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Mik Matters SUPPORTING SUSTAINABLE FARMING

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ISSUE 114 - SEPTEMBER 2022

www.dairygoldagri.ie

Welcome to the September edition of MILK MATTERS DAIRYGOLD'S DAIRY ADVISORY BULLETIN

Dear Milk Matters Reader,

With our current high milk price, there is a lot of valuable milk yet to be produced in 2022. To maximise the revenue your cows will produce from here to year end we need to ensure we control their milk yield decline. Within this month's **Nutrition Matters**,



we explore how to manage our cows milk yield decline while building grass covers. Under feeding cows now and building grass covers at the expense of overall cow intakes leads to an accelerated milk yield decline and low milk lactose.

Karl Skehan introduces us to our improved pre-calver gold specification for the coming season and explains how this new specification can decrease the incidences of metabolic disorders on your farm.

In **Grass Matters**, John Maher will discuss the importance of keeping grass in spring calved cows diet as long as possible. He also discusses which fertiliser we should be using right now.

While Daniel O'Sullivan looks at maximising the feed value of maize silage through correct harvesting.

Yours Sincerely,

Liam Stack

Liam Stack M.Agr.Sc RUMINANT TECHNICAL MANAGER, DAIRYGOLD AGRIBUSINESS

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THE YEAR TO DATE

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

Year to Date (up to week 32, 2022)

















NUTRITION MATTERS

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

Year to date our average cow has produced c.4000 Itrs of milk. There is a lot of valuable milk yet to flow. With a 3 % weekly decline from here to drying (based on 65c/ltr milk value) our average cow will produce €1080 worth of milk. With a 1.5 % weekly decline from here to drying (based on 65c/ltr milk value) our average cow will produce €1215 worth of milk. That's €13,500 additional milk revenue from here to drying off by maintaining milk volume as high as possibly for as long as possible.

Milk Revenue from the average cow from here to drying off from a controlled yield decline vs an accelerated yield decline:

	€
Controlled	1215
Accelerated	1080

KEY POINT: For the next month we need to feed our cows adequately, maintaining yield and holding milk protein % as high as possible for as long as possible while building grass covers.

To maintain production, intake must be maximized; grass quality must be maintained and a balanced amount of concentrates must be fed.

How do we maximise milk yield and milk protein from here to year end?

- Maximise your cows' intakes of good quality grass across the autumn by spreading fertiliser now to build a wedge of grass to carry you through, see William Burchills article on pages 19-20 for fertiliser advice
- Maintain cow intake at all time. Your cow will eat grass and concentrates and may require silage depending on your growth rates and your stocking rates. Concentrates are better to maintain production as they contain more energy on a kilo

basis than grass silage (it is energy or UFLs not where they come from that drives production). 4kg DM of concentrates contain c.4 UFL, 4 kgs DM of grass silage depending on quality may contain 2.8-3.2 UFLs. But a kilo of grass silage is better than a kilo of air. Ensure your cows are fully fed every day.

Building grass across the month of September

Grass Growth in August was poor, a lot of farms now find themselves behind target for grass as we start the month of September. We need to build grass covers now before growth slows in mid to late September. If your farm is behind target more concentrates will be needed to allow you to build this cover of grass.

Grass Growth needed to meet demand (0 cover built)

Stocking rate	2.5	3	3.5	4
Feeding 3kg in the parlour	36	43	50	58
Feeding 6kg in the parlour	30	36	41	47

Concentrate Feeding Required to be on target for grass on the 1st October base on current grass levels

Predicted Grass growth September		45	
1st Sept cover = On Target			
Stocking rate	2.5	3	3.5
Concentrate Feeding Required to be on target for grass by 1st October	2.5	4.5	7

Predicted Grass growth September		45	
1st Sept cover = 100kg ahead of Target			
Stocking rate	2.5	3	3.5
Concentrate Feeding Required to be on target for grass by 1st October	1.5	3.5	6

Predicted Grass growth September		45	
1st Sept cover = 100kg behind Target			
Stocking rate	2.5	3	3.5
Concentrate Feeding Required to be on target	3.5	5.5	8
for grass by 1st October			

Economics of concentrate feeding Autumn 2022:

In late lactation 1kg of concentrates can generate 1kg of extra milk. With concentrates costing $c. \leq 450-500/T$ and milk valued at up to 65c/ltr (including higher solids value), every 1kg or 45-50c spend on concentrates is going to return c.65c worth of milk.

A 90-cow herd feeding an additional 1 kg of concentrates will return €450-600 per month after the concentrate cost. Feeding 2 additional kgs will return €900-1200 per month after the concentrate cost. Feeding concentrates must be done responsibly and in balance with grass growth and demand.

Maintain milk lactose

Milk lactose is affected by stage of lactation and energy nutrition. Every effort must be taken to keep lactose percentages as high as possible now to prevent milk price deductions and forced early drying off.

Lactose levels of less than 4.45% affect your monthly balance score card, if your lactose levels are less than 4.2% it will affect both your balance score card and monthly base price.

Reasons for low lactose - Low energy intake:

Autumn grass is generally lower in DM, sugar and UFL than summer grass. As we move into the autumn more concentrates are required for the same level of production as is required by summer grass. Higher levels of concentrate feeding alone is no guarantee of high levels of energy intake or milk lactose %. Higher levels of concentrates must come in conjunction with an overall higher daily intake.

For example:

Farmer B below is feeding 2kg more concentrates to his cows than Farmer A but he is allocating 4kg DM less grass daily. His cows total daily intake is 15% lower (15.4kg DM daily vs 13.2 kg DM daily) and energy intake is 12% lower (14.6 UFL vs 12.9 UFL) than farmer A. Farmer B despite feeding more concentrates will have a lower lactose.

Reason = over estimating grass allocation to his cows

	Farmer A	Farmer B
Grass Allowance (kgDM)	12	8
Concentrate feeding (kg Fresh)	4	6
Overall intake	15.4	13.2
UFL intake	14.6	12.9

What to do if lactose is low

As with all milk constituents your bulk tank is the best place to assess your cow's diet. If your lactose is lower than it should be or falling faster than it should be you need to allocate more feed (total) to your cows.

If farmer B above allocates 2kg DM more grass to his cows his lactose will improve.

If farmer B is heavily stocked and cannot afford to allocate more grass to his cows, he can either:

- a. feed the 6 kg of concentrates + an additional 2kg of extra concentrates to his cows
- b. feed the 6 kg of concentrates and add an additional
 3kg DM grass silage (1 bale per 75 cows per day)
 to his cows.





NEW PRE-CALVER GOLD SPECIFICATION FOR THE COMING SEASON

By KARL SKEHAN, B.Agr.Sc, Area Sales Manager, Mob: 085 8001089

Over the past number of seasons, we have seen a growing number of milk fevers at farm level. Milk fever is a gateway disorder. Cows that suffer from milk fever are at multiple times greater risk of suffering from retained cleansing, displaced abomasum, mastitis etc.

For example, a cow that has a milk fever is 3 times more likely to have a retained afterbirth and 8 times more likely to get mastitis.

Times more likely with Clinical or Sub-clinical Milk Fever

To control milk fever at farm level we need to feed our cows high levels of magnesium and vitamin D while controlling cow body condition score (fat cows are 4 times more likely to suffer from milk fever than cows in the correct body condition score). To date, to overcome issues we have been advising a top up of 10 grams of magnesium before calving.



For the coming season we will increase the level of magnesium as standard within our pre-calver gold range from 31 grams per day to 40 grams per day, while also increasing our vitamin A, D and E levels. This should eliminate the need to top up with magnesium, decrease the incidences of milk fever, retained cleansings and mastitis while improving colostrum

quality and SCC levels.

If you're buying your dry cow minerals now be cautious and ensure that your mineral is of a high enough specification to minimise metabolic disorders on your farm.

