Irish Grassland Association

Newsletter Issue No. 23 April 2014

"to advance the knowledge of good grassland management in Irish Farming"



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Cookstown, Kells, Co. Meath, Ireland. www.irishgrassland.com General Information: secretary@irishgrassland.com Tel: (087) 96 26 483 Opening Hours: Tuesdays and Thursdays 9 am - 5 pm



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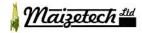








































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Irish Grassland Association President's Address



Eddie O'Donnell, President of the IGA and Dairy Farmer

Dear Member,

Welcome to this edition of the Irish Grassland Association Newsletter. We hope by the time members are reading this that the weather has improved across the country after the record rainfall measured everywhere since the start of 2014.

Health and safety is hugely important on all farms, no matter what sector one is farming in. The article on page 5 is focused to the importance of rectifying simple things health and safety issues around the farmyard such as a gate not hanging – remember "A stitch in time saves nine". The importance of looking after your own health is also highlighted.

The article on page 6 by Council Member David Cummins is on the Department of Agriculture, Food and the Marine Grass and Clover Recommended List of Varieties for 2014. The article is worth a read for anyone looking to purchase grass seeds this coming year or in the future.

On page 15 we have an article on the value of fertiliser. The article by Jez Wardman of Yara fertiliser talks about getting the right balance in terms of the fertiliser one is spreading on a certain field. This is very topical at the moment as farmers are looking to grow more grass on their farms. For this reason the Irish Grassland Association have decided to run a topical event in Limerick on the 24th of April covering the whole area of growing more grass as it is the cheapest feed we can provide for our stock. There are a few words previewing this event on page 17.

We also have a review of the annual Irish Grassland Association Dairy Conference that took place in the Newpark Hotel in Kilkenny city on the 7th of January on page 22. 400 people attended on the day, making this one of the largest ever Irish Grassland Association January Dairy Conferences. The conference was titled "Getting things right pre 2015" and was kindly sponsored by Zoetis/Pfizer Animal Health for the sixth year running. A new edition to the Conference this year was on the morning of the conference when we had a breakfast gathering at which Tom Clinton was the guest speaker. Tom outlined his thoughts on 'Opportunities for corporate entities post 2015'. This was very well received and we had 140 people sitting down to breakfast and a lively discussion took place after the presentation by Tom Clinton.

In the farmer focus in this edition we meet Andrew Purcell and Alf McGlew who farm in partnership in Co. Louth on page 18. The farm is a member of the Glanbia monitor farm programme. This farm was one of the farms we visited during the 2011 Dairy Summer Tour. It is interesting to read about the changes that have taken place on the farm since the visit in 201,1 and the improvements that have taken place.

As always we have a few dates for your diary on page 21 outlining what is coming up in the next few months on the Irish Grassland Association calendar. These include the Topical Event, Beef Summer Tour, Dairy Summer Tour and Sheep Conference and Farm Walk.

We have now migrated to the new SEPA banking system. As part of this changeover we will continue to deduct your valued membership renewals as normal, however without postal notifications as the annual fee of €60 remains unchanged. Our new website is nearly ready for launching and we apologise for any inconvenience caused while the site is down.

More details will be available on this and on coming events on the website www.irishgrassland.com and our facebook page www.facebook.com/irishgrassland or by contacting the Office manager, Maura Callery, secretary@irishgrassland.com

Yours sincerely,

Eddia O'Donnall

Eddie O Donnell

President, Irish Grasslands Association 2013-14

Paddy Ahern, Safety Made Simple



Paddy Ahern is a Health & Safety consultant specialising in Farm & Agri – Safety.

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As you sit down to read this, hopefully the biggest rush of your springtime work is past, grass is growing strongly and another good summer lies ahead. Management of Health & Safety on our farms is an important part of our workload. It has had a lot of bad press down through the years, some of it deserved. I hope this article may help you see Health & Safety in a new light.

We all know that working on a farm with all the risks associated with large animals and machinery is inherently more dangerous than working a 39 hour week in an office environment, but we owe it to ourselves and our loved ones to manage the risks better than has been the case to date. I like to compare management of Health & Safety on grassland farms to the growing and utilising of our best feed source, grass. The sight of a herd or a flock grazing contently in a lush pasture gladdens the heart of any farmer but as you well know this doesn't happen without having a good plan in place and taking the right management decisions at the right time.

We have tended to treat Health & Safety as a 'big job' that we need to get out of the way so that we can get back to farming. This may on occasion, be fine from a compliance point of view but if we are to really make our farms a safer and healthier place to live and work, we need to incorporate Health & Safety into our work routine.

The main starting point for management of Health & Safety is the drawing up of a Safety Statement or completing the code of practice document but this is only the same as drawing up a grassland management plan, good to have but not of much use unless we follow the guidelines in the plan to achieve our goal. Many farmers now walk their farms at least weekly during the growing season to measure grass growth and make timely decisions on what to graze and what to conserve for silage. If we were to follow the same template for Health & Safety, then we would see the little things that need fixing before they grow into big problems.

The old saying of 'A stitch in time saves nine' is really true when it comes to making and keeping our farms safer and healthier. A gate that's not hanging or latching properly is more easily fixed after lunch on a normal day than five minutes before the vet arrives for the annual herd test! This simple example can be repeated many times over on nearly every farm.

