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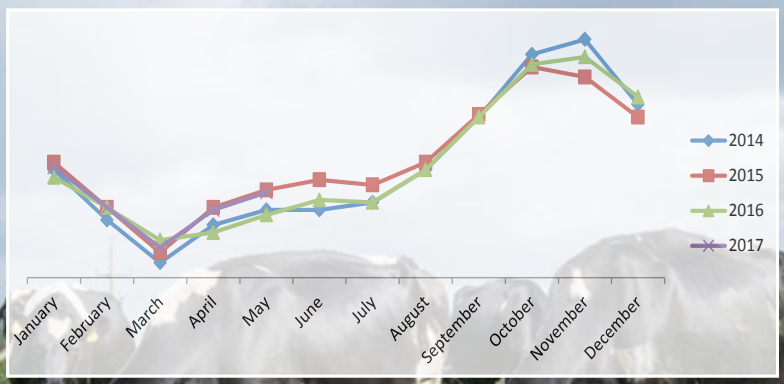
Golden Valleys, Growing Naturally

AGRI DIVISION

MILK MATTERS

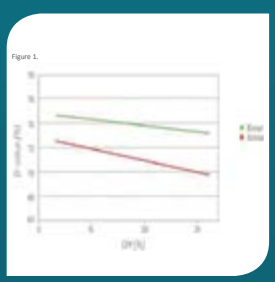
Issue 53 - JULY 2017 www.agritrading.ie

Dairygold's Dairy Advisory Bulletin



GUARD AGAINST THAT MID-SUMMER PRODUCTION SLUMP

ALSO IN THIS ISSUE



Welcome to the July edition of

MILK MATTERS

DAIRYGOLD'S DAIRY ADVISORY BULLETIN

Grass growth rates for the month of June have been very good. You need to maintain grass quality by adopting the best grassland management practices. In this month's, **Nutrition Matters**, we look at how grassland management can impact milk volume and milk proteins across the mid-summer.

Lime, phosphorus (P) and potassium (K) impact on nitrogen (N) utilisation and grass growth. While the amount of N and P we can apply is limited by Europe there is no limit on K. Despite this the K index of our soils is dropping every year. In this month's, **Grass Matters**, John Maher explores why K is dropping and suggests the use of high K fertilisers in the autumn to address this drop.

We are now in the month of July. Cows served now will calve on the 10th of April unless you use proven short gestation sire. Short gestation sires can push calving back by a week and boost production by 14kg Milk Solids. In this month's, **Fertility and Breeding Matters**, Doreen outlines how to approach breeding in July, which bulls to use and managing the introduction of stocks bull. Doreen also looks at dosing programme for your stock across the summer.

Yours Sincerely,

Liam Stack

Liam Stack M.Agr.Sc

RUMINANT TECHNICAL MANAGER,
DAIRYGOLD AGRIBUSINESS

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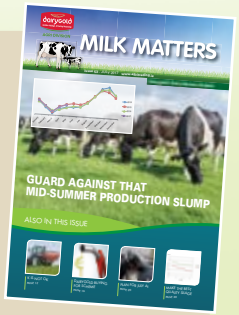


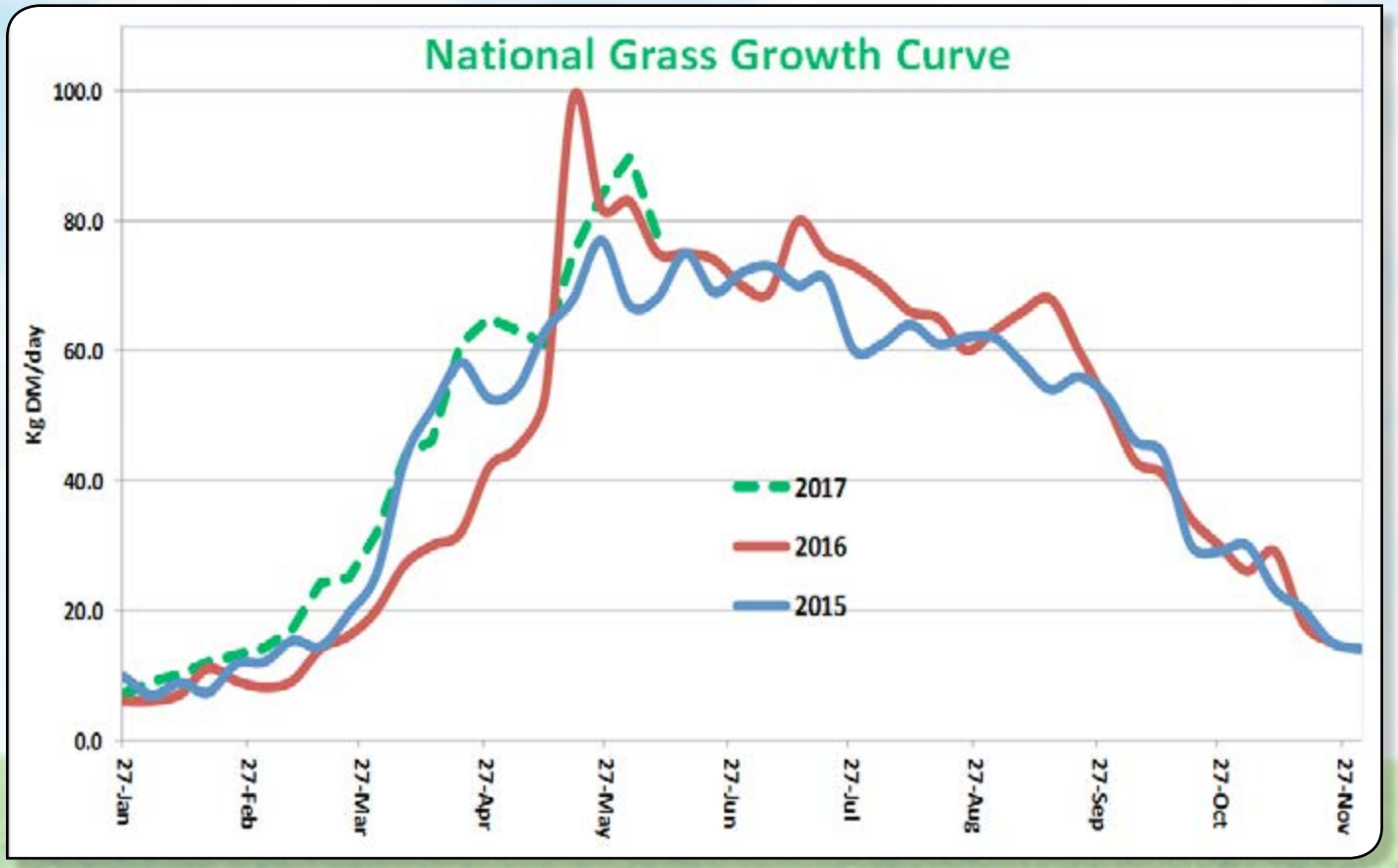
email: lstack@dairygold.ie

NUTRITION MATTERS

By LIAM STACK,
M.Agr.Sc, Ruminant Technical Manager

GUARD AGAINST THAT MID-SUMMER PRODUCTION SLUMP

Grass growth peaks in the months of May and June. With this comes the challenges of maintaining the correct pre-grazing covers and post grazing heights.



GRASS QUALITY AND DMD

	DMD %
Green Leaf	80-90%
Green Stem	60-70%
Mature Stem	40-50%
Dead Material	35-45%

Poor management of grass across the summer can result in the build-up and carryover of stem into paddocks. Stemmy paddocks lead to lower grass intakes, accelerated yield drops and lower milk protein %.