Mineral Feeding Pre-Calving

The objectives of a Dry Cow Management Program are for the cow to calve:

- In an optimum calcium status, this is a function of the silage mineral status and the level mineral of Magnesium and Vitamin D3 in the pre-calving mineral level.
- 2. With reduced metabolic disorders, this is influenced by the mineral Magnesium, Iodine, Selenium and Vitamin E & A levels.
- 3. In an optimum immune status, this is influenced by the mineral, Vitamins and trace elements (Selenium and Vitamins A & E).
 - 4. Producing high quality colostrum; this is influenced by mineral and vitamin supplementation.



Have you had an issue with Metabolic Disorders on your farm ?

In a recent survey of 155 Irish Farms, a dramatic decrease was shown in the incidences of metabolic disorders following the use of the correct Pre-calver mineral. This can give annual savings of up to €810 per farm.





AGRI BUSINESS

If you would like free independent advice from a highly experienced team of qualified advisors, simply let us know in Branch or by contacting your local Dairygold representative.

Inside Sales	022-31644
Michael Kenny	087-0671246
Des Twomey	087-3457063
Kieran Creed	086-1728335
Daniel O'Sullivan	086-2461648
Edmund Curtin	086-2441369
Ivan Vallence	086-7930237
Diarmuid O' Riordan	086-2461821
Karl Skehan	085-8001089
Sean Ryan	086-2461639
Michael Smith	086-2470403
John Vallence	087-6308417
Alan Coughlan	087-1027124
Alan Ryan	086-2621952



HARVEST IS ONE-SHOT OPPORTUNITY TO LOCK 'GOODNESS' INTO MAIZE SILAGE

By DANIEL O'SULLIVAN

The decisions made at harvest can have a huge impact on how much of this energy is preserved in the silage. Typical 15% of maize silage dry matter that is ensiled is lost but this can be much higher. The most obvious loss occurs when maize silage heats up, caused by yeasts and moulds 'feeding on' the silage in the presence of air.

How to get a good preservation in your clamp:

- The starting point for good preservation is to harvest maize at the correct time and in the correct way. You should harvest when the whole plant is at 30-33% dry matter and chop it to 1.5 - 2cm lengths. Higher dry matters and longer chop lengths make it more difficult to squeeze the air out of the crop in the clamp, this encourages heating. Late harvested crops will be of higher dry matter, making them more difficult to consolidate.
- 2. Use an appropriate additive, that not only controls heating but also improves fermentation. The greener the maize the more help it needs with the fermentation, while the drier the maize the more help it needs with yeats and moulds.
- 3. Take time to consolidate the crop thoroughly and seal it fully not only to starve spoilage organisms of oxygen but also to aid the fermentation.
- 4. Cover the pit adequately

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Understanding the nitrogen reserves within your soil



Nitrogen within the soils comes as organic and mineral. Organic N makes up 98% of the total nitrogen and is unavailable to crops. Microbes, in the soil through a process of mineralization convert organic nitrogen to mineral nitrogen, making it available to your crops. The more biologically healthy your soil is the better your microbes are working. Maintaining a good soil structure, organic matter content and soil pH will provide the best living conditions for microbes.

Dairygolds Analytical Services Laboratory in Lombardstown, has developed a test that can determine the amount of total and labile or potentially available nitrogen contained within your soils while also measuring the microbial activity and C:N ratio within your soils. This innovative analysis can then combine these 4 pieces of data to give a scale of the expected actual nitrogen release. Annually, labile nitrogen is converted to available Nitrogen by microbial activity. To maximise the effectiveness of this process requires a favourable C:N ratio, high soil biological activity, high labile nitrogen content and favourable climatic conditions.

Results to date from our bioSCAN tests in Lombardstown Analytical Services Laboratory show that there is on average 5100kg of total N in every hectare of soils. Of that 5100kg, on average 639kg is potentially available annually.

Of that 639kg, it is expected that between 50-220 kg of N becomes available each year, depending on the microbial activity within your soil. There is a big range in microbial activity, the higher the tested valued the better, however we had some soil with very low results, these soils will struggle to turn the potential nitrogen release into actual nitrogen release.

50

		Range		
Total N		1600-11000		
Labile or Potentially available N		165-1270		
Microbial activity*	156			55-297
	Good Microbial Conditions	Average Microbial Conditions	Poor Microbial Conditions	

220

bioSCAN results to date:

For microbial activity a value of <100 is poor, 101-275 is average and >276 is good.

Turn Knowledge into Action:

Available N (kg N/Ha)

Once you know your soils status you need to build a fertiliser program to promote overall soil biological health. This program should prescribe the best use of organic manures and lime, while encompassing new innovative technologies that work to stimulate the life contained within your soil.

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If you want to know more about soil biology and how it interacted with nitrogen release, if you want to establish your soils nitrogen levels and biological status, please or if you want to build a fertiliser program that is designed to improve overall soil biological health please contact your local Area Sales Manager or our inside sales team on 022-31644





AGRI BUSINESS

As it stands, 79% of soils are outside optimum soil fertility levels yet hold the potential to grow more grass. This growth boost and soil health opportunity is achievable for all farmers through this targeted and measurable GreenGrow programme... just one part of the agri evolution that we are leading as part of our commitment to support the farmers we serve.

Seamus O'Mahony, Head of Commercial Dairygold Agri Business



L to R Seamus O'Mahony, Head of Commercial Dairygold Agri Business, William McCullagh, Dairy farmer, Dripsey, Liam Stack, Ruminant Technical Manager at the launch of the GREENGROW Soil Health Programme

WHAT IS GREENGROW?

Dairygold has always had a part to play with its members in providing innovative ways to balance efficient & profitable livestock and crop production with consumer needs.

As the food supply chain faces continual pressure to reduce its environmental footprint, Dairygold Agri Business remains committed and ideally placed to help our farmers tackle the challenges ahead. This includes the need to reduce nitrogen usage by 20% as outlined with the EU Green Deal to deliver on agri sustainability goals.

Farmers need to ensure soil performance and retain their profitability levels while delivering

HOW DOES IT WORK?

Through timely soil sampling and a customised plan for lime, slurry and chemical fertiliser, the scheme aims to improve soil chemical and biological health, and ultimately maximise nitrogen use efficiency. The net results of the GreenGrow programme is that your soil will release a greater amount of their stored nitrogen and phosphorus, allowing you to grow more grass efficiently, reduce your dependence on chemical fertiliser and increase your nitrogen use efficiency. carbon reduction. Dairygold has invested in innovative soil science and technology that deliver soil health solutions.

We are proud to launch GreenGrow, our Soil Health programme which combines bespoke research with our in house, accredited laboratory, to provide decision support through our advisory sales team. This advice is customised to the soil in your fields.

The programme has been developed in direct response to the need to reduce carbon footprint across all European farms through reduced nitrogen use, increased carbon sequestration, and improved soil performance.

THE RESULTS

For a spend of less than €1 per acre per year you can establish the chemical and biological health of your soil, design and implement a fertiliser program that feeds your soil to maximise its background nitrogen and phosphorus release, growing an additional 0.85Tn DM of grass per ha. For the average Dairygold supplier, this annual €1/ acre spend could potentially yield €50/acre* of extra grass.

* Expected Return is based on increasing soil P index from 1 to 3 and increasing soil biological health by 10% with grass valued at €80/T DM. Actual return may be higher or lower, depending on a farm's individual circumstances.

BENEFITS

- Targeted application of lime to correct and maintain soil pH
- Targeted timely application of slurry to maximise its effective use
- Bespoke fertiliser plan on a fieldby-field basis
- Bespoke fertiliser plan to correct and maintain soil chemical and biological health
- Maximising the release of your soils stored nitrogen and phosphorus, reducing your need for chemical fertiliser
- Allowing your farm to grow more grass with the same chemical fertiliser use or to grow the same amount of grass with a lower fertiliser application
- Improving your farms carbon footprint, increasing sustainability and nitrogen use efficiency

To join the Programme, please contact your local Area Sales Manager or Inside Sales

022-31644 agriinfo@dairygold.ie





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FARMER PROFILE: John Hannon, Kiltemplan, Clarina, Co. Limerick.