We have all heard of the main causes of death and injury on farms, entanglement in machines, attacks by animals, falls from height, falls into slurry pits or fumes at agitation of slurry. In each of the above, there are usually many chances to bypass the tragedy before it happens, whether by ensuring the PTO guards are in place, animal handling facilities are up to spec and so on. The weekly walk through and timely maintenance keeps all of these minor things in place and dramatically reduces the likelihood of a major accident or worse still a fatality.

The most valuable asset on your farm is YOU!

The emphasis has traditionally been on the safety part of Health & Safety but from my experience working with farmers for the last twenty odd years, a farmer who is having issues with his or her health will also be more likely to be cutting corners from a safety view point. Our health is our wealth and we owe it to ourselves and our loved ones to do all in our power to ensure that conditions on our farms do not damage our health, the health of our families or anyone who may come onto our farm.

Farming can be a stressful job, with what seems like a constant battle with the weather and heavy workload around calving or lambing time. For many too it is a solitary job. The recent growth of discussion groups is a big step in the right direction and as these groups 'bed in', I see great potential for farmers to have much stronger peer support system. These groups too have potential to help with Health & Safety on farms. This can happen through allocating some group time to health & safety issues or where group members help critique the host farm. One of the greatest benefits of these groups is to demonstrate to farmers that no matter how tough things might be at any given time you are not the only one going through it and this support is vital.

So as the grass is jumping out of the ground on your next walk, spare a few minutes to have a look around you and see what small step you can take this week to make your farm a safer place to live and work. Wishing you all healthy and safe farming for the years ahead!

Grass and Clover Recommended List Varieties 2014



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 in Ireland.

The 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.

The Crop Evaluation and Certification Division of DAFM published the 2014 Grass and Clover Recommended List of Varieties in February. There are four new varieties of perennial ryegrass and one new medium-leafed white clover on this years Recommended List.

New varieties of Perennial Ryegrass on the 2014 Recommended List

*Variety Name	Group & Ploidy	Breeder	Origin
Seagoe	Intermediate Tetraploid	AFBI	Northern Ireland
Clanrye	Late Diploid	AFBI	Northern Ireland
Aspect	Late Tetraploid	DLF-Trifolium	Denmark
AberPlentiful	Late Tetraploid	IBERS	United Kingdom

^{*}Listed in order of Heading Date

New variety of White Clover on the 2014 Recommended List

Variety Name	Leaf Size	Breeder	Origin
Iona	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/2014/

Frequent Cutting / Simulated Grazing - Provisional Data

This year for the first time, provisional performance data based on the recently introduced Frequent Cutting (8 to 10 cuts per year) trial system is provided for some of the perennial ryegrass varieties in the Intermediate and Late heading groups. It supplements the usual data based on a General Purpose (6 cuts per year, including two silage cuts) trial system, which is available for all those varieties. Over the next few years, performance information from the Frequent Cutting trial system will become available for all varieties in those groups.

New layout of Tables for Recommended Intermediate and Late PRG varieties 2014 (see page 8 and 9).

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Provisional Frequent Cutting data would suggest that some varieties may perform better under a continuous grazing system than under a mixed silage/grazing system (e.g. AberMagic and Navan), or vice versa (e.g. AberCraigs and Trend).

When selecting grass seed, farmers should give preference to recommended cultivars 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
- Increase profits





RECOMMENDED INTERMEDIATE & LATE PERENNIAL RYEGRASS 2014

Main Table 2 - General Purpose (6 cuts including 2 silage cuts)

			Ground		1st	2nd			
	Heading	Total	Cover	Spring	Cut	Cut	Autumn	*DMD	*WSC
Variety Name	Date	Yield	1-9	Growth	Silage	Silage	Growth	%	%

Intermediate PRG Group

Control Mean (t E	OM/ha)	14.9	6.4	1.0	5.3	3.5	3.1	81.4	19.6
Boyne	22-May	104	6.8	111	105	108	104	98.6	92
Solomon	22-May	100	6.6	118	98	100	101	99.5	96
Rosetta	23-May	102	6.6	118	100	97	105	100.0	96
Rodrigo	26-May	99	6.8	102	97	99	99	99.5	92
AberMagic	30-May	100	6.9	91	90	111	113	101.8	123
Giant (T)	19-May	101	6.6	104	101	96	101	100.0	105
Magician (T)	21-May	102	6.1	107	101	105	102	100.5	100
Carraig (T)	23-May	103	6.7	112	103	105	104	100.7	107
Trend (T)	24-May	103	6.0	100	105	103	101	100.8	104
Seagoe (T)	28-May	102	6.0	104	104	106	102	101.2	107
Dunluce (T)	29-May	103	6.1	94	92	120	108	102.2	115

