

Animal Health & Milk Quality

Edition 3

Spring Management Series 2024



Farmer Focus



Kieran McDermott
Corkimmons, Clones, Co.Monaghan

Farm Profile

Farm Size: 55 Ha

Cow Nos.: 87

Calving start date: 7th February

% Calved: 80%

Managing SCC on farm

On the McDermott farm, Kieran completes 5 milk recordings per year. Before the first recording Kieran will be sure to send samples off for SCC testing for any cow, he may feel might be high for SCC. This means he is on top of SCC before first recording even takes place on the farm.

First recording on the farm is usually around the 20th of March. The second of the recordings is towards the end of April before breeding begins, then again in June, August, October and end of November before dry off takes place. Milk recording is used on the farm to monitor SCC, select cows to receive Selective Dry cow Therapy. The recording is also used to make breeding decisions on farm.

If a cow shows a high result for SCC after recording Kieran will first test the cow with a CMT test kit. 'If I still can't identify the quarter after I CMT, I will then take an individual sample from each quarter on the cow and send to IML to be tested for SCC'.

If the case is clinical the cow will be treated, if not the cow will be monitored for about 1-2 weeks and Kieran will rub udder cream on the cows elder. Kieran now has cluster cleanse installed on the farm but prior to this any high SCC cow would have been separated from the herd and milked last to prevent spread of infection.

If a cow is persistently high for SCC throughout the year Kieran will give the cow a longer dry period with long lasting antibiotics. If the cow is high again on the first milk recording the following year she will then be culled from the herd.

Treating a Mastitis Case

In Spring every cow is stripped during morning milking before clusters are attached in the parlour, if a cow has curds Kieran will see them before attachment. This means Kieran can dump her milk and treat the quarter accordingly. Kieran runs a colostrum herd on the farm during calving, this herd will be stripped both morning and evening as they are high risk. 'This takes a lot of work to strip each row of cows if you are doing it right, but it pays off'.

If a cow is spotted with mastitis an individual sample will be taken from the infected quarter. This sample is dated, and the cow number is also written on the bottle, the bottle is then frozen, and it goes to the vets for testing.



Farmer Focus (Continued)

When results of mastitis type come back from the vets Kieran will take note of mastitis type and the treatment recommended. From recording this data Kieran himself can then better identify what to treat each case with as the season progresses. Cows will receive the tube recommended and some Metacam under the skin and will be milked alone at the end of milking.

Milk Recording to make Educated Breeding Decisions

Breeding starts on the McDermott farm on May 5th usually. Prior to breeding Kieran will have sat down with his joint programme advisor Owen McPartland, Owen and Kieran will review Kierans milk recording data to pick out the top 1/3 of cows. These cows are mainly picked based off solids delivered, fat%, protein% and SCC, this top 1/3 will be the cows that Kieran intends to use for dairy A.I.

Kieran puts a high focus on DBI when selecting his beef bulls to breed with, carcass weight and carcass confirmation are the two main traits that he looks out for.



Managing SCC

Early milk recording is the gold standard for identifying problem cows but a significant proportion of the herd may be calved before this takes place. While not as accurate, early investigation using the California Mastitis Test (CMT) before a cow's milk goes to the bulk tank (5th day post calving – check antibiotic tube for exact withdrawal) can help identify cows very early in lactation that have potential to impact on your bulk tank Somatic Cell Count (SCC) and their herdmates.

Testing on the 5th or 6th day post calving should see the stress of the calving process passed for most animals, the exception being the odd excitable heifer. CMT testing cows at this stage, you will have 3 potential outcomes;

1. CMT is clear and that cow is suitable for milking to the tank
2. CMT shows coagulation on all four quarters – this is more than likely stress related and associated with freshly calved heifers
3. CMT shows coagulation on one or two quarters. This indicates high SCC/infection of these quarters.

When to record?

With the CellCheck Farm Summary Report, milk recording cows within 60 days of calving will measure the effectiveness of your dry cow treatment. This is critical for any farmer who was battling a high SCC last year and who undertook a programme of targeted dry cow therapy this past winter. It will also highlight if new infections during the dry period have occurred.

For Spring calving herds this would mean that milk recording should be carried out in the Mid-March to early April period. Leaving it later than this means your earlier calved cows will be further than 60 days into lactation.

Mastitis in the early lactation is a high risk. Early milk recording will give you an indication of any cows that need attention.

Heifers: recent research has highlighted that high SCC in heifers may be more prevalent than you might think. Early milk recording will identify any of these that need careful attention. It also will identify your higher performing heifers immediately.

The table below lists important points to remember when it comes to controlling SCC & mastitis:

Cow/Cow housing/environment	Milking Parlour
Clean down cubicles twice daily	Operators must wear gloves
Bed cubicles twice daily (lime or other dry product)	Wash and disinfect gloved hands regularly
Scrape passageways regularly	Wash and disinfect gloved hands after touching high SCC cows
Avoid overcrowding (one cubicle per cow minimum)	Where possible milk high SCC cows in the last row
Locate drinking points away from cubicles	Cluster dip after milking a high SCC or mastitis case
Roadways to paddocks free from muck pooling	Cluster flush systems should be considered in problem cases
Collection yard cleaned twice daily	Parlour washed down after every milking
Good nutrition – cows in good BCS have healthier immune systems to fight pathogens	Milking machine should be regularly serviced and liners changed every 2,000 milkings



