the aim of recruiting at least 200 herds and up to 4,000 cows in total. A second major project within this research programme is a large on-farm study to evaluate various oestrous (heat) synchronisation protocols with the aim of developing a strategy to enable the use of fixed-time AI, thus obviating the considerable labour and management input associated with achieving the necessary high rates of heat detection. Preliminary data from this project, which has been run across 30 participating herds across Ireland, has shown that pregnancy rates of up to 70% can be achieved following use of heat synchronisation and a single fixed time AI in suckler cows calved six weeks or more. There is certainly a role for AI in all herds and in particular those wishing to breed replacement heifers from within the herd. Replacement heifers should also be bred using AI, where possible, to proven easy calving bulls as the incidence of dystocia or difficult calving can be up to four fold higher in heifers compared with mature cows.

Genomically assisted selection

Genetic gain for improved cow fertility through traditional selection is often slow due to the typical low heritability of the component traits, difficulties for accurate measurement, inadequate recording and in some instances key traits may only be measured in mature females. However, the incorporation of genomic information (i.e. on the animals DNA profile) into breeding programmes has the potential to increase the rate of genetic gain in complex economically important traits, including fertility. The Beef Genomics Scheme launched by the Department of Agriculture, Food and Marine in conjunction with ICBF will put Ireland in prime position to implement a Genomic Selection programme for beef cattle which should accelerate the rate of genetic gain for improved reproductive efficiency. Teagasc research has underpinned the initiation and continued development of this technology. However, while new technologies such as this have the potential to improve the medium to longterm reproductive efficiency of suckler cows, there is no substitute for good management at farm level and this will always be the key determinant of achieving good cow fertility in suckler herds.



Farmer Focus - Margaret Lehane

Karen Dukelow,
Irish Grassland Association and
Teagasc Beef Specialist



It is often said that behind every good man there is a great woman, but I think in the case of Margaret and Dermot Lehane, there are two great farmers working side by side. They farm near Kanturk, Co. Cork and have four children ranging in age from 22 to 32. There are two enterprises on the farm, an integrated 240 sow pig farm with almost 3000 pigs in total which Dermot manages with 1 labour unit. He spends almost 75% of his time in that yard whilst Margaret (with the help of a college student for 3 months of the year) looks after a 70 cow suckler to beef unit on 52 ha.

I recently caught up with Margaret to get her view point on the challenges facing women in farming.

Margaret, how long have you been farming and how did you get into it?

I am a farmer's daughter and I married Dermot in 1980. He is a Pig farmer and later started into Beef. After getting married I would go with Dermot to the Pig yard and watched how he approached his workday. I was really impressed at how planned/organised his jobs were. The work-flow throughout the unit was very disciplined and easy. This was helped by his great ability to plan and layout the structure of the buildings. Ever before he erected a building he had the exact vision of how it would work. That was his strong point.

How and when did the beef enterprise start?

In 1982 we purchased the adjoining farm and started with calf rearing to finish (steers), but found it hard to source suitable calves. We purchased some females and started breeding from them each year until eventually after 30 years or more we ended up with our herd of 3/4 bred Limousins today. A brief outline of our suckling to beef system:

- Calving starts in December, up to 15th February each year.
- Breeding season starts 15th February
- Cows out to grass circa 17th March (weather dependant)
- Herd divided into male and female – 2 Bulls
- Early cycling cows sometimes get A.I. inside
- Weaning commences late September
- Housing in October
- All young bulls/cull heifers finished/sold under 16 months
- Breeding heifers calved at 2 years of age

What are your goals in farming Margaret?

My goals are to live, work, enjoy and be capable of producing world-class food from our farm. Secondly, to share this "know-how" and methods with as many people as possible especially to the younger and less informed. Thirdly, to have a strong pride in my workplace and enjoy a good quality of life for my family whilst doing this.

What has been rewarding about farming?