Late PRG Group

Controls Mean (t	DM/ha)	14.5	6.5	0.9	4.9	3.7	3.1	82.0	19.2
Stefani	01-Jun	99	6.8	96	100	98	100	99.9	97
Majestic	02-Jun	100	6.8	99	96	96	105	98.9	93
Glenveagh	02-Jun	99	7.4	85	100	97	104	99.7	102
Denver	02-Jun	98	6.9	86	99	98	97	99.5	91
Piccadilly	03-Jun	100	6.9	96	106	93	102	99.0	94
Soriento	03-Jun	97	7.0	88	97	100	95	99.5	95
Tyrella	03-Jun	98	6.6	113	100	91	97	100.0	105
Clanrye	05-Jun	102	7.0	90	97	111	100	99.6	100
Portstewart	05-Jun	97	6.7	84	94	101	100	100.2	102
Mezquita	06-Jun	97	7.1	91	96	101	97	99.1	93
Drumbo	07-Jun	99	6.7	104	90	102	106	101.0	112
AberChoice	09-Jun	102	6.8	95	91	111	109	102.0	128
Malambo	10-Jun	99	6.8	94	92	108	104	99.1	95
Delphin (T)	01-Jun	104	6.1	106	104	101	103	101.1	107
Glencar (T)	02-Jun	102	6.1	101	100	105	103	100.1	102
AberCraigs (T)	04-Jun	103	6.2	105	101	104	104	100.9	110
Aspect (T)	05-Jun	(102)	(6.7)	(105)	(95)	(107)	(104)	(101.6)	(111)
Navan (T)	06-Jun	102	6.3	84	95	106	112	101.1	112
AberGain (T)	06-Jun	107	6.3	125	103	105	110	102.6	123
Twymax (T)	06-Jun	101	6.4	87	97	110	102	101.1	112
Kintyre (T)	07-Jun	105	6.0	101	95	108	114	101.5	110
AberPlentiful (T)	07-Jun	106	6.2	102	97	108	112	101.2	112

Data shown in brackets () is based on only one sowing year (2009). *DMD and WSC controls data is shown as g/100g on this Table.

RECOMMENDED INTERMEDIATE & LATE PERENNIAL RYEGRASS 2014

Main Table 3 - Frequent Cutting (8 to 10 cuts per year)

	Heading	Total	Ground Cover	Spring	Summer	Autumn	*DMD
Variety Name	Date	Yield	1-9	Yield	Yield	Yield	%

Intermediate PRG Group

Control Mean (t Di		(11.0)	(6.3)	(1.6)	(7.1)	(2.3)	(82.5)
Boyne	22-May						
Solomon	22-May						
Rosetta	23-May						
Rodrigo	26-May						
AberMagic	30-May	(108)	(6.6)	(101)	(106)	(117)	(101.5)
					•		
Giant (T)	19-May						
Magician (T)	21-May	(100)	(6.1)	(99)	(99)	(101)	(100.3)
Carraig (T)	23-May						
Trend (T)	24-May	(101)	(5.7)	(92)	(104)	(96)	(100.3)
Seagoe (T)	28-May						
Dunluce (T)	29-May	(103)	(6.1)	(96)	(104)	(106)	(101.4)

Late PRG Group

Controls Mean (t [M/ha)	(10.5)	(6.4)	(1.3)	(7.1)	(2.1)	(82.4)
Stefani	01-Jun						
Majestic	02-Jun						
Glenveagh	02-Jun						
Denver	02-Jun	(98)	(7.2)	(93)	(99)	(95)	(99.3)
Piccadilly	03-Jun						
Soriento	03-Jun	(96)	(7.2)	(93)	(97)	(93)	(99.2)
Tyrella	03-Jun	(99)	(6.2)	(113)	(95)	(101)	(99.9)
Clanrye	05-Jun						
Portstewart	05-Jun	(98)	(7.1)	(93)	(99)	(100)	(100.0)
Mezquita	06-Jun	(98)	(7.7)	(99)	(99)	(95)	(99.2)
Drumbo	07-Jun						
AberChoice	09-Jun						
Malambo	10-Jun	(99)	(6.7)	(94)	(100)	(98)	(99.3)
Delphin (T)	01-Jun	(104)	(5.1)	(102)	(104)	(104)	(100.5)
Glencar (T)	02-Jun	(102)	(6.3)	(103)	(101)	(105)	(100.3)
AberCraigs (T)	04-Jun	(100)	(6.1)	(92)	(102)	(101)	(100.8)
Aspect (T)	05-Jun	(105)	(6.6)	(107)	(105)	(105)	(101.4)
Navan (T)	06-Jun	(106)	(6.1)	(101)	(104)	(117)	(101.0)
AberGain (T)	06-Jun						
Twymax (T)	06-Jun	(103)	(6.0)	(89)	(106)	(101)	(101.1)
Kintyre (T)	07-Jun						
AberPlentiful (T)	07-Jun						

Data shown in brackets () is based on only one sowing year (2010).

^{*}DMD controls data is shown as g/100g on this Table.

Benefits of grassland measurement

- Know how much grass is available on your farm
- Quantify grass growth
- Helps manage and maintain grass quality
- Aids feed budgeting
- Walking the farm every week allows you to see what is happening in each paddock
- Identifies surpluses and deficits in grass supply
- Helps with decisions around supplementation and taking paddocks out for silage
- · Allows timely decision making
- Allows you to measure how much each paddock grows on an annual basis
- Helps identify poorly performing paddocks and decide on what paddocks need to be reseeded

FREE PULL OUT
STEP BY STEP GUIDE
TO MEASURING GRASS
ON YOUR FARM

STEP BY STEP GUIDE TO MEASURING GRASS ON YOUR FARM

STEP 1

What do I need?