John and Catherine Hannon are milking cows with assistance from their family and outside help near Clarina, Co. Limerick. The Hannon's are always on the lookout for labour saving ideas and have adopted many of the lean principles on their farm in the past number of years.





Air Gates (Photo 1) which can be opened or closed from any place in the pit greatly increase the efficiency of the milking routine as it allows them to place all their focus on the cows. Autodrafter reduces stress on milker, the cow and is a safer way to draft cows for AI, treating lameness and dealing with other health issues. The installation of a drafting gate (Photo 2) has reduced the time and labour around segregating cows. There is a big reduction in animal stress during drafting with the elimination of human intervention.

The hose magnetic holder ensures the wash down hose is close to hand and prevents trip hazards (Photo 3).

John erected a multi-purpose backing gate (Photo 4) 20 years ago. This has been a massive laboursaving investment





on the farm as it serves two main purposes. The yard can be cleaned when the backing gate is moving in either a forward or reverse direction and cows can be coaxed closer to the parlour increasing cow flow.

Milk and calf carts used in the Spring (Photo 5).

The Hannon's have a *Kilkenny Spinner* which is used to a wash the 50 teat mobile calf feeder. This can be connected to a hose which makes washing easier (Photo 6). This



is very beneficial for gut health of the newborn calves especially when they are born with no immune system and are susceptible to bacterial infections.



"A" frame attached to tractors to provide fast and safe attachment of most of the implements on the farm (Photo 7). Reusable ONE glove (Photo 8) mittens speeds up the time associated with cleaning clusters after each milking.

John Hannon's view on the main BENEFITS of Leanfarm

"Dairy farming can be challenging; lean helps to make it a little better."



Making farms safer and more sustainable. Saving farmers time, money and effort.

Benefits delivered to the Hannon Farm

- Improved Labour Efficiency.
- Increased Organisation.
- Less Waste.

Questions on Leanfarm?

Contact the Milk Advisory Helpdesk on 1800-840-840 or John's Milk Advisor Raymond Ryan on 087 -1151453.

DAIRYGOLD ANNUAL MILK QUALITY AWARDS

The Regional Finalists and Runners up for the 2021 Dairygold Milk Quality Awards were announced in May in Springfort Hall. Once again, the candidates on show were of an extremely high standard in what is a major demonstration of the outstanding achievements and consistency of producing the highest quality milk by Dairygold suppliers. Over the course of our September and October editions of Milk Matters we will profile the candidates in each region and showcase their dedication to excellence.

Overall Winner and Limerick Regional Winner Gearoid and Sarah Maher, Killuragh, Cappamore, Co. Limerick.

Gearoid Maher from Killuragh Cappamore Co Limerick farms in partnership with his wife Sarah where he milks 80 Pedigree Friesian cows. Gearoid was merited as the overall winner of the Dairygold milk quality awards and will represent Dairygold in the upcoming NDC competition.

The herd produced 500 kgs of milk solids per cow in 2021 with average

Somatic Cell Count (SCC) of 118 and Total Bacterial Count (TBC) of 9. Attention to detail was vividly seen in all aspects of the farm business.

The Mahers place a significant focus on sustainability through nitrogen reduction on the platform, the use of selective dry cow therapy and abstaining from pesticide applications in the last 2 years. The Maher's also adopt adopting agroforestry practices within the holding.

Sustainability Winner and Limerick Finalist Liam and Geraldine Herlihy, Kingsland, Bruree, Kilmallock, Co. Limerick.

Liam and Geraldine Herlihy from Granagh Co Limerick farm alongside their son James. Pride and satisfaction in the job was very evident within this holding. They milk 70 pedigree Holstein Friesian cows with a dairy calf to beef system whilst purchasing all replacements.

The herd produced 485 kgs milk solids per cow in 2021 with average Somatic Cell Count (SCC) of 154 and Total Bacterial Count (TBC) of 8.

The Herlilys were one of the Dairygold ambassadors and pilot farms for the Leanfarm programme when it was first launched and continue to utilise its principles and ideas on a daily basis. The Herlihys are focusing greatly on soil quality and preserving water, clover inclusion and water harvesting protocols in place.

Limerick Finalist Anthony McCormack, Mooghaun, Newmarket on Fergus, Co. Clare.

Anthony McCormack from Newmarket-on-Fergus, Co Clare milks 110 Freisan cows with his farm help Michael. The herd produced 515 kgs milk solids per cow in 2021 with average Somatic Cell Count (SCC) of 147 and Total Bacterial Count (TBC) of 5.

Labour efficiency and excellent stock management techniques really stood out on the day. A consistent routine for each task carried out was in place and followed to a tee. Anthony's main aim is to achieve a profit whilst maintaining environmental sustainability.

Adequate stocking rate and reduced reliance on imported feed are the key measures along with the incorporation of biodiversity measures for wildlife.

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Second Overall and Mid Cork Regional Winner Janes and Orla Hurley, Dromfeigh, Ballineen, Co. Cork.

James, along with his wife Orla, milk 116 predominately Holstein Friesian cows on a 31.35 hectare milking platform.

The herd produced 740,000 litres of milk and 563 kgs milk solids per cow. In a bid to farm as sustainably as possible, James has put a huge emphasis on growing grass on the farm where over 14 tonne per hectare was grown in

2021. This was carried out amidst significant reclaiming done on the farm over many years.

James also prioritises breeding and has all of his cows fitted with sense hub collars and genotyped to ensure that replacements are bred from only the best cows.

Along with the excellent milk solids and fertility performance, the judges were really impressed with the maintenance and quality of the hedgerows on the farm. There has been a significant focus on clover for the last four years. James uses LESS whereby a contractor uses the dribble bar thus reducing the amount of chemical nitrogen being used on the farm.

Mid Cork Regional Finalist Sean, John and Eileen O'Leary, Kilbarry, Macroom, Co. Cork.

Sean O'Leary along with his parents John and Eileen milk 60 cows with a herd EBI of \in 148 on an 80 acre milking platform, at Kilbarry Macroom Co Cork.

Sean's herd produced over 350,000 litres in 2021 and 464 kgs milk solids per cow. Extensive land reclamation was carried out over the years to get the farm to where it is today. Some reseeding is done every year, where clover is also incorporated into the sward.

The judges were very impressed with how other sustainable farming techniques have been adopted such as use of protected urea and use of

sexed semen on the heifers. The O'Leary's also adopt LESS practice through the use of the dribble bar.

A new 14 unit Gascoigne parlour equipped with ACR's and a cluster cleanse system was installed 3 years ago and has made a significant difference in terms of the time spent in the parlour. These changes have also combined to facilitate for more regular and streamlined process when milk recording. The O'Learys are able to maintain their SCC at a very low level, where the average for 2021 was a very impressive 55,000.

Mid Cork Regional Finalist John Keane, Coolmakee West, Farnanes, Co. Limerick

John Keane milks 85 cows with a herd EBI of \leq 158 on 42 HA in Farnanes Co Cork. In 2021 the herd produced 599 kgs milk solids per cow. The parlour is a 16-unit GEA. John has all the cows fitted with heat detection collars which are a massive help during the breeding season and have reduced the workload significantly.

The judges were very impressed with other sustainable measures which John has adopted such as use of LESS and use of protected urea. They were especially impressed at how well John has established clover in his pastures. The adoption of clover is something which John has researched extensively over the years and now sees its benefits in reducing his chemical nitrogen usage.







Third Overall and Mallow Regional Winner Conor and Eileen Murphy, Killeen, Aghabullogue, Co. Cork.

Conor and Eileen Murphy were third overall and Mallow regional winners of the Dairygold Milk Quality Awards 2021. Conor milks 100 cows and produced 550 kgs milk solids per cow in 2021. Conor operates a unique system where he selects his cows with the highest genetic merit and these are inseminated to sexed semen. The rest of Conor's cows are submitted to Angus and a mop up Angus bull is then used. Conor has various out blocks and this is where he rears his replacements and beef cattle.