KEY POINT: An increase of 1% in grass digestibility will increase dry matter intake by 0.3-0.4kg DM

NUTRITION MATTERS

Successful grassland management is built around a compromise between adequate daily herbage allowance and post grazing sward height. We must walk the tight rope, of supplying enough grass to meet our cows intake requirements, while maintaining adequate grazing pressure to ensure paddocks are grazed out tight enough.

To maintain Grass quality during the mid-summer:

1. **Walk your grass weekly** (more frequently during times of high growth)

2. **Create a grass wedge**
   A grass wedge looks at how your farm is fixed for grass now and over the coming weeks.
   Is there a deficit or surplus?
   It allows you to react with confidence:
   - Taking paddocks out for round bales when there's a surplus.
   - Feeding back those round bales or concentrates during times of shortage.

   The summer will bring both scenarios.

3. **Graze paddocks at 1400-1600kg/ha**
   Grazing paddocks at the correct pre-grazing covers and to the correct post grazing heights, increases utilisation and maintains grass quality (digestibility). The better the grass quality, the higher the grass intakes, milk yields and the milk protein %.

UFL and milk carrying capacity of different pre-grazing covers:

Cover (kgDM/ha)	Potential Intake (kg DM)*	UFL	Milk supported (kg)**	Milk soilds supported (kg)**
1300	17	1	25	1.8
2000	16.5	0.95	22	1.6
2500	16	0.9	19	1.4

*Potential intake assumes an intake reduction on heavier covers

** UFL requirement maintenance = 6, per kg milk = 0.44, per kg MS = 6.2

KEY POINT: Excessive pre-grazing covers = lower intake potential, DMD and UFL. Every 5% drop in DMD = 3ltrs lower milk

4. **Graze paddocks down to 4cm**
   To maintain grass quality you must graze down to 4cm. Simple as. Leaving a butt on your paddocks introduces stem, drops the intake potential and energy content of your swards.

NUTRITION MATTERS

Topping, almost a dirty word nowadays:

Higher yielding cows struggle to attain the energy they need on grass as they cannot eat enough of it. Be-wary of asking these types of cows to graze to 4cm as this will result in further intake restriction and milk yield drops.

Certainly the most economical way to get down to 4cm is with your cows but if that is not achievable on your farm get the topper out and maintain grass quality as a priority.

Milk proteins and mid-summer grass quality:

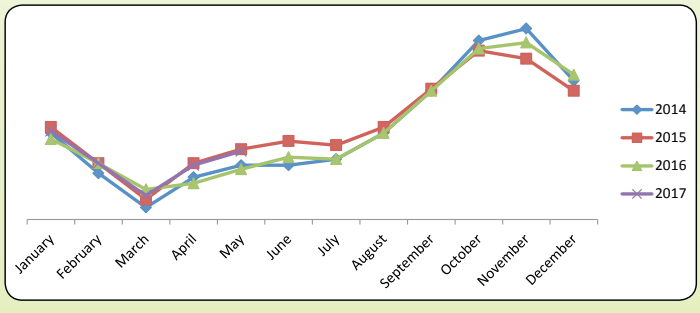
KEY POINT: Milk protein is directly related to the energy nutrition.

Milk proteins follow the same curve annually.

In the spring, it starts off high and drops to a low point around paddy's day. As we get more grass (energy) into our cows diet, milk protein recovers. The low point and the speed of the recovery is year dependent. Years with better grass growth have high proteins across the spring. Milk proteins should then climb to the end of the year.

In the summer milk proteins plateau every June and July before kicking on again from August to year end. This summer plateau is down to grass quality. Often you will find that summers with lower grass growth are better from a milk protein stand point. During these summers lower growth predisposed feeding of lower covers and better quality grass.

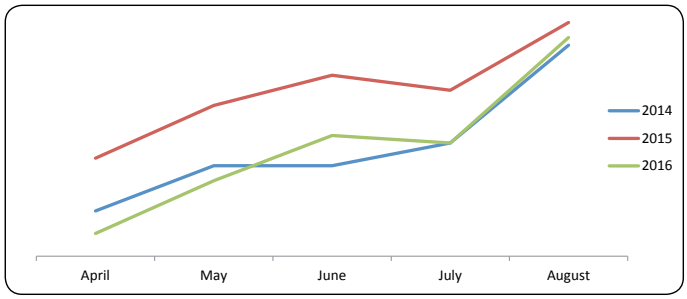
Month by month milk protein %



Mid-summer milk protein plateau

In 2015 and 2016 the milk protein % of milk supplied to Dairygold in July was lower than in June. While in 2014 the increase was hardly worth noting (3.37 vs 3.4).

April to August milk protein 2014-2016



Milk volume and mid-summer grass quality:

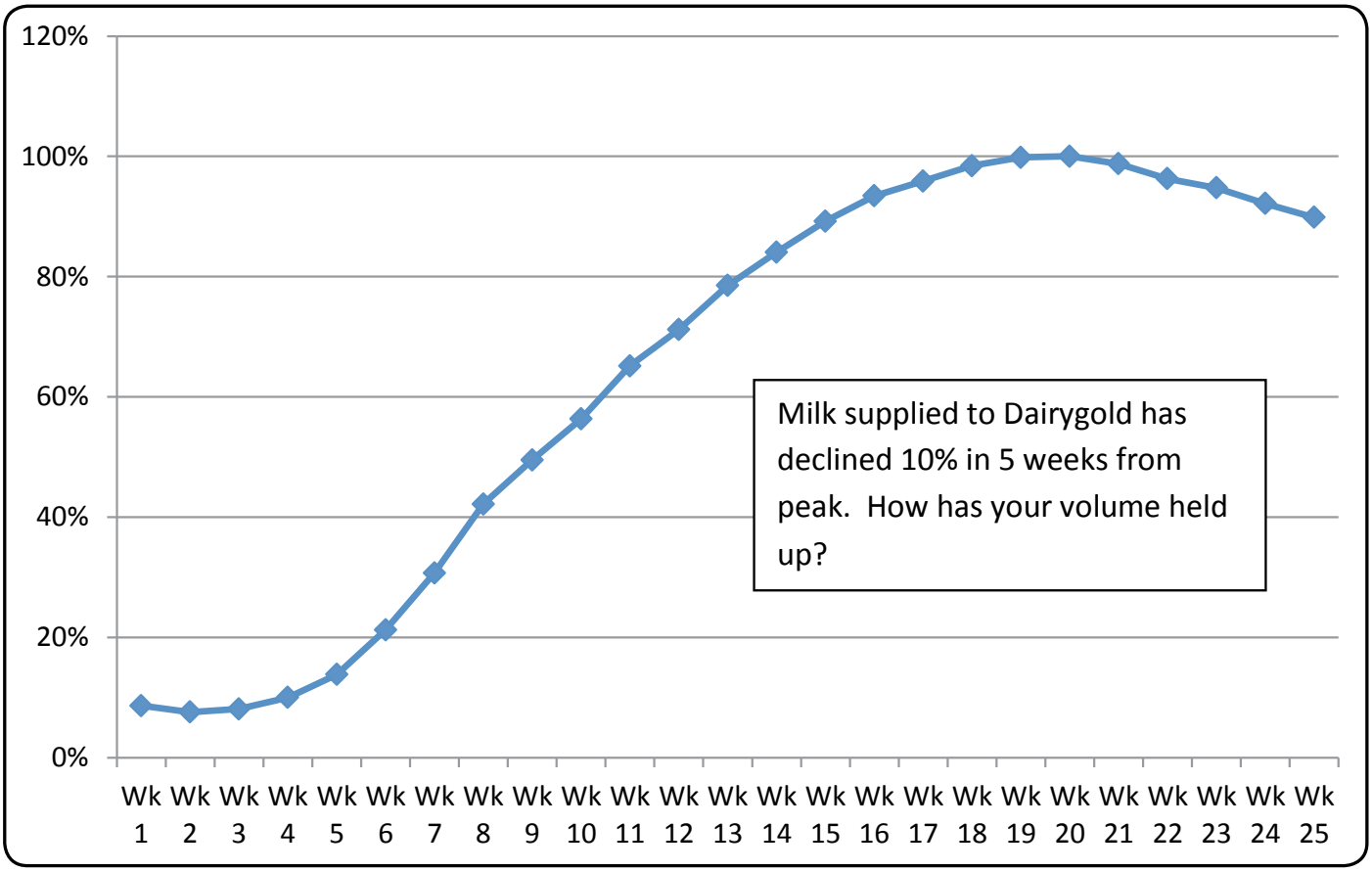
Milk volume should decline at 2.5% a week or 10% a month from its peak. A decline of greater than this is down to insufficient energy intake. Once volume starts to decline its very hard to stop. This is especially true in late lactation. After a production decline adding energy back into the diet is not guaranteed to give a volume increase. However it will slow the drop back to a more natural rate. Every effort should be made to maintain volume across the mid-summer grazing season. Failure to do so will lead to:

- Low individual cow milk yields in the autumn
- Lower milk lactose %
- The possibility of having to dry cows off early when solid adjusted milk prices are high and while we're enjoying our now customary Indian summer.

KEY POINT: A milk yield decline from 28ltrs to 25 ltrs is a decline of 11%. This kind of decline is exceptable from one month to another but not from week to week.

NUTRITION MATTERS

% of Dairygold peak milk supplied weekly



To maintain energy intakes across the mid-summer grazing season:

1. Maintain grass quality and quantity
2. Use concentrates strategically when needed

Milk Yield	Grass intake	Concentrates needed to meet energy demand	Kg concentrates needed to meet energy demand
>25	17	no	
28	17	yes	1.5
30	17	yes	2.5
32	17	yes	3.25
34	17	yes	4.25
36	17	yes	5
38	17	yes	6

Assumes 0 BCS change, +/- 1 kg DM grass = +/- 1 kg of feed, +/- 1 kg of milk = =/- 0.5 kg of feed

NUTRITION MATTERS

GRASS AS A FEEDSTUFF:

Grass like all other feed stuffs is not a complete feedstuff.

It can be too high in protein, it lacks structural fibre, its fatty acid profile tends to depress milk butterfat %, it is low in some essential minerals.

Most importantly though, grass is a very high, very cheap source of energy.

KEY POINT:
High intakes of 17kg Dm of grass are only achievable during ideal grazing conditions. Poor grass quality (excessive pre-grazing covers), limited grass quantity (low pre-grazing covers, < 1100-1200 kg/ha) and poor grass DM all limit the cows potential grass intake.

FEEDING CONCENTRATES AT GRASS:

Feeding concentrates at grass should never be done at the expense of grassland management.

Feeding concentrates at grass will only deliver a response if the cows overall intake increases.

Research has shown responses of between 0.6 - 1 kg of milk per kg of concentrates feed.

Higher responses have been shown for high yielding cows who can't meet their intake requirements from grass alone.

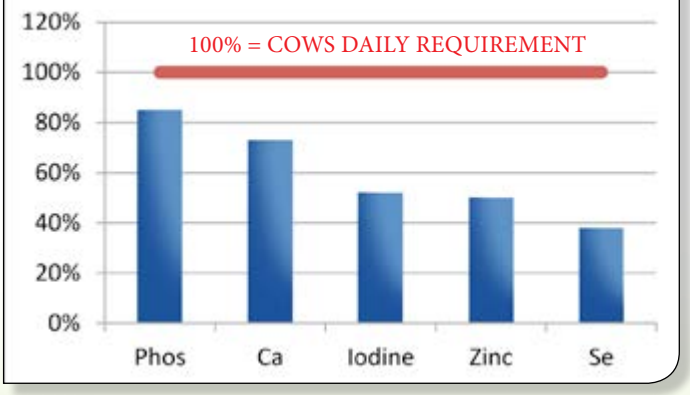
*cows milking over 25ltrs will require concentrates to meet their energy requirement at grass.

TRACE MINERAL REQUIREMENTS OF A DAIRY COW

	mg/hd/day	Mineral Role
Copper	150 - 450	Infertility & production
Selenium	3 - 5	Fertility, SCC, Mastitis, Disease resistance
Cobalt	5 - 10	Low production, low DMI
Manganese	100 - 450	Low production, possible dwarfism
Zinc	375 - 750	Lameness, SCC, Production
Iodine	12 - 60	Weak Calves, Embryonic Death

Teagasc: Higher levels are for deficiency situations – lower levels are for routine supplementation

GRAZED GRASS AS A MINERAL SOURCE FOR DAIRY COW



The cost of feeding magnesium through concentrates is dependent on the milk yield response. Yield responses are typically 0.6kg milk per kg of concentrates. Higher yielding cows that struggle to maximise their intakes at grass will deliver a higher response of c.1kg milk per kg concentrates.

NUTRITION MATTERS

OPTIONS FOR GETTING MAGNESIUM INTO COWS

	Cost (c/hd/day)
Dusting cal mag*	14c
Mag chloride flakes**	13c
Flow Mag***	18c

* 17kg/ha. labour input required
** large herds may need to split for a morning and evening dose
*** need a dispensing system, adjust during wet weather

THE ECONOMICS OF GETTING CAL MAG AND MINERAL INTO COWS AT GRASS:

OPTIONS FOR GETTING TRACE ELEMENTS INTO COW

	Cost (c/hd/day)
Trace element bolus (assumes 6 months cover)*	3c

* will supply a blend of mineral over 3 - 6 month

OPTIONS FOR GETTING MAGNESIUM AND TRACE ELEMENTS INTO COWS

	Net Cost (c/hd/day)
Dusting Cal mag** + trace element bolus	17c/day
Mag chloride flakes*** + trace element bolus	16c/day
Flow mag*** + trace element bolus	21c/day
Flow mag fertility + trace elements****	32c/day
Post Calver gold 14%*	1 - 25c/day
Supermag 5.6% cal mag @ 1kg*	-6.4 - 6c/day

* assumes a milk yield response of 0.6 - 1 kg milk/kg concentrates and a milk price of 31c/ltr
*** 17kg/ha. labour input required
**** large herds may need to split for a morning and evening dose
**** need a dispensing system, adjust during wet weather

Benefits of the Gold Range

1. **Yea-sacc = + 5% milk yield, 5-7 less open days, higher rumen ph =less SARA**
2. **Bioplex Cu, Zn, Mn and Selplex = less SCC, Lameness, Better fertility performance + 8% conception rate**
3. **Biotin = less lameness, + 5% milk yield**
4. **High inclusion of Maize meal = increased milk protein, less SARA**

Congratulation's to Jim Barrett on winning the "Prime Elite 25 plus" milk replacer competition.

Jim says he is "thrilled with the performance of his replacement heifers on Prime Elite 25 Plus". Jim has noted that his calves have thrived very well and he has had excellent growth and performance rates since he switched to this new product. Seamus O'Mahony commented that: "Dairygold Agri Business strives to improve efficiency for our customers and that Prime Elite 25 Plus has been formulated to the most stringent quality standards for optimal growth rates in line with AHI recommendations.

Celebrating the recent launch of Prime Elite 25 Plus Premium Calf Milk Replacer, Dairygold Co-op announced the second winner of their JFC Milk Kart competition. Rachel McCarthy & Jim Canty (Dairy Area Sales Managers) together with Margaret Creed & Denis O'Leary (Terelton Branch Staff), congratulated Jim Barrett, Enniskeane, Co. Cork on winning the JFC Milk Kart.