- Quadrate, shears, spring balance and plastic bag
- Motivation and discipline
- Note pad and pen (list of all the paddock numbers, enter cover next to it)
- Size of your paddocks
- Calculator

STEP 2

Assign a specific time once a week to walk your farm and allow time afterwards to calculate farm cover and to make decisions based on the information collected during the walk. There is no point collecting data if you do not use it to make decisions.

STEP 3

Walk the farm. To start off measure the first paddock with your equipment. This will help to train your eye to estimate herbage mass/cover in a paddock. Pick an area that you feel is representative of the paddock. Cut the grass inside the quadrate with your clippers, as shown below.

Then place all of the cut grass in a plastic bag and weigh, as shown below (adjust your spring balance to include weight of plastic bag).





It is necessary to estimate the dry matter (DM) of the grass you have in the bag. The table below may help you with this:

DM %	12%	14%	16%	18%	20%
		Grass wet - recent rain		Grass dry to touch – main grazing season	Grass very dry – dry weather

At this stage you should have the weight of grass in the bag and an estimate of dry matter.

To work out grass cover per ha use this formula:

kg DM/ha = Grass weight (g) \times 40 \times grass DM% divided by 100

For example:

Grass weight 200 g and 18% DM $200 \times 40 \times 0.18 = 1440 \text{ kg DM/ha}$

Note paddock number and cover, and continue to the next paddock. Do not waste much time debating the cover - make a decision and move on. After a while it will not be necessary to cut and weigh each paddock, but until you train your eye to estimate covers you should do so. In time you will find cutting a few paddocks, especially the first few, will calibrate your eye for the rest of the farm walk.

STEP 4

At the end of the walk it is important to use the information that you have collected to make decisions. To do this you will need to calculate:

- Feed demand per ha
- Average farm cover (= total farm cover/hectares being grazed)
- Calculate growth (kg DM/ha/day)
- Grass cover per livestock unit (Average farm cover/total livestock units on grazing area). Teagasc can provide targets for the different times of year.
- Days grazing ahead
- Target pre grazing cover (kg DM/ha)
- Target post grazing cover (kg DM/ha)
- The feed wedge

(If you use a computer programme, such as Teagasc, Pasture Base Ireland, Agrinet or Kingswood, many of these will be automatically calculated)

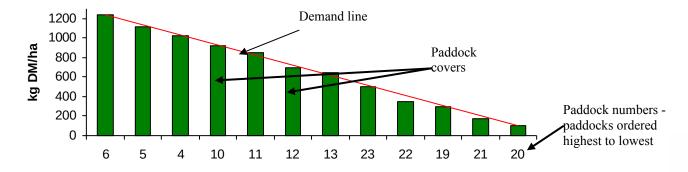
The Feed Wedge

The feed wedge is a useful tool to visualize your farm cover, particularly during the main grazing season (April – August). It can be used to identify surpluses and deficits and allow corrective action to be taken. To create a wedge, order your paddocks from highest to lowest cover and shade these in on graph/boxed paper (see below). Then calculate your feed demand, rotation length and target post-grazing cover to identify your optimum pre-grazing cover.

Example: on a farm stocked at 3 LU/ha, with feed demand of 18 kg/LU/day, rotation length of 21 days and target post grazing cover of 100 kg DM/ha the ideal pre-grazing cover is 1234 kg DM/ha.

$$3 \times 18 \times 21 + 100 = 1234 \text{ kg DM/ha}$$

Draw a line along the wedge from the target pre-grazing cover (e.g. 1234 kg DM/ha as above) to your target post-grazing cover (100 kg DM/ha as above), this is the demand line on your feed wedge (see below). If you have a perfect feed wedge all the paddocks will touch this line, otherwise management decisions to deal with surpluses/deficits will be required, e.g. remove surplus grass as baled silage or introduce concentrates and/or silage in times of deficit.



The spring rotation planner and autumn budgeting should be used to ensure good grass utilization and make sure grass is available until magic day in spring and until housing date in autumn.

Other tips for grass measuring

- Keep a grazing diary of paddocks; this can help identify poorly performing paddocks that you might want to add to your reseeding list
- Do a feed budget every year and revise when necessary
- Use tools like the spring rotation planner for planning your spring feeding
- Keep measuring so you can make timely effective decisions. Ask your local adviser for targets and help when necessary.
- Join a local grass measurement group to learn from others

For more information/assistance contact the IGA Regional Development Officers or your local advisor.

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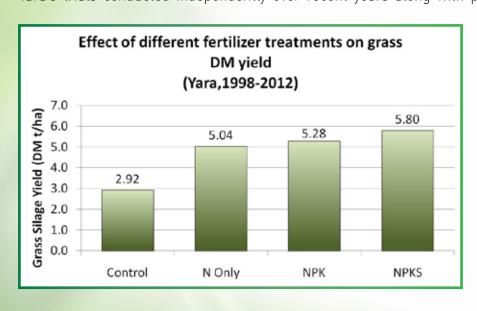




The Value of Fertiliser Jez Wardman, Agronomic Coordinator, Yara UK & Ireland Limited



With grass being the cheapest source of feed available, Yara recommend a balanced fertiliser programme to ensure optimum economic yields of nutritious feed. A balanced programme consists of major and secondary nutrients Phosphate, Potash and Sulphur to ensure the most is made from the applied Nitrogen. Yara's trials conducted independently over recent years along with previous Yara trials data show the



benefit of a full NPKS fertilizer programme on the dry matter yields of grass.

