NEWSLETTER

In this newsletter we will be covering the following topics:

- Future of Calf Health
- Derogation Changes 2020, 2021 and 2022
- The Spring Grazing Plan
- Carbon Solohead Farm
- Farm Development Programme

2021 - A defining year.

February 2021

Our thanks to those who attended our annual Dairy Seminar last month. We had capacity attendance with excellent speakers and good engagement across a wide range of topics. It is clear to all of us that 2021 will be a defining year in Ireland's approach to climate change in preparation the years ahead. The many elements of climate policy that will impact farm and processing expenditure will need to be well understood in order for targets to be met. Many of our key statistics are moving in the wrong direction, unfortunately. Our farm services team, supplemented by the necessary professional expertise, will be on hand to help farmers face and deal with these issues.

As last year's milk season opened up, our industry had some very real concerns about Covid-19. A lot has been learned in terms of combating the pandemic and in general, everyone has played their part. The fact that no milk was lost last season is not something that we can take for granted this year. 2021 will ultimately be a defining year in our response to Covid-19. The challenge is even greater this year given the virulence and rapidity of mutation we have seen in recent months.



Farmers should be aware that, while there is a national vaccination plan, key dairy personnel (those who have critical skills in the running of specialised plant) are unlikely to be vaccinated in time for peak production. Last year's success in avoiding the loss of milk at farm level cannot be taken for granted. Continued production growth poses a challenge to peak processing capacity this year anyway.

Tipperary has fared very well with Covid, generally speaking. We had no cases in 2020 but have seen the emergence of a small number of cases and close contacts immediately after Christmas. Fortunately, the close contacts tested negative and operations have not been affected. All our protocols are working and will remain in place as long as we are faced with the pandemic. We are likely to be living with safety protocols well into 2021. We appreciate the patience of customers (particularly our Agribusiness customers) as we face another tense year due to the pandemic.

Finally, we look forward to a defining year for Tipperary Co-Op in terms of a very full milk processing season 2021 and the full-year benefits of all our new equipment. Markets are looking significantly stronger than this time last year and certainly than in recent months. Milk futures are generally strong and we hope that the early positive market sentiment remains throughout the year.

John Daly

Chief Executive



FUTURE OF CALF HEALTH

Compiled by Martin Kavanagh, MVB Cert DHH

There will be significant changes to the way antibiotics are prescribed and used in 2022. To protect from bacteria that cannot be killed by routine antibiotics, the risk from Antimicrobial Resistance (AMR) must be managed. This includes prudent use of antibiotics on all farms, including not using antibiotics across a group of animals to prevent disease, restricting oral use, and only using certain types of drugs under strict veterinary guidelines or not at all.For instance, fluoroquinolones such as 'Marbocyl' are classified as Highest Priority Critically Important Antibiotics and will be severely restricted for use on farm under current guidelines.

The implication of prudent antibiotic use is a greater need to manage our animals to lower the risk of infectious disease. Calf disease is a balancing act between the number of bugs in the environment of the calves and the resistance the calf has to disease. The more bugs and less resistance the more likely that an outbreak of scour or pneumonia will occour. 84% of our dairy cows calve between January and the end of April. Many farms are dealing with an overwhelming number of calves landing in a short period of time.

Calf health and welfare impacts future milk production. 'Sick days' for a heifer calf result in lowered milk production in her lifetime and increases the risk of culling at a younger age. While Ireland has an excellent average calf mortality, calf welfare in intensive systems is coming under more and more scrutiny from the consumer. It is necessary to do everything possible to improve outcomes for calves to protect our marketplace.

So, to avoid disease, there are two areas to control: the number of bugs (infection pressure) and calf resistance. Reducing the number of bugs involves constant attention to hygiene, reducing stocking densities in sheds, and avoiding introducing sick calves to healthy ones. Improving the calf's resistance involves constant attention to the quality and quantity of colostrum given in the first hours of life, vaccination, feeding calves for health, and managing the calf environment to avoid stresses that reduce the calf's ability to fight disease.