Conor is a participant in the ABP Advantage Beef Programme where he rears all the Angus calves to slaughter and gets a breed bonus for Angus cattle.

Conor is highly active when it comes to measuring grass and walks the farm once a week at a minimum with his Teagasc Advisor so he can optimise grass utilisation. Conor also recently installed heat and rumination collars so as to further improve animal health and conception rates especially with sexed semen being used so much.

Mallow Regional Finalist Shane O'Donoghue, Tullig, Millstreet, Co. Cork.

Shane O'Donoghue and his wife Noreen milk 105 cows in Tullig, Millstreet off a milking platform of 48 hectares with a total land base of 87 hectares. All dairy beef calves are kept on the farm up to 12 months of age, all replacement heifers are calved down and surplus stock sold each year. Milk quality is paramount on farm with 2021 TBC's averaging 4, average SCC being 105 all being produced from a herd with an EBI of \in 143.

In 2021, Shane produced 511 kgs milk solids per cow while feeding 1 tonne of meal. With increased focus on producing milk in a low-cost manner a big emphasis has been put on maximising the amount of grass grown on the farm with LESS in the form of injection adopted on farm.

Biodiversity and sustainability are very high on Shane's list of priorities. He recently sacrificed an acre of land near a stream and planted it with a butterfly and bee seed mix as a way of promoting insect life along the river side.



Mallow Regional Finalist Michael Moynihan, c/o Blossomfort Farm, Blossomfort, Ballyclough, Mallow, Co. Cork.

The Moynihan's were also finalists in the Mallow region of the Dairygold Milk Quality Awards 2021. Michael farms with his wife Mary Clare and 3 sons Aaron Cormac and Luke. In 2021, the Moynihan's 110 cows produced 511 kgS milk solids per cow.

A big focus on the Moynihan's farm is a right first-time approach to Somatic Cell Count. This is clearly evident on the farm and through the milk results with SCC consistently under 120 with TBC's also achieving premium standard every month.



Grass is a big focus on the Moynihan farm with Michael sometimes splitting the herd up so as to achieve the correct grazing residual. Michael places a huge emphasis on post grazing residuals. This ensures grass quality is maintained throughout the grazing season.

Dairygold Biodiversity Tree Project



In partnership Trees on the Land with.....

Dairygold have AGAIN partnered with Trees-on-the-Land to supply 50,000 Native Broadleaf Trees FREE to Dairygold Milk and Tillage Suppliers this autumn!

Last year the Biodiversity Tree Project was successfully launched and saw over forty thousand trees being quickly taken up by Dairygold suppliers. This year's program will offer 50, 000 trees, completely free to any active milk and tillage suppliers to plant on their farm.

Any Dairygold Milk and Tillage supplier who wishes to receive free trees to plant on their farm, simply needs to complete an online application form. All eligible suppliers will receive a text message with a link to this online application form over the coming weeks!

"We recognize the role that we must play in protecting and enhancing nature and biodiversity. We are delighted to build on the success of last year's programme and partner again with Trees on the Land to provide 50,000 native Irish trees sourced from native Irish seed" Orlaith Tynan, Head of Environment and Sustainability, Dairygold

"We are delighted to be working with Dairygold again to offer packs of native Irish trees to Dairygold Milk and Tillage Suppliers. The project was such a success last year and we look forward to packing up more trees for Dairygold suppliers this winter." Imogen Rabone, Trees on the Land

Terms & Conditions:

- Minimum of 25 trees and Maximum of 100 trees allowed per milk or tillage supplier.
- Trees packs available in 25, 50 and 100 trees.
- Trees will be delivered to the Dairygold branch of your choice between Dec 2022- End of January 2023.
- · Trees must be collected within a week of delivery to the branch. (A text will inform you of their delivery)
- · The trees must be planted on your own land and Dairygold staff may visit to check their progress
- Trees must be fenced from livestock (a single line electric fence will be adequate on a dairy only livestock farm).
- · Participants must provide consent to allow Dairygold to include the planted trees in future biodiversity initiatives. (Map area and mark on map anonymously to showcase biodiversity initiatives).
- Tree numbers are limited and suppliers will receive trees on a first-come-first-serve basis.
- Closing date for application is 30th September 2022.

Benefits of Planting Trees



- Improve Soil Quality





The trees are small forestry grade whips between 40cm and 60cm tall and sometimes a little larger being one or two years old. They are very tough and hardy at this size and tend to settle in and take off far more quickly than a larger tree even if they look like tiny twigs when first planted

Photo above shows an oak tree planted in it's first year.

Tree packs available:

The trees are all native Irish trees, grown from Irish provenance seed in Irish nurseries. The trees are available in five different pack types and consist of species mixes suitable for 1. Woodland 2. Shelterbelts 3. Hedgerows 4. Sheltered Parklands and 5. Water Quality.

Woodland Packs:

Suitable for establishing small areas or pockets of woodland or coppice. 50 trees will cover approximately 1/20th of an acre set at 2m x 2m spacings. Packs will include an appropriate mix of oak, birch, hazel, scots pine, alder, rowan and hawthorn

Hedge Packs:

Suitable for planting a new length of hedge or for filling gaps in an old hedge. 50 trees will set 10 meters of hedgerow with 5 plants per meter on a staggered row. Packs will include an appropriate mix of hawthorn, hazel, oak, birch and rowan with blackthorn included if supplies permit.

Shelter Belt Packs:

Suitable for establishing rows and strips of shelter belt trees. One pack of 50 trees will make approximately 50 meters of shelter belt with trees set at 2-meter intervals in two staggered rows 2 meters apart. Packs will include an appropriate mix of alder, birch, hazel, oak, rowan, hawthorn and scots pine.

Scattered Parkland Tree Packs:

Suitable for setting individual trees or small groups of trees onto pasture in a parkland or wood-pasture style. Trees can be widely spaced at random or with at least 15-20 metres between trees. Packs will include an appropriate mix of oak, birch, alder, hawthorn and scots pine. You may specify which species you would like on the application form in the special requirements box.

Water Quality Packs:

Suitable for setting small numbers of individual trees or scattered groups of trees close to ditches, drains and watercourses to protect ground from poaching and to interrupt excess surface water and nutrients. Trees should be set so that there is an even balance of light and shade along waterways. Packs will include an appropriate mix of alder, birch, hawthorn and rowan

Once you complete your application form online, you will receive an email from a member of the Trees on the Lanteam confirming your successful application. Once the tree are delivered to your Dairygold Branch of choice, you will receive a text message informing you of their arrival

For further information or if you have any queries, please follow this link:

<u>https://www.treesontheland.com/dairygold-introduction-page</u> or email info@treesontheland.com



Above: Liam O 'Doherty planting his free trees last year along a gappy earthen bank on his farm Below: Trees planted between a road and a fence



"We often tend to think of trees as meaning forestry, with large areas of trees planted in a dense block and the land lost from agriculture forever. But there are many places to plant trees that don't have anything to do with forestry and which can provide daily benefits throughout the farming year without impacting on productive acreage.

(Imogen Rabone, Trees on the Land)"



Farm Sustainability Advisor

For queries on Farm Sustainability please contact Ciara Donovan on 086 793 0863 or email cdonovan@dairygold.ie

FERTILISER PRIORITIES FOR THE AUTUMN

By WILLIAM BURCHILL, PhD., Teagasc/Dairygold Joint Programme

Final N fertilizer application of the year

The aim of the final N fertilizer application of the year is boost grass growth in order to build grass covers for the Autumn. Many farmers are completing their final blanket spread of N in the last week of August/ first week of September compared to waiting unit the deadline day of the 14th September. By doing this they are taking advantage of the superior growth rates now compared to mid-September and getting a greater return from the final blanket spread of N fertilizer. Recent Teagasc trials clearly demonstrates that delaying the final N fertilizer application in autumn significantly reduces the grass dry matter yield response to fertilizer N (Figure 1).