To achieve a balanced programme farmers must also achieve a balance between the use of slurry or manures and fertiliser. The 'secret' to achieving this correct balance between slurry and fertilizer usage on grassland is to approach grass in the same way as any other crop. Just like all crops, grass has a specific demand for nutrients, both macronutrients - N,P,K,S - and micronutrients such as manganese and copper. If the crop nutrition program is well

balanced every 1 kg of nitrogen will produce 22 kg DM, however, if it is not then this return could drop to 16 kg DM. In financial terms this return is approximately €3 for every €1 investment.

It is vital therefore that, when applying slurry, farmers recognize its nutritional value. A typical 30 m³/ha (approx. 2,500 gal/ac) slurry application is worth approximately €100/ha of NPK, which is a significant contribution, and one that must be accurately accounted for. This of course, just emphasises that thorough planning is always essential.

Firstly, the crop's nutritional requirement should be assessed in relation to the demands that will be made of it. Producing high quality grass will be essential for farmers this year as they try to offset high feed costs by increasing the amount of quality forage in the diet. Getting the right balance will be a critical component of a profitable system this year.

Whatever these demands amount to, they must be satisfied by the three elements of the nutrient supply chain:

1. Soil reserves

2. Organic manures/slurries

3. Fertiliser

The next key fact that must be known is the soil's fertility status. Ideally, soil analysis should be carried out every 4 years, so 25% of a farm's fields should be sampled annually. Expert analysis of the results will provide the soil index and indicate which nutrients need to be added. However, to ensure that the correct balance between the slurry and fertilizer to be applied is achieved, an analysis of the nutrients contained in the manure must also be undertaken. This will allow an appropriate fertilizer to be selected to make amends for what is found to be missing.

The grade of fertilizer you select at this point does not have to be an exact match to the deficit. A balance can be carried forward in the rotation. However, balancing slurry and fertilizers in this way does avoid over applying non-organic fertilizers, which is never ideal.

When applying slurry, adopting better application techniques – band spreading, trailing-shoe application, injection (shallow and deep) – can increase the value of the nitrogen in the slurry. This will also help prevent heavy contamination of the grass leaves which may affect fermentation and the intake potential of the silage. Research has shown that slurry can be applied six weeks before a silage harvest by the trailing-shoe method with no contamination of the herbage or adverse effects on silage. Contamination of grass with slurry can also reduce grazing times if animals are turned out to grass too quickly following applications.

Animal Health Issues

Another issue to consider is the availability of nutrients not essential for grass growth, but beneficial for good animal health, such as selenium, copper, zinc and cobalt. These can all be supplied by using fertilizer treatments such as Top Stock, NutriBooster or Grasstrac." A deficiency of these minerals leads to problems with fertility, the animals immune function, and mastitis giving potentially high veterinary costs.

The incidence of mastitis and fertility problems following Selenium treatment. (W. Klawonn et al. 1996).							
Total animal group = 104 milking cows	Se deficient group	Se supplied group					
Cows with mastitis	22	12					
Mastitis treatment	32	17					
Cows With Fertility Problems	41	19					

All in all, it's worth remembering that slurry is a valuable on-farm resource, with a little effort, getting the balance between slurry and fertilizers right means supplying grass with the nutrients it needs to optimise growth, without undue waste.

For further information please log on to www.yara.com



"Growing More Grass" is the title of the topical event being run by the Irish Grassland Association this spring.

The event, kindly sponsored by Yara Fertiliser, is being held on the 24th of April from 11 am to 1 pm on the farm of Danny and Patrick Cremin, Ballintubber, Newcastlewest, Co. Limerick. The topic 'Growing More Grass' is vital for all farmers as grass is the cheapest source of feed for dairy, beef and sheep livestock. Soil fertility (P, K and soil pH) has declined sharply across the country over the past few years so it is hugely important that this issue is highlighted and information provided so that farmers can address the issue and improve soil fertility, and thereby faciolitate increased grass production. The event will focus on the strategies to grow more grass by using the right quantity of different types of fertiliser depending on the soil test results of each field.

Mary McEvoy from Teagasc, Moorepark will cover the topic of growing more grass by looking at the different cultivars available to farmers on different land types and highlighting the new grass breeding index (Pasture Profit Index) which will be launched in the near future. The Cremin brothers are part of the Moorepark cultivar trial and so know exactly what each paddock is producing and the cultivar in each paddock and they will highlight to farmers attending the event their preferred cultivars and explain the reasons for their preferences.

Mark Plunkett from Teagasc, Johnstown Castle will cover the soil P,K and the optimum soil pH level to grow the amount of grass that the Cremains', like many other farmers, want to grow on their farm. Mark will discuss the amount of P and K fertiliser required annually over a number of years to increase a soil from index 1 to index 3. The amount of fertiliser required to grow a good crop of silage and at reseeding will also be discussed.

Sponsored by:

Mark Tucker from Yara fertiliser will cover the compounds they have available for spreading by farmers and the differences in some of their fertilisers.

All Irish Grassland Association Members are welcome to attend.





