

# IRISH GRASSLAND ASSOCIATION

Irish Grassland Association

#### WHAT'S INSIDE

Farming into a brighter 2012 Cow type debate heats up Dairy Summer Tour review Student conference & farm walk review Kepak farm to host IGA National beef event Soil analysis - Back to basics Reseeding update Upcoming IGA events

AND PARTY

# **IRISH GRASSLAND ASSOCIATION**



Irish Grassland Association Cookstown, Kells, Co. Meath.

### **CORPORATE MEMBERS 2011**



Tel: 087 9626483 Email: secretary@irishgrassland.com Web: www.irishgrassland.com OPENING HOURS: Tuesdays & Thursdays: 9.00a.m. to 5.00p.m.



#### **Dear Member,**

Welcome to this autumn edition of our Grassland newsletter. As 2011 draws to a close we can reflect on a year that was very positive for Irish grassland farmers with relatively favourable weather conditions and strong commodity prices for both our milk and meat products. 2011 has also been a year when agriculture has appeared to move centre stage in Irish economic thinking with a renewed media focus on Irish agriculture and its potential contribution to the plight of our economy. The combined export revenues of  $\in$ 4 billion from the dairy and beef industries in addition to a further  $\in$ 0.25 billon from the sheep industry are the product of our 3.4 million ha of grassland. The recently published Food Harvest 2020

commissioned by the Department of Agriculture, Fisheries and Food targets a 50% increase in total milk production while also targeting significant increases in the value of the beef (20%) and sheep sectors (20%). This level of output can only be achieved by a significant increase in the amount of grass grown and utilised on our farms. Grazed grass utilization /ha is also one of the main factors affecting profit/ha on Irish dairy and drystock farms with each extra tonne of DM utilised adding between 100 and 200/ha to net farm profit. Grass utilised/ha is a consequence of grass grown/ha, stocking rate and grassland management. Nationally dairy and drystock farmers operate at a stocking rate of 1.78 and 1.31LU/ha respectively and are utilising approximately 7.5 and 4.5t DM/ha respectively whereas some of our best grassland farmers are utilising over 12t of grass DM/ha.

The Irish Grassland Association was founded in 1949 by a group of like minded individuals who saw a need "to advance and spread the knowledge of modern grassland management in Irish Farming" It's relevance to the development of Irish agriculture is as obvious today as it was over 60 years ago. Over the last 12 months the IGA, a voluntary organisation of farmers, researchers, advisors and agribusiness members has run 16 public events in 12 counties across all 4 provinces providing an independent forum for stimulating new ideas.

I would like to thank all of you for your support of the IGA through your membership and attendance at our events over the last 12 months and I believe that by working together discussing new information, technologies, farm practices and policies we can grasp the opportunity to put Irish grass based agriculture as a cornerstone of our economy and provide a sustainable livelihood for all those involved.

Yours sincerely

Dr Padraig French Irish Grassland Association President 2011/12





Dr Padraig French new Irish Grassland Association President, making a presentation to outgoing President Philip Donohoe



Front row L-R: Philip Donohoe outgoing IGA President, Dr Deirdre Hennessy new IGA Vice President, Padraig French newIGA President and Maura Callery IGA Office Manager along with the new council of the Irish Grassland Association (IGA)

## **Farming into a brighter 2012** John Fagan sheep farmer and IGA council member

#### Its that time of year again when the rams are let out, and things begin to calm down on the farm.

Well normally that is the case for me at this time of year however I have just started building a new sheep/lambing shed which should have started three months ago, but the Bank Manager or should I say managers took a little bit more convincing than I thought. Overall it has been a good year. 1,700 lambs were born on the farm give a lambing rate of 1.64 from 700 mature ewes and 1.1 from 500 ewe lambs, and given the year that is in it, it is a good year to be selling them. I am continuing to increase the flock, and this year I am putting 1,300 ewes out with the ram. The lambing is due to start on Valentines Day, so any cards should be sent directly to the new sheep shed.





I still have 400 lambs to sell. 260 ewe lambs and 140 ram lambs. I broke one of my golden rules, and I introduced meal to the ram lambs in early August and I am already regretting it. I wanted to push them a little bit faster than normal being anxious to get in a few quid and clear up fields for next year, but I find that unless you are regularly foot bathing them, they tend to pick up lameness around feeders and not only this they can become quite lazy eaters with regards to grass. On the issue of lameness, my ewe lambs, which

were in a field conveniently located to a yard and footbath, were treated regularly and are thriving well. By comparison the ram lambs, which are nowhere near a footbath, are struggling with scalds and this is delaying finishing them off regardless of concentrates. The farm is on three blocks of land, and I have one footbath that works perfectly, but anywhere else they are haphazard and it's just not doing the job right. So I am going to build another two foot baths on the other two blocks that can deal with a large amount of sheep quickly and conveniently. The majority of the lambs are finished off grass, and altogether since the end of May I have finished 1,130 lambs. 170 were retained as replacements and the remaining 400 will be finished over the next few months.