Almost half of the calves that undergo a post-mortem have not been fed enough colostrum. In an Irish study in 2017, 39% of colostrum samples tested as they were being fed to calves were of low quality because of the time of milking the cow; the more time between calving and milking the poorer quality the colostrum will be. In the same study, 56% of the samples had too many bacteria. Dirty colostrum is not absorbed as effectively by the calf. Following the 3,2,1 rule makes sense, 3 litres within 2 hours from the 1st milking. Be as clean as possible. Sanitising feeding equipment by rinsing in cold/lukewarm water and soaking in a dilute solution of peracetic acid (1:200 to 1:1000) will help reduce the bacterial load.

Get calves less than a week old blood tested in February and again in March to check the absorption of colostrum. It is a guide to your management and may prevent a problem.



Most scours result from rotavirus and cryptosporidia. These bugs are on every farm. Rotavirus can be very successfully vaccinated against. There are no vaccines for cryptosporidia and the key management tool to reduce crypto is hygiene and enough nutrition. Clean dry beds and disinfected housing are critical. Remember crypto is highly contagious: if you get an outbreak, clean, and disinfect the pens (Kenocox), replace the bedding immediately. Clean all leggings and coats in the machine or replace them. Work from young calves to old calves, and always sick calves last. Get heat on the sick ones and give 4 meals a day – electrolytes fed separately to milk but always keep on milk.

Calves less than 3 weeks old are very susceptible to cold stress. Unfortunately, many calf houses are damp and cold, prone to draughts, and difficult to keep clean. There is great merit in old-fashioned white washing to seal and disinfect walls. There is no substitute for deep dry beds of straw, and in very open or large houses, using calf-jackets will really help the young small calves.

Enough feed is a constant limiting factor. Young calves need 15% of their bodyweight fed as milk. If the temperature drops, calves should be fed an extra lite for every 10 degree drop below 10 degrees. If you get pneumonia, particularly when increasing group size at 3-4 weeks of age, check on calves that are not competing as well, keep them in a smaller group and definitely feed twice per day.

Keeping disease levels under control is a balancing act. There is only so much work you can do, and as you well know, a sick calf takes up more time than 40 healthy ones! The more effort that is made to keep houses clean, draught-free, and dry, and the more attention that is paid to colostrum and nutrition, the more chance there is of avoiding a soul-destroying outbreak of calf disease.

Tipp Co-Operartive farm services team are happy to help in providing guidance on best practice in calf rearing.



DEROGATION CHANGES FOR 2020, 2021 AND 2022

From 01/01/2020 for derogation farms

Compulsory Lime Programme

- Detailed Liming plan -maximise the nutrient use efficiency
- Front load over 4 years for derogation applicants 2020 onwards
- Spread a minimum 25% of lime each year starting in 2020
 - Conacre don't require liming unless 2 years in derogation
 - Peat soils, High Mo areas etc. to be considered
 - Must be recorded on 2020 derogation records
 - Should leave 2 years between applying lime and soil sampling

Low Emission Slurry Spreading (LESS)

- This will help the efficiency of livestock manures on farm and in turn help to reduce ammonia losses.
- Slurry remaining on the holding after the 15/4/2020 must be spread by LESS.
- All Slurry on the holding from the 12/1/2021 must be spread by LESS.
- Recorded on 2019 records onwards

Training

- Adopting best practice in nutrient use efficiency and management of nutrients; and the protection of water
- Mandatory Environmental Training Course
 - 3 modules x 5+ hours/module
 - Nutrient Use efficiency (soil fertility)
 - Water, Gaseous emissions and Biodiversity -Teagasc put 2,800 farmers through this online in Oct-Dec 2020
 - Grass Course unless a minimum of 20 grass measurements were completed in 2020
- 15+ hours of training in modules above
- Available to all derogation farmers in 2021
- Farming Sustainably (Biodiversity, water quality and gaseous emissions)