Farmer Focus – Andrew Purcell & Alf McGlew Dairy Partnership Re-visited

Rosalyn Drew, Drummonds and Irish Grassland Association Council Member



Rosalyn Drew

In 2011, the Irish Grassland Associations Dairy Summer Tour travelled to Drogheda in Co. Louth. Part of the tour that day included a visit to the dairy enterprise of Andrew Purcell and Alf McGlew who had formed a farm partnership in 2007. In the four years since the formation, the two men had expanded the farm, had a milking platform of 90 ha and were milking 241 spring calving Friesian cows with a quota of 1.2 million litres. Summer Tour attendees learnt about the creation of a successful partnership and how the farm developed to suit this type of farming system. Alf and Andrew's overall plan for the future was to optimise the potential of the farm. In order to achieve this they would focus on listed targets within the following four key areas:

- Infrastructure and farm development
- Herd improvement
- Grassland management
- Financial management

Where the farm is now and how it got here

Now in 2014, Andrew and Alf have further expanded the farm, have a milking platform of 100 ha, are milking 260 cows and have increased quota to 1.3 million litres (supplying Lakeland and Glanbia).

Shortly after the IGA's Dairy Summer Tour in 2011, the men were asked to join the Glanbia Monitor Farm Program. The two men believe that this has had a very positive impact towards the success of their system. Under the guidance of Richard O'Brien (Glanbia Monitor Farm Co-ordinator) and Teagasc advisor John Lawlor, there is a big emphasis on grassland management - planning spring rotations and spring and autumn budgets. Boundaries are constantly being pushed with the importance of financials always to the fore.

Production Performance

Table 1. Production performance from 2006 (before partnership formed) to 2013 and target for 2015.

	2006 (Andrew)	2006 (Alf)	2007	2011	2013	Target 2015
Stocking rate (LU/ha)	1.9	2.3	2.1	2.8	2.6	3.0
Cow numbers	70	70	142	241	260	300
Grass harvested (t DM/ha)	-	-	-	10.4	13	14
Yield (litre/cow)	6900	5700	6724	5800	5640	5800
Fat (%)	4.1	3.85	4.28	4.00	4.44	4.50
Protein (%)	3.21	3.30	3.31	3.35	3.49	3.55
Milk solids/cow (kg)	554	420	510	439	459	480
Milk solids/ha (kg)	987	965	1102	1229	1186	

Infrastructure and Farm Development since 2011

The total land area of the farm has increased from 151 ha to 171 ha. New farm roadways have been put down and extra troughs for the water system were put in. In the yard, to accommodate the increased cow numbers, an extra slatted buffer feeding area with mats for out-wintering was created. The collecting yard area has now doubled in size with an out-wintering tank for 60 cows. While a robotic milking machine is not seen as a feasible option for this farm there are future plans to expand the current parlour. A change in machinery policy was made in 2013. A key number of machinery items were identified as surplus to requirements and were sold off. Now the farm manages on one tractor and a loader.

Herd Improvement and Breeding Policy

This farm is now ranked in the top 10% for EBI and is on course to be ranked in the top 5% in the next two years. The farms EBI ranking as of the 1st January 2014 was €144 for cows (fertility €73, milk €41) and €175 for heifers born in 2012 (fertility €77, milk €58). The farm has an eleven week breeding season which starts on the 1st May. Al is used for 6 weeks and Aberdeen Angus bulls for the following five weeks to mop up. The current breeding policy aims to produce a Jersey cross Holstein/Friesian type cow. Back in 2011, hybrid vigour was brought into the herd through the introduction of Jersey and Norwegian Red breeds. This move increased herd fertility and milk solids production. In three years empty rates have dropped from 22% to 11%. Satisfied with fertility rates, now the farmers are focussing on further improving milk solids and have moved away from the Norwegian Red breed for this reason. Bull selection now focuses on using Friesian bulls on cross bred cows. Ease of calving remains the priority when selecting bulls for the heifers. The use of sexed semen is not being considered yet due to a fear of the effect it may have on calving interval. Al Bulls of choice this year will be ABO & PSQ for the heifers and ABO, PBM, PSV and the Jersey bred OKM for the cows.

Table 2. Fertility performance in 2011 and 2013.

	2011	2013
Calving interval (days)	380	368
6 week calving rate (%)	66	88
Mean calving date	22 Feb.	16 Feb.
Empty rate (%)	16	11
Submission rate (%)	82	88

Calf rearing & animal health

Alf and Andrew weigh all calves from 8 weeks old up to 2 years. Animals are weighed approximately five times in their life and weights are recorded with ICBF. They have found this job has improved efficiency in that it identifies lighter stock and helps replacements reach target weights more quickly.

The current Herd Health status is healthy thanks to the introduction of a Herd Health Plan which was drawn up with the farms local vet. This plan includes a dosing and vaccination plan. Heifers are still being injected for Selenium due to low Selenium levels in a particular block of land. Cell count is similar to 2011 level, currently at approx. 100,000.

Grassland Management

Both farmers agree that since joining the Glanbia Monitor Farm program they have a greater emphasis on grass budgeting and regular measurement using the quadrate. The focus is now on getting the cows out earlier and for longer. Turnout is usually the start of February or as soon as cows start calving while closing up is usually late November. Due to their grassland management program in 2013, there was a build up of grass cover for autumn grazing meaning there was no buffer feeding of silage/forage until cows were housed.

Silage is first cut on the 15th May, with two cuts taken from the out farm and one on the home farm. Silage yields average 10 ton/acre with quality of 75 +DMD. Last years' bad weather meant that any poor quality silage was sold off and high quality fodder was bought in. Luckily there were only a few weeks whereby fodder needed to be purchased.

