

MAINTAIN GRASS QUALITY across the main grazing season...

by using the best
grassland management practices

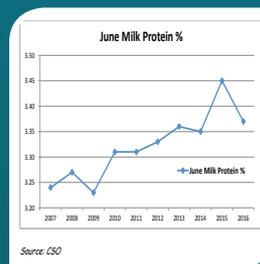
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PHOSPHORUS NUTRITION
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Welcome to the June edition of

MILK MATTERS

DAIRYGOLD'S DAIRY ADVISORY BULLETIN



During the month of June its vital that you maintain grass quality by adopting the best grassland management practices. Grass quality will be the main driver of production and fertility in your herd.



In this month's **Grass Matters**, John Maher discusses the importance of grass quality on milk protein %. While milk protein is on an upward plane our management of grass from year to year still has a big impact on it.

June the 1st breeding = march the 11th calving. With-in **Fertility and Breeding Matters**, Doreen discusses Oestrous Synchronisation and Fixed timed AI, whilst looking at how you can improve your heat detection with fewer numbers of cows bulling.

What are the best fertiliser options available to you for the rest of the growing season? That depends on your soil P & K indexes. Check out pages 15 to 18 for your summer fertiliser options.

Are your cows eating stones? What are the cause, implications and solutions to this. Have a look at pages 28-31 for a comprehensive review.

Yours Sincerely,

Liam Stack

Liam Stack M.Agr.Sc

RUMINANT TECHNICAL MANAGER,
DAIRYGOLD AGRIBUSINESS

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To contact the editor of

MILK MATTERS

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NUTRITION MATTERS

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



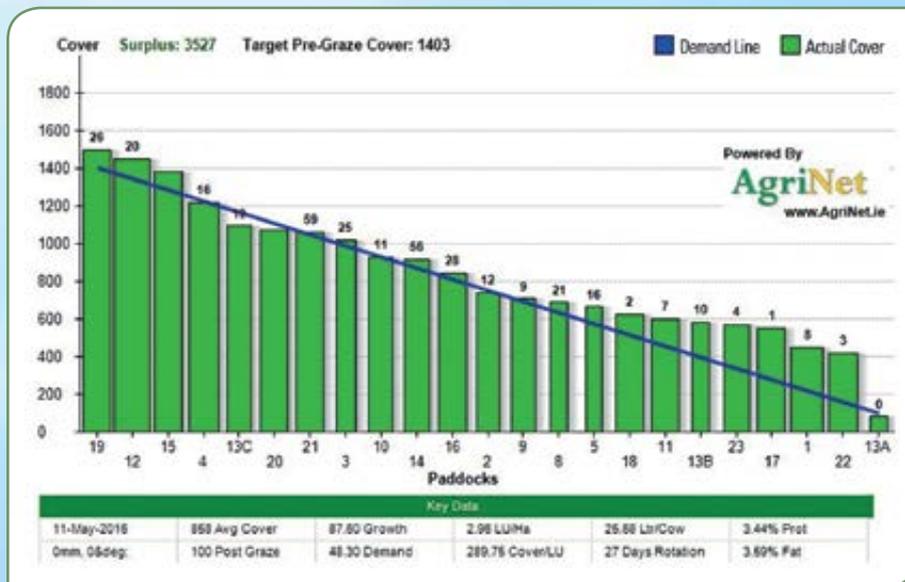
KEY POINT: From a nutritional stand point the most important and influential job you will do across the summer is to manage the quantity and quality of grass on your farm.

YOU SHOULD:

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 and down to 4cm

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 %s.

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.



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.

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

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.

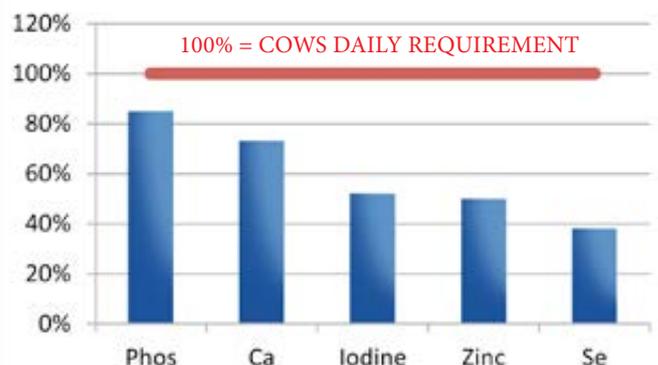


TRACE MINERAL REQUIREMENTS OF A DAIRY COW

	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



NUTRITION MATTERS

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.



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

Biotin Now Available In Post Calver Gold Range

Addition of Biotin to a dairy cow diet leads to:

1. Less lameness
2. An improved health status
3. Increased milk yield

**NOW AVAILABLE IN
POST CALVER GOLD**

innovation 

Lameness:

Poor fertility, mastitis and lameness are some of the biggest costs on dairy farms. Every lame cow costs you on between €280 - €300.

Published research has shown that feeding c.20mg Biotin per day had positive effects on:

- White line separation,
- Digital and Inter-digital Dermatitis,
- Healing of Sole Ulcer
- Lameness in Seasonally Calved Dairy Cows

Estimate Cost of a Single Case of Lameness

	€/Case
Treatment Cost	55
Loss of Production (c.500ltrs @0.15c/ltr margin)	75
Culling (10% of lameness = culling)	100
Reduced Fertility	50
	280-300

LESS LAMENESS

Biotin on milk yield:

Published research has shown that feeding c.20mg Biotin per day increased milk production by between 1.3-1.6 ltrs per day. These trials also reported higher intakes (c.0.87kg).



Colman Purcell, Dairygold nutritionist believes that the biggest responses are to be got in the most intensive feeding situations with the higher producing cows, but that a ROI is delivered with much lower responses.

Biotin on herd fertility:

Colman concluded that "it would be reasonable in my opinion to expect that any improvements in hoof health and locomotive score would have positive knock-on effects on fertility."

Please contact inside sales or your local ASM for more information.



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***

Supported by

Alltech®

Contact your Area Sales Manager,
Inside Sales or Lombardstown Mill
on 022 47275 to order. www.agritrading.ie





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 22-05-17

Farm Details:

Area available: 17.65 ha
Current Stocking Rate (MP): 3.4
Farm Cover: 733 kg /DM/Ha (215 kg DM/cow)
Growth rate: 110kg DM/ha per day
Demand: 58 kg DM/ha/day
Supplement: Concentrate 6 kg/cow/day
Average DIM: 90 (range 28-122)



Image © Zoe McKay

Grass Supply:

AFC on 22nd May was 733kg DM/ha (range 100 to 1400kg DM/ha). We began the 4th round over the weekend and we are allocating 17kg DM of grass and an average of 6kg of concentrates per day. Grass growth has doubled in the last week so surplus paddocks have been taken out for bales and they will be cut Wednesday. We are measuring twice a week to keep track of growth and control quality with another cover planned for Friday. We will also be spraying off 2ha (11%) of the MP this week for reseeding.

Grass grazed over the weekend was 19% DM.

Supplements:

As cows reach 120 DIM, concentrates are being reduced to 3.5 kg per day. Cows are being fed on average 6 kg (between 3.5 and 8 kgs) of a high energy, medium protein concentrate.

A recent trace element screen on pasture (17 paddocks), blood, urine and liver samples for the herd indicates that cows had adequate Iodine status as indicated by urinary Iodine analysis. The amount of Iodine fed at the time was 9 mg per day and herbage samples averaged 0.4 mg /kg DM Iodine (range 0.32 to 0.46). Other results indicate adequate Copper status despite quite high levels of herbage Molybdenum. Overall we are quite happy with this outcome. It appears that we can achieve adequate Iodine status with a low supplementation rate at Lyons.