POSTCALVER GOLD

Now contains Biotin

- High energy feed containing Category One ingredients with Maize as the No. One ingredient
- Contains high levels of Phosphorus and Magnesium
- Contains BIOPLEX® Zinc, Copper and Manganese and SEL-PLEX® organic selenium from Alltech® to support the immune system and improve fertility parameters
- Contains high levels of Vitamin E
- Contains high levels of Vitamin D to prevent milk fever post calving
- Contains YEA-SACC® live yeast to improve digestibility, feed efficiency, increase production and improve fertility performance
- High quality source of energy and protein
- Available in 14% , 16%, 18% and 20% protein cubes

Dairygold maximises the use of quality Irish Grain across it's Ruminant Feed Range

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Inside Sales or Lombardstown Mill
on 022 47275 to order. www.agritrading.ie

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Lyons Systems Research Herd Notes

Background: The main aim of the **Systems Research Herd** at UCD Lyons Farm is to evaluate the feasibility (including profitability) of a higher input/output grazing system within a limited land holding scenario. The focus is on maximising milk solids output from the existing land holding which involves high output from individual cows and high stocking rates on the MP. This will occur most efficiently through maximising the use of grazed grass/home grown forage in the system and the strategic use of supplementation thereafter. Such a system might facilitate the successful expansion of the farm business without the need to buy or rent extra land, to buy stock, to acquire extra labour or to provide extra cow facilities. For the study purpose, stocking rate and concentrate inputs are fixed. For more details on the Systems Research Herd visit http://www.ucd.ie/agfood/welcomemessage/systemsresearchherd/.

Lyons Systems Research Herd Notes Week 19-06-17

Farm Details:

Area available: 15.71 (1.94 ha closed for reseeding)
Current Stocking Rate (MP): 3.82
Farm Cover: 659 kg DM/ha (172 kg DM/cow)
Growth Rate: 75 kg DM/ha/day
Demand: 68.5 kg DM/ha/day
Supplement: Concentrate 4.7 kg/cow/day
Average DIM: 118 (range 56-150)

Grass Supply:

AFC on 19th June was 659 kg DM/ha (range 180 to 1400 kg DM/ha). We will continue to measure twice a week to manage quality and allocations.
7 ha of second cut silage was cut on the out block last Friday, June 16th. We are grazing our 6th rotation on the MP and we topped 2 paddocks out of 13 on the 5th rotation.
In the year to date the MP has grown 6.61t DM/ha of grass, which is ahead of our accumulative growth (6.3t DM/ha) to the end of June 2016.

Feed Budget

31 cows are now being fed 3.5 kg of concentrate as they have reached 120 DIM, with 29 cows now receiving 6 kg of concentrates. This step down coincides with the passing of the most important period of the breeding season. Grass allowance has been increased to 18 kg DM per day to try and challenge the cows to eat as much grass DM as possible. Grass DMI last week was 16.7 kg, at 17.5% DM.

Fertiliser:

185kg/ha (151 units/acre) of nitrogen has been spread on the MP to date.

Milk Production:

Average production is currently 30.1 kg/cow for the week 12th to 19th June, at 4.10% fat and 3.39% protein (2.3 kg MS). SCC is 88,000. Fat, protein and SCC figures are based on milk recording results from the 7th June.

BCS:

The average BCS on 9th June was 3.0, with a range of 2.5 to 3.5. 88% of the herd was in the range 2.75 to 3.25.

Breeding Season 2017:

Breeding started on April 24th and will continue for 12 weeks. By the end of the 8th week of breeding, 98% of eligible cows have been served.
Cows were scanned 13th June, covering the first three weeks of breeding. 24 cows out of 50 that were eligible at MSD scanned pregnant (48%), meaning 40% of the total herd are now confirmed pregnant after three weeks of breeding.

TOP PRIZE ON OFFER FOR GRASSLAND FARMER OF THE YEAR

With 2017 designated the Year of Sustainable Grassland, and a proven link between increased grass utilisation and increased profitability (every extra tonne utilised is worth an extra €181/ha on dairy farms; €105/ha on drystock farms), the Department of Agriculture, Food & the Marine, in collaboration with numerous industry stakeholders, have recently launched a competition as part of the Grass10 initiative to find the Grassland Farmer of the Year. The Grass10 campaign aims to increase the quantity of grass utilised on livestock farms (dairy, beef and sheep), with the objective of achieving: 10 tons grass DM/ha/year utilised, with 10 grazings/paddock/year.

The competition has an impressive overall prize fund of **€30,000** up for grabs, with young farmer, regional and enterprise awards on offer, as per below:

- **Grassland Farmer of the Year** – Overall Competition Winner
- **Regional Award Winners** for Leinster, Munster and Connaught/Ulster
- **Enterprise Award Winners** in Dairy Beef and Sheep
- **Development Award Winner** (Young Farmer under 30 years)

Each category winners will receive a prize of **€4,000**, and the overall winner (who will be selected from one of the 7 categories) will receive an additional **€2,000** in prize money.

Application forms can be downloaded from **www.teagasc.ie/crops/grassland/grass10/** or can be requested from **Niamh.allen@teagasc.ie** or by phoning 025-42457.

Completed application forms should be submitted on or before **Wednesday July 5th 2017** to Grassland Farmer of the Year Competition c/o Niamh Allen, Teagasc, Moorepark, Fermoy, Co. Cork.

GRASS MATTERS

By JOHN MAHER
Dairy Specialist, Teagasc Moorepark

K is not OK

The capability of grass to grow starts below the surface. If the major elements of P and K are compromised – less grass will be grown. In fact, less grass will be grown when growth is really needed. Many farmers and the wider agricultural industry will argue that the levels of P (Phosphorus) allowance are restrictive. However, there are no legislative limits on the quantity (or timing) of K (Potassium) application. It is obvious from the table below where we are with soil K status. The vast majority of soils are index 1 or 2 for K and are therefore deficient in Potassium (k). Soils that are index 3 or 4 have adequate K that will not limit grass production.

County	% Soils that are Index 1 or 2	
	2016	2007
Cork	50%	38%
Limerick	62%	42%
Tipperary	54%	38%
Clare	55%	33%
Kerry	63%	47%

Soils at Index 1 or 2 for K will grow less grass. The table also indicates that the trend continues to deteriorate in soil K status over time. In fact, the two years previous to 2016 have shown an even further decline.

Every ton of grass DM/Ha eaten by the cow is worth an additional €180/Ha. Therefore fixing a deficiency in soil K would be worth well over €200/Ha additional profit. One bag of muriate of Potash (K)/acre (0-0-50) would do a lot to fix a soil deficiency in K and would cost less than €20 per 50kg bag.

What is causing Soil K Deficiency?

There are primarily 5 main reasons why the trends are moving in the wrong direction.

KEY POINT: Soils with low soil index for K will reduce grass DM production by about 1.5 ton DM/Ha or more.

1. Soil pH

About 65% of soils across the Dairygold region are deficient in lime. When soil pH is less than 5.5, the soil will fix (lock-up) more K i.e. less K will be available to the grass plant.

2. Milk output

The average dairy cow in the Dairygold region will remove 7-8kg of K in milk. At a stocking rate of 2.5 cows/ha (1 cow/acre), the amount of k removed is 20kg/ha (16 units k/acre). That is equivalent to about half a bag of muriate of Potash (K) per acre when meat & milk are added together. Obviously higher stocking rates will remove more K from the soil.

3. Silage output

Every bale of silage made (200 kg DM /bale) will remove 5kg of K/bale. So every 5 bales /acre made will also remove about half a bag of muriate of Potash (K) per acre. In theory, some of this should return in the form of slurry but often this theory is not practised.

4. Rain

Every 1000mm (40 inches) of rainfall removes 10kg K/ha naturally. Obviously if rainfall is higher, then more K will be removed from the soil.