The farm is currently concentrating on improving soil fertility. This new policy involves blanket testing the entire farm. A soil sample is taken for every 4 ha every 3 years. The last test was done in 2013 and all grassland management decisions are based on this. Jobs such as re-seeding will not be carried out until soil fertility is satisfactory. Past results showed large areas of the farm were low in P and K at Index 2 or lower. This required two years of intensive fertilising. The soil is now mostly Index 3. They have also had to use a lot of ground lime in the past two years in order to correct soil pH.

In 2013, it was decided to change from out-wintering heifers on kale to Red Start plus grass silage. This change brought about better weight gain and better utilisation of ground.

Financial Performance

Table 3. Profit monitor for 2010 and 2013.

	2010	2013
Milk price (c/l)	29.9	40.77
Gross output (c/l)	29.42	39.36
Variable costs (c/l)	8.33	12.74
Fixed costs (c/l)	9.92	9.52
Common costs (c/l)	15.55	18.23
Common profit (c/l)	13.87	21.13



Contrary to plans in 2011, it was found that a contingency fund was not very tax efficient. Instead the two men have re-invested back into the business through spending on building up soil fertility and infrastructure. They intend to continue this for as long as milk price allows. Cash flows and performance projections are critical in business and the development of a Cost Control Planner has been hugely successful.

Farming Partnerships & the future

This is the eighth year of a successful 50:50 partnership and is an example to dairy farmers who need to expand farm size that partnerships are a viable option. Andrew and Alf believe that dairying in the future will be a suitable farm enterprise for partnerships as there is a regular income and no reliability on entitlements. Both men think there is a good living in dairy farming and that education is an important part of its success. To develop a good partnership will require time (between 6-8 months), communication and planning. It will bring many benefits in terms of labour and time off. This farm now has one full time worker which allows both Alf and Andrew to finish up by 5 pm most evenings. Machinery work such as spreading fertiliser or slurry is contracted out and relief milkers are brought in at busy times such as March and April.

The saying 'two heads are better than one' also applies in partnerships in that both parties learn from each other, are more motivated to do things better and to try new ideas. However the farm must be run as a commercial enterprise that has to be economically viable in order to support two families. This requires that farmers do their figures and plan ahead particularly if they are to withstand changes in milk prices in the future.

Date for your Diary

APRIL

Open Day at Teagasc Dairygold Research Farm

Teagasc, in association with the Irish Grassland Association, will host an open day at the Moorepark Dairygold Research Farm in Kilworth, County Cork at 10 am on Wednesday the 9th of April 2014. The event will focus on the Robotic Milking Project, the forthcoming breeding season and the Next Generation Herd. The Irish Grassland Association is a partner in an EU funded project with Moorepark examining the role of automatic milking systems (AMS) in grass based milk production systems. All Irish Grassland Association members are invited to attend the open day. If you can attend, members are asked to sign in at the event.

AUTOGRASSMILK

Topical Event – Growing More Grass

The Irish Grassland Association will hold an event focussed on Growing More Grass on Thursday 24th of April at 11 am on the farm of Danny and Patrick Cremin, Newcastlewest, Co. Limerick. The event will be sponsored by Yara fertiliser. Topics to be discussed will include strategies to grow more grass, fertiliser type, soil P, K and pH. All IGA members are invited to attend.



JULY

Beef Summer Tour

This year, the beef conference will take on a new format, that of a Beef Summer Tour. Similarly to the Dairy Summer Tour, the Beef Summer Tour will visit two farms. As well as hearing from the host farmers on the day, delegates will also hear from a number of technical speakers (research and advisory). This year's beef event will visit farms in Co. Waterford and nearby Co. Kilkenny on the 3rd of July. Further information will be available in the next newsletter.

AUGUST

Dairy Summer Tour

This year's Dairy Summer Tour will visit the mid-lands, around Co. Laois. It will take place in August. The committee are currently busy putting together this year's programme and details will be available in the next newsletter.

Sheep conference

The 2014 sheep conference is currently in the planning stage. Details will be available in the next newsletter.



Review: Irish Grassland Association 2014 Dairy Conference – 'Getting things right pre 2015'



Deirdre Hennessy and Michael Bateman, Irish Grassland Association Council

The annual Irish Grassland Association 2014 Dairy Conference which took place on Tuesday 7th January at the Newpark Hotel, Co. Kilkenny was a very successful, sell out event. The conference was sponsored by Zoetis.

On the morning of the conference, a breakfast meeting took place with guest speaker Tom Clinton. This was a new venture for the Irish Grassland Association and proved very popular, with places snapped up well in advance of the day. This aspect of the day provided an opportunity for Irish Grassland Association corporate members and members to meet over breakfast. Tom Clinton outlined his thoughts on 'Opportunities for corporate entities post 2015'. Tom stressed the importance of treating dairy farming as a commercial business both from the corporate side and from the farmers' side.

The main conference focused on many of the key things that must be put in place in advance of 2015. Irish dairy farming is on the eve of the post quota era. With just one more complete quota year to go ahead of milk quota abolition it is crucial that farmers now focus on 'getting things right' in the dairy farm business to take advantage of the opportunities that will be available.