Grass measurement (or grass course)

- Record the grass produced annually on the farm
- The following 20 measurements are required per month over the season as follows;
 - February (1)
 - March (2)

- April to Sept (14)
- October (2)
- November (1)
- PBI (Pasturebase Ireland) or similar software can be used

Reduction in Crude Protein in Concentrates

- 2020: Max 16% CP between 1st April and 15th September
- 2021: Max 15% CP between 1st April and 15th September
- Potentially 14 % CP from 2022 onwards

Increased use of clover in swards

 New grass reseeding completed by derogation farmers must include minimum clover content (1.5kgs/ha of naked clover)

Land Eligibility (Commonage and rough grazing)

- Commonage/Rough grazing will not be eligible for derogation in 2020
- Cannot be included for the calculation of the chemical fertiliser allowance

Improve Farm biodiversity (Hedges)

- Biodiversity loss -implement measures in the All Island Pollinator Plan
- One of 2 measures to be included in the 2020 plan

CHANGES FOR 2021

Water Protection Measures

Animals must be excluded from all watercourses

- Water troughs must be >20m from watercourses
- Watercourse = as defined as solid blue line on OSI website 1:5.000
- Farm roadways for every farm in the country (slope away from waters)

Dairy Organic N Increase

- Dairy cow 85 to 89 kgs N/cow/year
- Will push 700+ farms over 170 kgs N/ha/year
- Will push 300+ farms over 210 and 250 kgs N/ha/year

Changes for non-derogation farms (WFSR>170Kgs N/ha)

- Farms exporting slurry have to put in place numbers 1-5 see table below
- All Farms must apply number 6

Terms	Whole Farm Stocking Rate Excluding N Exports >170Kgs N/Ha	Grassland Stocking Rate Excluding N Exports			
Definition	Organic N Produced by Grazing & Non-grazing Livestock/Holding Area (Grassland and Arable)	Organic N Produced by Grazing Livestock on the Holding /Grassland Area			
1. Use of LESS	YES				
2. Liming Programme	YES				
3. Crude Protein in Ration 15%	YES				
4. Fencing Watercourses	YES	YES			
5. Setback Water Troughs	YES	YES			
6. Farm Roadways	Applies To All Farms - If There Are Roadways Present				



NAP REVIEW 2022 -2025

- Review the effects of the nitrates derogation on water quality, in conjunction with the EPA.
- Work with nitrates derogation farmers to improve environmental outcomes on their farms, ensuring the sustainable use of the derogation, in line with our environmental objectives.
- Alignment with Farm to Fork & EU Biodiversity Strategy.
- Introduction of measures with multiple benefits for water quality and climate mitigation.
- The condensed nature of derogation farms in some of the more vulnerable catchments is a concern.

THE SPRING GRAZING PLAN

Compiled by John Maher Teagasc, Moorepark

The supply of grass on farms is currently very good in mid-January (about 825 kg DM/ha according to figures from PastureBase Ireland). This level of grass supply allows calved cows to be turned out full-time after calving to a predominantly grass diet even where the 6-week calving rate is high. Of course reasonable weather is needed to do so but the grass supply is there to start!

Over winter grass growth has averaged about 3-4 kgDM/ ha/day in the Tipperary co-op region. For those who want

to get the most for spring grass. It is important to complete a grass budget using PastureBase

This allows grass to be budgeted to make sure that the farm arrives at an average farm cover of 550-600 KgDM/ ha in early April. It is important that there is an adequate level of grass available to start the second grazing rotation. So all grazing plans/budgets work towards this target.