Fertiliser:

154kg/ha (125 units/acre) of Nitrogen has been spread on the MP to date.

Milk Production:

Average production is currently 34.6 kg/cow, 3.97% fat, 3.42% protein (2.6 kg MS). SCC is 128,000, based on milk recording on the 10th of May. This has more than doubled from the previous recording due to one cow with clinical mastitis recording a SCC of 4.3 million.

BCS: The average BCS on 9th May was 2.9 with a range of 2.5 to 3.5. 88% of the herd were 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 3rd week of breeding 92% of the eligible cows (\geq 42 DIM at MSD) had been served. 5 cows have repeated by the end of the 4th week of breeding.

Breeding is all by A.I. and bulls to be used across the herd this year are as follows: FR2226, FR4020, FR2298, SEW, FR4019, FR4118, FR2426, FR2032, FR2339, FR2237, FR4021, YKZ and FR2040.

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. Consequently the management team has engaged a number of our product and service providers to investigate opportunities.

We can now confirm that agreements have been reached with two companies which will allow shareholders and customers to purchase insurance and fuels at very competitive prices.



INSURANCE

Dairygold has reached an agreement with Zurich Insurance to offer preferential rates to Dairygold Members and account holders. The offer relates to farm, household and vehicle insurance. Along with the commitment to provide a very competitive quote, Zurich will also offer a number of further enhancements available at no extra cost.

Information leaflets and referral forms will be available through the Area Sales Management team and at all Co-op Superstore locations.

If you are interested in availing of this opportunity, please complete the Zurich Insurance Referral Form and return it to Inside Sales Team, Dairygold Agri Offices, West End, Mallow, Co. Cork P51 R593

We encourage all Members and customers to request a Zurich quotation well in advance of the next renewal date.



TAKE A FRESH LOOK AT YOUR FARM INSURANCE.

Introducing Zurich Farm Insurance to Dairygold members.

FOR EXPERT ADVICE AND TO FIND OUT MORE COMPLETE AND RETURN YOUR DAIRYGOLD REFERRAL FORM.



**ZURICH INSURANCE.
FOR THOSE WHO TRULY LOVE THEIR BUSINESS.**



Zurich Insurance plc is regulated by the Central Bank of Ireland

FUELS

Dairygold has also reached an agreement with Top Oil allowing all Dairygold Members and customers to apply to receive a Dairygold/TOP Oil fuel card. This fuel card can be used in over 230 Top Oil and DCI card service stations within the Dairygold catchment area and many other stations nationally. The fuel card holder can purchase Diesel, Petrol and Sulphur Free Gas Oil at very competitive prices with all purchases being charged to the card holder's account. A statement is e-mailed to the account holder at the end of each month and payment is made via direct debit from the card holders bank account on the 26th of the month following.



While fuel prices may change on a daily basis, all card holders will be charged the same price on any particular day at all participating forecourts regardless of the forecourt's advertised fuel prices.



DAIRYGOLD BUYING FOR SHAREHOLDERS & CUSTOMERS

Other family members can also acquire a card for charging to the same account or they can have their own individual account. This fuel card allows all card holders to have a single record for all fuel purchases.

Members can also request a quotation from Top Oil for the farm or home delivery of Kerosene, Diesel and Sulphur Free Gas Oil.

Dairygold/Top Oil Fuel Card Referral Forms will be available from any member of the Dairygold Agri Sales Management team and at all Co-op Superstore locations.

You can also contact our Inside Sales Team at 022-31644 to request a referral form.

If you are interested in availing of this opportunity, please complete the Top Oil Fuel Card Referral Form and return it to Inside Sales Team, Dairygold Agri Offices, West End, Mallow, Co. Cork, P51 R593

Both of these agreements have been negotiated in order to provide preferential rates for our Members and account holders and should reduce your costs in both cases. In that regard we encourage you to make the effort to investigate these offers further. In our ongoing efforts to support our Members and loyal customers we will continue to investigate other opportunities and keep you updated of our progress.



Top Oil is delighted to partner with Dairygold in bringing you the **Top Oil / Dairygold Fuel Cards**

The Top Oil Fuel card can be used in over 200 locations nationwide which includes 6 Motorway Service Areas on the M1 & M4 motorways. Many of Top Oil's Fuel Card locations are strategically located on or near the main Motorway network routes and provide 24-hour access to fuels.

Top Oil Fuel Card locations are fleet, truck, van and HGV friendly. There are high speed pumps supplying diesel & unleaded products at these locations.

Our fuel card management team will provide you with detailed management reports on a monthly basis, which will help you make decisions to lower your fuel costs.

We offer superior customer service with a dedicated account manager and strive to always offer you the best fuel prices possible.

Benefits of Top Oil / Dairygold Fuel cards:

- Competitive price *
- Invoice and Receipts for good account management
- No need to tie money up in bulk diesel purchases
- No need for security for theft of road diesel
- Nationwide locations and access to national network

* Price may vary depending on the location. For further details, please contact a member of our fuel card sales team at fuelcard@top.ie



www.dairygold.ie



www.top.ie



CONTROL OF GUTWORMS IN WEANED CALVES AT GRASS

Gutworms

Weaned dairy or dairy cross calves and weaned suckler calves born last autumn are the group of cattle most at risk of gutworms at this time of the year. Clinically significant infections can be evident within a couple of months of turn-out, but calves can suffer subclinical losses even earlier. Parasite control plans may use strategic or 'wait and see' approaches to the use of anthelmintics to control gutworms. Spring born suckled calves generally do not require treatment for gutworms at this time of year, because their grass intake is low and additionally, milk has a protective effect against gutworms.

Dosing with anthelmintics generally will be required to control gutworms, particularly in weaned calves turned out onto high risk pasture (fields grazed by calves the previous year). The most commonly used practice is to treat calves within three weeks of turnout and repeat this at appropriate intervals (depending on the residual activity of the drug used) until mid-July.

An alternative approach, for weaned calves turned out onto 'safe' pastures (fields not grazed by cattle last year), is to weigh calves at turnout and monitor their daily live weight gain (DLWG) 6-8 weeks later and over the summer. An animal with a DLWG of less than 0.6 – 0.75kg per day indicates that gutworms are a problem (in the absence of other factors affecting performance) and treatment is required. A

An animal with DLWG of less than 0.6 - 0.75kg per day indicates that gutworms are a problem (in the absence of other factors affecting performance) and treatment is required.

pooled faecal sample can also be useful to confirm the presence or absence of gutworm eggs in the group. The second half of the grazing season is the main risk period for calves managed in this way and farmers must have effective monitoring in place to allow quick action to be taken, if necessary, or use group treatments from July onwards.

With both strategies calves should remain setstocked, or move to aftergrass when this becomes available.

Lungworm

Lungworm is generally not an issue early in the grazing season but it is important to remember that lungworm infection is unpredictable and all cattle at grass should be monitored for coughing.

Farmers should discuss strategic parasite control with their vet.





CELLCHECK FARMER WORKSHOPS *SIGN UP TODAY!*

Did you know that you could increase your net farm profit by at least 1 cent per litre by improving mastitis control? Learn how at a CellCheck Farmer Workshop.....

Participation in a CellCheck Farmer Workshop as part of the Dairy Knowledge Transfer programme is a great opportunity to help you to understand the causes of mastitis and highlight how making simple changes in your everyday milking routine and management can improve and maintain lower SCC levels in your herd.