The biggest rewards for me are: Healthy surroundings for both man and beast. Be my own boss - even to rattle off a verse of a ballad or a hymn whilst walking through the cattle houses or fields. Freedom - however I am sorry to say that the quality of life on the farm was more enjoyable heretofore. These new rules, regulations, books, forms, and inspectors popping up at every corner are certainly a big turn-off especially for any young person anxious to farm. We, who own our farms and yards, should have been much more careful and sharper not to have allowed all these bosses/inspectors swarm into our yards and drum up a nice little earner for themselves (@ 70c/mile sure why wouldn't they)? Other countries are laughing at how easy we take all this.

What advice would you give to young women interested in farming or the agricultural industry as a career choice?

Farming as a career for a woman is very challenging especially if she is married. The juggling and constant pull between the domestic duties, family time, shopping/socialising on the one side and the gruelling, physical workload, meeting deadlines, organising daily and seasonal jobs on the farm is truly very demanding. For a man or a woman I really do believe that any farmer today has to be multi-talented because the range of duties on a daily basis could range from vet-skills, plumbing, mechanic, stockperson, driver, mentor, fencing, and accountant. No other occupation requires our level of professionalism. Add this to the role of a mother and home-maker and hey presto no spare time.

Margaret, as producing excellent quality food from your farm has always been a goal of yours, have you ever thought of working with a farmer's market or even opening your own farm shop?

Yes, and in 2009 I attended UCC to study an Artisan and Food Production Diploma. It started in the busy springtime of year for me and when I look back now I am amazed at myself as I was up in the Lecture Halls at 8.30 to 9.00 am in the mornings. Whilst it was a day or two at a time it was very challenging to mentally switch to Academic from the day to day stock duties on the farm, but somehow I managed. Again, my husband Dermot was really supportive and we worked together as a team. I enjoyed the experience and was quite inquisitive to see at first-hand what college life was really like. I suppose the reasons for doing this Diploma was (a) a Farmers' market had started in Kanturk a few years previously and saw the lovely connection I had with customers, (b) as we had our own supply of beef, pigs and broilers I had a little dream of opening a Farm Shop. However, with so many "irons in the fire" I just never got that far!

Margaret, what do you like to do in your spare time?

If I have any time to spare, I love to cycle and let the wind through my hair!!! Crafts were always part of my hobbies so if and when I retire from today's busy routine I do plan to take up where I left off. As some of our children are working in China and London I would love to travel and see them more often.

Finally, if any young woman wants to get into farming I would say to her.... get to know all aspects of the career and be as educated as possible beforehand. Make plans and goals and try to be realistic and achieve them. Stay focused and I would have no doubt that with the vast array of knowledge and IT skills it will be possible to work through all the demands of farming work in a much more efficient way than we did. Have a good network of like-minded people to touch base and share knowledge. Women are wonderful organisers, brilliant at co-ordinating and ploughing through so many assorted and varied challenges. I have no doubt many will achieve deserved rewards in the years ahead. Wait and see!

Photo of Margaret Lehané courtesy of Mark Moore, Teagasc



Will it pay to reseed in 2015?

Rosalyn Drew,
Irish Grassland Association
Council Member and
Drummonds Ltd.



If Conditions this Spring suit Reseeding – 'GRASP THIS OPPORTUNITY'

Grass is the foundation of a profitable system for Irish Livestock Farmers. After 1st of April 2015, milk quotas will be gone and the focus will be to increase milk and meat production as efficiently as possible. At the recent Irish Grassland Dairy Conference, Dr. John Roche (New Zealand Dairy Consultant) gave an excellent presentation on the future profitability of Irish dairy farms post-quota. The take home message from the presentation was that grazed grass is Ireland's competitive advantage as it distinguishes us from our competitors and it is the foundation of profitable systems. The majority of Irish dairy farmers are likely to be profitable in the long run only if they can maintain a low-cost grass based system with minimal requirements for purchased feed. Analysis of recent Irish Profit Monitor data shows that farm profit increases with an increase in grassland utilisation.

FOR EVERY EXTRA TON OF GRASS DM UTILISED PER HECTARE, **OPERATING PROFIT INCREASED €268/HECTARE (€108.45/ACRE)!**

It is conservatively estimated that Irish farms are leaving 5 ton grass DM **unutilised** per hectare!