5. Use of high N – low P & K compounds

Traditionally, products like 0-10-20/0-7-30 were spread at the back end of the year to boost soil fertility and replace the P & K that was removed. There was very good science (in terms of fixing soil deficiencies and boosting grass production) behind this strategy. There are now very many fertiliser products available that carry a low amount of P and K. These fertiliser products are suitable where maintenance of soil fertility is required. The problem now is that we need **build-up and maintenance** amounts of K to fix the industry wide problem of poor soil fertility.

Example Dairy Farm:

Let's take an example of an average dairy farm which produces about 5000 litres of milk/cow with an average farm stocking rate (2-2.5 cows/ha) and receives 1200mm (50 inches of rainfall) per year.

This farm will require about 30 units/ac of K (35kg K/ha) per year just to maintain the current soil status. This makes 3 very important assumptions. Firstly, that soil pH (lime requirement) is all above 5.5 pH and secondly, that all the slurry is redistributed evenly across the farm. Thirdly, it also assumes that soil index is good (Index 3 or 4) on the grazing ground and where the silage is made. Higher stocking rates will require higher levels of K application.

GRASS MATTERS

However, if this farm is at soil index 1 for K, the farm will require 75 units K/acre (or 1.5 bags or muriate of Potash/acre).

Levels of k (units per acre) required to fix soil deficiency at differing soil indexes (S.R 1 cow/acre or 2.5cows/Ha)

Soil Index	1	2	3
Level of K units/ac	75	52	28

Teagasc/Dairygold Demonstration and Focus Farm Performance

Milk Yield (L/Cow)	23.8
Fat %	3.99
Protein %	3.55
Milk Solids Yield (Kg MS/Cow)	1.85
Grass Growth Kg DM/Ha	79
Demand Kg DM/Ha	59
Average Farm Cover (Kg/Ha)	696
Cover/Cow (Kg/DM/Cow)	181

CHFC MATTERS

By IVOR BRYAN

CHFC Public Relations Officer

As the days get longer into the summer and the work load is hopefully reducing you might get some time to get out and enjoy some of our club events. For the month of July we are involved/ run the following events.

- Monday 10th July Cork Yma Calf Show @5pm in the West Cork Equine Centre, Garryndruig, Killbrittan
- Friday 14th July YMA field evening at The SEAVIEW herd of Denis & Claire White, Duneen, Clonakilty.
- Friday 21st July field evening at the KNOCKVALE herd of Tom & Alan Buttimer, Iyre, Clonakilty.
- 17th August Annual Club bbq and DAIRYGOLD PRE-CALVER GOLD CORK HERDS COMPETITION prize giving at The Vienna Woods Hotel.

Also some national events of interest might be :

- 6th July IHFA national open day at Victor Jackson's CROSSNACOLE Herd, Kiltegan , Co Wicklow
- 25th & 26th The National YMA Calf show finals.

To keep up to date on all these events and other club activities check out the club facebook page. We look forward to seeing you at these events.

DAIRYGOLD GRASSLAND SPECIALIST PROGRAMME DELIVERING RESULTS ON FARM

By SHANE COTTER Mob: 087 0671246
B.Agr.Sc, Dairygold Grassland Specialist

dairygold
Golden Valleys, Growing Naturally
AGRI DIVISION

Increasing grass utilisation by 1.0tn DM/ha/year is worth €180/ha to dairy farmers. Controlling a field with 20% docks can grow 2t/ha extra grass worth €360/ha.

Doxstar PRO
HERBICIDE

John Sweeney farms in Shanballymore, Mallow, Co. Cork. He is a progressive farmer who knows the importance of excellent quality grass in the grazing and silage system. John is a former Agricultural Science Association Environmental award winner and Dairygold Milk Quality Award Finalist.

John Sweeney and Dairygold Grassland Specialist Shane Cotter

John had a high infestation of docks in a number of fields this spring. John said "I estimated that I had roughly 30% of docks in many fields this spring, this is reducing the amount of quality silage and grazing's I can take from these fields". John has used Doxstar in previous years and commented that he was very happy with its strong long term kill. "Since spraying there are no visible docks in the field after two months. I'm going taking a cut of silage off of this field and it's of excellent quality with no weeds visible."

Dairygold Grassland Specialist Shane Cotter explains: "DoxstarPro was applied to this sward during excellent growing conditions while the docks were eight to ten inches across. The full rate of 2 Litres per hectare into 300 Litres per hectare of water was applied by John's contractor. Using higher water rates is crucial in controlling grassland weeds. Doxstar is an excellent product and is fast acting and has a short stock exclusion time of 7 days."

To conclude John summed it up that "you pay for what you get, I'm consistently happy with Doxstar and would have no problem to use it again. I get good long term control from the product every time I have used it."

Before Doxstar Pro

After Doxstar Pro

AGRI BUSINESS

DAIRYGOLD BUYING FOR SHAREHOLDERS & CUSTOMERS

Dairygold's board and management are constantly seeking opportunities to provide financial benefits for its members. The society is now leveraging its business relationships to source preferential offers for Members and account holders. You have recently received referral forms for both Insurance & Fuel Card offers.

The first step to avail of these offers is to sign and return your referral forms to our Inside Sales Team, Dairygold Agri Offices, West End, Mallow, Co. Cork (Telephone 022 31644). Copies of the referral forms are printed on page 19.

INSURANCE

Dairygold has reached an agreement with Zurich Insurance to offer preferential rates for farm, household and vehicle insurance to Dairygold customers. Zurich will provide very competitive quotes and will also offer a number of free insurance enhancements.

The formal launch date for this offer is the 1st of July 2017 and Zurich are now quoting Dairygold customers who have returned their insurance referral form.

Please note: Zurich will contact Dairygold customers based on their insurance renewal date, with July renewal dates being prioritised.

FUELS

Dairygold has also reached an agreement with TOP Oil allowing all Dairygold customers to apply for a Dairygold/TOP Oil fuel card. Fuel card holders can purchase fuels at very competitive prices from over 230 TOP Oil and DCI card service stations within the Dairygold catchment area. Statements are e-mailed to account holders at the end of each month and payment is made via direct debit from the card holders bank account on the 28th of the month following.

While fuel prices may change daily, all card holders will be charged the same price on any particular day at participating forecourts regardless of their advertised fuel prices. Members can also request quotations from TOP for farm/home delivery.

The daily fuel prices are available from:

www.agritrading.ie/Dairygold--Top-Oil-Fuel-Prices

TOP Oil are currently issuing fuel card application forms to accounts holders who have returned referral forms. If you have received but not returned your Dairygold/TOP Fuel Card Application Form, please return it to TOP immediately.
The launch date for the Dairygold/TOP Fuel Card is the 1st of July 2017. Fuel cards are issued to Dairygold customers once TOP have received & approved the application form.

DAIRYGOLD BUYING FOR SHAREHOLDERS & CUSTOMERS

CONGRATULATONS

Congratulations to Dermot O'Connell , who was the winner of the Dairygold/Zurich draw following the Farm Health & Safety event on 12th May in Cork Racecourse, Mallow.

Included in the photos are: Noel O'Sullivan, Agri Manager, Co-op Superstores, Mallow, Graham Minogue, Head of Broker Partnerships, Zurich, competition winner Dermot O'Connell and Joe Horgan, Dairygold Agri Business

Exclusive Farm Insurance Deal for Dairygold Members

As Ireland's fastest growing farm insurer, you can rely on our support for many years to come whilst enjoying the many exclusive benefits as a Dairygold member:

- Superior farm insurance with enhanced covers
- Preferential pricing
- Local farm insurance expertise through Zurich Direct or selected broker partners
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- Outstanding financial strength*
- Over 80 years' insurance expertise in Ireland

Not only that, you will also enjoy...+

All this backed up by Zurich's excellent claims service. For expert advice and preferential pricing, return your Zurich Insurance referral form to Dairygold.