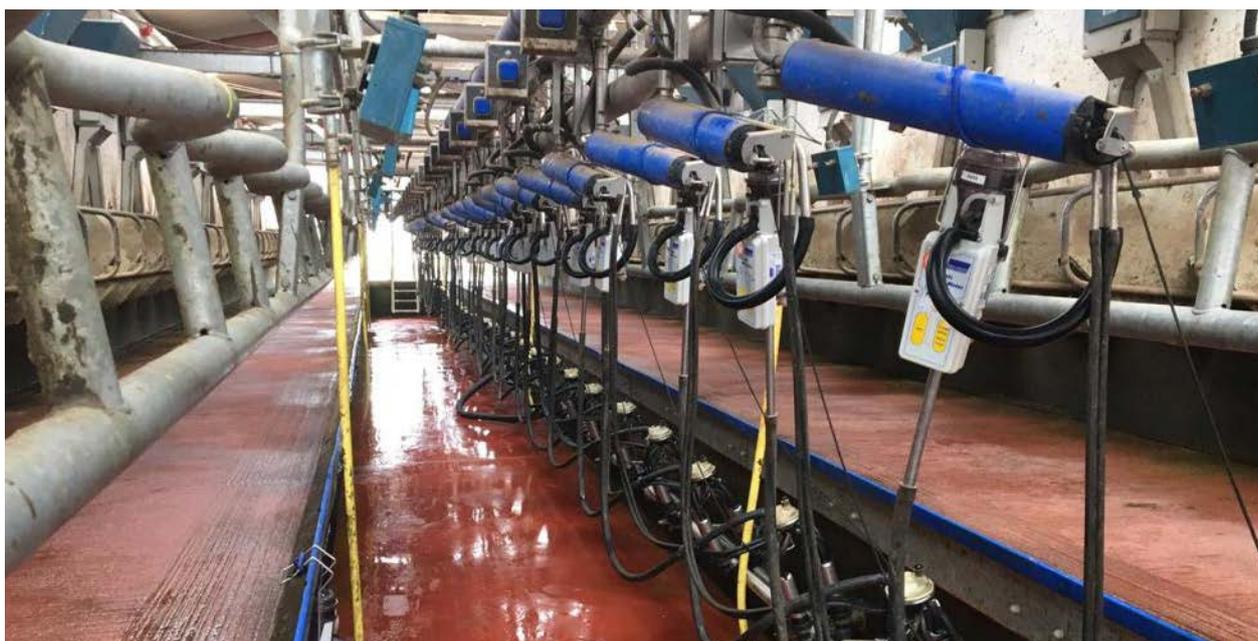
Seek Help!

Ongoing SCC and mastitis issues do not just have a financial effect on farms, there is also the added mental strain of dealing with constant cases of mastitis or an elevated SCC. Help is available and should be sought out. If you are constantly dealing with these issues contact one of our Joint Programme Advisors, and they can help you put a plan in place in conjunction with advice from your veterinary practitioner to not just treat infections but to also seek out and eliminate the cause of these infections.

Below is a recommended milk recording calendar for a spring calving herd:

Sample Milk Recording Schedule for Spring calving herd (4 tests)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		1st recording			2nd recording						
							3rd recording				
									4th recording		
<ul style="list-style-type: none"> ▶ 1st recording – needs to take place within 60 days of the first cow calving, generally mid-March to early April. This will give an indication as to how effective SCC management in the dry period has been. ▶ 2nd recording – for mid-season SCC management and an indication as to how good main season grassland management is (milk protein highly influenced by grass quality) ▶ 3rd recording – as above and helps identify cows with more persistent lactations, thus identifying high performing animals in the herd. ▶ 4th recording – no more than 30 days before planned start of drying off. Identifies cows that are suitable for sealer only at dry off and cows that may require further action with regards to lowering their SCC before and during the dry period. <p>Note: 4 tests is the minimum recommended number to carry out yearly. However there is no reason why milk recording can't be carried out more often, indeed split calving herds would be recommended to record at least 6 times a year in order to hit the right stages of lactation for both Autumn and Spring calving cows.</p>											



If you haven't milk recorded before but would like to start this year, see our tips to getting started in the box below:

- 1 Identification – Freeze branding cows is the fool-proof method of identification. Make sure freeze brands are visible on the day of recording. Electronic tagging of all female dairy calves should also be considered.
- 2 In parlours with Auto-ID, make sure tags or pedometers are reading correctly and registered correctly on the computerised system.
- 3 Contact with Progressive Genetics milk recording team prior to first recording is recommended to ascertain what equipment is needed.
- 4 Make sure all equipment is clean before sampling (i.e., jars, jar taps & sampling bottles).
- 5 Good records – recording calving dates & dry-off dates is extremely important to have accurate milk recording data. Your herd also needs to be on the ICBF database, all reports are uploaded to this and available for viewing on your ICBF page.
- 6 If going down the eDIY route, have help available for the days you are recording. Milking will take longer on these days so be prepared for it. It is also possible to have a recorder accompany the eDIY meters and do this work for you, this is something worth considering.

Most important, when milk recording, is to use the information that is subsequently generated. If you start milk recording for the first time in 2021 and would like some help and guidance on interpreting the reports please contact Michael from our Lakeland/Teagasc Joint Programme team on **087 188 3803** and he will be happy to help.

To get started Milk Recording contact Progressive Genetics milk recording team on **(046) 9540606**.



Joint Development Programme

Lakeland Dairies/Teagasc Joint Development Programme has produced this Spring Management Series. Our advisors are currently available by phone to discuss all farm related matters.

▶ Susan Casey 087 099 5359 ▶ Owen McPartland 087 330 2254 ▶ Michael Monahan 087 188 3803