October/November 2020

TIPPERARY
COOPERATIVE

NEWSLETTER

In this newsletter we will be covering the following topics:

- Autumn Grazing - Lower feed costs and set up farm for spring!
- Soil Fertility
- Winter Milk Bonus
- Farm Development Programme
- CellCheck Tip of the Month

Coronavirus CV-19 update and business implications.

October 2020

I would have hoped by now to be describing our national outcome of COVID-19 as a success story. In our July issue one could have realistically expected that the main challenges brought about by the pandemic to be firmly behind us by now. Unfortunately, this has not been the case and instead we have a serious national resurgence to deal with as 2020 closes. The commercial challenges and consequences for many business sectors up to now, including dairy processing, have been enormous. Dairy markets have been unsettled for much of the year and although some stability emerged mid-year for butter and skim, we appear to be facing falling markets as season 2021 opens up. It now looks like we will have to deal with the pandemic well into 2021.

Nevertheless, I am pleased to report that Tipperary Co-Op has maintained COVID-free status all year with no elevated temperatures, no reported cases or related cases causing issues in our manufacturing plants or in Agribusiness stores and services. Given what is happening around us, this is not a situation that anyone can guarantee indefinitely. Strong and strictly-enforced protocols have been in place and will have to remain in place for the moment at least. Throughout the dairy processing industry so far in 2020 the cost of maintaining COVID-free status has run into many millions of euro.

Restrictions are frustrating for our store customers and for any Dairy Ingredient customers when they visit us. We all have to adapt to these safety measures as a new way of life now. Our priority is to keep people safe and to operate plant and premises safely. We will continue to do so and we appreciate the continued support of everyone associated with us as we tackle this together. I would ask you, as we have asked all personnel, to please do your absolute utmost to protect yourself, your family and your business from the consequences of infection. The national attitude to the effectiveness of masks is a live issue at the moment but we would ask everyone to wear one when you come into our stores and Agri yards and to keep them on until you leave. The wearing of masks is definitely helping with overall awareness in the manufacturing plants and we would suggest that it can only help when you meet staff, neighbours and friends in our stores and yards and our milk collection and delivery drivers. Please support us in this.

Advisory and AGM

We had scheduled an Advisory meeting for last week and we had hoped to shortly facilitate a normal AGM giving suppliers and shareholders the chance to physically meet and discuss the business. Unfortunately, COVID numbers took a significant turn in the wrong direction and we decided to run those meetings online instead. These will be organised via Zoom in the near future. We regret the inconvenience but look forward to engaging safely with our people as soon as we can.

Sincerely,

John Daly

John Daly
Chief Executive

Please Maintain Social Distancing and wear a face covering when orders are being delivered or when milk is being collected at farm level, as this will help secure a regular and much needed service.

www.tipperary-coop.ie
Email: info@tipperary-coop.ie

AUTUMN GRAZING
LOWER FEED COSTS & SET UP FARM FOR SPRING!

Compiled by John Maher, Teagasc Dairy Specialist

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. Every day at grass is worth €2 cow/day additional profit.

The second objective is set the farm up for spring grass. The most important task any dairy farmer will undertake over the next 2 months is to ensure that the farm is closed off properly to have an adequate supply of grass early next year. The last rotation needs to be planned to have grass early in spring. The last rotation should begin in early October (5th to 10th) for most farms. This date will vary a small bit according to grass growth, soil type and to a lesser extent with stocking rate. For farms with a difficult soil type closing up should begin in last days of September. To get good clean outs of paddocks a strip wire will be necessary.

The first closed paddocks will carry most grass over the winter period and ideally should be paddocks that have been grazed out well, cut once or twice during the grazing season (this includes silage ground) as they will be cleaner and easier to graze out. Most of these paddocks will not be grazed until March, when more cows are calved and grass intake is rising.

The most critical paddocks to close up the farm though are the paddocks that are needed for the rainy day. These paddocks:

- **are drier paddocks on the farm**
- **are square in shape**
- **have the farm roadway on 2 sides**
- **have lots of access and exit points**
- **have good access to water**
- **have a medium cover of grass next spring (800-1000 kg DM/ha)**

To achieve a medium level of cover on these paddocks, they will need to be closed in late October.

Every farmer should identify about 4-5 of these paddocks to close in late October to have for the rainy day next spring.

Date when 60% is closed

This is a very critical date. For most farms this is early November. This is because most of the grass available in early spring has been grown in October/early November. Very little growth occurs over the winter months so most of the grass available in spring is carried over from the previous autumn/early winter. The target is to have about 60% of the farm closed up by November 1st.

Higher stocking rates on the milking platform will require over 70% closed.