Table 1:- Nitrogen Fertiliser and slurry application plan for the early spring period on well-drained soil

Fertiliser/ Slurry Split	Month	Stocking rate (LU/ha)	Milk sales (L)	Milk sales (kg MS)	C footprint (t/ha)	C footprint (kg/L)
1	January¹/ February	2.10	472,059	39,500	7.9	0.87
		2.39	675,173	56,000	10.3	0.95
2	March ·	2.55	715,694	60,000	10.5	0.92
		2.49	705,245	58,222	10.4	0.92
Total N by 1 st April ²		2.47	677,620	57,842	9.8	0.90

Enhancing Grass Supply:

While the supply of grass on many farms is good at the moment (825 KgDM/ha) the demand for grass is high on many farms due to the 6 week calving rate and a stocking rate close to 3/ha on the milking platform. So every effort must be made to grow as much grass as possible during early spring. Increasing early spring grass supply on the farm is necessary to reduce feed costs. The best response to fertiliser N will be got on the drier paddocks with a ryegrass sward and where soil fertility is reasonable.

A fertiliser and slurry application plan for early spring is outlined in table 1. An application of Protected UREA (23 units/acre) needs to be completed on about 60 to 70% of the farm to boost the grass supply on the farm. Applying Nitrogen fertiliser early (weather permitting) will not only grow more grass but help the recovery of grass after grazing, so there will be more grass available for the next round of grazing also. Protected Urea fertiliser (23 units/ac) is targeted for early spring application where ground conditions allow. Sometimes conditions are suitable in February or sometimes later. Ground conditions are key. Flexibility in

application is essential as not every paddock will be able to take traffic. Simply put, some paddocks will be too wet.

Slurry needs to be targeted on the low grass cover paddocks with low soil fertility at about 2,500 gals/acre. LESS (dribble bar/ trailing shoe) technology should be used to spread this slurry where possible. This is because N capture is higher and the grass is not coated with slurry. The land that receives slurry should not receive the first application of urea fertiliser.

A second application of Urea fertiliser should be planned for late February/early March (about 46 units of Protected Urea/acre). This fertiliser N application should be reduced to a half bag of Protected Urea/acre where paddocks get slurry.

Turnout:

Cows should be turned out to grass as early as possible in February. The aim is to graze about 30% of the farm during this month. This is not easily achieved unless there is a flexible approach and a grazing plan is put in place. Last year, February was a very wet month. February 2019 was much drier.

Firstly, there must be many sets of reels and stakes ready. These will need to be distributed on both the wetter and drier parts



of the farm. It is important to state that there is no set strategy to graze wet or dry paddocks. When the weather is good wetter parts of the farm need to be targeted for grazing and when the weather is poor the drier parts of the farm are targeted. Grazing the paddocks with the lowest cover of grass needs to be targeted. Paddocks with covers of grass of about 700-900 KgDM/ ha are suitable. Most of the silage ground should be targeted for grazing in early March.

When grazing gets going, a decision has to be made whether silage or grass is fed. The aim is always grass if possible. Cows should be turned out to grass in the morning for 2-3 hours. This can be 9 am or later depending on the weather. However, cows cannot go to grass full of silage as this will restrict their appetite for grass enormously.

Rainy Days?

Wet days arrive every spring so a plan has to be put in place to deal with these days. The driest paddocks with multiple access and lowest covers of grass need to be used on these days to ensure access of cows to grass. This is a suggested wet day plan for grazing in early spring:

- Cows are milked at 7.30 am
- Cows go out to grass by about 9am
- Cows return to shed by about 11.30am (No access to silage between 11.30am & 3pm)
- Cows are milked at 3pm
- Cows return to grass for 2 to 3 hours
- Cows return to shed by about 6 to 7pm
- Cows can have access to silage at night but all silage needs to be gone by 7am

TEAGASC TIPPERARY CO-OP JOINT PROGRAMME

Teagasc and Tipperary Co-op have decided to extend their three-year joint development programme by a further year until the end of 2021. The programme was affected by the COVID19 restrictions on public gatherings and advisory contacts with our host farmers. We plan to have a number of virtual events this spring on the farms and hopefully on-farm events later in 2021.

We recently met each of our focus farmers to keep you up to date with a summary of the current position on each of their farms. We'll follow up in spring 2022 with a more detailed four-year review for each of their farms.