Zurich Insurance plc is regulated by the Central Bank of Ireland. *Rated AA- by Standard & Poor's as at 15 June 2017. +National Ploughing Tickets are subject to availability. Zurich reserves the right to offer an alternative prize of equal or greater value. Voucher is available through Zurich Direct or selected broker partners. Offer is available on inception of policy and each subsequent renewal where offered. One €100 voucher per member, per year. Voucher cannot be used in conjunction with any other discount or offer. Minimum premium of €500 applies. Subject to standard underwriting criteria terms and conditions. Zurich retains the right to change the terms and conditions of this offer or withdraw the offer at any time.

FUEL CARD REFERRAL FORM

Name:	
Address:	
Dairygold Account Number/ Staff No.:	
Telephone Number – Landline:	
Mobile:	
Email Address:	
I hereby request and authorise Dairygold Co Operative Society Limited to confirm my relationship with the Society and forward my details to Top Oil.	
Signed:	
Date:	

ZURICH INSURANCE REFERRAL FORM

Name:	
Address:	
Dairygold Account Number/ Staff No.:	
Telephone Number – Landline:	
Mobile:	
Email Address:	
Insurance Policy Renewal Date:	
I hereby request and authorise Dairygold Co Operative Society Limited to confirm my relationship with the Society and forward my details to Zurich Insurance	
Signed:	
Date:	

FERTILITY & BREEDING

By DOREEN CORRIDAN
MVB MRCVS PhD, Munster Cattle Breeding

NOTE:

1st July mating is the 10th April 2018 calving

Short gestation sires 1st July mating is the 3rd April 2018 calving

KEY POINT: The next three weeks are key to reducing the number of empty cows at year end. Gain 1 week and 14kg milk solids per cow with short gestation sires. Ensure you retain 80% of the current herd for 2018.

1. Intensity of heat detection. Focus on those not yet confirmed pregnant.

Intensity of heat detection is crucial now. Very few cows are coming on heat so each cow will just have 10 mounts each. A vasectomised bull is invaluable at this stage. Scratch cards work well at this time of year.

2. Pregnancy Diagnosis.

Identify empty cows now. Pregnancy diagnose all cows now that have not repeated and are more than 30 days since the last service and are assumed pregnant. This is a hugely beneficial in identifying empty cows and giving them an opportunity of 1 or 2 services before the season ends. Even if you have bulls left off this is worth doing.

3. Short Gestation Sires.

The average beef bull has a gestation length of + 3 days. Very easy calving & short gestation AI sires are available that will reduce gestation length by 5 days. This will give you an extra 8 days in milk in early lactation adding 14-16 kg of milk solids worth approx. €80. Use these sires now.

4. Synchronization and fixed timed AI is working well on farms.

Late calving cows that are calved 35 days and cows that are identified empty can be synchronised. This programme was outlined in last month's Milk matters.

Synchronisation on the 1st of July means inseminating cows on the 11th July, repeats are due on the 31st July. This gives the opportunity of two mating's before the season ends, ensuring the cow will remain in the herd.

STOCK BULLS

1. Prior to releasing the stock bulls have your vet fertility test them. Secondly ensure that they are working. Watch out for young bulls especially.
2. Continue inseminating for the 1st fortnight after the bull is released, this will maximise fertility. It will also ensure you will avoid a lull in calving next April. It will give the bull time to adjust and familiarise himself to his new routine.
3. Continue inseminating until you have only a cow coming into heat every second day. At that stage, the bull will be able to cope very well.
4. If you have more than 1 bull rotating them every 24 hours and resting them will maximise fertility. This avoids bulls fighting and reduces the number of mating's each bull does therefore maximising fertility. Leaving all the bulls with the cows results in most cows being mated with 2 or more bulls and a reduction in the semen quality & quantity at each ejaculate.
5. If the bull goes lame or gets hurt remove him from the cows and treat him immediately. Do not be concerned about the administration of antibiotics or anti inflammatories drugs to the bull if prescribed by your vet. There is an old wife's tale that antibiotics and anti-inflammatories reduced fertility - this is incorrect, it is elevated temperature, pain and swelling that causes reduces fertility.
6. Young bulls need to be fed during the season to minimise weight loss to 50 kg. Bulls are hardworking animals and need energy for maintenance, growth and activity. The bull will not give himself time to eat as he will be continually following cows in heat and those coming into heat. 2- 4Kg of a beef ration is ideal, this can be given at each milking.

BEEF ON THE DAIRY HERD PROGRAMME

Partnerships between the dairy herd producers of calves and the finishers can be developed.

Munster has a specific beef on dairy breeding programme to address the needs of dairy herdowners. 2017 saw good beef calf prices add significantly to the income of dairy farmers.

Beef bulls for the dairy herd need to:

- Be easy calving,
- Have short gestation
- Have excellent quality calf with the correct colour markings.

FERTILITY & BREEDING

Easy calving and short gestation are key as we are using these bulls on our later calving cows who tend to be calving in a higher BCS. We also need to bring these cows forward in calving date and increase their days in milk. Difficult calving's ties up labour and reduce subsequent fertility. The average beef bull has a gestation length of + 3 days.

ULTI-MATE Beef Sires

Code	Name	Breed	Calv Diff %	Rel %	Breed Av. Calv Diff %	Gest days	Replacement Index (across breed stars)
KYA	CORNAMUCKLA LORD HARDY K222	AA	0.7	99	2.2	-4.6	✡✡✡✡✡
AA2123	CHRISTON ELTON P623	AA	1.6	92	2.2	-4.1	✡✡✡✡✡
RGZ	TUBRIDMORE GIZMO E.T. (ET)	AA	2.6	99	2.2	-1.0	✡✡✡✡✡
HE2043	SOLPOLL 1 KENTUCKY KID PP HYF	HE	3.4	98	3.95	-1.1	✡✡✡✡✡
HE2408	NETHERHALL 1 OZ DAFFY M040	HE	2.3	72	3.95	-0.3	✡✡✡✡
BB2083	RACHID DE REMICHAMPAGNE	BB	7.5	71	12.8	-1.0	✡✡

These sires are specifically selected for their exceptionally short gestation and high conception rate figures

KYA is the shortest available beef sire for dairy cows available at -5 days, his calves are very saleable despite his calving figure 0.7%. His progeny from the dairy are meeting the market specifications for the Angus scheme.

AA 2123 is -4 days in gestation with 0.6% calving difficulty, his first crop of calves was born this spring and were very saleable with a high satisfaction rating and they seem to be growthy.

RGZ is the sire for those finishing or carrying their cattle to the store stage, he is 2.6% calving, -1 day in gestation with excellent carcass confirmation and weight.

HE 2043 is the magic combination of calving ease, short gestation, polled and excellent calf quality. His calves are excellent sellers with tremendous thickness and shape.

HE2408 another polled sire had his first crop of calves born this spring, he is 2.3% calving and very saleable calves.

ZAG, a Limousin bull, is a superb bull to use on dairy cows to produce high index replacement heifers for suckler farmers in the BDGP scheme. These are likely to command a high premium.

Carcass market specifications for the Angus & Hereford schemes:

The challenge is to meet these market specifications with easy calving short gestation genetics.

Conformation	O= or greater
Fat score	2+ to 4=
Carcass weight	280 – 320 kg Minimum carcass weight for bonus scheme of 220 kg for a heifer and 230 kg for a steer Maximum carcass weight 380 kg for breed bonus

KEY POINT: This panel of sires are the best available worldwide for the dairy herd where you can have confidence in the extreme easy calving and short gestation and benefit from the exceptional calf quality and resulting calf price. Real money earners.

For your own stock bull or for any intended purchase check out his figures, go into **www.icbf.com** and you will see 'bull search' put in the tag number of your bull and press search, you will have available all his figures and their reliability.