#### Reseeding

The reseeding demonstration in August was a great success and the three techniques of reseeding gave farmers plenty of food for thought. It is hard to distinguish which type of method was the best, as I believe that each method was good, it just depends on what the farmer wants to achieve. For example for ground that is stony and not suitable for the plough the direct drilling, or one pass system is the most appropriate. If the farmer wants to get a field level or is going in after tillage, I would be inclined to plough till and sow. Whatever methods, the application of lime and fertilizer are essential. Reseeding is a costly job, but well worth it in the long run.



This year I still have a 13 acre field to reseed and I will be going in with 1.25 kilos of Crusader (clover) per acre, with a four variety mix of Solomon, Twymax, Portstewart and Mezquita. The weather has delayed me in getting it done, but at least at this late stage it will be done, and I will have it next April for a few hungry mouths.

#### Heifers

The weanling heifers that I bought last year are coming to the stage where the heaviest will be killed off grass. 60 of them are getting meal, and I hope to slaughter them in October, the remaining 60 will be housed and I hope to have them ready around Christmas. In the meantime I'll be trying to buy replacements but it looks like that this year it will be easier said than done. If the prices are too high I am happy enough to walk away, and leave it for another year.

#### Irish Grassland Association

#### Newsletter No. 13 October 2011

#### **Ploughing Championships**

I ventured to the Ploughing Championships for two days, not having got enough from one. The amount of stuff on offer was mind blowing. I picked up a weigh platform for weighing cattle, which works from the same weighing equipment that I bought for the sheep. It will, as the sign said, take the guess work out of selling my cattle. I also picked up anti backing gates for my mobile Prattley handling unit, which should make using an already useful tool even more useful.

#### **Preparing for 2012**

I am already getting the fields ready for next years lambing, and that is why I am going to house the remaining heiters quite early, so as to get them off the land. I find that this is vital if I am to have adequate grass in spring for ewes and lambs. For approval under the Sheep handling scheme to carry out some fencing on the farm, so as soon as I get a good spell of weather I want to get this job done. As the farm was in tillage for a long time many of the fields are quite large, leaving grass harder to manage. By reducing the field size it should make life a little bit easier.

Overall 2011 has been a good year, I am expanding my flock gradually, and my grassland management is improving. I look forward to getting my new Sheep shed, which is based on UCD Lyons design, built. I wonder is it been overly optimistic to have it done by Christmas, I just hope that the winter is not as harsh as it has been over the last couple of years.

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# Beef Farm Walk

Visit to Paul Turleys Farm

### COW TYPE DEBATE HEATS, UP ,



#### JUSTIN MCCARTHY LIVESTOCK EDITOR

The debate on cow type heated up with over 350 farmers attending a special suckler conference and farm walk organised by the Irish Farmers Journal, Irish Grassland Association and the Ulster Grassland Society last Tuesday.

The special one-day event, focusing on the importance of cow type in improving the viability of the suckler herd, saw farmers from as far south as Kerry travelling to Down to participate in the debate. Dr Francis Lively, Agri-Food and Biosciences Institute (AFBI), along with Dr Andrew Cromie, ICBF, set the scene in relation to the breeding challenges facing the sector. Both men exposed the low levels of performance currently being achieved in Northern Ireland (NI) and the Republic of Ireland (ROI). Lively presented data showing that only 37% to 40% of cows were achieving a calving interval of less than 365 days with the average calving interval across the national herd running at 400 days in both Northern Ireland and the Republic of Ireland. The average age at first calving was 31 months on both sides of the border. Reducing this to 24 months was shown to have the potential to significantly increase output while having no negative effect on fertility. While this generated some debate among farmers, Lively said that provided heifers had reached 60% of mature weight at breeding and were 90% of mature weight, when calving down there would be no negative effect on fertility. He highlighted figures showing that on the CAFRE hill farm, where all replacements are calved down at 24 months. 93% of first calving heifers were back in calf after a nine-week breeding period. This was just 1% lower than the average for the mature cow herd. Both men highlighted a major issue in relation to the number of calves being produced per cow per year, one of the key breeding performance indicators in a suckler herd. In ROI, the trend is negative with just 0.8 calves produced per cow per year, down from 0.86 in 2007. The figure for NI herds is worse at just 0.79. To put these figures in context, the target for the demonstration farms participating in the Teagasc/Irish Farmers Journal BETTER farm programme is 0.95, which equates to an additional 16 calves per 100 cows. Cromie attributed the decline in the fertility in the national herd to increased influence of terminal sire breed on the national cow herd. He produced figures showing that 40% of suckler replacements were three-quarter bred and stated that while this trend was improving carcase weights, it was negatively affecting fertility.

He added that the increase in carcase weight delivered from the shift towards continental breeding in the dam was actually reducing overall herd output due to poor fertility and increasing production costs due a decline in milk yield. The 350 people who attended the farm walk learned how the simple farming system in operation, using an Angus/British Friesian cross cow and an Angus terminal sire, combined with a low cost wintering system, resulted in a net margin of £261 ( $\varepsilon$ 334)/cow in 2009/2010.