Over 150 workshops have been delivered so far, and feedback has been very positive. Andrew McHugh, a dairy farmer from Brianstown, Co. Longford, previously attended a workshop and says that he would 'absolutely recommend this to others as the workshop contains lots of detail, and there is something for everyone to learn. It's the attention to detail that reduces mastitis on farm and helps increase profitability. There is no magic bullet for mastitis - it's about good, consistent practices in key management areas. CellCheck Farmer Workshops

are designed to work through all these areas and will make a difference to mastitis control, from the very next time you milk.'

One of the unique features of a CellCheck workshop is that it is delivered by a team consisting of a milking machine technician, a vet, a milk processor quality advisor and a farm advisor. For Andrew's discussion group 'the involvement of all the disciplines, like the machine technician and the vet, was something new.... and very beneficial'. The workshop is 2.5 hours in duration and is farm-based, with a mixture of classroom style learning, interactive and practical workstations, and group discussion. Group sizes are small to allow plenty of discussion and questions.

The next phase of workshop delivery as part of the Dairy KT programme will commence in June. Remember, CellCheck Farmer Workshops aren't limited to participants of the Dairy KT programme - they are relevant to all dairy farmers and milkers. Contact your nearest CellCheck Regional Coordinator for details of activities in your area.

NAME	AREA	EMAIL	MOBILE
Micheal Guinan (Aurivo)	Mayo / Sligo / Galway	micheal.guinan@aurivo.ie	086 3511852
Tom Downes (Lakelands Co-op)	Longford / Monaghan / Louth / Meath	downest@lakeland.ie	087 2564669
Brendan Dillon (Glanbia)	Cork / Waterford / Wexford / Wicklow	brdillon@glanbia.ie	087 2626851
Tom Starr (Arrabawn Co-op)	Limerick / Tipperary	tstarr@arrabawn.ie	087 6697010
Sean McCarthy (Kerry Agri-Business)	Kerry / Limerick	sean.mccarthy@kerry.ie	066 7163200
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2017 CHFC SUMMER EVENTS

By IVOR BRYAN
CHFC Public Relations Officer

COMING SOON SUMMER 2017

Our 2017 Post Calver Gold CHFC Herds Competition again kindly sponsored by Dairygold will be judged over the 2nd and 3rd weeks of June, with the prizes being presented at the clubs summer BBQ (date to be finalised).

There is a slightly changed format this year with a new spring calving section, hopefully reflecting that a majority of herds are spring calved, and to have them competing against similar herds.

- # 19th June the National Friesian open day will be held by Michael Spillane, Mountain Pure Friesians, Co Tipperary.
- # 27th June CHFC Field Evening at Henry O'Keeffe, Radney Herd, Freemount.
- # Club Tour 5-7th July Taking in the IHFA Open day and other activities for full details and booking. Contact Seamus Crowley on 0851689933.
- # IHFA National Open day at Victor Jacksons Crossnacole herd, Kilteagen, Co. Wicklow.
- # 10th July Cork YMA Calf show. Held at The West Cork Equestrian Center, Kilbrittian.
- # 26 -27th July National YMA Calf Show. Cillin Mart Kilkenny.
- # 21st October National Dairy Show, Millstreet.



We would like to congratulate the following Cork Breeders who won national titles in the recent weeks.

- Tim Kiely, Ballydaly, Millstreet, who was presented with the IHFA Award at the National Hall of Fame Awards Athlone.
- Robert Troys cow 'Springhaven Bidy EX92' who won the EBI RDS Champion of Champions award for 2017.
- Robert Shannon won the IHFA RDS Champion of Champions Award for his Ballydehob Herd.



To keep up to date with the latest happenings in the club please check out the clubs Facebook page.



AGRI BUSINESS

Summer Fertiliser Programme

DO I NEED TO SPREAD SULPHUR?



The Law of the Minimum

Liebig's Law of the minimum states that growth will be limited by the nutrient in scarcest supply – Don't let Sulphur be the cause of lost yield potential on your farm.



Sulphur

Sulphur is an essential nutrient for grass growth and is closely associated with Nitrogen uptake and efficiency.

Even with the right pH and the correct levels of N,P and K, S deficiency can lead to a reduction in the quantity and quality of grass grown.

Spending just €6/ha on Sulphur can prevent yield reductions of up to €100/ha. That's a return on investment of over 16:1.

THE ROLE OF SULPHUR:

INCREASE GRASS PROTEIN

Sulphur is essential for the formation on amino acids, the building blocks for proteins which are needed for growth and development in plants and animals.

Sulphur applications can increase protein content of grass silage by up to 22%.

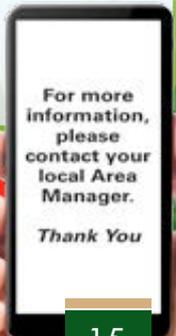
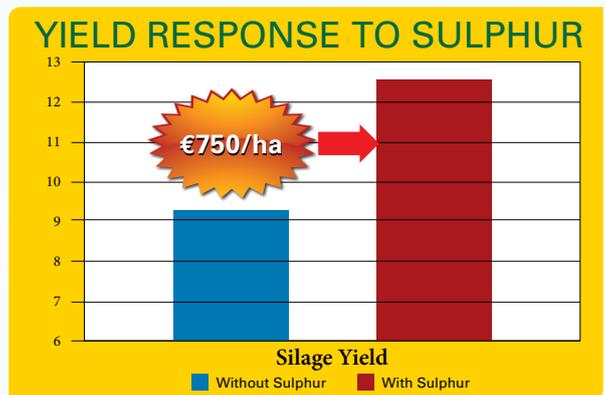
INCREASE GRASS SUGAR CONTENT

Sulphur applications have been **proven to increase grass sugars by 20%.**

INCREASE YIELD

Sulphur is required to convert Nitrogen to plant dry matter. As grass grows, both Sulphur and Nitrogen are used together. A sulphur deficiency will decrease nitrogen use efficiency and reduce yield.

Trials have shown that **spreading sulphur can increase grass yield by 2t/ha/yr (€500/ha) and silage yields by over 3t/ha/yr (€750/ha).**



Call your local Dairygold Area Manager or CO-OP Store today



WHEN SHOULD I SPREAD SULPHUR AND HOW MUCH SHOULD I USE?

The response to S fertiliser increases as the rate of N fertiliser increases.

- Apply 20 kg/ha (16 units/acre) per year for grazed swards on a little and often approach starting in early spring (3-5 units per round).
- For silage swards apply 20 kg/ha or 16 units/acre of S per cut.
- Avoid over application of S as it will trigger a Copper/Selenium deficiency in livestock.

SUMMER GRAZING PRODUCTS

Option 1: LOW SOIL FERTILITY



Pasture Boost:



- 28:2½:5
- + 5% Sulphur
- + 1% Magnesium
- + 3% Calcium

Pasture Boost is a balanced compound fertiliser specifically aimed at main grazing season grass growth for use instead of 27:2½:5

FEATURES:

- 28% Nitrogen – Pasture Boost contains 2 forms of Nitrogen, GEN and Ammonium. The ammonium is in a readily available form for the plant while the GEN is Urea coated with a urease and denitrification inhibitor so it can be used all throughout the season.

- 5% Sulphur – Sulphur is proven to increase grass yield and protein. Increases of 2t/ha and 3.3t/ha have been seen where Sulphur is applied to grazing and silage ground respectively.

APPLY: 1½ bags/ac of Pasture Boost after each grazing to supply adequate nutrients for maximum yield.

€500/ha

3 bags/ac -

Greengrow Pasture Boost

84 - 7½ - 15 - 15 S - 3 Mg - 9 Ca

Prolonged Release Nitrogen

Prolonged Release Sulphur

Available Magnesium and Calcium



3 bags/ac - 27-2½-5

81 - 7½ - 15

Unprotected Nitrogen

No Sulphur

No Available Magnesium and Calcium

Option 2: ADEQUATE SOIL P + K



Sweetgrass:

- 23% Nitrogen
- + 2% Sulphur
- + 5% Sodium
- + 1.2% Magnesium

Sweetgrass is a balanced Nitrogen fertiliser containing Sulphur, Sodium and Magnesium specifically aimed at main grazing season grass growth.