Successful expansion of Irish dairy farming will occur by managing grass in the following ways:

- Improvement of soil fertility
- Drainage of wet land
- Breeding appropriate cows for the grass based system
- **Improving grass species through reseeding**

The Need to Reseed Grass reseeding is one of the best long-term investments any livestock farmer can make, as it increases the overall productivity of the farm and helps develop a more sustainable business for the future. There is huge capacity on Irish farms to grow more grass but that capacity will be limited if the swards are old and soil is nutrient deficient. Teagasc Moorepark research shows that old swards will drag down profits in the following ways. Old pasture swards tend to be dominated with weed grass species that will produce 3 ton DM/ha/year less than perennial ryegrass dominated paddocks and will be of lower quality and digestibility. They are also nutrient inefficient - up to 25% less responsive to fertiliser inputs such as nitrogen.

When reseeding, the objectives should be to create new swards that will:

- Increase the productive capacity of the farm. New grass varieties will produce higher total annual yields. Increased dense leafy swards will also increase the stocking rate capacity of paddocks.
- Persistently produce high quality grass year after year. Improved palatability will increase grass intakes while higher digestibility will lead to higher animal output. The potential to produce between 12 and 16 ton grass DM/ha over a long growing season is a major competitive advantage for Irish livestock farmers.

- Extend the grazing season through increased spring and autumn growth. Every extra day at grass in early spring and late autumn is worth €2.70 & €2.10/cow/day, respectively.
- Be responsive to fertiliser and more nutrient efficient
- Reduce silage and concentrate requirements

Selection of grass varieties and most suitable mixture When selecting the most suitable mixture to use, it is important to be aware of the varieties contained in the bag. Ideally a mixture should contain those varieties that have been tried and tested under Irish conditions and appear on either the DAFM (Ireland) or DARD (Northern Ireland) Recommended Lists for 2015. These lists are an excellent source of information on how varieties perform over a period of years and are deemed most suitable for Irish farms.

Ideally the most suitable mixture will be the one that contains the varieties that are the highest performers in the characteristics that are most relevant to the purpose of the paddock. For example, an intensive early grazing dairy farm will require good spring growth, ground cover, palatability and excellent digestibility. If the paddock is to be used mostly for grazing then diploid and tetraploid varieties that score well under the Simulated Grazing category should be considered.

This year for the first time, the Irish Recommended List (RL) of Grass Varieties includes the Teagasc Pasture Profit Index (PPI). This index ranks ryegrass varieties based on their potential to influence farm profitability. Used in conjunction with the RL, the PPI is designed to assist grassland farmers in selecting those varieties most suitable for their enterprise. Each variety is given a value for the following traits of economic importance for a grass based farm: spring, summer and autumn growth, quality, silage yields and persistency.

Grasp the Opportunity!

If conditions allow reseeding this spring, then farmers should grasp the opportunity to invest in the future profitability and potential of their farm. Considering that grass is the cheapest feed source on Irish livestock farms and that it has a higher feed value than concentrates when it is well managed, then reseeding to improve the sward is a highly cost effective investment even when milk prices are low.

For more information contact: Rosalyn Drew, Drummonds Ltd.

Don't delay – manage the weeds in your reseed!

Rosalyn Drew,
Irish Grassland Association
Council Member and
Drummonds Ltd.



All the benefits of your reseed can be lost after sowing if you fail to manage weed infestation. Teagasc trials have shown that killing weeds in the first two months after reseeding will have a long lasting effect – **up to 4 years!**

Weeds are bad news particularly in reseeded swards because they:

- Compete with the new grass for ground cover, light and nutrients
- Are unpalatable and can even be poisonous to stock, e.g. ragwort and buttercup
- Can quickly take over paddocks and if left unchecked will dramatically reduce the quality of the sward
- Can spread to neighbouring fields
- Make paddocks look untidy and unkempt

Essential to control docks and chickweed in reseeds

It is critically important to eradicate weeds such as docks and chickweed at the seedling stage as this is when they are most vulnerable and it is the best opportunity to achieve lifetime weed control in a sward. Considering that a conventional reseed costs approx.. €300/acre to establish, then a good weed control program is essential to ensure a productive sward for the next 10 to 15 years.