#### Key profit drivers on Turley farm

In the afternoon, the debate moved to farm level with delegates travelling out to the farm of Paul Turley. The Down man runs an extremely efficient herd of 116 Angus X Friesian spring calving cows/heifers. The herd is run on a parttime basis with Paul spending an average of two hours per day on the farm over the course of the year. Benchmarking figures show average profit per cow in 2009/2010 at £261 or €364 per cow unit. The projection for the 2011/2012 period is for this figure to increase by a further £100 to £150 (€116 to €174) due to higher market prices. With 85% of the farm area rented, a land charge of £125 (€145) per cow unit has been deducted from these profit figures. During the farm tour, it was clear that the exceptional profit figures were down to the fact that the cow type and the breeding programme on the Turley farm ticked all the boxes in relation to the key profit drivers. The cow type and progeny produced were suited to a grass-based system, the herd was highly fertile with 91.5 animals sold per 100 cows/ heifers put to the bull, the calving spread on the farm was just nine weeks and the calving interval was less than 365 days. Paul also puts strong emphasis on cow temperament, which is a key aspect in the management of the herd. The premium price being obtained for Aberdeen Angus progeny is also a significant factor in the bottom line. Both the productivity and profit levels being achieved on the farm certainly highlighted the true potential of an efficient suckler herd. All presentations and further details on the Turley farm can be viewed at www.farmersjournal.ie

#### Challenge to identify right animals

Farmers were urged not to slip into the trap of debating the merits of various breeds when discussing cow type. Both Lively and Cromie presented clear data showing that there was as much variation within breeds for the key economic traits as there was across breeds. The challenge facing the sector was to identify the high performing animals within each breed and to then utilise them in a structured replacement policy. Cromie explained that, with increasing evidence to suggest a negative relationship between terminal and maternal traits, ICBF is reviewing the weightings placed on various traits. He said that ICBF is looking at the option of separating maternal and terminal indices in order to provide farmers with a new index for selecting replacements.

#### Requirements

Looking ahead, the ICBF man told farmers that unless the continental breeds can respond to the new requirements and provide maternal bulls that will deliver the relevant traits, there will be a shift towards more traditional breeds as farmers look to address fertility and milk issues. The thorny issue of mature cow weight was also addressed. Lively dispelled the belief that bigger cows produce heavier weanlings and produced data showing no correlation between mature cow weight and weaning weight. Despite having no positive effect on calf weaning weight, each 100kg increase in mature cow weight increases annual feed costs by  $\pounds 26 \in (30)$  per annum according to AFBI research. The increased cull value of the heavier cow was shown to offset a significant percentage of this saving in feed. However, Lively highlighted that almost 80% of the suckler herd in Northern Ireland operated within a Less Favoured Area (LFA) and, therefore, on land not suited to carrying larger cows.

#### **Irish Grassland Association**

Newsletter No. 13 October 2011







#### More focused breeding

Kieran Mailey, Northern Ireland Suckler Beef Programme, along with Adam Woods, Teagasc/Irish Farmers Journal BETTER farm programme, detailed the practical steps that could be taken to improve output from the suckler herd. One of the key objectives of both technical efficiency programmes is to improve output on the demonstration farms through a more focused breeding programme. This has seen farmers focusing on tightening the calving interval, establishing defined breeding periods, limiting the breeding season to 12 weeks, improving cow type and culling unproductive cows. The financial reward on the farms participating in the Teagasc/Irish Farmers Journal BETTER farm programme was in the region of  $\in$ 6,710 or  $\in$ 110 per cow.

#### **Potential for replacements**

The potential to source replacements from the dairy herd was hotly debated with many farmers concerned that this would represent a step backwards. But Lively presented data showing that, in relation to carcaseweight and conformation, progeny from Limousin X Holstein cows were on par with progeny from continental bred cows. According to Cromie, advances in sexed semen could open up 60% of the national dairy herd to breeding replacements for the suckler herd. However, he warned that clear structures would need to be put in place that ensured the breeding programme adopted on dairy farmers delivered suitable heifers for the suckler herd. The potential of genomic selection in quickly identifying these heifers was highlighted.

Paul Turley, host of the farm walk organised by the IFA, UGS and the Irish Farmers Journal, explains the system he uses on his suckler herd. Paul's herd has achieved 91.5 animals sold per 100 cows and heifers put to the bull. The calving spread was less than nine weeks with a calving interval of under 365 days.







Irish Grasslan Association UPCOMING EVENT: (see page 14) IGA National Beef Conference & farm Walk Thursday October 20th 2011 Trim Castle hotel & Kepak Farms Co.Meath

# Irish Grassland Association Dairy Summer Tour review

by David Wright Irish Farmers Journal



The large crowd who attended the Irish Grassland Association Dairy summer tour went home with a clear message – maximise grazed grass, your cheapest resource. However, grazed grass was just about the only thing the two farm visits had in common.

What was clear on the day is there is no substitute to good management and attention to detail irrespective of the farming system. In the right farm situation both extensive and intensive forms of dairying can produce significant profits.

