

Teagasc Notes for week ending Friday 5th February 2021

Mastitis Control in Early lactation

Another calving season kicks off and we hope it will run smooth and with little complications. There are a number of issues that can impact on how smooth a calving season will run for example milk fever, retained foetal membranes, calf scour, difficult calving's and mastitis/SCC are only some of the issues that can impact on a successful calving season.

Managing Mastitis in Spring

Mastitis is a major issue throughout lactation but in particular during the spring. There are a number of measures you can address which will help minimise the impact of mastitis at calving. We will start with calving boxes. Clean out as regular as possible, ideally after every calving. If you let bedding build up in these pens, use a disinfectant lime product, which can be scattered over new straw when applied to the calving pen. These pens should be cleaned out on a regular basis. We see these pens as a major cause of mastitis especially to in-calf heifers as they have no dry cow tube or internal teat sealer and also towards the end of the calving season when infection rates have built up in pens.

Liming

Liming cubicles twice per day with automatic scrappers running every 3 to 4 hours will help greatly in reducing infection rates on cubicle beds and help greatly in keeping them dry and clean. Applying a disinfectant lime product once per week can be a significant help to keep infection rates down.

Milking Machine

What we do in the milking parlour is one of the most significant factors in causing mastitis and facilitating its spread through the herd. Try and have a new set of liners for the start of the season. They will facilitate better milk out and prevent the transfer of infection during milking. Always have a new pair of milking gloves for every milking, when inspecting cows and foremilkng, always pre spray with teat spray, strip out cows and dry wipe. This will greatly impact on milk let down and prevent you from spreading infection via your gloves. Post spray all cows post milking ensuring 15 mls per cow per milking is applied. Check that all teats are covered well. You will notice skin condition will be in very good condition with this practice.

Early Detection of Mastitis

The cure rate of any clinical case of mastitis will depend on early detection. Giving the right treatment at the appropriate time and administering the correct dose rate. To ensure proper treatment, a milk sample should be taken from the first number of cases and sent to the laboratory for culture and sensitivity testing. This sample should be taken prior to treatment. The teat should be disinfected thoroughly and a sample should be put into a sterile container. Put the date and cow number on the bottle and freeze it. This then can be dropped off to your local laboratory for analysis.

E.g. Animal Health Laboratories, Shinagh, Bandon.

With the restriction on antibiotics and poor cure rates in mastitis cases, we need to know the problem cows early in lactation to prevent spread through the herd, milk recording is the key to successful management of mastitis and of your herd. Early identification of problem cases can be achieved, analysis of your dry period is carried out but the first milk recording must be carried out within 60 days of the first number of cows calving, you need to have your first milk recording done before 1st April in order to get an accurate report on how the cure rate over the dry period went, and what level of new infection is in your 1st calvers and in the rest of your herd. When you get your report talk to your adviser/Vet to go through the report with you, there is a huge amount of information available in these reports.

Disinfecting Clusters

Get into the habit of disinfecting clusters after problem cows, e.g. put 30 mls of peracetic acid into 10 litres of water and this solution will disinfect 10 clusters, a new solution is required after 10 dips. This technique greatly reduces the chances of spread through the herd.

The Californian Mastitis Test (CMT)

The CMT kit is a simple and excellent tool to help identify high SCC quarters within high cell count cows when your milk recording report comes back. It is impossible to identify sub clinical mastitis without this aid as there are no visible clots in these high cell count quarters to the naked eye.

The procedure is very simple:

- Carry out the test prior to milking
- Discard the first 3 draws and then fill each well with a quantity of milk, try to avoid cross contamination.
- Once all 4 wells have a quantity of milk, tilt the tray to a 45 degree angle, to ensure an equal volume of milk in all 4 wells.
- Turn the tray back flat and squeeze the bottle until an equal quantity of solution is applied to all four wells. There should be approximately a 50:50 mix of milk and reagent.

Stir the tray for 30 seconds and watch for any changes to the consistency of the solution. The degree of thickness reflects how high the SCC level is within the quarter.

I highly recommend that you take a sample of milk into a bottle and label it. Use this sample at the end of milking to CMT test the cows, when you have time to analyse and record your results.

CMT Scoring scale

Score 1 very good (no change to the thickness very fluid SCC<500,000)

Score 2 Poor (slight changes to consistency grains evident when tilted left to right slight thickness evident SCC >500, 00 and<1,500,000)

Score 3 Very poor (thickness very evident when swirling, when emptying wells solution may stick to the paddle SCC >2,000,000).

The accurate interpretation of this rapid test takes a certain level of skill and practice. The starting point should be to have a recent milk recording carried out or an individual SCC on all cows carried out by your co-op. To help train your eye, consider carrying out a laboratory SCC test on individual quarters, then carry out a CMT on these quarters and compare results.

It is very important to record the results, when the results are recorded you can analyse them to see if any pattern is evident, e.g. a lot of back right quarters etc.

It is important to discuss with your Adviser or Vet what treatment/ culling procedures should be followed when you have performed this test. These results in conjunction with milk recording are an excellent tool to control and understand mastitis patterns within your dairy herd.

Retirement for Brian Hilliard

Last Friday, the 29th of January Teagasc bade farewell to a colleague, Brian Hilliard, who retired after 39 years working with Teagasc in Waterford. Brian, a Kerry man, started his career in the County Committee of Agriculture in Offaly in 1981, moving to Waterford in 1982. Brian first worked in Lismore before moving to Dungarvan in 1984. Brian has worked with many dairy farmers across the county in the intervening years.

He has been a great pioneer and leader in dairy production. The breadth of his development work has been staggering. Brian took a leadership role in developing and promoting a number of key technologies including maize production, crossbreeding and more recently once-a-day milking. Brian had a huge impact on developing dairy production in County Waterford and beyond.

Many farmers in County Waterford participated in education tours with Brian and colleagues in Dungarvan over the years. And while there was a lot of fun to be had on these trips, Brian always ensured that the farms / research centres that were visited encouraged farmers to broaden their thinking and explore new ideas / new technologies that could be applied to their own farms.

We wish Brian health and happiness in his retirement and the best of luck in the next phase of his life