High populations of annual weeds such as chickweed can compete with the new grass. When they die off in the autumn time, gaps are left in the sward that are ideal homes for docks to establish over the winter. Trials at Aberystwyth Research Centre, Wales, have shown that a 20% infestation of docks can cut silage

yields by 20%. This equates to the loss of almost one tonne of silage DM/acre in a typical crop of first cut silage. Docks also damage the film used in baled silage and adversely affect the fermentation process of the forage. This leads to losses in both feed value and waste of fodder.

Weed Control in New Leys

One of the biggest problems that new grass has in establishing is competition from the thousands of weed seeds present in the top layer of the newly cultivated seed bed. Guidelines to get the best control of weeds in new reseeds are:

- Apply herbicide when weeds are actively growing
- Apply herbicide when the grass is at the 2 – 3 leaf growth stage
- The choice of herbicide will depend on the presence or absence of white clover in the new sward. If necessary, clover can be over-sown into the new grass after weed control has been carried out.
- Always follow the product label instructions when applying all plant protection products
- Ask your local advisor/merchant for their advice on the product most suitable for your situation
- Keep the prescribed Cross Compliance records and remember pesticide users must comply with the new regulations as outlined in the Sustainable Use Directive

Summary of Herbicides suitable for use in New Leys (as of March 2015)

Weed	Product	Clover safe	Rate/ha
Docks	Eagle	Yes	40-60 g
	Underclear	Yes	7 L
	Legumex DB	Yes	7 L
	DB Plus	Yes	7 L
	Undersown	Yes	7 L
	Clovex	Yes	7 L
Chickweed	Triad	Yes	10 g

High populations of docks and chickweed – not clover safe

Weed	Product	Clover safe	Rate/ha
Docks and chickweed	Starane 2	No	0.75 L
	Hurler	No	0.75 L
	Reaper	No	0.75 L
	Hi-Load Mircam	No	1.25 L
Creeping buttercup and Thistles	D50	No	3.3 L



Building resilience to help cope with stressful times

Mairead Leonard,
Psychotherapist,
Dublin and Louth



"The oak fought the wind and was broken,
the willow bent when it must and survived"
Robert Jordan

It's the busiest time of the year on our farm, calving as usual but this year with double the numbers. We know the theory of expansion, the business and planning and infrastructural necessities but what we are yet to find out is the human toll from this big leap forward.

"An ounce of prevention is better than a pound of cure" so as we collectively prepare in doubling the effort, it is timely to consider the human resources required. It is going to be a steep learning curve no doubt with some curved balls to be lobbed at the most inappropriate times. A test of resilience awaits us and we need to assess the cumulative factors that can best protect our ability to keep bouncing back when things are not going our way. Research into the nature of resilience began about 80 years ago and was first considered a fairly stable personality trait, we now know that it can be learned and developed by anyone.

The most important factor in resilience is having positive relationships inside or outside the family; it is the single most critical means of handling both ordinary and extraordinary levels of stress. After that gruelling day and before the next one follows, it is therefore crucial to take time to share the company of another supportive and caring ally be it a partner or friend. A problem shared is a problem halved and it is always useful to get the insight or perspective of another irrespective of whether you agree or not.

Loneliness and isolation are cited as two of the most adverse aspects of the farming lifestyle and we need to be mindful of their impact on ourselves and others. We are relational beings and need connection to others at all times, not just when there's a crisis like death or sudden illness. Increased mechanisation, mart closures, rural pub and post office closures, drink driving laws, cuts to rural bus routes, all have whittled away opportunities for vital social interaction. It is a personal responsibility to maintain one's own well-being by finding ways of accessing a social life through off farm activities like sports, hobbies, interests, involvement in farming organisations, volunteering or whatever means of interacting with other human beings.