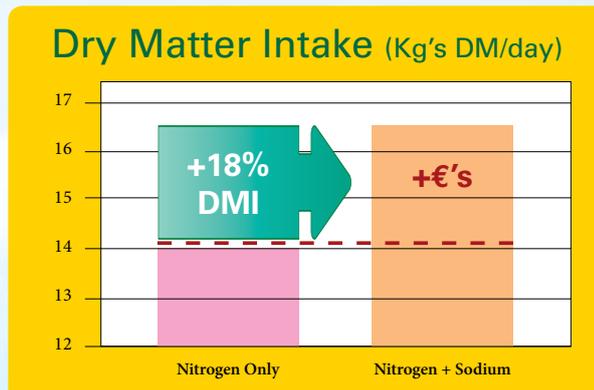
FEATURES:

- Sodium – Sodium increases the palatability of grazing grass – especially where slurry is being spread. Sweeter grass means tighter grazing and higher % grass utilization.
- Sulphur – Sweetgrass also contains sulphur to improve quantity and quality of grass grown.



BENEFITS:

- Keep topping to a minimum by grazing tighter - topping is labour intensive and delays pasture regrowth.
- Better regrowth grass – grazing tighter ensures more leaf and less stem in regrowth grass.
- Higher DMI (dry matter intakes) of cows. Higher DMI means more milk in the tank!
- Grazing tighter each rotation improves grass utilisation, one of the key determinants in the number of cows a farm can carry and ultimately farm profitability.



Application Rate: Apply Sweetgrass throughout the grazing season to ensure maximum benefit from Sulphur and Sodium is achieved.

€250/ha

Every extra tonne of DM that's utilized per hectare is worth **€250** – that's a saving of over **€8,000** for utilizing 1t/ha extra across the average Irish farm. Increase tonnes utilised by using Sweetgrass in your main grazing season fertiliser programme.





2ND CUT SILAGE PRODUCTS

Silage Boost:

- **21:2:10**
- **2% Sulphur**
- **AVAIL**

Silage Boost is a compound fertiliser specifically formulated for use on silage ground where high amounts of N, P, K and S are needed.

Product	Rate	Units N	Units P	Units K	Units S
24:2½:10	3 bags/ac	72	7.5	30	0
Silage Boost	3½ bags/ac	73.5	7	35	7



FEATURES:

- Silage Boost contains Avail Phosphorus Enhancer which prevents Phosphate from being locked up in the soil.
- Sulphur – Up to 20Kg/ha/cut of Sulphur should be applied to your silage crop.
- NPK formulation is adjusted to reflect soil analysis trends in the Dairygold catchment area.



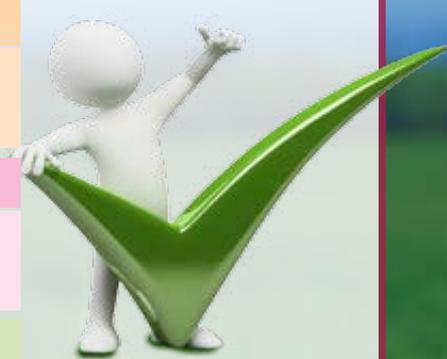
BENEFITS:

- Avail Phosphorus Enhancer has been proven to provide a yield response of up to 1.5t/ha. This is worth approximately €375/ha.
- Sulphur has been proven to increase silage yields by up to 3.3t DM/ha/yr. This has a value of €825/ha/year.
- Applying recommended rates supplies extra N, K, and S while also supplying protected P for a minimal cost.

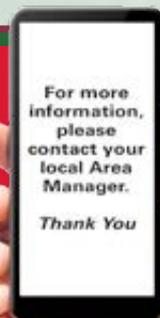
Apply: 3 - 3½ bags/ac of Silage Boost on silage ground to supply adequate nutrients for maximum yield.

CHOOSE YOUR 3 STAR FERTILISER ★★ ★

	PRODUCT		PRODUCT FEATURES
Low Soil Fertility	27:2½:5	★★★	N,P,K
	Pasture Boost	★★★★★	N,P,K Sulphur Trace Elements
Good Soil Fertility	CAN	★	Nitrogen
	Sweetgrass	★★★★★	Nitrogen Sulphur Sweetener (Na)
Silage Fertiliser	24:2½:10	★★★	N,P,K
	Silage Boost	★★★★★	N,P,K Sulphur Avail



Call your local Dairygold Area Manager or CO-OP Store today



For more information, please contact your local Area Manager.
Thank You

GRASS MATTERS

By JOHN MAHER
Dairy Specialist, Teagasc Moorepark

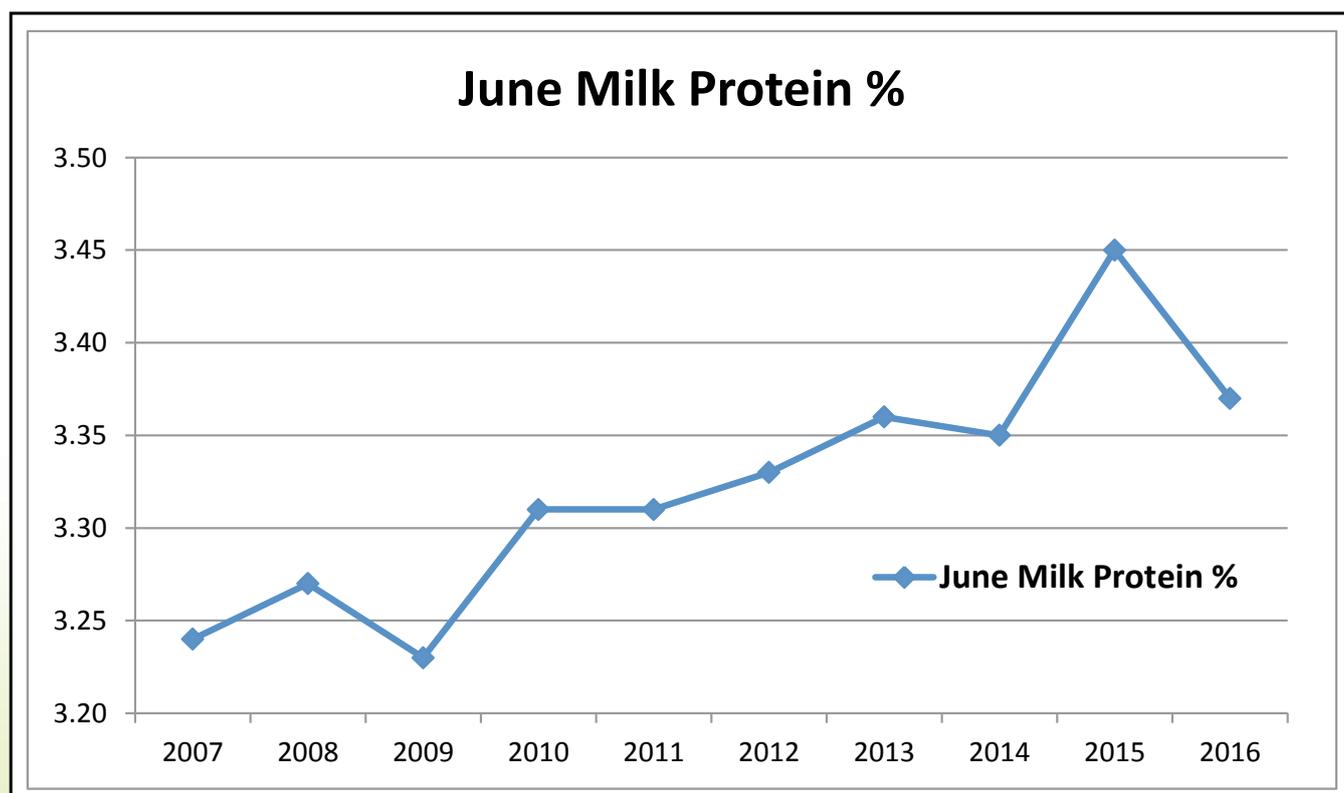


MILK PROTEIN IN JUNE IS ALL ABOUT GRASS QUALITY!!!