The units N/acre applied will vary across farms and should be decided upon based on the **remaining fertilizer N allowance** of the farm for the year and on the amount of grass on the farm at that time. If rotation length and average farm cover is on target or ahead of target an application of 20-25 units will be sufficient (See GRASS MATTERS for grass targets). However, if rotation length and average farm grass cover is behind target an application of 30-35 units/acre should be applied.



Figure 1: Recent Teagasc trial results illustrating the grass dry matter yield response to N fertilizer applications at three different timing in the Autumn. Source David Wall and Ian Fox, Teagasc Johnstown Castle.

Maintenance P and K

Maintenance P and K for Grazing and Surplus bales



Figure 1. Maintenance P and K requirements for a grass cover of 1,500 kg DM/ha depending on weather it is grazed or cut for bales.

The maintenance P and K requirements of a paddock in any given year will depend on the yield of the paddock and weather the paddock was primarily grazed or if there were, surplus bales cut on the paddock. Figure 1 highlights the amount of P and K removed from a cover of 1,500 grass DM/ha. Up to 10 times more K can be removed from a paddock when it is cut for bales v's grazing. When grazed cows will recycle 90% of the K in the grass back on to the paddock in dung and urine. If baled 100% of the K in the grass is removed from the field. A typical bale of silage contains 10 units of K and 1.7 units of P.

For example if a paddock was grazed 6 times so far this year and will be grazed another three times before the end of the year the maintenance requirements can be worked out roughly as follows:

9 grazing x 3 units K/grazing = 27 units K/acre 9 grazing x 1.7 units P/grazing = 15.3 units P/acre

This changes significantly, where surplus bales are taken. For example if the same paddock was grazed 8 times in the year and cut for surplus bales once at a yield of 4 bales/acre the maintenance requirements for K are as follows:

8 grazing x 3 units K/grazing = 24 units K/acre 4 bales/acre x 10 units K/bale = 40 units K/acre Total = 64 units K/acre These figures can be used to work out the K and P maintenance requirements of your individual paddocks. An application of 2,000 gallons of slurry will provide anywhere from 40 to 65 units K/acre and 8 to 12 units P/acre. Using slurry is the cheapest ways to meet these P and K maintenance requirements but often there is not enough slurry to go around the entire farm. Now is a good time of the year to assess what has been applied P and K wise year to date and determine if sufficient P and K has been applied via slurry or fertiliser to meet P and K maintenance requirements.

Fertiliser Actions For September

- 0
- Review soil samples for lime status and apply lime as required
- Assess P and K maintenance requirements
- Apply slurry first and then fertiliser to meet P and K maintenance requirements
 - Apply final N and P fertiliser applications before the 15th September



GRASS MATTERS

By JOHN MAHER, Grass10, Teagasc, Moorepark



Chasing Grass Supply

Grass supply during august was tight on many farms across the Dairygold co-op region. This has left many farms behind on grass supply entering September. Grass supply need to be boosted on farm as much and as soon as possible as growth rate will decline in the latter half of September. It is very difficult to increase grass supply in October!!

There are two objectives in autumn grazing management of dairy cows. Firstly, the cows must be adequately fed using the cheapest available feed which is grazed grass. The second objective is set the farm up for spring grass. Many farmers do not realise that the grazing season begins in the autumn and that autumn management of grazed grass is the primary factor influencing the supply of grass available in spring on any farm.

Every day at grass is worth over $\in 2$ per cow per day at grass in this period. Teagasc data also indicates that a 10 day increase in grazing season length increases annual farm profitability by over $\in 30$ /cow, and reduces GHG emissions by 2% per annum. However, data from PastureBase Ireland (PBI) indicates most farmers do not reach the autumn grazing targets set out in Table 1. This limits the potential financial gain that can be achieved by having grass in the diet of the grazing animal.

Outlined below in table 1 are the targets for the autumn for different stocking rates on the milking platform.

Table 1. AUTUMN GRAZING TARGETS

Date	Cover/Cow (Kg DM)	Average Farm Cover (Kg DM/Ha)	Rotation Length
STOCKING RATE	OF 2.5 LU/HA		
1st September	300	750	30 Days
Mid-September	400-450	1,000-1,100	35 Days
1st October	400	1,000	40 Days
1st November	60%+ of your grazing p	latform should be closed	for Spring at this stage
Fully Housed		600	
STOCKING RATE	OF 3.0 LU/HA		
1st September	330	990	30 Days
Mid-September	370	1100	35 Days
1st October	380	1150	40 Days
1st November	65%+ of your grazing p	latform should be closed	for Spring at this stage
Fully Housed		650	
STOCKING RATE	OF 3.5 LU/HA		
1st September	280	980	30 Days
Mid-September	340	1200	35 Days
1st October	335	1175	40 Days
1st November	70% of your grazing pla	atform should be closed for	or Spring at this stage
Fully Housed		700-750	

The focus of grazing management during September is to build up grass for later in autumn and thereby increase the number of days at grass in October/ November. However, paddocks need to be cleaned out well during this period to ensure that there will not be a build-up of dead material during closing up of paddocks. It is important to graze down to a residual of 4 - 4.5 cm in the autumn as this will remove dead material. This will stimulate extra growth of grass and growth of a new generation of grass tillers.

Getting Grass Supply Right

Rotation length should be about 28 to 30 days on September 1st.

If Short?

Correction can be achieved by feeding more ration or silage/zero grazed grass if you really need to slow down the rotation. Feeding a forage (silage/zero grazed grass) has a greater impact on reducing grass intake than feeding ration. The demand for grass can also be reduced by selling surplus cows, selling the cull cows, drying off low yielders etc. or removing other stock off the cow grazing platform. There is a good trade for cows at the moment. It is important to slow down the rotation as grass growth will decline rapidly during September. So act now if you are behind on grass supply.

If too much?

Having too much grass can also be a challenge. Building up very large volumes of grass on the farm particularly in the latter half of September will leave a "white butt" after grazing. Large volumes of grass are hard to graze out and often grass is wasted or walked into the ground particularly if grazing conditions are poor. Often land is damaged or poached where cows are forced to graze in small areas due the volume of grass being grazed being too high. The vigour of the sward entering into winter is also reduced. So try to avoid rotation lengths greater than 40 days.

The target farm cover figure is about 400 kgDM/cow by mid-September for those who measure grass.

Giving cows access to grass is very good at keeping costs low and boosting milk composition.





GETTING THE BALANCE RIGHT IN GRASS SUPPLY

Grass growth rates during August increased dramatically on many farms with heavy soils. Many of the farms in the Heavy Soils Programme have made additional silage during August. Outlined below is the Group Report from Pasturebase for the Heavy Soils Farm for Mid-August. Grass growth rate was about 70 kg DM/ha/day which is about 15%-20% higher than normal. If growth rates remain close to this level for the remainder of August, these farms will have an average grass cover above 1000/1100 kg DM/ha for September 1st. Simply put, this is too much grass to be carrying into September. While groung conditions have been good during the summer, grazing very high covers of grass prove difficult to graze out unlees the weather is exceptional. Cows do not perform as well on this type of grass. The aim should be to have a green base after grazing and the paddock cleaned out well as we enter autumn. Surplus grass will need to be converted into baled silage before weather/ground conditions deteriorate.