Back in 55AD a canny Turkish philosopher, Epictetus, identified that "people are not disturbed by things, but the view they take of them" and that is the case. Humour, optimism and adaptive thinking are the cornerstones of what we may consider a good attitude. Empirical evidence on highly resilient people found that they all had a propensity for coping strategies that concretely elicit positive emotions such as benefit finding like the silver lining on the cloud, cognitive reappraisal like thinking about a problem in a new way or "outside the box", a good sense of humour, optimism and goal directed problem focused coping. Individuals who tend to approach problems with these methods of coping may strengthen their resistance to stress by allocating more access to these positive emotional resources.

People with low resilience are more likely to believe that there is no end to the unpleasant experience of daily stressors and have higher levels of stress in general. Negative thinking is the thought process where people find the worst in everything and reduce their expectations by considering the worst

possible scenarios. Negative thinking tends to manifest into a pattern that can cause tremendous stress, worry and sadness over time. The good news is that we can choose our thoughts and that the habit of negative thinking can be changed with practice. It is as simple as pausing to reflect on a thought and assessing its usefulness, how it impacts on how you feel and what action you feel like taking. If it is negative, you can decide that it is only a thought and it can be readily replaced with another more constructive one, one that makes you feel more optimistic and likely to act with more enthusiasm.

There is so much negativity about milk price at the moment and it's so easy to be sucked into the doom and gloom in thought and conversation but there's nothing we can do about it. A more helpful and adaptive use of mental energy is to channel it towards what we can control inside the farm gate. Accept the things you cannot change - like the weather also. There will be the days and nights of relentless rain and the cows will destroy the paddocks. There's the choice of focusing on the 2% of temporary destruction or the 98% of the farm that's unharmed. Animals will get sick, there will be mystery viruses and it is natural to worry, but hugely important to remember all the healthy stock in the mix.

Take the time to reflect on setbacks in the past and to acknowledge that they are now only memories, albeit not the best ones. Mistakes are opportunities to learn and we all know that our best lessons in life have been lived and not rote learned from a textbook. Anchor in the very short truism "this too shall pass".

The American Psychological Society suggest ten ways to build that bounce back ability or resilience:

1. To maintain good relationships with close family members, friends and others
2. To avoid seeing crises or stressful events as unbearable problems
3. To accept problems that cannot be changed
4. To develop realistic goals and move towards them
5. To take decisive actions in adverse situations
6. To look for opportunities of self-discovery after a struggle with loss
7. To develop self confidence
8. To keep a long term perspective and consider the stressful event in a broader context
9. To maintain a hopeful outlook, expecting good things and visualising what is wished
10. To take care of mind and body

In my job as a counsellor and psychotherapist I meet the courageous people who are proactive when they feel their ability to bounce back is spent! Often their spirit is on the floor and it is such a privilege to accompany them as they access their own forgotten resources, challenge their destructive patterns of thinking and ultimately discover new ways of relating to their life circumstances. There possibly would be little need for the likes of me if people really reached out to each other and gave each other the very precious commodity that is time and connection. Discussion groups may consider scheduling time to check in on how the person of the farmer is, as well as how he or she is performing? Open up! Contextually, will you meet anyone with greater empathy than a fellow farmer? Remember you're a human being with that mix of strength and vulnerability! Both need to be aired.

Preview: Irish Grassland Association Sheep Farm Walk 2015

Philip Creighton,
Irish Grassland Association
Council and Teagasc, Athenry



The Irish Grassland Association Sheep Farm Walk 2015 will take place on Tuesday 19th of May on the farm of Ned Morrissey, Dunhill, Co Waterford.

