Lakeland DAIRIES

Teagasc
Agriculture and Food Development Authority

Joint Development Programme

Animal Health & Milk Quality

Edition 3

Spring Management Series 2023

Farmer Focus

William and Alan Nicholson
Tomacrow, Drumacrib, Castleblayney, Co. Monaghan

Farm Profile

Farm Size: 67 Ha

Cow Nos.: 120

% Calved: 82%

Managing SCC on farm

On the Nicholson farm, William and Alan record milk four times a year. They record in April, June, August, and October. When results are received from the recordings, any cows which have been infected or recently infected will be monitored daily. The high SCC cows will be stripped regularly in the parlour and checked for any signs of clinical mastitis. The cow will also receive a SCC bolus to try and cure the issue. After 3 weeks have passed, Alan will then take an individual sample from the treated cow and send it off for testing, if the cow has not cured and SCC is still high the cow will either be:

1. Treated with mastitis tubes.
2. Dried off in the infected quarter.
3. Culled from the herd.

This protocol works well on the farm and is all made possible using milk recording.

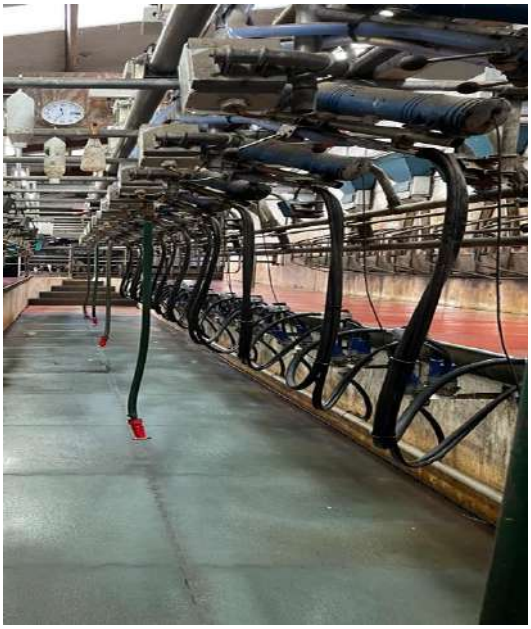
Milk Recording to make Big Breeding decisions

On farm milk recording is not only used to monitor cell count but also for the use of selective dry cow therapy and for breeding purposes. With the breeding season approaching, Alan will use his previous year's recordings along with his first recording of this year to help select cows to breed off.

Farmer Focus (Continued)

When selecting cows for breeding, Alan pays particular attention to the margin per day section of his recording, a cow must be in the top 25% in its lactation group to be selected. Other factors such as cell count, lameness, previous calving date and EBI will also be taken into consideration to select the top cows within the herd. Any cow which is not deemed suitable to breed a milking replacement will receive a high DBI beef bull from service one on farm this year.

Breeding will commence on May 1st. Heifers will be synched and receive sexed semen with cows selected to breed milking replacements off also receiving sexed semen with Alan having great success with it in previous years. Any cow which does not cycle in the first 3 weeks will be scanned to see if there is a problem. All cows will be tail painted 3 weeks prior to breeding giving Alan a good idea of which cows are cycling.



Body Condition Scoring Cows

Alan keeps a tight eye on all cows on farm to ensure condition is kept at an optimum at all times. If it was the case that a cow was to be lacking in condition she will be marked and milked once a day for a number of weeks. If condition does not improve Alan will then call on the vet to have a look at the cow to see if there are any underlying conditions which may be impacting on the cow's condition.

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		

- 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.

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.*

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**.

Lakeland DAIRIES

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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