The more intensive system is that operated by Louth farmer, Tom Kelly a well-known breeder of high quality Holstein Friesian breeding stock. His 330 cows are doing 7,600 litres (based on Creamery deliveries) or 10,000 litres on 305 day milk recording, with 1.5 million litres of his total quota of 1.9 million litres, sold as liquid milk. Grass makes up around 40% of the diet. Cows receive just under 2 t concentrate per cow, fed to yield. The winter diet includes 500 tonnes of maize silage and 300 tonnes of fodder beet.

Contrasting this was the farming system of Andrew Purcell and Alf McGlew. Their 230 cows yielded an average of 5,600 litres in 2010, with 600 kg of concentrate mostly fed in the spring. The farming partnership has a milk quota of 1.2 million litres and is about to introduce cross bred cows into their farming operation. The aim is to maximise milk output at lowest cost.

Financial performance

at the second	T Kelly	Profit Monitor 2010 — liquid milk	Purcell + McGlew	Profit Monitor 2010	
	2010 c/l	Top 20% c/l	2010 c/l	Top 10% c/l	
Milk price	31.5	33.52	29.9	31.59	
Gross output	32.25	33.52	29.42	32.76	
Variable costs	9.9	8.96	9.33	8.55	
Fixed costs	12.09	7.64	9.92	6.19	
Common costs	15.43	15.27	15.55	13.53	
Common profit	16.82	18.25	13.87	19.23	

Shown in the Table is the financial performance on the farms in 2010. T Kelly gross output excludes sales of pedigree stock

Local Teagasc adviser. John Lawlor works with both farms. He says he is very excited about the development and progress on the Purcell / McGlew unit, describing it as a "work in progress". The aim is to get to 300 cows in the next five years, producing 1400 kg of milk solids per hectare. Comparing their results to the top 10% - "the best of the best according to Lawlor", the farming partnership had a slightly lower milk price due to lower milk solids and lower output, mainly due to a 16% empty rate in 2010. Variable costs are low, but fixed costs higher than the top 10% mainly due to depreciation on new buildings, milking parlour and some new machinery. Lawlor says it is important not to be discouraged if not in the top 10% - "work to improve the figures you have control over".

On the Kelly farm the cow type and level of feeding is at the opposite end to that seen earlier in the day. But, he is able to generate significant profit even before sales of pedigree breeding stock, which are not included in his

figures. According to John Lawlor milk price on the Kelly farm is slightly below the top 20% due to lower milk solids, but variable costs are well under control, despite concentrate costs of near 5 cents per litre. Fixed costs are much higher, due mainly to depreciation on building, hired in labour and leased in land. However, Lawlor describes overall performance as "excellent, given the scale of the operation". In fact, if you multiply Tom Kelly's common profit of 16.82 c/l by his quota of 1.9 million litres, shows just how much surplus cash this business can generate over a year.

Tom Kelly admits that he needs to address issues with cow fertility. A calving interval of 497 days is limiting his ability to maximise the efficiency of milk produced from his herd. Kelly also acknowledges that his higher input system can't be easily changed if input prices rise. At grass, cows are fed to yield - 0.4 kg concentrate per litre produced over 22 litres to a maximum of 10 kg concentrate per day. For a week in 2010 he increased the threshold for

putting concentrates in from 22 litres to 26 litres - the result - he saved €45 in concentrate but milk sales dropped €150. His message was "if feeding additional concentrate will increase profit why not feed concentrate?" His problem, if prices are poor, and concentrate price high, he has higher yielding cows that can't be fed economically. While a liquid milk contract provided some insulation from low milk prices in 2009, Tom Kelly maintains all producers were feeling the pain of low prices, not just higher input producers. With the end of quotas in 2015, land is likely to be the new limiting factor on most Irish dairy farms. Whatever about the best system to employ then, Tom Kelly has a simple philosophy when it comes to milking cows - "have passion in it and do it the best you actually can".









#### Questions and Answers Andrew Purcell and Alf McGlew

#### **Q** What are the main benefits of farming in partnership?

A "The first main benefit is the major reduction in workload. Two heads are better than one, motivation is increased, animal husbandry is easier. We now have the 'muscle' and the confidence to lease land as we know we can work it. There is a high level of trust and integrity between us, but we don't socialise together. How the partnership would be dissolved was one of the first things we considered".

#### Q Will the same cow be needed after quotas end?

A "The cow type here is in transition. We are looking for the most beneficial cow for a spring calving system to maximise kg of milk solids per hectare at lowest cost. The science from Moorepark is pointing us towards a crossbred Jersey. All 2011 calves are crossbred. We are pretty confident we are going in the right direction".

#### Q Where can you take the 'days at grass' target?

A "We are utilising 9.7 t grass Dry Matter (DM) per hectare at the moment and would like to get to 11 t in the next two years. Hopefully we can add a couple of weeks onto the grazing season, but cow type is currently a factor. It was well into March this year before cows were out night and day. The top guys are getting 292 days at grass and nine out of ten are using the crossbred Jersey to do it".

#### Q Why are you feeding so much meal?

A "We fed 600 kg per cow, mostly around turnout when cows were getting 4 kg per day. Our aim is to get to 500 kg".