Grass Summary:

Farm	Farm Cover (kg DM /ha)	Cover/LU (kg DM /LU)	Stocking Rate (LU/ha)	Growth/ha (kg DM /ha/day)	Demand/ha (kg DM /ha/day)	Pre Grazing Yield	Rotation Length Now (Days)	Grass Intake/Cow (kg DM /cow)	Meal Intake (kg/cow)	Kg MS/cow
Macroom	786	252	3.12	64	50	1450	21	16.0	3.0	
Doonbeg	840	299	2.81	67	46	1750	21	17.2	2.8	
Athea	730	264	2.76	57	44	1400	25	16.0	2.0	
Castleisland	763	231	3.30	88	52	2000	24	16.5	3.5	
Kiskeam	739	223	3.32	53	53	1300	22	16.0	2.4	
Rossmore	1004	284	3.53	87	60	1800	21	17.0	2.0	
Average	810	259	3.14	69	51	1617	22	16.5	3	

Given the current weather predictions and soil temperatures, it looks like high grass growth rates are going to continue. It is important though that grass is controlled on the farm to get grazing right for the September and October period. Closing up the farm for the winter normally begins on heavy farms at the end of September. Ground conditions nearly always dictate when stock have to be removed from pasture and housed. Any grazing that happens in November is bonus territory.

Outlined below is the autumn grazing targets in terms of grass supply and rotation lengths for farms with difficult land.

There are 2 key grazing measurements that are particularly important for September.

1. Rotation Length:

Rotation length does not go beyond 35 days during September. So if you have 100 acres of grazing for the herd, the minimum amount of land grazed to be grazed is 3 acres per day. If you are grazing only 2 acres/day the rotation length is about 50 days, which is far too long. This will result in very heavy covers of grass which are difficult to graze out especially in soft grazing conditions.

2. Grass Cover Being Grazed:

The grass cover being grazed is less than 2000 kg M/ha. Growth rates during late August/September on farms with heavy land can often be quite high. Soil temperatures are at their highest and the soil releases additional Nitrogen. Achieving average growth rates of 50-55 kgDM/ha with a 35 day rotation will produce grass covers less than 2000 kgDM/ha which will be easily enough grazed. Longer rotation lengths with higher growth rates result in very high covers of grass which are very challenging to graze especially when weather conditions are poor.

Grazing grass with higher covers is very challenging on a heavy farm during September and October when ground conditions are soft. However operating on-off grazing and having excellent grazing infrastructure is a tremendous help keeping grass in the diet of the cow. Strip grazing is also be necessary. Wet paddocks should be targeted for grazing during drier weather. Some days may come when grazing conditions are very poor and grazing will not be possible.

Autumn Grazing Targets

Date	Cover/Cow (Kg DM)	Average Farm Cover (Kg DM/Ha)	Rotation Length			
STOCKING RAT	TE OF 2.5 LU/HA					
1st September	280-300	700-750	25-26 Days			
Mid-September	375-400	1,000	33-35 Days			
1st October	350	875	35 Days			
1st November	80-90%+ of your grazing platform should be closed for Spring at this stage					
Fully Housed		600				
STOCKING RAT	TE OF 3.0 LU/HA					
1st September	300	900	25-26 Days			
Mid-September	350	1050	33-35 Days			
1st October	325	975	35 Days			
1st November	The grazing platform should be closed for Spring at this stage					
Fully Housed	600					

The key message now is try to hold a 30-35 day rotation during September.



TEAGASC/DAIRYGOLD MONITOR FARMER PROFILE ESTABLISHING A RED CLOVER SILAGE

By GRAINNE HURLEY, PhD.,

Teagasc / Dairygold Joint Programme

There has been a lot of interest around the establishment of red clover silage swards this year due to the cost of fertilzer, the reduction of chemical fertilzer allowances and also due to the introduction by DAFM of the Red Clover Silage Measure scheme earlier in the year.

Six of the ten Teagasc/Dairygold monitor and signpost farmers sowed red clover grass silage mixes in 2021 and some of the farmers have also incorporated red clover into grazing mixes on the milking platform this year. Below are some lessons the group have learned from growing a red clover silage crop.

Having optimumn soil fertiliy is critical to maximise a crop of perennial ryegrass - this message is well known. But the clover plant is as much or even more dependant on on having optimum soil fertility than perennial ryegrass. If you don't have optimum soil fertilty, even if the clover plant does establish its unlikely it will persist too long. Soil pH must be at 6.5 and soil indexes for phosphorous and potassium must be at least index 3. The recommendatoin is to apply 3 bags/ acre of 10:10:20 at reseeding (or dung if you have no phosphorous allowance) - but this is to germinate the seed only - this will not help build any soil indexes. So if you plan to incorporate red clover onto your farm and soil fertility is poor, you MUST fix soil fertility first before you incorporate red clover.

Time of reseeding: A number of the monitor farmers reseeded in August and they felt that the results were not as good compared to the farmers who reseeded red clover in April or May. Autumn reseeding is not as good for plant establishment compared to spring reseeding . Soil temperatures are dropping due to shorter days which reduces the clover plant establishment. Also the window of opportunity to spray with post emergence spray is reducing. If weeds such as chickweed take control, it will be difficult to manage them as there is no clover safe post emergence spray on the market. Regular tight grazing is an effective way to reduce a chickweed burden. Like white clover, red clover is susceptible to poaching so if you do graze a red clover sward in the shoulders of the year take extra care not to poach the ground thus damaging the red clover plant.

Post emergence spray is critical when reseeding. There are clover safe products for newly established lays on the market but there is a time restriction on their use so it is important to read labels carefully. Controlling commen weeds like docks is cheaper and more effective at a earlier stage of growth.

John and Brendan Walsh have had good results to date with their red clover silage crop. The picture below was taken in mid July of Brendan assessing a red clover silage sward they reseeded in June 2021. This field was grazed four times last year with replacement heifers -it was not cut for silage in year one. Then in the spring of this year they applied 3000gallons/acre of slurry and this was then cut for first cut silage in mid May yielding 6.25tonnes grass DM/ha. They then applied another 3000 gallons/acre of slurry and it was cut again on 5 July yielding 4.7tonnes grassDM/ha. Due to drought conditions and with a grass supply shortage on the milking block the field was zero-grazed for cows in mid August with a yield of 3.75tonnesDM/ha. This field has yielded 14.7tonnes/ha by mid August with no chemical nitrogen applied since it was sown in June 2021! How long will red clover persist for? Brendan doesn't know but with what savings of fertilizer that have been made on this silage crop to date, it has been well worth investment!



Brendan Walsh assessing his red clover grass silage mix 13 days after being cut.

HERD HEALTH AND FERTILITY



By DENNIS HOWARD,

Munster Bovine

As I am writing this article on the 18th of August, some much needed rain has arrived on grassland farms throughout the Dairygold region. Hopefully, as you are reading these pages, the rain has taken effect and average farm covers have improved which will take pressure off and allow you to build grass for the back end. If this is the case, September will hopefully be a month where your system will coast along. However, there are some key herd management tasks to complete and herd health issues to watch out for.

SCC and Mastitis

SCC can start to creep at this time of year. The average cow in most herds is heading for 7 months in milk and cows with high cell count quarters have had ample opportunity to spread infection, especially if preventative measures have relaxed a little over the summer. Also, the dilution effect in the tank is reducing as yield drops back and bulk tank SCC rise will become more obvious.

The first step is to do a milk recording and take action with the results.

Cows that have an SCC of greater than 200K appear in two separate reports.

Persistently Infected Cows – These cows have had two or more consecutive tests over 200K in the current lactation.

Cow ID	Calving Date	Lact	Current SCC 22/06/2022	% Tank SCC	SCC 20/04/2022	SCC 11/11/2021	SCC 27/08/2021	SCC Last test previous lact	SCC Average previous lact
1481	10/02/2022	4	2080	6.2	1167	220	582	220	151
1220	27/03/2022	5	3591	4.4	592	867	1994	867	1523

Recently Infected – These cows are over 200K in the current recording but were below 200K in the previous recording.

Cow ID	Calving Date	Lact	Current SCC 22/06/2022	% Tank SCC	SCC 20/04/2022	SCC 11/11/2021	SCC 27/08/2021	SCC Last test previous lact	SCC Average previous lact
1670	01/02/2022	3	2580	3.7	70	58	73	58	59
1653	29/01/2022	3	3090	3.4	38	33	56	33	46

These two reports give you the SCC history of the cow. In general, the longer the history of high cell count, the poorer the chance of achieving a cure.