Heavy Land Farms

Grazing at the back end of the year on farms with heavy land will largely be determined by the ground conditions. Generally there is a large supply of grass on these farms and sometimes there is even too much grass to get through. It is important to try to avoid very heavy covers of grass i.e. Grass in paddocks well above 2000 kg/ha. Large quantities of grass can be difficult to graze out well on heavy land and then the farm is not closed off well for winter. Having an average farm cover currently around 800-900 kg/ha ensures that this does not happen. The grass will be green from top to bottom and easily grazed.

For farms with a difficult soil type and high six week calving rate, closing up should begin in last days of September. So most of October will be spent closing up the farm.

To get started grazing next spring, some of the drier paddocks that have good grazing infrastructure with roadways and plenty of access/exit points will need to be targeted. So these paddocks will need to be closed earlier to ensure a grass good supply is available to start grazing next spring. There is often the temptation to graze these paddocks late on a heavy farm because of their drier soil type and good grazing infrastructure. Every day at grass in spring is worth €1/cow/day more than grass in autumn.

Spread K (Potassium) and Spread Lime

Many soils are deficient in Lime and K and this time of year is a good time to tackle both.

- Try to spread Muriate of Potash (0-0-50) which costs about €400/ton (€20/bag/acre). This would increase grass production by at least 1 ton of DM/ha (worth €170/ton)

  on grazing ground and an even greater response on silage ground.

- 1 bag/acre of 0:0:50 (Muriate Potash) applied will generally result in the soil increase an index. i.e. moving from index 1 to index 2. Given this cost of straight K fertiliser (€20/acre): The benefit in grass production is €60/acre.

- The level of lime usage has halved since the early 1980s. The level of lime usage must at least double to return the soil to its right pH. By doing so it will:

- Increase P and K availability & Increase N fertiliser response

SOIL FERTILITY

Our farm services team at Tipperary Co-op are offering a soil sampling and analysis service. We will also be offering fertiliser recommendations for the coming year.

Grass is by far the cheapest source of feed on dairy farms. 15-20% of the total variable costs on dairy farms go towards fertiliser. In order to maximise the amount of grass grown on farms, soil fertility is paramount. The management of soil fertility should be a primary objective on farms.

Benefits of good soil fertility:

- More grass
- Increased milk yields
- Less fertiliser usage
- More Profit

A soil test will analyse the following:

- Ph (Lime Requirement)
- Phosphorus
- Potassium

Building Soil Fertility

1. Lime

Lime can be spread at any time of the year. This said it is important to spread when grass covers and ground conditions are low. September- December is best time to spread lime on grazing paddock. On silage ground it is best to spread after cutting to minimise risk of lime entering silage pits and bales.

It is recommended to spread lime on 20% of your farm every year in order to spread the cost of liming over a longer period. 2-3 T/Acre (5-7.5 T/Ha) is sufficient when spreading on dry ground and 1.5 T/Acre (3.75 T/Ha) should be spread on heavy land.

It is important to remember if lime has been spread then slurry should not be spread on that land for up to 3 months. This also applies to Urea based fertilisers.

2. Phosphorus (P)

Phosphorus is very sensitive to ph so if lime is needed, it is best to spread lime to help improve P uptake. P should be spread in the Spring and Autumn. Spreading little and often is the best approach to improving P

- 10-30kgs P/ha/yr for each index (1/4 - 1/2 bag/acre of Gran 16% Super P). This is a guide of the amount of P needed depending on your soil results.

3. Potassium (K)

Potassium (K) is generally very low in silage fields due to K being available in large amounts. K is responsible for improving silage yields. It is important that 90 units/acre or 120 kgs/ha is spread for first cut silage and 28 units/acre or 35 kgs/ha is spread for second cut silage. It is important not exceed 90 units/acre or 120 kgs/ha in both first cut silage and in spring grazing swards as luxury amounts of K can cause milk fever in high K silages and grass tetany in high K grass swards. K should be spread in the Spring and again in the Autumn if needed. K is not regulated by the European Union's Nitrates Directive, so it can be spread during the closed period for slurry and chemical Nitrogen and Phosphorus if ground and weather conditions are suitable.

These are the three main parameters that effect soil fertility. By analysing these soil tests and taking samples every 3-5 years you can manage your soil profile, in addition to this Andrew can create a fertiliser plan specifically designed to your soil results. These plans are designed to help improve your understanding of these results and as a result get the more value from these analysis.

If you would like to avail of this service and advice please fill out the FORM attached.

Please contact our Farm Services Team if you would like to avail of this service.