Grass quality can be poorer in June due to increased stem content. This will decrease the digestibility of the grass to be grazed. Grass stem is also difficult for the cows to digest. Therefore the energy intake of the cow will decrease and then cow performance will decrease.

It is natural for the plant to try to reproduce and go to seed. By default, stem content increases. However with the right approach to grazing management, grass can be kept leafy.

Milk protein production suffers the most when grass is stemmy. Often milk protein falls by 0.1-0.2% during mid-season months. This will result in a lower milk cheque. So we must aim to have the right grass ahead of the cows as much as possible.

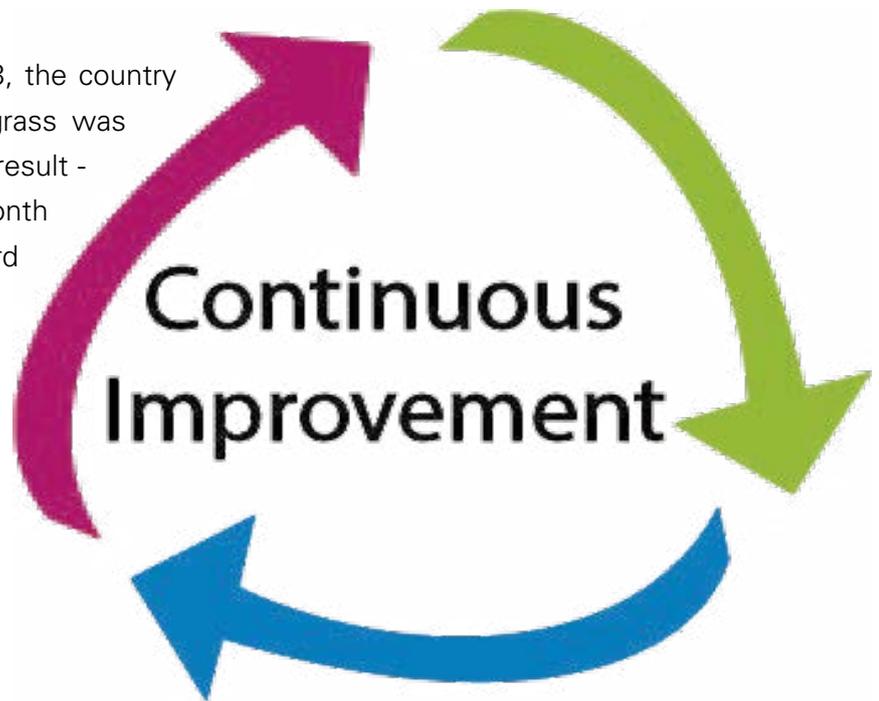


Source: CSO

Outlined in the table is the milk protein % in the month of June for the last 10 years from the CSO. The first trend that is obvious is that improvement in protein content is being achieved over time. However, the second trend is that variation occurs between years. In some years the milk protein content can be disappointing. Poor grass quality explains this.

GRASS MATTERS

To give an example, In April & May of 2013, the country was in famine for grass. Every blade of grass was eaten and pastures grazed to the floor. The result - The highest protein ever recorded in the month of June (up to that year) because the sward quality was excellent that month. So despite farmers struggling to feed their cows in the spring of that year, cows produced milk with very high protein contents in June 2013.



So keeping the

“RIGHT”

grass in front of the cows for grazing is critical to keep the performance of the herd high. For those who measure grass this is 1400 KgDM/Ha of leafy grass.

During the month of June, every farmer needs to identify the 2 – 3 (or more) paddocks that have poor quality grass and not graze them. They should be removed from the grazing rotation preferably as silage. Round bale silage is a preferable option than topping as topping wastes feed.

Remember you need cows to graze leafy grass (around 1,400kgDM/ha). Growth rates should average around 65-70kgDM/ha/day during June and this means you should have a grazing rotation of about 20 days. The aim is to keep a farm cover of around 160-180 kg DM/cow. Of course, using the grass wedge is also a very good guide to try to keep the right grass in front of the cows.

SULPHUR: NOT TOO LATE!!!

Sulphur deficiency arises mainly during the summer months but you need the “money in the bank” before the summer arrives. Every paddock needs about 15-20 units/acre of Sulphur applied to it by the end of June. Applying ASN (26%N & 14%S per 50kg bag) now at 1.5 bags/acre will meet your Sulphur requirement for the year. For those who apply a CAN + S type product, they would have needed to have started this strategy in early May to get enough Sulphur out by the end of June.



FERTILISER

Grazing ground requires about 20-30 units of N/ac. However, where 1st cut silage area is coming back into the grazing rotation, apply about 40 units N/ac. Slurry should be applied to the silage ground for 2nd cut silage. Every 1,000 gals of good quality slurry is almost equivalent to 1 bag of 0:7:30/ac. However, with most silage ground having poor soil fertility, some additional P and K will need to be applied to silage ground. Normally 80 units N/ac is required for 2nd cut silage.

SPREAD LIME & FIX THE P&K

Despite what most farmers think summer time is a good time to spread lime on silage ground. The

sward is clean after cutting so the lime won't stick to the grass plant. There will be no damage caused to the land as you are not trying to spread ground lime during the winter. Lime can be spread on paddocks that are cut out for round bale silage or pit silage. The contractors will apply lime 1.5 to 2 ton/acre on silage fields or paddocks taken out for bales. Sometimes this means a contractor will spread 6 ton on 3 acres. So flexibility is key here but lime gets applied. From a recent survey on lime application, farmers identified weather as the main barrier to lime application. This makes sense if you are trying to apply lime during the off season months. However, applying lime during the drier six months of the year is possible on cleaned off swards.

Remember that applying lime to soils to raise the pH above 6 will increase the availability of Phosphorus (P) and to a lesser extent Potassium (K). Compound fertilisers are not cheap (especially P) so lime application releases the P from the soil and will lower fertiliser costs!!!

Applying 2 bags/acre of 18-6-12 (or 2,000 – 3,000 gals/acre of slurry & 35 units N/ac) after the second cut is recommended to help soil fertility.

TEAGASC/DAIRYGOLD DEMONSTRATION & FOCUS FARM PERFORMANCE (18/5/17)

Milk Yield (l/cow)	27
Fat %	3.98
Protein %	3.50
MS Yield (kgMS/cow)	2.1
Grass Growth Kg DM/ha	70
Demand kg DM/ha	60
Average Farm Cover (kg/ha)	625
Cover/cow (kg DM/cow)	161
Meal (Kg/cow)	2.75





FERTILITY & BREEDING

By **DOREEN CORRIDAN**

MVB MRCVS PhD, Munster Cattle Breeding

NOTE:

June 1st mating is the 11th March calving - Short gestation sires will calve the 1st March



Reduce April calvers and empty cows. Cows bred in June calve in March.

February & March calved mature cows leave the most profit.

Target to calve 80% + of the milking herd of 2017 in Feb and Mar 2018.