John, Charlotte and John G Crowe

John, Charlotte and John G Crowe farm in partnership together and milk a cross bred herd, they milked 144 cows on a 56ha milking platform in 2020. They produced 508 kgs milk solids per cow with 700 kgs meal fed per cow, cows were dried off over one month earlier this year to facilitate installing a new milking parlour. 15.7 tonnes of grass dry matter was grown in 2020 and this reflects a high percentage of reseeding and monitoring soil fertility closely to maximise grass production. To conclude they have increased cow numbers from 120 in 2018 to 144 in 2020 and plan to milk similar numbers for 2021.

Peter Hughes and Paul Maguire

Paul/Peter milked 78 cows in 2020 on a milking platform of 21.5 ha, MP SR of 3.62 . 14 tonnes of grass dry matter per hectare and averaged >8 grazings per paddock on the milking platform. A conscious effort was made to increase zero grazing in order to reduce meal used versus 2019. Milk solids produced increased in 2020 with a significant reduction in meal. 552 kg milk solids per cow for 2020 with 900 kg meal fed per cow. 11% of the MP was reseeded with a grass/clover mix. Sexed semen was used and CR of 60% achieved on the sexed semen.

Glen Tour Farms

Glentour Farms milked 151 cows in 2020 on a milking platform of 48.07 ha. They grew 12.5 tonnes of grass dry matter per hectare for 2020. They sold 475 kgs milk solids per cow for 2020 with 990 kgs meal fed per cow. 52% of the herd consisted of 1st and 2nd calvers in 2020 and they plan to be selling in excess of 500kgs of

MS once the herd matures, and to reduce the concentrate fed per cow to 700kgs. Michael, Eamon and Martin have put a big focus on reseeding since joining the programme and have reseeded 32% of the milking platform. Draining fields on the milking platform in order to improve tile drains and alleviate surface water has helped improve the flexibility of grazing platform which means days at grass have and will increase going forward. Since 2018 cow numbers have increased from 124 and they are planning to milk 150+ cows again for 2021.

TJ Ryan

TJ milked 126 cows in 2020 on a milking platform of 41.5 ha. According to TJ, 'This year turned out to be a great grass growing year on our farm. The dry spring really suited the area and we grew 13.5 tonnes of grass dry matter per hectare and averaged 8 grazings per paddock on the milking platform. He sold 559 kg milk solids per cow for 2020 with 1120 kgs meal fed per cow. "The reseeding and drainage we've done over the past number of years are really paying for themselves at this stage."

Planning to milk 130 cows again in 2021 have increased from 107 cows in 2018 and reduce the concentrate per cow to 800kgs.

James, Seamus and Janice Farrell

Seamus Farrell milked 96 cows on a milking platform of 35ha in 2020. Seamus said '2020 has been a good year for us here. The milking platform was stocked at 2.74 cows/ha. Milk solids per cow have improved again on the previous year at 540kgs/MS/cow sold this year with 1.2t of concentrate being fed. It was a good grass growing year for the main part, never really coming under pressure throughout the main season. We grew 13tonne of grass with paddocks averaging 9 grazing's each."

Solohead Research Farm -Daniel Barrett Farm Manager

Solohead Research Farm milked 137 cows in 2020 on a milking platform of 53 ha. 490 kgs of milk solids were sold per cow for 2020 with 500 kgs meal fed per cow. In 2020 the farm grew 15.1 Tonnes DM per Ha. The plan is to milk similar numbers for 2021.

Since 2018 the cow numbers have stayed steady at 137 and all replacements remain to be contract reared off the farm.



LOWERING THE ENVIRONMENTAL FOOTPRINTS OF MILK PRODUCTION AT SOLOHEAD RESEARCH FARM

James Humphreys and Daniel Barrett, Teagasc

Milk production at Solohead has increased by over 50% since pre-quota (Table 1). This is in line with the national milk industry. The Irish dairy industry faces challenges, including the reduction of its environmental footprints and the maintenance of both its competitiveness and industry reputation. EU and Irish government policies are asking more of dairy farmers in

terms of lowering nutrient losses to water, a reduction in both carbon and ammonia footprints and improvement of habitats for biodiversity. Since 2017 at Solohead we have been implementing practices to lower the carbon and ammonia footprints of milk production on the farm.