It is well worth taking the time to CMT (paddle)test these high cows and identify the offending quarter. You will pick up a high quarter on CMT if it is greater than 500K. A quarter with an SCC of over 1 million will be obvious.

The best action to take to manage a high quarter depends on the cow's SCC history outlined in the two reports.

 If a cow has a poor history, like cow number 1220 in the report above, there is no point in attempting to treat an infected quarter in this cow. It would be a waste of money and very poor use of antibiotics. Cow number 1220 was high last year, failed to cure over the dry period and has been high since. The best option here is to dry the quarter now or dry off the cow. Cow 1670 above has been below 100K in the current and previous lactation but is in the millions in the current milk recording. If you can identify the offending quarter with the CMT, it is well worth treating and the chance of cure is high as long as an appropriate antibiotic is used and a correct veterinary protocol is followed. These quarters are also excellent candidates to send for culture and sensitivity test. If you cannot find the offending quarter, it may have been an environmental infection and may well have self-cured. A high proportion of young cows with a good history will self-cure.

Stopping the spread of contagious mastitis.

Special attention needs to be paid to cows that have tested high to prevent them from spreading on the infection - milking last, selective cluster dipping, or cluster flushing.

Post milking teat disinfection needs to be a constant in your miking routine.

You are disinfecting the outside of the teat to stop any growth of mastitis-causing bacteria that come from infected cows that have been milked with the same cluster. You are also conditioning the teat to promote a smooth teat surface which will hinder bacterial growth.

Keep an eye on teat end health.

Excessively rough teat ends indicate that all is not right with the machine or the milking routine.

Overmilking, faulty ACRs, worn liners, vacuum or pulsator trouble can all contribute to teat end damage. The teat end is the cow's physical barrier to bacteria entering from the outside. Rough damaged teat ends also provide a perfect breeding ground for bacteria.

Teat score 50 cows and record any cow with one or more rough teat ends. Multiplying the result by two will give a percentage of cows with rough teat ends. This figure should be less than 20%.

Liner change - Liners need to be changed every 2000 milking or every 6 months – whichever comes first.

Environmental Mastitis

If you are experiencing high number of clinical cases and/or the recent infection rate is high, and the majority of these cows are not becoming persistently infected - suspect that the bacteria causing the mastitis are coming from the environment.

Buffer feeding, dirty passages and collecting yards will lead to more manure spatter onto teats and will increase the risk. Wet weather also increases the risk. Be mindful and reduce the risk where possible. Prespraying and wiping can be introduced when the risk is higher.

Servicing the machine

It is getting more difficult for milking machine technicians to get around to servicing during the dry period. Summer and autumn is ideal, weather is warmer, the job is more pleasant and technicians are not as busy. Book a service now if not already done.



Parasites - What to watch out for this autumn By and large it has been a dry year so far, consequently the parasite risk has been low, and less dosing should have been required.

Lungworm

The heavy rain that came in mid-August will have spread lungworm larvae from dung pads onto the grass. This will increase the risk of lungworm with coughing symptoms likely to manifest 2 weeks after the initial infection. Be vigilant for coughing and signs of lungworm in all categories of stock. If lungworm is suspected, all animals in the group need to be dosed. Faecal testing for lungworm is unreliable. Your vet can perform a lung wash if confirmation is required particularly in adult cows.

Stomach Worms

The risk of a stomach worm burden will also increase following rain and wet weather. However, a low burden that is not affecting performance does not automatically need treatment and if treatment is required, not all animals in the bunch may require it.

Stomach worm in **calves** - if they are not coughing (lungworm), they are thriving well and they have no clinical signs like dirty tails – they may not require treatment or only the poor performers may require treatment. If in doubt, take fresh dung samples from 5-10 calves and submit for testing to your veterinary practice. Similar logic applies for second season grazers.

Stomach worm in cows - If the herd is performing as expected, body condition is good, dungs are normal and there is no coughing that might be lungworm - cows should not need to be dosed. The herd health results for stomach worms are a useful to aid the decision-making process. It is antibodies that are being measured which is really a measurement of the cows own immune response. If the results are reading high, it indicates that exposure has been high, and the cow's immune system has responded. Dosing may be appropriate depending on how performance, body condition etc is looking.

I often get asked is it a good idea to dose a portion of the cows e.g. 1st lactations, thin cows etc. If there is no indication to dose the entire herd but you think for example the young cows are struggling with a stomach worm burden, it makes sense to target these animals. Eprinomectin is the only product licenced for the treatment of stomach worms and lungworm in lactating dairy cows.

It is critical to avoid underestimating the weight when calculating the dose. You will get a poor response from underdosing, and it will contribute to developing anthelmintic resistance. If dosing a section of the herd, it is better to use an injection. Undosed animals will get a low dose from rubbing and licked the animals that were dosed, which will hasten the development of resistance.

Salmonella

Monitoring and vaccination

If your herd is being vaccinated for Salmonella, September is the best month to vaccinate. The reason for this is that it is the stress of drying off cows and housing that can kick start the shedding of the bacteria form carrier cows. The vaccine needs to be on board well in advance of this risk period. The only vaccine available on the market is Bovivac – S. The primary course is 2 doses three weeks apart. Any animal that is receiving the vaccine for the first time needs this. The booster is 1 dose annually. The dose is 5ml and the route is under the skin. Ensure to use new needles and sterilised equipment to avoid localised swelling and infection.

Salmonella is tested for in the bulk milk in August and September. It is an extremely useful tool for monitoring for the infection. If you get a sudden high reading, take heed and consult your vet or give me or Martin a ring if you are on the silver or gold programme.

If you are vaccinating, the test is also useful for monitoring how the vaccine is performing and if all is going as it should be.

BOVINE					Bellyngrindraden, Malline, Co. Cork, 191 (1972), Irill (122) 41238 inligense anterformes in anno counterported
Herd No. D370081X Supplier No. 100021				-	
Test Carried Out	Nov 20	May 21	Jun 21	Aug 21	Notes
BVD	-	0.11	0.30	-	
Neospora	5.94	5.74		7.19	7 - 14: Possibility increasing that camer animals are present. Monitor results closely.
Stomach Worms	-	-)	0.93	0.80	0.6-0.8: Low levels of antibodies detected. Significant worm burden unlikely
Liver Fluke	1.40	3.12	2.08	1,87	Less than 30: No evidence of recent exposure in the herd
Mycopiasma	-	+/		124,73	Greater than 30: Significant antibodies detected. Mycopiasma likely to be present in the herd.
Q Fever	-		+	127.95	Greater than 40. High levels of antibodies detected in the herd
Salmonella Vaccinated	-	4	184.66	181.71	Greater than 150: Antibody levels as expected in a vaccinated herd.
IBR Vaccinated	-	0.81	0.93	0.95	Creater than 0.8: Very low levels of wild antibodies detected. Very good control through vaccination
Lepto Vaccinated	-		0.92	0.66	Greater than 0.3: Antibody Levels as expected in a vaccinating hard.

Pregnancy Diagnosis

September is an ideal month to get your herd scanned. The oldest pregnancies are still not too big (about the size of a big cat) and still visible when scanning. Early scanning will allow more accurate ageing of the pregnancy and increase the chance of identifying twins. More accurate aging will lead to more accurate calving dates which will allow you to be more precise with your dry off dates.

If you are a user of the FarmOps app, the 'Record Scan' feature will help improve the accuracy of the results. You can search quickly, and all the cows serves will appear, also crucially the days pregnant will be displayed. This allows the pregnancy to be matched to the appropriate serve. The result can be recorded quickly and accurately and will go to ICBF.

Milk pregnancy testing is also available through the milk recording. The big advantage is that the cows do not need to be put through the crush and do not need to be handled. The results are accurate in determining if the cow is pregnant or not but will not give the age of the pregnancy or identify twins.