WHY?

1. Mature cows 3rd lactation + calving in February & March is key
2. Longer lactations 280 days + result in highest Kgs sold
3. Reduced replacements required - cost saving

4. Max grass in diet leading to more profit
5. Less groups of even sized cattle on farms
6. Ease of management - Focus on 1 job at a time
7. Higher fertility performance in 2018 – As will have a longer interval calving to 1st service

ACT NOW?

1. Immediately synchronize & breed cows calved 35 days not bred.
2. Increase the intensity of heat detection.
3. Use the Dairy short gestation, easy calving and high fertility sire panel.
4. Use the Beef short gestation, easy calving and high fertility sire panel.

1. COWS CALVED 35 DAYS NOT BRED YET

Give cows an opportunity to remain in the herd for 2018 & calve in March 2018

Cows need to be in good body condition, clean and calved at least 35 days. This programme is excellent and works well with fixed timed AI. It gives these cows an opportunity of 2-3 services before the end of the breeding season if you act now- 15th June, 6th July & 27th July. Need to keep 80% of the current herd for 2018 to maximise profits.

The big advantage of this programme is that;

- Cows will get an opportunity of 2-3 services to get them into March calving
- Every cow treated gets bred in 10 days
- Repeats are together for ease of detection
- Non cycling cows will be got cycling
- Combine this programme with the short gestation & high fertility panel to gain a further 10 days
- Zero milk withdrawal
- 7:1 return on investment



FERTILITY & BREEDING

Date	Day	Protocol	Time
Mon 5th June	0	PRID or CIDR and GnRH (2.5ml Receptal)	AM
Mon 12th June	7	PG (e.g. 5ml Lutalyse or 2ml Estrumate)	AM
Tue 13th June	8	PRID or CIDR out	AM
Wed 14th June	9	GnRH (e.g. 2.5ml Receptal)	PM
Thur 15th June	10	AI all cows	AM-NOON
16th, 17th, 18th June watch carefully for late heats			

PRID, CIDR, GnRH (Receptal, Overelin), PG (Lutalyse, Estrumate, Enzaprost, Cyclix) are all POM medicines.

The second GnRH should be timed 36 hours after PRID, or CIDR removal and AI 18 hours after this injection. Note the PM injection on Wednesday. These AM & PM treatments can be done at milking times.

2. INCREASE THE INTENSITY OF HEAT DETECTION IN JUNE

Do not get lured into a false sense of security that all is well and I am having a great year!

Herds are now in the 2nd 3 week period of mating. Mounting activity is halved from the previous 3 weeks so intensity of detection needs to improve.

In a 100 cow herd in the 1st three week period each cow had on average 50 mountings in her heat period. This level of activity is now halved to 27 mounts in each period, as over 50% of the cows are pregnant and are not interested in mounting.

Herdowners are still expecting the same level of activity and may be lured into a false sense of security of 'all is well'.

Weeks Breeding	200 cow herd		100 cow herd	
	Cows in heat per day	Mounts per cow per day	Cows in heat per day	Mounts per cow per day
1st 3 Weeks	10	50+	5	50
2nd 3 Weeks	5	50	3	27
3rd 3 Weeks	3	27	1 to 2	11
4th 3 Weeks	1 to 2	11	1	10

Avoid a false sense of security. Work out the number of repeats per day you should be getting.

FERTILITY & BREEDING

After 3 Weeks Breeding 100 Cow Herd

Submission rate	Conception rate					
	50%		60%		70%	
	In calf	Not in Calf To pick up	In calf	Not in Calf To pick up	In calf	Not in Calf To pick up
70%	3	65	42	58	49	51
80%	40	60	48	52	56	44
90%	45	55	54	46	63	37

Depending on the submission and conception rate there is between 40 to 60 cows to be picked up in heat.

What can I do to increase the intensity of heat detection?

1. Synchronize all cows calved 35 days not bred and use fixed timed AI
2. Release Vasectomised bulls fitted with chin balls
3. Remove as much of the old tail paint as possible. Change the colour of tail paint and AI if the new colour is removed. Ignore the paint on cows that you could not remove as mounting will not remove it either.
4. Top up paint twice a week without layering it on
5. Change to crayons twice a week instead of tail paint
6. Change to scratch cards for the cows
7. Go out late evening after milking for a heat detection of 15-20 minutes



3. SHORT GESTATION, EASY CALVING & HIGH FERTILITY DAIRY SIRE PANEL 1st June mating is the 11th March calving with 283 days gestation - Pull this back to the 1st March calving with this Sire Panel

This is a superb choice for the 2nd & 3rd service onwards to compact down the calving period and get cows into lactation quickly.

This panel is designed with herd owners who wish to shorten the length of pregnancy in the late calvers and allow them to calve easy ensuring a quicker return to service. This panel will shorten the pregnancy up to 11 days.

All of this panel is less than 3% calving with the majority less than 2.5%, ease of calving increases fertility and production in the subsequent season.

This panel of sires have a proven track record of

achieving high conception rates.

Each day in lactation is worth 2Kgs of milk solids, with each 1 Kg of protein worth €6+ and each 1Kg of fat worth €3+, this is €9 per day in production alone, each week reduction is worth €63 per cow.

- Take 10 days off the pregnancy
- Add 20kg of milk solids
- Tighten the calving pattern 2018
- Allow you get some more replacements if needed
- Increase March calvers and reduce April calvers
- Avoid late calvers

Short Gestation, Easy Calving & High Fertility Dairy Sire Panel 2017

Code	iname	CAT	EBI	Prod SI	Fert SI	Health SI	Main SI	Milk	Solids	Fat %	Prot %	Calv Diff	Rel	Gestation Days
	Average		239	71	115	3	12	55	24	0.22	0.12	2.5%	99%	-5.4
FR2056	(IG) MODELIGO WHISPER	SRM	248	53	131	-2	13	43	21	0.22	0.08	2.4%	99%	-6.6
FR2032	(IG) OAKGLEN HARRY	PED	231	63	132	0	2	-148	23	0.43	0.17	3.0%	99%	-5.6
FR2239	(IG) DIAMOND ANTON	SRM	266	81	128	7	5	146	27	0.15	0.11	2.2%	98%	-5.6
FR2079	(IG) MODELIGO LUKE	SRM	223	92	80	-3	25	89	32	0.28	0.15	2.3%	99%	-5.2
YAB	(IG) BARTLEMY ANDREW	SRM	236	56	110	11	26	205	23	0.1	0.03	2.5%	99%	-4.8
LWR	(IG) LONGVIEW RELIABLE	PED	231	80	109	6	-2	-2	19	0.14	0.18	2.4%	99%	-4.5

4.

SHORT GESTATION, EASY CALVING BEEF SIRES FOR THE DAIRY HERD

If you have an adequate number of replacements secured, this panel will maximise your calf value and tighten the calving pattern.

Munster has a specific beef on dairy breeding programme for Angus, Hereford, Belgian Blue, Limousin and Simmental to address the needs of dairy herdowners.