#### Questions and Answers Tom Kelly

- **Q** What is the maximum distance you can walk Holstein Friesian cows?
- A "The maximum distance at present is 1 km. At this time of year we only make the cows do one long walk per day. There is enormous potential to unlock more grazing on this farm and we could easily add another 200 cows, but need cubicles, quota etc".
- Q How can you fill your quota as cheaply as possible?
- A "We try to make the best use of grazed grass. We utilised 9.3 - 9.5 t DM per hectare in 2010 and when the 1<sup>st</sup> February comes we think about grazing. Milking cows graze to 350 -400 kg DM per hectare, and the paddocks are cleaned out by dry cows. Cows are buffer fed until grazing full-time by the middle of March. The first wet night in November and the cows will be housed".
- **Q** Why are there so many cows dry?
- A "I had to dry off early an extra 60 cows this year due to quota issues and currently have 100 dry cows. I am hoping to sell cows in the autumn, probably into Northern Ireland. The problem with selling there is the milk comes back in a container".
- Q What are your breeding goals?
- A "I am maybe breeding too much milk into the herd and will concentrate on fertility in the future. My two main breeding goals have been high milk solids and good type. Calving interval is currently 497 days, but I want to get it down to 440 days within the next three years".
- Q What margin do you need over spring milk?
- A "There is a negligible difference in price between winter and spring milk at the moment. I would need a 20% increase in price over spring milk to cover the higher costs of winter milk. In the future any increases in production on this farm will be on the back of spring calving."

Upcoming event IGA National Dairy Conference January 10th & 11th 2012 Athlone and Cork



# FBD

Padraig French Irish Grassland Association President 2011/12 along with speakers at the student conference. L-R Pat Hickey Dairy Farmer, Adam Woods BETTER Farm programme, and John Fagan Sheep Farmer and IGA council member.

# Student conference review October 3rd 2011

On October 3rd the IGA held its second annual student event in Tullow, Co. Carlow which was sponsored by FBD insurance. The event is one of a kind in that it brings together third level students from University College Dublin, Dundalk Institute of Technology and Ballyhaise, Clonakilty and Kildalton Teagasc Colleges and Gurteen College to attend a morning conference with three guest speakers delivering a paper each in dairy, beef and sheep and to attend a choice of farm walk in the afternoon. There were 240 delegates altogether including students, lecturers and staff which is a significant increase on last year's event indicating an growing interest in a student only forum.

### The day began with three excellent guest speakers: 'The story so far'

#### Patrick and John Hickey, Dairy farmer, Ardnacraney, Tang, Co.Westmeath

Patrick gave an update on Ardnacraney farm which was purchased by Patrick and his brother John in 2005. The progress of the farm from the first development year in 2006 through to 2011 was discussed in full. Patrick gave a very frank and honest account of the financial performance of the farm. There were plenty of questions and discussion around herd health, meal feeding grassland management and target areas for improvement for the future.

### 'Potential for increased profitability on Irish cattle farms

Lessons from the Teagasc/Irish Farmers Journal Better Farm Programme' -

#### Adam Woods, Beef BETTER Farm Adviser

Adam presented a comprehensive review of the Teagasc/ Irish Farmers Journal Better Farm Programme from initiation in 2008 to progress that has been made on the farms to date. The improvements made on the farms in a number of key areas were shown: stocking rate (average of 1.85 LU/ha in 2008 to 2.02 in 2010), breeding performance (calves/cow/year has increased from 0.87 in 2007/08 to 0.90 in 2009/10), animal performance (total kilograms of liveweight produced per farm has increased by 11,261kg since 2008) and grassland management (kilograms of liveweight per hectare has increased by 29% since 2008) which is down to reseeding, setting up paddocks, soil fertility and grass budgeting. It is expected that the average gross margin on the BETTER farms will be  $\in$ 700 – 800/ha in 2011. Most of this will come from further improvement in output both in terms of kilograms produced and improved store and beef price.

### 'Farming into a brighter future'

#### John Fagan, Sheep farmer, Gartlandstown, Co. Westmeath

John gave a run down on the management of his sheep and finishing beef enterprise throughout the year. John currently has 1300 ewes going to the ram this year with the aim of running a 1500 ewe flock next year. John highlighted the importance of grassland management particularly reseeding and the use of white clover to finish lambs. Almost 1300 of Johns lambs have been finished from grass with no meal feeding in 2011. Overall John gave a very positive impression and outlook for sheep and beef farming for the students encouraging them to take opportunities to travel abroad to broaden their horizons and learn from similar grass producing countries like New Zealand.