Maximising grass growth and utilisation on farm are key components of profitable milk production systems. Getting the balance right between pre-grazing herbage mass, grass quality and grass growth impacts on the productivity and utilisation of grazed grass on farm. In the first session of the conference Dr. Eva Lewis, Teagasc Moorepark, outlined research findings in terms of optimum pre-grazing herbage mass and its impact on herbage quality and annual grass production. Abigail Ryan, Teagasc Moorepark provided a lot of information on factors influencing grass growth on farms, with particular emphasis on the importance of getting soil fertility right. John Curtis, Dairy Farmer, Co. Wexford gave a very interesting and thorough description of grassland management on his farm and its importance in maintaining feed quality to his cows, particularly in mid-summer when milk protein content can drop as grass quality declines. The overall message from all three speakers was the importance of managing pre-grazing herbage mass to ensure grass quality. As a guideline, in mid-season, mid-April to mid-August, target pre-grazing herbage mass of 1500 kg DM/ha to ensure a balance between grass quantity grown on the farm and grass quality.

Grass production and utilisation is one key aspect of milk production systems. Many other factors will influence the profitability and the success of dairy farms post 2015. The session 'Key aspects of efficiency to put in place for 2015'

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focused on key aspects of efficiency that need to be put in place to optimise milk production systems post 2015. Should we be focussing on cent/l or profit per hectare?? Paidi Kelly, formerly Irish Farmers Journal and now PhD student at Teagasc Moorepark, and George Ramsbottom, Teagasc, analysed 2011 farm profit monitor data for 1150 spring calving dairy farms. The data show a strong correlation between profit per litre and per hectare. Farmers with high profit per ha tend to be more intensive, while those with high profit per litre tend to be more efficient. The most profitable farmers will be those who are both intensive and efficient. It is difficult to achieve both, and one likely has to be efficient before you can be both efficient and intensive. Dr. Pat Dillon, Head of the Animal and Grassland Research and Innovation Centre, Teagasc Moorepark outlined what he considers to be the key aspects of efficient dairy farms for the post 2015 era. Pat outlined the key aspects of a resilient dairy production system; these include:

- Exploiting comparative advantage grass based systems
- Low cost grass based- competitive
- Tactical management a good farmer
- The components of a resilient dairy farm system are:
- Resources High productivity grassland
- Animals High EBI livestock
- Business Profit focused
- People Highly trained and consider life style

In summing up, Pat Dillon highlighted a few issues including the importance of being efficient before expanding, increasing grass production and utilisation, importance of high EBI young stock, improving financial skills, choosing a system that can deliver consistent profit at volatile milk price (grass based system) and the importance of not overcapitalising in the farm development phase.

The third session of the conference led to a lively debate on 'What the Post Quota Cow look will like?'. Francis Kearney, ICBF, outlined where the EBI is taking us and what farmers need to focus on to ensure they have the most productive, fertile cows in their herd. Francis told delegates that having the right cow for the system is very important, as is very good management of that cow. A top cow can come in many shapes, sizes and colours - no one size fits all. The EBI is taking us towards more fertile, robust, healthier cows that are genetically capable of producing increased milk solids. As more economically important traits become available they will be added to EBI. There are still many questions around what will happen in the future such as restriction that may be applied (e.g. emissions, seasonality, costs of production); these will be dealt with if/when they arise. Francis concluded by saying that available genomic technology has and will continue to greatly accelerate the improvement in EBI. Dr. Frank Buckley, Teagasc Moorepark, gave will an update on the Next Generation Herd. The preliminary results from the Next Generation Herd are very promising. Frank stressed the importance of continuing to build on genetic improvement. He advised farmers to strive for a fertility sub-index of €140 and to maximise the impact of superior genetics in their herd. He also advised farmers to consider crossbreeding as it can rapidly improve fertility and is worth an additional €100 (approximately) per cow per lactation. Two dairy farmers with contrasting dairy cow types gave excellent presentations on why their cow will suit their system post quota. Shane Chambers, Co. Cork, has a predominately Jersey cross herd, while Jim Delahunty, Co. Tipperary, has a Holstein Friesian dominant herd. Shane plans to continue crossbreeding; he wants a high EBI cow (€200+) with a strong fertility sub index (€140+) and one that is easy to manage. Every cow on the farm should produce a calf per year. Maintaining a high herd health status is hugely important for Shane, and ultimately his herd must produce a good net return. Jim outlined his reasons for staying 'black and white', including the fact that he already has excellent herd fertility; he feels the reliability of bulls in Ireland is better for the black and white, that genetic gain is greater in the black and white and there is enough variation within the black and white breed. Jims farm has a small grazing platform and so long walks are not an issue for his cows. Milk solids production per cow is very important in Jim's system. If crossbreeding was introduced, Jim feels that a third breed would be necessary to maintain hybrid vigour, and that would result in a number of challenges. This session concluded with a lively discussion, facilitated in part by the challenges put forward by the two farmer speakers.

The final session of the day provided a good perspective for grassland dairy farmers. Chris Knowles, a dairy framer from Cornwall in England gave a paper titled 'Why focus on grass post quota?'. This paper was very interesting as Chris has come full circle in terms of his dairy production system. Chris was operating a high input, largely indoor dairy system. For many years now he is fully committed to the grass based system. Chris's main messages were: Keep it simple; Milk quota is only one limiting factor; and Find the optimum for your farm.