A number of panels are available to fulfil your requirements. Get

the 'Beef Sires for the Dairy Herd 2017' brochure from your technician or go online

Munster's Beef on Dairy Sires-Panels for 2017

- Short Gestation Sires
- Beef Sires For Dairy Maiden Heifers
- Sires To Maximise Calf & Carcass Value
- Beef Sires To Produce Suckler Replacements From The Dairy Herd
- Beef Sires Suitable For Jersey Cross Cows

Short gestation, Easy calving Beef Sires for the Dairy Herd

Code	Name	Breed	Calv Diff %	Rel %	Gest days	Carcass wgt (Kgs)	Carcass conf	Replacement Index (across breed stars)	Comment
KYA	CORNAMUCKLA LORD HARDY K222	AA	0.7	99	-4.6	-1	0.45	★★★★★	Proven
AA2123	CHRISTON ELTON P623	AA	1.6	92	-4.1	9	0.55	★★★★★	Proven
HE2043	SOLPOLL 1 KENTUCKY KID PP HYF	HE	3.4	98	-1.1	-1	1.97	★★★★★	Proven, Homo-Polled
BB2083	RACHID DE REMICHAMPAGNE	BB	7.5	71	-1	14	0.16	★★	Full proof pending
RGZ	TUBRIDMORE GIZMO E.T. (ET)	AA	2.6	99	-1	8	0.36	★★★★★	Proven
AA2309	ST AODAIN L MASTER	AA	2.8	91	-0.7	3	0.58	★★★★	Full proof pending
BB2343	NEWPOLE HEARTTHROB	BB	9.7	76	-0.6	21	2.26	★	Full proof pending
KKO	DENDOR 1 KOHINOOR PP {HYF}	HE	4.9	99	-0.3	-5	0.42	★★★	Proven, Homo-Polled
HE2408	NETHERHALL 1 OZ DAFFY M040	HE	2.3	72	-0.3	4	0.39	★★★★	Proof Pending, Homo-Polled

The average beef sire gestation is + 3 days in gestation - Look at this impressive panel on gestation length.

FERTILITY & BREEDING

Munster's Beef on Dairy Programme focusses on the following traits to maximise value to the Dairy Herdowner.

Calving Ease

Difficult calving's and any interference at calving reduces subsequent fertility and production.

AA2025 & KYA have less than 1% calving difficulty at 99% reliability.

Short Gestation - Short Gestation Sire Panels.

Most beef sires are used in the 2nd and subsequent services, these March and April calving cows need a short gestation sire to get increase their days in milk.

Angus KYA & AA2123 are both over 7 days shorter than your average bull. HE2043 & BB2083 & RGZ are 4 days shorter than your average bull and will maximise calf value.

Calf Quality - Sires to maximise Calf and Carcass Value Panels.

HE2043 Hereford & RGZ Angus & DBZ Belgian Blue & ZAG Limousin will maximise calf price.

Polled.

Reduces the need for dehorning and any resultant setbacks. All the Herefords are polled except HE2407.

BDGP Scheme – Beef Sires to produce Suckler Replacements from the Dairy Herd.

Suckler herdowners in the BDGP scheme require 20% of their females to be 4 & 5 star for replacement value by October 2018 and 50% to be 4 & 5 star by October 2020.



Lm2117 and ZAG are the two Limousin sires and the Simmental sire SI2152 are ideal to produce suckler replacements from the dairy herd.

Partnerships between the dairy herd producers of calves and calf finishers can be developed to benefit both herdowners. The challenge is to meet the market specifications with easy calving and short gestation sires.

With the increasing number of beef calves from the dairy herd and the Angus & Hereford schemes, the Munster beef on dairy programme is focussed on identifying sires that will deliver calving ease & short gestation for the dairy herdowner and the required carcass trait specifications for the market.

The following are the carcass market specifications:

- Conformation of a minimum O = or greater
- Fat score of a 2+ to 4 =
- Carcass weight ideally 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

STOCK BULL MANAGEMENT

Bull Power

A ratio of 1:15 for young bulls and 1:20-25 for mature bulls is required. If you have not enough bull power and are finding it difficult to detect cows continue using AI after letting the bull out until the ratio is manageable.

For a young bull, you need less than 1 cow every second day on heat and for a mature bull less than 1 cow per day on heat- otherwise keep inseminating.

If you are using a bull in his first season the following is important:

- Fertility test to ensure semen quality
- Mate him to females a similar size or smaller than himself initially
- Feed him during the breeding season and prevent weight loss in excess of 50-80Kg
- Have a ratio of 1:15 empty females
- Monitor his performance - chin ball on bull or scratch cards on females.
- Lamé or injured bulls need to be rested and replaced

If you are using a bull in his second or subsequent season the following is important:

- What was last years conception rate
- Fertility test to ensure semen quality
- Ensure he is not lame, injured or has arthritis. Watch for a decrease of libido in older bulls.
- Have a ratio of 1:20-25 females
- If running multiple bulls rotate them between groups of cows for maximum performance
- In their 24 hour off period they need to be fed and rested away from females
- Monitor his performance - chin ball is useful here.



SCC

1. Avoid high SCC cows spreading infection in the herd

- Go through your problem cow report from milk recording
- Treat 1st calvers & cows that had low SCC last year
- If high last year and this year either dry off the infected quarter or cull them
- 1 quarter infected on otherwise normal udder, dry the infected quarter

2. Ensure you have fly repellent in teat spray

3. Put up a barrier to prevent cows lying on cubicles at milking times

Make your 'Farm Safety Pledge'

As we gear up for the summer holidays, Zurich and Dairygold have partnered to run a school's farm safety poster competition. Primary schools (5th and 6th class) pupils are being asked to make their 'Farm Safety Pledge' in the form of a colourful poster. Pupils must first choose a theme and design a farm safety poster based on the chosen theme. These include:

- Machinery – e.g. quad bikes; PTO; tractor buckets; trailers.
- Tractors – seat belts; passenger seats.
- Animals – cow/calf; bull; horse
- Farmyard – signage; hay shed; slurry pits.

Pupils must then make their safety pledge and incorporate it in the poster design.

"I am farm safe when I:

....."

Examples:

- keep back from a cow and her calf
- keep away from slurry
- don't climb on bales
- don't walk behind the horse
- don't play in the farmyard
- keep away from moving tractors

Entries

The closing date for entries is the 14th June. Include the theme of your poster, your name, age, class, school address, school phone number on your entry. Post your entry to:

My Farm Safety Pledge,
Dairygold Co-Operative Society Ltd.,
Clonmel Road, Mitchelstown,
Co. Cork.



Pictured at the Farm Safety Event in Mallow are Lauren Bolster, Scoil Eoin Naofa, Ballyclough, Alma Jordan, AgriKids, John O'Gorman, Vice Chairman Dairygold, Billy Cronin, Dairygold, John Maher, Teagasc, Declan O'Halloran, Zurich Insurance & Emma O'Connor, Scoil Eoin Naofa, Ballyclough.

Prizes:

1st Prize

- Individual - €250 & Trophy
- School - €1000 & Trophy

2nd Prize

- Individual - €150 & Trophy
- School - €700 & certificate

3rd Prize

- Individual - €100 & Trophy
- School - €300 & certificate

4th – 8th Prize

- Individual - €50 each

For Further information:

Email your questions to marketcomm@zurich.ie.