Pregnancy Testing through your Milk Recording

Munster are offering a service through the milk recording whereby the samples can be tested for pregnancy once the cow is pregnant 30 days. This is a very convenient, cost effective service that is 95% accurate. You can decide which cows you need tested and inform your milk recorder. At the next recording, you can do a different batch as they become due. Now is a very effective time to pregnancy test these cows, as any that are empty will be identified and allow you to get two mating's into them prior to the season ending.

FERTILITY & BREEDING

Calf rearing 2018 - Plan Now

Replacement heifers are costing in the region of €1,500 to get them into the milking parlour. It takes an average of 1.65 lactations before she has paid for herself, then she begins to contribute to the bottom line. To maximise profitability we need to have a herd averaging 5.5 lactations.

Calf rearing is crucial to achieving these targets. Doubling the birth weight in the first 6 weeks of life enhances future production and fertility greatly.

Cryptosporidium - Prevention is better than cure.

Cryptosporidium has increased significantly in the last number of years, increased number of calving's in the calving shed and reduced immunity will predispose to this. It has a devastating impact on farmers affected as there is:-

- No Vaccine
- No Cure
- Significant calf rearing stress with extra care and feeding required
- Poor whole of life performance for affected animals

KEY POINT: July is the month to clean the calving and calf rearing pens to help ensure an uneventful calf rearing season in 2018.

Recommended procedure for cleaning calving and calf rearing pens and houses

Kenocox is a useful product to use as it is effective against both cryptosporidia and coccidia.

1. All dried faeces and other dirt should be removed from the walls, floors and gates of the pens. These cryptosporidium oocysts are protected somewhat from dehydration in dried faeces, so any faeces remaining from the previous year's calves needs to be removed.
2. All surfaces should be power washed and preferably steam cleaned to remove all dirt from within cracks and crevices on the walls and floors.
3. Then apply an effective disinfectant e.g. Kenocox. Kenocox is effective against cryptosporidium and coccidia, adhere to the safety guidelines.
4. Use the dilution rate and contact time to be effective against both cryptosporidium and coccidia. You need a dilution rate of 4% (1:25) and a contact time of two hours.Apply the formula with a foaming lance and apply 0.4 l of solution per meter square. Let the product dry.
5. A final rinse with water and allow to dry. This last point is critical to the control and prevention of cryptosporidium as desiccation or drying is important in inactivating the C. parvum oocysts. Opening the doors and taking out the gates and exposing them to air and sunlight is key to drying out the house.
6. Once dry the houses and pens should be left empty of livestock for at least 3 months.

Vaccinations

KEY POINT: If you are on **an IBR vaccination programme**, July is the month to review it.

The two main vaccines on the market are Rispoval IBR and Bovilis IBR both are marker vaccines, this allows us to differentiate between vaccinated and unvaccinated cattle and both have live and inactivated vaccines.

There are two programmes, either every 6 months with a live vaccine or an annual inactivated vaccine. Discuss with your vet the most appropriate for your farm.

Every 6 months live

This vaccine is suitable for herds with a high level of IBR in the herd, herds expanding or purchasing stock, large herds and contract rearing herds etc.

In this programme a live vaccination is administered every 6 months to all the animals on the farm intra muscular and for calves under three months of age administer the vaccine intra nasal. The ideal timing of this programme for spring calving dairy herds is January and July.

The reason for this is that the January vaccine is given a month just before calving, to give the maximum amount of antibody cover at the time when IBR is likely to be shedding the most and causing the most problems. It will boost the antibody in the cow herself and in the colostrum for the calf. Around calving is when cows are under the most stress, their immune system is compromised and are most likely to be shedding IBR, also at this time we have two vulnerable groups on the farm the young calves just born and the first calved heifers having just joined the herd.

If you are on this programme vaccinate all your animals this month –July.

Annual Inactivated

This vaccine is suitable for herds with a low level of IBR in the herd and herds that their only purchase is a stock bull tested negative and vaccinated.

In this programme an inactivated vaccine is administered annually once the animals have received a live vaccine within 6 months of the first annual inactivated vaccine. The ideal timing of the annual vaccine is January as explained above.

Each animal needs to initially receive a live vaccine within 6 months of the January inactivated vaccine. If you are already on this programme your young stock need to receive their live vaccine from now on.

You can get to know and monitor your IBR status with the Munster bulk milk screening. There are two different tests, if you are not vaccinating we do the gB test and if you are vaccinating we do the gE test.

SUSTAINABLE USE OF ANTHELMINTHIC'S

1. We need to control lungworm and stomach worms to avoid animals having growth and production setbacks.
2. We also need to develop immunity in the young animals for later life.
3. We need to avoid over reliance on antehelminthics and use grazing management practices and rotating different age groups in conjunction with antehelminthics to control the parasites.

KEY POINT: Calves are 1st season grazers and have no immunity to either lungworm or stomach worms. The bulling heifers are 2nd season grazers and have some immunity. The cows are 3rd season grazers + and should have developed immunity by correct practices being adapted in the 1st and 2nd season grazing.

We have 3 families of anthelminthic's

1. **Benzimadoles:** White drenches (Albex, Valbazen, Repridose bolus etc.)
2. **Levamisoles:** Yellow drenches or pour-ons (Levacide, Levafas diamond)
3. **Macrocyclic lactones:** Clear pour-ons/injections (Ivomec, dectomax, Eprinex, Mastermectin etc.)

We need to do out a plan for each group of animals. Now is a suitable time to talk to your vet to discuss your circumstances and formulate a plan for the season.

CALVES

Need a dose within 3 weeks of going out as they are usually in infected calf paddocks initially. Then we need to try and graze them in clean, safe pastures. Grass after a cut of silage being taken is clean pasture so we can extend the period between doses and wait for the calves to develop a cough prior to the next dose in order to develop immunity. Equally grazing the calves after the bulling heifers helps to clean the pastures, as bulling

CALVES

heifers are low risk and have developed some immunity since their 1st grazing season. Calves in a good nutritional plane and in good body condition will develop immunity easy and are less likely to succumb to parasites.

Best dosing practice:

1. Rotate the dosing products between the 3 different families avoid over reliance on one family.
2. Extend the period between the doses. Avoid dosing every time they are in the yard!
3. Administer the correct dose for the correct weight. Under dosing can lead to resistance. Avoid dosing calves in feed this leads to under dosing.
4. Let calves remain in the old pasture for 3 days after dosing prior to being moved to clean pastures.
5. Monitor dung samples for egg counts with your vet.

BULLING HEIFERS

One dose during the grazing season should be sufficient for this group.

Dose now at the end of June or early July.

If you used the Macrocyclic lactones last year, use a white or yellow drench this year.

BULLING HEIFERS

If you are in a heavily infected Liver Fluke area consider a Liver Fluke dose now as well. The bulk milk sample last Autumn is a good indication of the level of infection on the farm or else factory reports if you slaughter cattle. Either a Triclabendazole-Fasinex/Endofluke/ Tribex or if they are 6 months from calving you can use Trodax, both are extremely useful.
Adhere to withdrawl times carefully.

COWS

Cows should have their immunity developed. However, 1st calvers may not have their imunity fully developed. They may benefit from a dose at this time, also any thin 2nd calvers. Ensure it is zero withdrawl. In addition to the pourons there is now an injectable available Eprices, there is some evidence available to suggest that the injectable is superior to pourons especially for lungworm. Avoid under dosing. Avoid dosing the whole herd as this will increase resistance long term as well as costing money.

Less Mastitis = More Profit .... for all!