CHFC MATTERS

By CHRISTOPHER McCARTHY, CHFC Public Relations Officer



A selection of the CHFC herds competition results 2022

	Autumn A section	Spring A section
Senior Cow	1st. Laurelelm Jerrick Jean owned by Ricky Barrett	1st. Millstreet Dewberry GJM 958 owned by Denis Kiely
	2nd. Mohoncross Dawn 30 owned by Jerry Hegarty	2nd. Coppenrua WDZ Angleen owned by Noel and Annette Crowley
Junior cow	1st. Laurelelm Roman Brilliant owned by Ricky Barrett	1st. Stoneblack Juniper 20 owned by Tim and Michael O Sullivan
	2nd. Wiltor Beemer Sara 2 owned by Robert, Sylvia and Jason Helen	2nd. Fountainstown blizzard 843 owned by Nigel Bryan
Heifer in milk	1st. Eedy Crushabull Acclaim owned by Robert, Sylvia and Jason Helen	1st. Millstreet Dewberry Pepper 633 owned by Denis Kiely
	2nd. Ringleader Pepper Cherry 38 owned by Noel O Donovan	2nd. Coppenrua Ballydehob Dooneen owned by Noel Crowley
Cow family	1st. Acclaim family, Eedy herd bred by Robert, Sylvia and Jason Helen	1st. Skehanagh Begonia bred by Michael Murphy
	2nd. Dairybriez family Ringleader herd bred by Noel O Donovan	2nd. Coppenrua Angelina bred by Noel and Annette Crowley
Group of 3 senior cows	1st. Mohoncross herd bred by Jerry Hegarty	1st. Stoneblack herd bred by Tim and Michael O Sullivan
	2nd. Ringleader herd bred by Noel O Donovan	2nd. Millstreet herd bred by Denis Kiely
Highest protein percentage herd	Ballydehob herd bred by Robert Shannon 3.68% protein	Windyhill herd bred by Denis O Donoghue, 3.69% protein
Highest EBI herd	Ballydehob herd bred by Robert Shannon herd, EBI of €203	Windyhill herd bred by Denis O Donoghue, herd EBI of €190

	Autumn A section	Spring A section
Lowest SCC herd	Ringleader herd bred by Noel O Donovan, SCC of 47	Fountainstown herd bred by Nigel Bryan, SCC of 43
Sustainability award	Ryefarm herd bred by Eddie O Flynn	Millstreet herd bred by Denis Kiely
Overall Winners	1st. Ringleader herd bred by Noel O Donovan	1st. Stoneblack herd bred by Tim and Michael O Sullivan
	2nd. Mohoncross herd bred by Jerry Hegarty	2nd. Millstreet herd bred by Denis Kiely
	3rd. Laurelelm Herd bred by Ricky Barrett	3rd. Coppenrua herd bred by Noel and Annette Crowley
Judges Prize	Noel O Donovan	Sean Keating



Michael Murphy winner spring A highest EBI herd with his son Christopher, daughter Alice, his wife Anna with Diarmuid O'Riordan and Edmond Curtin of Dairygold Agribusiness.



Left Nigel Bryan winner of lowest SCC in spring A section. Right Stephen Nagle winner or senior cow in Autumn B section with Diarmuid O'Riordan and Edmond Curtin of Dairygold Agribusiness



Austin lynch with his daughter Maeve winner of Cow family in Spring B section with Diarmuid O'Riordan and Edmond Curtin of Dairygold Agribusiness



Left Ivor Bryan winner second place senior cow Autumn; B Right Ricky Barrett winning senior Cow Autumn A, with Diarmuid O'Riordan and Edmond Curtin of Dairygold Agribusiness



Noel Crowely with his son Adrian Winning second second place senior cow in spring A section with Diarmuid O'Riordan and Edmond Curtin of Dairygold Agribusiness

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ANTIBIOTIC CHANGE AND PREPARATION FOR WINTER 2022

The use of antibiotics on farms is changing. "Use as little as possible and as much as necessary" is the basis of both responsible and prudent use of antibiotics on your farm. Some people may think that this doesn't affect them, but it affects everyone who either prescribes or administers antibiotics. Bacterial resistance to antibiotics, referred to as antimicrobial resistance (AMR), is increasing throughout the world.

If the right antibiotic is not administered to the right animal for the right disease for the right duration at the right dose, resistance to antibiotics can develop, resulting in that antibiotic ceasing to be effective to treat that bacteria on your farm and the potential for resistance to be transferred to bacteria that cause disease in humans.

Since January 2022, on farm use of antibiotics has changed as a result of EU Regulation:

- Antibiotics are not to be applied routinely nor used to compensate for poor hygiene, inadequate animal husbandry or lack of care or compensate for poor farm management.
- Preventive administration of antibiotics to an animal or group of animals is only possible where your veterinary practitioner determines that an individual animal or a restricted group of animals are at a very high risk of infection.
- The use of antibiotics to control the spread of disease in a group of animals with infection can only be carried out if the practitioner determines that the risk of spread of an infection or of an infectious disease within the group is high and where no other appropriate alternatives are available to the practitioner.

What opportunities are available to reduce antibiotic use on your farm? An important first step is to draw up a Herd Health Plan (HHP) to ensure the best possible health and welfare of the cattle on the farm, which, in turn, leads to optimum animal performance and productivity. The HHP should be devised as a collaborative effort with your veterinary practitioner. The plan is developed based on their unique personal knowledge of the farm. Mastitis control as part of the HHP is a key area for dairy farms, accounting for the majority of antibiotic use in most herds. Antibiotic usage to control either lactation or dry period mastitis can be reduced in the following ways:

- Understand what is best for your cows taking into consideration what is happening at herd level using your monthly bulk tank SCC from your Co-op. The SCC record of each cow allows you to understand what is happening to your cows. If you are not recording each cow, it is never too late to start.
- Find out the type of bacteria involved in your mastitis cases. Sampling of 6-10 cows with mastitis of varying lactation numbers during the year is all that is required. This will provide an adequate bacterial profile and list whether they are susceptible or resistant to a range of antibiotics.
- Maintain accurate records of antibiotic usage in your cows: date of administration, amount of antibiotic used, duration of treatment, number/freeze brand of cows, withdrawal period and unused antibiotic. This record is essential when looking at treatment required at drying off.
- Start planning for selective dry cow therapy in your herd this Autumn if not already started. If eligible, sign up for a free Dry Cow Consult by clicking on the link.

https://animalhealthireland.ie/programmes/cellcheck/ cellcheck-dry-cow-consult-tasah/



New changes to Dry Cow Therapy for 2022

New Veterinary Medicines Regulation EU 2019/6 which came into effect in January 2022 changes how your veterinary practitioner can approach prescribing antimicrobial dry cow therapy. This is to ensure the continued effectiveness of antibiotics and to reduce the development of resistance.

A blanket approach to drying off is no longer permitted, instead your veterinary practitioner must adopt a **selective approach to dry cow therapy** when prescribing dry cow mastitis tubes for your herd.

With a selective approach, all cows are considered individually in terms of the risk of mastitis over the dry period. Your veterinary practitioner will determine if a dry cow tube is needed at drying off, in some cows an internal teat sealant alone will be sufficient.

A selective approach involves doing a risk assessment at the individual animal level to determine which cows will need antimicrobial treatment over the dry period.

Dry cow tubes can be prescribed but on an individual cow basis where there is evidence of a risk of infection in that cow. Your veterinary practitioner needs individual cow information to assess the risk of infection to the individual cows in your herd.

Information includes:

- Records of all mastitis cases
- Previous treatments and related outcomes
- Any milk quality data including somatic cell counts, bacterial culture and antibiotic susceptibility testing

Milk recording is recommended as a key tool to better inform the development of a targeted dry cow mastitis control strategy.

Your practitioner may also need to examine the cows and do further tests. To ensure an effective approach to mastitis control, a selective dry-cow strategy for your herd must be worked out carefully, hence the importance of engaging in good time with your veterinary practitioner when making farm-level decisions.



An Roinn Talmhaíochta, Bia agus Mara Department of Agriculture, Food and the Marine

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