After lunch the students were given a choice of one of two farm walks to participate in in Baltinglass, Co. Wicklow: John Kelly, Saundersgrove, Baltinglass, Co Wicklow: Sheep BETTER farmer

Brendan Byrne, Goldenfort, Grangecon, Co. Wicklow: Teagasc monitor dairy farmer

Students from UCD, Ballyhaise, Kildalton and Gurteen participated in the farm walk at John Kelly's. John currently runs a 505 ewe flock plus 190 replacements on 56 ha, with the intention of increasing to 700 ewes. John's goal is to improve the profitability of the sheep enterprise through:

- Increasing output/ewe through breeding policy and ewe management
- Improve lamb performance
- Improve grassland management through pre-determined sward height, closing date, lambing date and reseeding
- · Improve gross margin/ hectare

Topics covered throughout the afternoon included grassland management, flock productivity, lamb performance, financial performance and lessons learned. John again gave a very positive account of sheep farming saying it was a very rewarding career choice which left a lasting impression with the student audience. Students from UCD, Ballyhaise, Clonakilty, Gurteen and Kildaton attended the farm walk at Brendan Byrnes. The farm consists of 66.7 hectares (164 acres) of owned land, 32.3 hectares (80 acres) of leased land and a milk guota of 112,200 gallons.

The farm has also been used as a monitor farm under the Teagasc/Glanbia dairy programme in the years 2007 to 2010. During this period protein was lifted from 3.22% to 3.36% in 2010. This increase is being attributed to the enhanced quality of the grass being offered to the cows. The tillage enterprise on the farm is 5.6 hectares of maize and 10.5 hectares of cereals. The aim of the tillage enterprise on the farm is to grow most of the farms winter feed requirements. The 90 dairy cows are split between 40% autumn and 60% spring calving. There is a liquid between 40% autumn and 61% litres per day. In 2010 the cows produced 6020 litres at 3.36% protein and 3.97% butterfat. The average EBI for the cows is €53, with a calving interval of 393days. There is also a beef enterprise on the farm which brings the autumn born dairy bull calves together with bought in weanlings to bull beef at approximately 18 months.

Topics covered during the afternoon were grassland management, financial and cow performance and how this is achieved, bull beef system and future plans. There was plenty of lively discussion surrounding Brendans system of operation and how his farm compares to similar systems in the area and to a grass-based spring calving system. John Kelly sheep farm and IGA council memb talking to dry stock students at the IGA student conference.

Brendan Byrne dairy farmer talking to the dairy students who attended the student conference.

# Kepak Farm to host Irish Grassland Association National Beef Event

Kindly sponsored by

The Irish Grassland Association (IGA) have just announced details of their annual Beef Farm Walk and Conference, which will be held on Thursday 20th October on Kepak Farm in Clonee, Co. Meath and Trim Castle Hotel, Trim, Co. Meath. The event will be split into two parts, with the farm walk taking place in the morning followed by dinner and an afternoon conference. The event is being sponsored by Kepak Group.

Kepak Farm is a 2,500-head finishing unit and finishes approximately 5,000 cattle annually. Cattle breeds are typically continental crossbreds with males finished as bulls at under 22 months of age and heifers at around 20 months of age. Slaughter weights range from 600 kg for heifers to 700 kg for bulls. Live demos will be a key element of the day and will include: a selection of recently purchased bulls and heifers and a grading demo of ready-for-slaughter cattle highlighting variations in conformation and fat scores. The economics and relative merits of alternative finishing systems will be outlined.

The afternoon conference session will feature some of the leading figures and farmers from the beef industry and will include the latest information on finishing technologies and grassland management for beef production systems. Dr. Edward O'Riordan, Teagasc, Grange and Patrick O'Leary, cattle finisher from Trim, Co. Meath will continue the cattle finishing theme from the morning farm walk. Dr. O'Riordan will outline the latest research results from Grange on finishing suckler beef cattle while Mr. O'Leary will outline the operation of his finishing system and the key factors that drive profitability on his farm. Given the importance and cost implications of BVD for the Irish cattle herd, David Graham, Animal Health Ireland, will outline the national BVD eradication programme which was launched at the Ploughing Championships recently and will commence later this year. Willie Treacy, Louth Suckler Farmer and demo farm in the Teagasc/Farmers Journal BETTER Farm Programme, will describe the importance of grassland renovation and reseeding to maintain output on his farm.

Karen Dukelow, Teagasc, Bandon, will describe a grassland management project which was initiated by the Bandon Beef Discussion Group in 2011 and how the farmers involved are improving profitability by focusing on maximising live weight performance from grazed grass.

Commenting on the event, IGA president Padraig French, expressed his delight at having secured such an excellent program for the day. "High profit finishing systems focused on efficient feeding strategies and meeting key market specifications are a critical link in the beef industry production chain. We are delighted to have put together a high quality program, which will address the key issues in a farmer friendly fashion. I am confident that those attending on the day will return home refreshed, re-invigorated and with a number of key pointers for their farming system".

Announcing details of their sponsorship and hosting of the event, Jonathan Forbes, Kepak Group, said "We are delighted to welcome the IGA and guests to the Kepak Farm situated four miles from our headquarters in Clonee Co. Meath. Kepak fully support this information and discussion day as a tremendous learning opportunity and a 'must attend' for all beef finishers.



Michael Kelly site Manager Kepak Clone, Paul Crosson Irish Grassland Association, Greg McCloskey farm manager, Kepak Farms and Jonathan Forbes procurement manager, Kepak G

As Stakeholders in the Teagasc/Farmers Journal BETTER Farm Programme, we have witnessed huge improvements on the participating farms in terms of improving health protocol, stocking rates, physical performance and especially grassland management. Improving grassland managing abilities on the BETTER farms has shown to be the simplest way to improving profitability and improving gross margins.