IDENTIFYING AND TREATING MASTITIS

Compiled by Martin Kavanagh MVB Cert DHH

Antimicrobial resistance to antibiotics is a clear and present threat to the human population. Non-prudent use of antibiotics when treating our animals is part of the jigsaw that results in bacteria in our hospitals that are becoming increasingly difficult to manage. The Department of Agriculture (DAFM) have made it clear that there is a significant change coming in the laws governing prescribing of animal medicines in 2022. Category B antibiotics, including fluoroquinolones such as Marbofloxacin, and 3rd and 4th generation Cephalosporins such as Cobactan or Cephagaurd, will be restricted or excluded from use in food producing animals. Vets will be tasked with prescribing rules to reduce the use of these critically important antibiotics, and also change how they prescribe oral antibiotics such as CTC powder. DAFM is required to have a central database of all drugs used in food producing animals by 2027 to have a transparent record of how much is used, in what animals, and by whom. Whether anti-parasitic drugs, worm, fluke, and lice doses, will fall under this legislation is unclear but it has been recommended to DAFM.

Treating mastitis cases is the main reason antibiotics are used in dairy cows. Research into the treatment of mastitis in cows suggests that success in achieving a cure by eliminating bacteria from the cow's quarter is limited. This is reflected in our own experience where on many farms using antibiotic tubes or injections to treat mastitis cases is frustrating and unrewarding. It also leads to problems as tubes are changed during treatment and cows may receive three or four different combinations of antibiotics that ultimately promote drug resistance in surviving populations of bacteria. We need to be more careful.

Classifying Mastitis

Mastitis is classed as clinical, where you can see visible changes in the milk or quarter, or subclinical, where there is no visible change but there is a raised cell count. Cell count quantifies the number of 'body' cells in the milk that flood into the quarter in response to infection. So, a raised cell count, over 200,000 cells per ml of milk, indicates an infected quarter. Raised SCC equals mastitis.

Subclinical cases, high SCC, are as likely to improve with or without therapy during the lactation! What will determine if a cow gets better is whether the bacteria is responsive to treatment in the first place, how old the cow is, if it is a recurrent problem and if more than one quarter is infected. In clinical cases, tubes deliver more antibiotic to the inside of the cow's udder more effectively than most of the injectable antibiotics. There is little proven benefit by using an injection, except in cases where the cow is off-form, has a severe E. coli infection, or the mastitis is caused by bacteria that gets into the udder tissue such as Staph. aureus. Tubes are favoured over injection as they have a lower risk of creating antibiotic resistance due to the route of administration and the local effect in the udder.

Care must always be taken when using tubes as there is the danger of introducing more infection into the udder. Using an antibiotic tube either during lactation or at the dry period requires equal attention to cleanliness. Teat ends must be cleaned with spirits or an antiseptic wipe before a tube is inserted.

In the mastitis samples taken by Tipperary Coop, 45% of the samples contain Staph. Aureus and increasingly these bacteria show resistance to penicillin which results in the infection being largely untreatable during the lactation. By knowing this we can avoid the frustration of treating cows that are unlikely to respond. The goal is, if they are young cows under 4 lactations, that they get a long dry period of over 70 days where they have a chance to heal and have the benefit of a long-acting dry cow antibiotic that is more effective than lactating cow tubes.

Young cows during the lactation with clinical mastitis will benefit more from a longer period of treatment with tubes, and a three to six day treatment is more advisable. If the mastitis is recurrent, the better option is to stop milking the quarter. This has two advantages; milk can go to the tank from the three healthy teats, and the risk of infecting other cows via the cluster or by milker's hands is reduced. Older cows, with mastitis for the first time should be treated the same way. Again, if the older cow has a chronic SCC problem or has had recurring cases, then it is questionable whether any treatment will bring a benefit.

With mild cases of mastitis where there is some change in the milk and the cow has no sickness, treatment may be restricted to some udder creams and stripping out. Many cows with mild and some with moderate cases will self-cure without an antibiotic treatment.

What to do

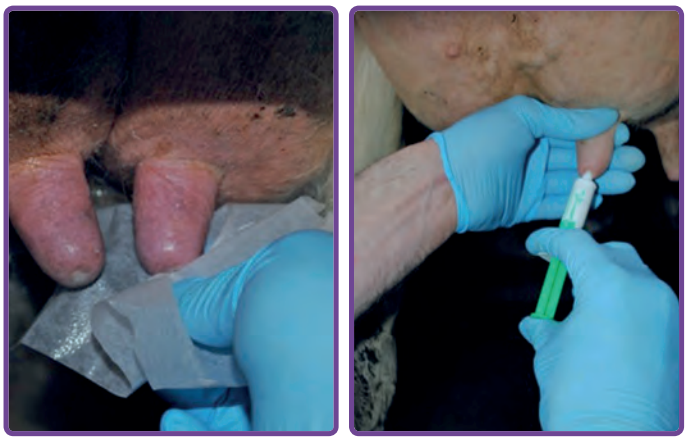
If the frequency of cases is increasing the first thing to do is to take sterile samples of the mastitis milk before treatment. Freeze the sample and when you have accumulated three or four samples then send them for culture. This will help identify if

the bacteria are treatable or not, where is the likely source, and what is the likely outcome from treatment.