One of the key CellCheck messages to be presented at the upcoming Teagasc Moorepark Open Day, will be about the increased profitability that improving mastitis control and milk quality brings. Recent Teagasc analysis of the national bulk tank somatic cell count (SCC) database shows the magnitude of this financial return for the whole industry. The national bulk tank SCC database captures volume and SCC information for almost 95% of the milk supplied in Ireland, and currently contains three consecutive years of data, 2013-2015 (Fig 1). In 2015, 64% of milk supplied had an SCC <200,000 cells/mL. Looking in closer detail at the SCC distribution of all milk supplied in 2015, economic analysis shows that it was worth an extra €38 million to the dairy industry in increased milk value, when compared to the SCC distribution in 2013.

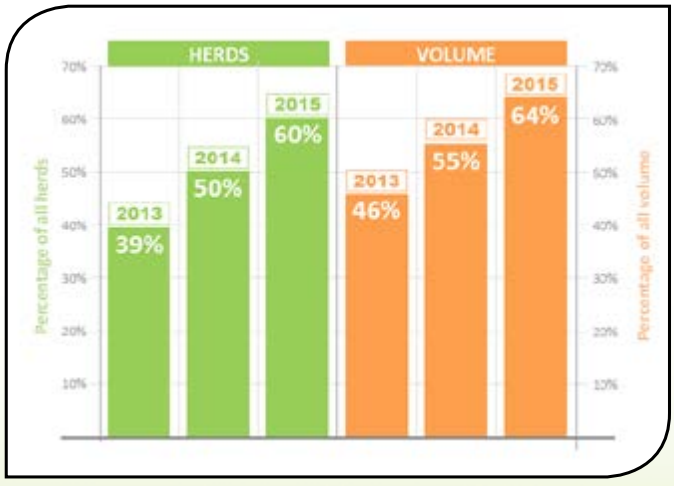


Figure 1. Proportion of herds and milk volume with SCC <200,000 cells/mL.

This extra milk value yielded gains of 3:1 to farmers and processors i.e. €27m to farmers and €11m to processors.

The increased value to farmers is mainly due to increased yields as a result of lower SCC. The financial benefits of a lower SCC should not be underestimated. For example, at a milk price of 30c/L if a 100-cow herd reduces its SCC from 350,000 cells/mL to 250,000 cells/mL, the farm would generate almost €4,000 extra profit. An additional €8,200 extra profit could be gained if the reduction was from 250,000 cells/mL to 150,000 cells/mL.

To see how much more profit you could earn with a lower herd SCC, use the CostCheck interactive calculator. CostCheck allows you to estimate the potential increase in profit from reducing the incidence of mastitis (both clinical cases and cows with high SCC) on your dairy farm, using your own data. The CostCheck calculator can be downloaded from the Animal Health Ireland website (**www.animalhealthireland.ie**) or the Teagasc website (**www.teagasc.ie**).

For practical information on reducing SCC to deliver extra farm profit, see CellCheck Farm Guidelines for Mastitis Control.

BETTER ANIMAL PERFORMANCE WITH ECOSYL

To maximise your farm profit you must maximise the amount of milk or meat produced from home-grown forage, be that grass or silage.

Across the winter grass silage will be responsible for:

- Weanling growth
- In-calf heifer growth
- Dry cow nutrition
- Early lactation milk production and BCS maintenance

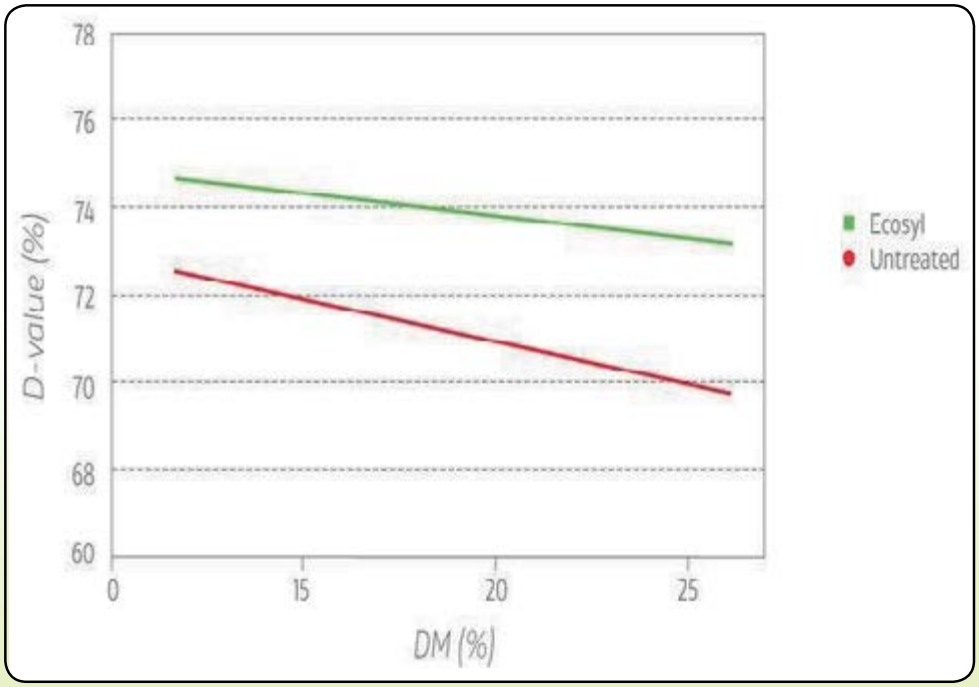
In order to preserve as much of the nutritional value of your grass as silage it is important that the fermentation is fast and efficient. In 200 trials over a wide range of crops and ensiling conditions Ecosyl has been shown to improve fermentation.

Better fermentation pattern at ensiling should:

1. Lead to a more palatable clamp with increased intake potential
2. Higher energy and better quality protein. The faster fermentation ensures the energy and protein are retained with the silage and are therefor available at feed out

Figure 1.

The only way to determine intake, digestibility and ME of silages accurately is by feeding them to animals and analysing everything in and out.



KEY POINT: Keady (2001) said that one unit increase in digestibility can be expected to increase DM intake by 1.5% which would lead to an extra 0.37 kg milk/cow/day or 28 g/day beef liveweight gain.

BETTER ANIMAL PERFORMANCE WITH ECOSYL

Feeding trials with Ecosyl treated silage have shown significant increases in:

- Silage DM intake of 5%,
- organic matter digestibility (OMD) of 3 'D' units
- ME of 5%

when compared to untreated silage

Table 1. Intake, digestibility and ME improvements from Ecosyl treatment

	Untreated	Ecosyl	No. of Trials
Silage DM intake (kg/day)	8.20	8.62*	34
OM dig (%DM)	71.3	74.0*	26
ME (MJ/kgDM)	10.6	11.2*	11

*statistically significant difference

Ecosyl has its biggest effect on organic matter digestibility with high DM grass of lower digestibility (Figs 1).

By using Ecosyl you could:

- Harvest your grass at the same time as usual and get and increased quality
- Harvest your grass later, increasing yield without suffering a quality loss

NITROGEN UTILISATION

Protein is lost from a clamp of silage when the grasses true protein is converted to ammonia. Higher levels of protein losses are suffered if the fermentation is poor. The faster silage fermentation with Ecosyl's means less protein loss and better animal performance.

In 30 trials, Ecosyl treatment has resulted in up to 42% (average 8%) higher true protein in the silage. Diets with a higher level of true protein are used more efficiently by the rumen microorganisms, resulting in increased nitrogen digestibility and retention.

Table 2. N digestibility and N retention improvements from Ecosyl treatment

	Untreated	Ecosyl	No. of Trials
N digestibility (g/kg)	671	695*	20
N retention (g/d)	31.1	37.9*	19

*statistically significant difference

An ongoing project at USDFRC (United States Dairy Forage Research Center) in Madison, USA, into the reasons behind improved production with Ecosyl has confirmed better N utilisation as shown by a significant reduction in milk urea N (Muck et al., 2011).

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