Conditions

- Competition is open to all Primary Schools 5th & 6th classes.
- Entries to state what theme the poster is following and to include the 'Farm Safety Pledge'.
- Winners will be announced 22nd June 2017.
- Judges decision is final.
- Only one entry will be accepted from each entrant in this

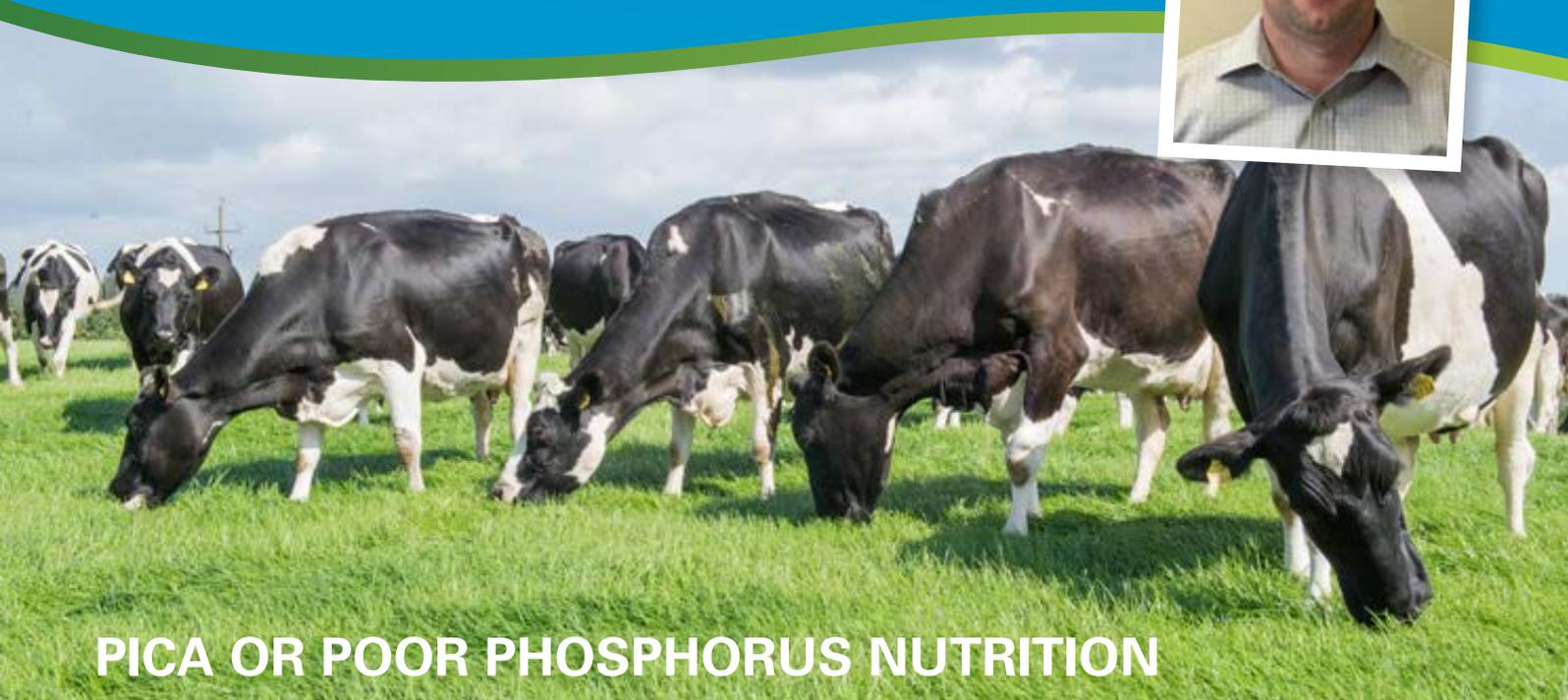
- All entries become the property of Dairygold and Zurich Insurance and entrants agree to allow Dairygold and Zurich Insurance to promote their work at a future date.
- Zurich Insurance plc is regulated by the Central Bank of Ireland.

Thank you to AgriKids for the use of their "Beware of the Bull" illustration from 'Tales from Riverside Farm'.

**Stay farm safe
this summer**

PICA OR POOR PHOSPHORUS NUTRITION

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



PICA OR POOR PHOSPHORUS NUTRITION

Cows eating stones, plastic, timber, scrub on the ditches.

There are good stores of phosphorus (P) within a dairy cow and the dairy cow has a good ability to recycle this when needed. A dairy cow can be in short supply for weeks provided that the body stores were "full" before the period of shortage. During these periods of shortage mobilisation from the stores helps to maintain normal P levels. If a period of plentiful supply of P follows a period of shortage, the stores are replenished again.

Why is phosphorus important?

Phosphorus plays an important role in the energy nutrition of a dairy cow. Low levels of P have been associated with poor fertility performance and low levels of production.

Daily phosphorus requirements:

	Total Requirements (grms/day)
DRY COW	25 - 30
MILKING COW	60 - 70

What could cause this problem?

1 Insufficient dietary phosphorus

- a. Grass + trace elements in the water or a trace element bolus

Grass P ranges between 0.2 – 0.45 % DM.

Trace element boluses or trace elements going through the water don't contain any P.

	Kg DM	P grms/Kg DM	Total P (grms/day)	% of daily requirement
Grass	17	2-4.5	34-76	
Trace Elements		0	0	
TOTAL			34-76	48-100%

PICA OR POOR PHOSPHORUS NUTRITION

b. Grass + a concentrate

Typical levels supplied in the diet

	Kg DM	P grms/Kg DM	Total P (grms/day)	% of daily requirement
Grass	16	2-4.5	32-72	
Concentrate	2	5	10	
TOTAL			42-82	60-100%

c. Grass + a straight + trace elements in the water or a trace element bolus

The level of phosphorus within raw material differs, with some straights having only 25% of the P compared to a finished feed.

	Pgms/Kg DM
Barley	4
Citrus	1.3
Soya Hulls	1.8

	Kg DM	Pgms/Kg DM	Total P (grms/day)	% of daily requirement
Grass	16	2-4.5	32-72	
Soya Hulls	2	1.8	3.6	
Trace Elements		0	0	
TOTAL			35-75	50-100%

How much P is your forage supplying?

Should you consider a mineral analysis?

2 Poor rumen function due to lush spring grass

The dairy cow has an ability to recycle 30 grms + of P daily within her saliva. Lush spring grass is low in effective fibre. This means the cow spends less time chewing her chud and generating saliva. Lower levels of saliva production means less recycled saliva to fill any potential gap left by the cows diet.

Are the incidences of pica on your farm coinciding with lush spring growth and perhaps even butterfat drops? Are the cows looking for a roughage source to chew on?

Diagnosing an issue?

1. Is there a history of P deficiency on your farm?
2. Blood test 8-10 animals
3. Soil P indexes. Soil P is dropping year on year. We now have a lower percentage of soils in index 3 and 4 for P than 5 years ago.

PICA OR POOR PHOSPHORUS NUTRITION

Is this affecting your grass P levels?



What can be done?

1. Consult your local Area Sales Manager, Branch Agri Lead or Inside Sales, to implement a specific plan for your farm
2. Take a sample of your pasture and analyse for minerals. Analysis of grass for minerals is complex as grass takes up minerals at differing rates depending on its maturity. You should be analyzing regrowth's at 5, 10, 14, 21 days.

This is still not a perfect science, as I've seen herds showing sign of pica with grass silage mineral analysis that are ok for P.

3. At all times try to maintain rumen function. As we've covered in previously articles this is easier said than done at grass. Profitable and sustainable farming systems are based around maximizing grass quality and quantity. Increasing grass quality and less effective dietary fibre come hand in hand. Cows are always going to struggle with rumen function when grass quality is at its best.

4. Feed additional dietary phosphorus. Dietary P is expensive. Additional P within the concentrate will increase the feed costs by c.5%. You should

look at the level of P in your base diet before incurring this cost.

Additional P can be added:

- through the water
- within your concentrate

Dairygold have a limited number of high P feeds on offer with up to twice the standard P levels. Consult your local Area Sales Manager, Branch Agri Lead or Inside Sales to implement a specific plan for your farm.

3-4 weeks of feeding additional P has been shown to solve the issue.

Every litre of milk contains c.1gm of P. As the lactation progresses the cows requirement for P drops. This drop in milk yield coincides with a natural drop in grass quality and better rumen function. Signs of pica on farm are often short lived but its still important to get them addressed.

Adding addition P to the diet will treat the symptoms but may not be solving the root cause of the problem. Work with your vet, advisor or nutritionist to put a farm specific plan in place



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