Kepak is committed to contributing to research and discussion initiatives to promote improvements and efficiencies at farm level. Our Dairy Calf-to-Beef Initiative is due to process the first calves in Spring 2012 and will determine over the next three years the best production system to reward producers. Our Angus Initiatives and soon to be launched Commercial Young bull project further emphasises our commitment to improving production efficiencies and profitability at farm level".

An important part of the day will feature the presentation of the Irish Grassland Association Lifetime Merit Award which in 2011 will be awarded to Dr. Padraig O'Kiely, Teagasc, Grange. Dr. O'Kiely is one of the leading worldwide figures in silage production research and has made a huge contribution to Irish grassland farming over a period of three decades. The award is richly deserved and has been met with wide approval in industry and farming circles.

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#### Prepaid discounted rates €35 for members €70 for nonmembers Cost for the day includes the following:

Full conference proceedings 2 Tea/Coffee and homemade scones on arrival 3 Two-course dinner followed by tea and coffee 4 Bus transfers to and from the farm 5 The prepaid cost for nonmembers also includes one year's free membership (for all new d/d memberships to the Irish Grassland Association).

Registrations will take place at the Trim Castle Hotel at 9.30am. For more information, please contact the conference secretary on 087 9626483.

You can now also book on-line at www.irishgrassland.com where the best prepaid deals are available.

# Soil Analysis – Back to Basics

Stan Lalor and Mark Plunkett Teagasc, Crops Environment and Land Use Programme, Johnstown Castle, Co. Wexford.

Soil analysis is the starting point in meeting the soils nutrient requirements to maximise grass production. Soil fertility usually changes slowly over time and should to be viewed as a long term farm investment. For example, an up to date soil test report will provide advice on the type and rate of lime required for up to 5 years. A small annual investment (C1/ha/year) in a standard soil test will help ensure the long term soil productivity on your farm. Standard soil testing includes soil pH, lime requirement, P and K. Additional tests are also available for Mg and micronutrients. There is no suitable soil test for N or S.

#### **RELIABLE SOIL TEST RESULTS**

Obtaining good quality soil samples using the correct procedure is critical if results are to be useful for soil fertility management. The following guidelines should be followed in order to take a representative soil samples for your farm:

#### **Taking soil samples**

- Soil test results are of little value if the soil sample taken is not representative of the field or area being sampled.
- Soil testing should be done every 3-5 years. A soil test every 4 years is required for a nitrates derogation. To spread costs, sample 20-30% of the farm every year.
- Divide the farm into fields or areas that can be easily managed separately when applying fertilizers. As a guide, take one sample to represent between 2 and 4 hectares. If the area is very uniform a sample maybe taken to represent a larger area. For farms with a Nitrates Derogation, the requirement is that the average soil sample area is not greater than 5 ha.
- Take separate samples from areas that are different in soil type, previous cropping history, slope, drainage or persistent poor yields.

#### **Key Risks**

- Do not sample a field until 3 to 6 months after the last application of P or K or slurry. Where lime has been applied allow a time lag of up to 2 years before sampling for soil pH and lime requirements.
- Sampling depth: ensure that soil is sampled to 10 cm depth. Shallower sampling can give inaccurate results, particularly for P. Where permanent pasture is ploughed for reseeding, re-sample the field as soon as possible after ploughing, and the soil ploughed up to the surface may have a different nutrient status to the soil ploughed down.
- Avoid any unusual spots such as old fences, ditches, drinking troughs, dung or urine patches or where fertilizer/manures or lime has been heaped or spilled in the past. Follow a 'W' soil sampling pattern to ensure that the sample is representative of the entire field. Avoid walking in the lines of normal fertilizer and lime spreading operations on the field.
- Take a minimum of 20 cores per soil sample.
- Avoid sampling under extremes of soil conditions, e.g. waterlogged or very dry soils. Sample at the same time of the year to aid comparisons of soil sample results.
- Ensure samples are correctly labelled to their source field, and keep good records. This avoids and confusion when the results are returned.

#### Using the results

Soil samples are worthless if results are not interpreted and used to formulate a liming and fertiliser programme for the years ahead.

#### Soil pH

Soil pH is the starting point in ensuring optimum nutrient availability. Fertilizer efficiency will be reduced where the soil pH is incorrect. The optimum pH for productivity, biological activity and nutrient availability in grassland soils is 6.3. The pH of acid soils can be increased by applying lime. Lime does not need to be applied every year. Apply enough lime once every 3-5 years to reach a pH of 6.5. This will maintain the soil pH close to the optimum for a number of years.

The rate of application is determined by soil analysis and shown on the analysis report. Don't apply more than 7.5 t/ha (3 t/acre) in a single application. Where lime requirements are greater than 7.5 t/ha, apply 7.5 t/ha initially, and then apply the remainder after 2 years. In soils that are at risk of having high molybdenum (Mo) status, reduce the lime requirement by 5 t/ha to avoid potential problems with copper (Cu) deficiency (Mo can make Cu unavailable to animals). The optimum soil pH for high Mo soils is 6.2.