Table 1. Fertilizer N input, stocking rates, milk sales, carbon and ammonia footprints of milk production at Solohead Research Farm between 2011 and 2020.

	Fertilizer N (kg/ha)	Stocking rate (LU/ha)	Milk sales (L)	Milk sales (kg MS)	C footprint (t/ha)	C footprint (kg/L)	Ammonia (kg/ha)
2011-2013	195	2.10	472,059	39,500	7.9	0.87	33.5
2016	280	2.39	675,173	56,000	10.3	0.95	46.5
2017	242	2.55	715,694	60,000	10.5	0.92	46.5
2018	242	2.49	705,245	58,222	10.4	0.92	45.8
2019	224	2.47	677,620	57,842	9.8	0.90	43.5
2020	104	2.53	764,795	64,350	8.8	0.78	37.4

In 2015 our replacement heifers were contract reared and cow numbers were increased from 90 per-quota to 126 in 2016 and to between 130 and 140 between 2017 and 2020. Since 2017 the focus has been on lowering carbon and ammonia footprints primarily by lowering fertilizer N use on the farm. This is achieved by (i) ensuring that all paddocks are at optimum soil fertility in terms of lime and P & K status, (ii) increased reliance on white and red clover in swards and (iii) switching from splashplate to low emissions slurry spreading (band spreading and trailing shoe). Due to these measures fertilizer N use has been lowered from an average of 280 kg/ha in 2016 to 104 kg/ha in 2020 with no reduction in milk output from the farm. The challenge is to maintain the current level of milk output with substantially lower fertilizer N input.

The fertilizer N applied is solely in the form of protected urea, either straight urea or a compound such as 29:0:14. Improving the EBI of the herd also contributed to lower footprints albeit through small annual incremental gains. We are also testing the use of sexed semen. The outcome of these measures is that we have lowered the carbon footprint per ha by 14% and the ammonia footprint per ha by 20% compared with 2016. These reductions are sufficient to meet the reduction targets outlined in the national Ag-Climatise policy document.

Furthermore, the carbon footprint per L of milk was lowered by 18% compared with 2016. A carbon footprint of 0.78 kg CO2eq. per L is exceptionally low by international standards (which typically range between 1.0 and 2.0 kg CO2eq. per L). Such a low carbon footprint is beneficial to the image and marketability of our milk. It is likely that Ireland's milk production will continue to grow over the next decade. Future prospects for the Irish dairy industry remain positive due a growing global population of increasingly affluent people. Realising this potential requires adopting the practices outlined above that mitigate the emissions associated with increasing the size of the national dairy herd to meet national and EU emissions reduction targets.