In the meantime, begin treatment, in new moderate cases, using a simple lactating cow tube e.g. penicillin or B-lactam based (Chat with your prescribing vet) for an extended treatment period. Make sure to obey the withdrawals and if in doubt check the milk in the Co-op for residue before going back into the tank. If an antibiotic tube is used more frequently or in greater amounts than the label says, then an extended withdrawal period of 7 days is required.

Based on the result of the bacteriology, the best course of action can then be decided on; whether to treat or not, what tubes to use, how long they should be used for and whether there will be a benefit from early drying of the quarter. Also, this knowledge will help in making drying off decisions in terms of length of dry -off period and length of activity of the dry cow tube.

Most mastitis outbreaks will require management changes to bring them under control. The simple things of liner change, teat dip quality and quantity, parlour hygiene and a correctly functioning milking machine and milking routine will influence the outcome much more than antibiotics.



Pinch the top of the teat when inserting a sealer to ensure the bacteria proof barrier is in place in the teat canal.

The goal is to reduce the need for antibiotics and only use as much as necessary when necessary. This means there is a need for more information both from bacteriology testing and milk recordings to assist in making good decisions. Tipperary Co-op can give you advice on taking milk samples for bacteriology and the course of action to be taken.

FARM DEVELOPMENT PROGRAMME 2018-2020

Please see the current data on the focus farms in the Tipperary Co-op/Teagasc Farm Development programme.

Week Ending 2nd October 2020	John, Charlotte and John G Crowe	Peter Hughes and Paul Maguire	Glen Tour Farms	Seamus, James and Janice Farrell	T.J. Ryan	Solohead Research Farm
Milk Yield (Litres)	19.1	20	17	21	19.4	15
Butterfat %	4.88	4.68	4.76	4.42	4.76	5.11
Protein %	4.10	3.80	4.00	3.94	4.02	4.27
SCC ('000)	85	90	48	110	159	124
Milk Solids/Cow/Day (Kgs)	1.76	1.74	1.53	1.80	1.75	1.44
Concentrate Fed (kgs/Days)	3	2	3	3	3	0.5
Farm Cover (Kgs DM/HA)	1,100	1,045	872	887	1029	1260
Cover Per Cow (Kgs DM/LU)	460	400	325	316	333	475
Growth Rate (Kgs DM/ Day/Ha)	38	58	40	50	54	45
Rotation Length (Days)	40	35	40	35	30	38
Scanning Results for 2019 (% Empty)	6	Not scanned yet	10	14	9	10

If you have missed or would like to watch the videos again from our recent virtual tour on Glen Tour Farms, please type the following links into your internet browser:

1. https://bit.ly/36mxQJu - **Introduction**
2. https://bit.ly/3l7Fk74 - **Grass Management**
3. https://bit.ly/3jvR1UY - **Herd Health**
4. https://bit.ly/3nm72Pm - **Footbath Routines**
5. https://bit.ly/3nkL3II - **Infrastructure on Farm**
6. https://bit.ly/3jCnNDI - **TAMS Application**
7. https:// https://bit.ly/2F6qWN4 - **Energy Efficiency on Farms**

Tipperary Co-op and Teagasc, would like to thank Michael, Eamon, Martin and Triona along with all the other focus farm participants for all their co-operation and time in making these videos for our milk suppliers.

WINTER MILK BONUS SCHEME

Details of the current Winter Milk Bonus Scheme covering the winter months of November, December, January and February are as follows:

It is proposed to pay a bonus of 3 cent per litre for the respective months, based on achieving the following conditions:

- TBC less than or equal to 50,000/ml.
- SCC less than or equal to 400,000/ml.
- Thermodurics less than or equal to 1,000/ml.
- Lactose greater than or equal to 4.20%.
- Providing milk volumes in November of greater than 30% of the supply from the previous May.
- Providing milk volumes in December of greater than 15% of the supply from the previous May.
- Providing milk volumes in January of greater than 10% of the supply from the previous May.
- Providing milk volumes in February of greater than 15% of the supply from the previous May.