#### P and K fertility

Nutrient advice is based on a simple soil Index system. Fields or areas can be categorised on a soil Index scale of 1 to 4 for each nutrients (P, K, most micronutrients) based on soil test results (Table 1). The Index system is based on the expected response to fertilizers.

Table 1. Soil Index system for P, K and Mg in grassland.

Soil Index Description Response to fertilizers Soil test result range for each Index (mg/L)

1			Р	К	Mg
1	Very low	Definite	0-3.0	0 - 50	0 - 25
2	Low	Likely	3.1 - 5.0	51 - 100	26 - 50
3	Medium	Unlikely/Tenuous	5.1 - 8.0	101 - 150	51 - 100
4	High	None	8.1	151	101

Nutrient advice is based on a target of maintaining soils in Index 3. At this Index, soils have a bank of available nutrients to deliver nutrients to the grass. The objective is to replace the nutrients that are being removed in products such as silage, milk or meat. Index 1 and 2 soils have low nutrient levels, and require additional inputs in order to support the grass and increase the soil fertility to the target Index 3. Soils in Index 4 have high nutrients levels and will support the grass sward without additional fertilizers.

#### Maintaining soil fertility when in Index 3

The approach to maintaining soil fertility is to replace the nutrients removed in product. For example, 1 kg of P is removed from the farm in approximately 1000 litres or in 100 kg of animal liveweight. Nutrient advice rates are based on replacing the nutrient offtake.

#### Building soil fertility when in Index 1 and 2

Additional nutrients above those required to replace nutrients removed in products are required to build soil fertility from low Index 1 and 2 levels up to Index 3. The length of time required for soil nutrients levels to increase or decrease will depend on the soil type, but can take a number of years. Therefore, apply additional nutrients for soil build up for a number of years until soil analysis indicates increased fertility.

#### Monitoring fertility over time

It is essential that when you get your soil sample results back that they are applied to improve the soils productivity and farm profitability with improved farm production and fertilizer management. Changes in soil fertility takes time and should be monitored every 3-5 years. This is the best test of a fertiliser programme and will help identify areas of the farm that need special attention. For example, target areas that would benefit from organic manure applications/changing fertiliser type to better match crop requirements.

#### In Summary

- Take soil samples on a regular basis and ensure soils are sampled to the correct sampling depth.
- Up to date soil test results will take the guess work out of fertiliser planning
- Apply lime as per recommendation and develop a fertiliser (P&K) spreading plan to build soil fertility levels over time.
- Take advantage of fertiliser savings on high fertility soil (index 4).

#### Irish Grassland Association Reseeding Events 2011

Reseeding is a key component of grass based milk and meat production systems as it increases the quantity of grass available for grazing animals. Reseeded swards generally produce greater quantities of herbage, particularly in the early spring and late autumn/winter, than do old permanent pastures. This increased grass supply allows livestock to be turned out to grass earlier than is possible in old permanent pasture. Reseeded pastures also generally have higher feed guality than old swards. In response to the increasing interest in reseeding, and the increased demand for information on reseeding methods, seed selection and post sowing management the Irish Grassland Association hosted five reseeding events around the country in 2011, jointly sponsored by Germinal Seeds and Goldcrop. Information on the first two events, at the farms of Pat and Olive Weeks in April, and that of Henry Walsh in May, was provided in the last newsletter. In the first week of August a further three events were held. These took place on the farms of John Fagan in Westmeath, Jimmy Garivan in Westport, Co. Mayo and Padraig Mulligan in Templeboy, Co. Sligo. The main areas focussed on at these events were:

- when is the best time to reseed
- · why reseeding is necessary
- . the benefits that can be gained from reseeding swards

GERMINAL

- importance of soil tests
- options for reseeding
- post emergence spraying
- post reseeding grazing management

Speakers at the events were the farmer at each farm, Philip Creighton, Teagasc, Athenry, Dr. Deirdre Hennessy, IGA council member/Teagasc Moorepark and a Teagasc advisor at each farm - Bernard Hyde at the Westmeath event, John Noonan at the Westport event and Veronica Ryan at the Sligo event. Information was provided on all of the areas mentioned above, and there was a lot of questions from the audiences. There were also demonstrations of reseeding methods and machinery. Reseeding methods demonstrated included one-pass, plough and till, and stitching in. Up to 450 people attended the events across the three days.

In spring 2012 some of the host farms will be revisited and you can see for yourself how swards established under the different reseeding methods, and the host farmers will discuss their thoughts on the methods. The host farmers will also give details of post sowing management and herbage production.

If you have a group in your area interested in hosting a reseeding event in spring 2012 contact Maura in the IGA Office on 087 9626483 or email secretary@irishgrassland.com.

Members from the IGA with some speakers from Teagasc and joint event sponsors Germinal seeds and goldcrop



IGA National Beef Conference & farm Walk Thursday October 20th 2011 Trim Castle hotel & Kepak Farms Co.Meath IGA National Dairy Conference January 10th & 11th 2012 Athlone and Cork



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