Ned operates a mixed sheep and tillage farm. The sheep enterprise is run as a mid-season lamb production system with the aim of finding the best balance between maximising output and reducing labour input. The flock consists of 370 ewes which lamb from mid-March. There is a strong focus on reducing labour on the farm with ewes out wintered on fodder beet for the last number of years and then turned onto saved grass prior to lambing outdoors reducing the need for meal feeding. Stocking rate on the grassland area is high at 13 ewes/ha with an equally impressive weaning rate of 1.6 lambs/ewe regularly achieved. Grassland management is a top priority with strong emphasis placed on utilising as much grass within the diet of the finishing lamb as possible. A paddock system and a planned reseeding programme in conjunction with the fodder beet help to maximise the use of grass on this farm.

In addition to the many interesting topics to be discussed with regard to Ned's system of production additional topics to be covered on the day include a talk by Longford Sheep and Beef producer and IGA Council Member Kevin Farrell on his experiences of the benefits of being part of a lamb producer group as well as a beef producer group and a farm input purchasing group. Teagasc Sheep Specialist Frank Hynes will then present information with regard to faecal egg count testing in sheep to monitor parasite burdens and give a step by step guide on how and when to collect samples for testing.

The event will commence at 2 pm and will be signposted. For further information and updates visit www.irishgrassland.com

Preview: The Irish Grassland Association Beef Conference 2015

Adam Woods,
Irish Grassland Association
Beef Chairman
and Teagasc



The Irish Grassland Association beef conference for 2015 will focus on dairy calf to beef systems with a range of speakers from a research background and a farmer background with the following key areas being addressed on Tuesday 30th June

- Dairy Calf to beef Systems and Profitability Targets
- Calf Rearing and Calf Health Targets
- Farm Case Studies of Dairy calf to beef systems

The outdoor afternoon session will be held on Kevin Farrell's farm just outside Ballymahon, Co. Longford. Kevin farms a mixed enterprise lambing 300 ewes and rearing 150 calves from 2 weeks of age to finish. Over the past 2 years Kevin has concentrated on rearing healthy calves, maximising output from his farm and increasing the amount of grazed grass in the diets of all animals on the farm. The system is working with Kevin returning a gross margin on his cattle enterprise in 2014 of €956/Ha.



Kevin Farrell,
Host Farmer



Preview: The Family Farm – looking to the future

Noreen Begley,
Regional Development Officer,
Irish Grassland Association



The Irish Grassland Association will hold a farm walk on the farm of Geoffrey Wycherley on Tuesday the 5th of May at 11.00 am sharp. Geoffrey has been dairy farming in Lislevane, Bandon, Co. Cork since 1989. This is a spring calving dairy herd with the majority of the cows calving in February. He is currently milking 220 cows. He is in machinery and labour partnership with his two brothers. Geoffrey is also part of the Teagasc Catchment Programme; therefore, soil samples have been taken routinely for the last number of years.

With a new era dawning in Irish agriculture, there is exciting times ahead for the Irish dairy industry. Thus, there are a number of opportunities for farmers to ensure that the family farm can remain a viable option going forward. As Geoffrey is already in a farm partnership, the setting is perfect to discuss the relevant topics with regard to the future of dairying.

With expansion in dairy farm occurring on various levels, one of the key areas that needs to be looked at is the efficient use of labour. A number of areas need to be examined including, the employment of either part-time or full-time staff or creating a labour efficient farm using various labour saving devices.

Topics to be discussed on the day include the current performance of the farm, grassland management, breeding management and strategies, farm partnerships and managing cash flow. A discussion forum will also be held on the topic of labour efficiency. Speakers from Teagasc and IFAC will attend.

This is a free admission event sponsored by IFAC. If you require further information please do not hesitate to call Noreen at 087-9329232.



**We would like to thank our
sponsor IFAC**



Dates for your Diary 2015

Topical Event:

**The Family Farm - looking to the future
5th May**

**Sheep Conference
19th May**

**Beef Event
30th June**

**Dairy Summer Tour
28th July**

Interested in joining a clover monitor group?

Teagasc Moorepark are establishing a monitor group to investigate the potential of incorporating white clover into perennial ryegrass pastures at farm level. If you are interested in joining the group please contact Deirdre Hennessy at deirdre.hennessy@teagasc.ie. Participating farmers will need to be measuring and recording grass growth/farm cover