TIPPERARY CO-OPERATIVE MILK RECORDING SERVICE

BENEFITS OF MILK RECORDINGS

- 1. The most obvious benefit of milk recording is that it allows the farmer to track their best and worst producers. This allows the farmer to make management decisions such as; which cows are underperforming and may be suitable to cull or, which cows are producing in your system and are more suitable for breeding replacements.
- Regular milk recording will also allow the herd owner to keep track of the somatic cell count (SCC) of each cow. This will identify and facilitate the management of repeat offenders and could dramatically decrease your herds overall SCC and improve milk price.
- 3. Herds that are milk recording get a CellCheck Farm Summary Report after each recording-this report highlights the areas of excellence in terms of mastitis control, and also areas that could be improved. It quantifies the daily loss occurring as a result of high SCC cows, so the herd owner can clearly see what can be gained financially from preventing infection.
- 4. Milk recording adds significant value to any surplus breeding stock being sold off farm and increases the chances of a bull calf being selected to enter AI through the Gene Ireland programme.
- 5. Milk recording results are fed into ICBF's genetic evaluations. This allows us to give your cows an EBI with a higher reliability. Herds that are milk recording also get access to high EBI young bulls through the Gene Ireland programme. Getting these bulls tested in herds that are milk recording allows ICBF to prove these bulls in a shorter period of time, thereby increasing the speed of genetic gain.
- 6. In autumn 2017, ICBF launched a new culling tool known as 'Cows Own Worth' or COW. This ranks cows on their expected profit potential for the rest of their lifetime. The COW takes into account the environmental aspects such as; calving date, age, milk recording results, health events, etc. The COW acts as a guide in choosing which cows to cull from your herd, and is only available for herds that are milk recording.
- 7. Cost effective pregnancy diagnosis is now possible through milk samples. This service will indicate if a cow is in calf or not, at a reasonable cost and will remove the task of handling all the cows for scanning.
- 8. Milk recording data provided the phenotypic (on the ground) data that has allowed ICBF to launch genomic evaluations for the Holstein/Friesian breed. in time more milk records for crossbred cows will enable ICBF to launch genomics for crossbreds.
- 9. Herds that milk record at least four times in the calendar year and have the dry off dates recorded for their cows receive an Annual Report every year from ICBF. This report is now being requested by banks when farmers are seeking finance, to benchmark performance and repayment ability.
- 10. Milk recording records increase the compensation available for animals that have to be culled because of a positive TB reaction.

EDIY Manual Milk Recording Service

This service uses electronic meters which record milk volume and take test sample automatically. The farmer operates the system hence the "DIY" name. He receives full training and support from his Technician on operation of the system.

- €140 For First 50 Cows per Milk Recording
- €2.00 per Cow Thereafter

e.g. 100 Cows is \leq 140 for first 50 Cows plus \leq 2.00 x 50 Cows = \leq 240 per Milk Recording or \leq 960 for Four Milk Recording per Year

Manual Milk Recording Service

This service is only available to milk suppliers that have their own recording jars or meters. Manual Milk Recording Pricelist:

- A4 Scheme Milk Recording Once per Month €16.00 per Cow per Year
- A6 Scheme Milk Recording Every 6 Weeks €13.50 per Cow per Year
- A8 Scheme Milk Recording Four Times a Year €11.50 per Cow per Year

Please Contact Donal Ryan 086-8106661 or Andrew O'Neill 086-1836505 if you would like more information or would like to participate in this service.

See enclosed the 2021 Registration Form.



Selenium in Fertiliser



Why use Selenium?

SELENIUM IS ESSENTIAL - Teagasc

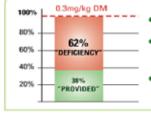
Selenium is an essential trace element for Vitamin E function and reproduction in animals Selenium Deficiency is a BIG Issue Selenium Deficiency symptoms include:

- Fertility problems
- Retained placenta
- · White muscle disease
- Weight loss
- Irregular repeats
- Cystic Ovaries
- Subclinical deficiency is also very common

Irish pastures suppy only 38% of the Selenium requirements of an average lactating cow (Teagasc 2013)

On average, the cow's complete diet provided only 58% her requirement for Selenium (Teagasc 2013)





- Selenium Deficiency is a BIG Problem.
- On average, Irish grassland provides just 38% of cows daily selenium needs.
- Irish dairy cows need more Selenium!!!

"We first used Selenistart in 2016 after identifying a deficiency through a silage mineral analysis. Selenium is essential for optimum growth and fertility performance, and now our herd gets their full selenium requirement from grass and forage, all year round" -

John, Charlotte and John G Crowe



CONTACT YOUR LOCAL REPRESENTATIVE OF TIPPERARY CO-OP TODAY FOR FULL DETAILS AND PRICING

Paul Fortune 087-2439427 Noel O'Dwyer 087-8151240
Tom Moher 086-6057399
Martin Costello 087-2982135 John Wade 0504-42444

