The Portrait of Quebec Dairy Farms in Constant Evolution!

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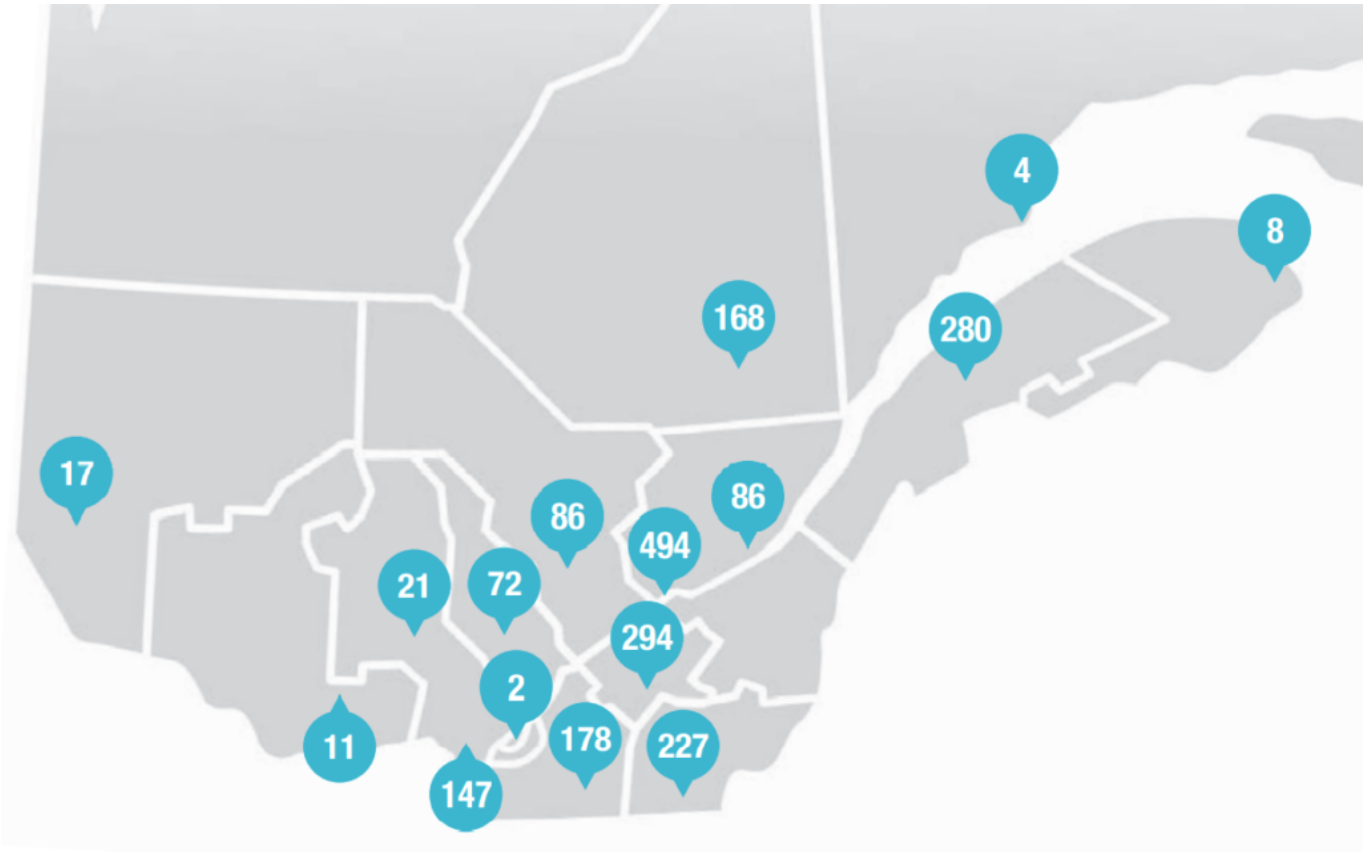
Between April 2020 and January 2021, two questionnaires were administered by Lactanet technicians and advisors to all their dairy producers. The first focused on housing and dairy herd management, and the second on calf and heifer management practices. The following article presents some highlights of the data collected during this survey.



Project Summary

The main objective of this survey was to provide a portrait of the situation of Quebec dairy farms regarding animal housing and on-farm practices.

A total of 2143 farms volunteered to answer the questionnaires. The distribution of farms in size and geography is very representative of all Quebec dairy farms.



Types of stalls

Free-stall housing is gaining popularity among Quebec dairy operations. Nearly 84% of farms house their calves in free-stall setups. Of this number, 53% chose individual housing and 47% group housing. Individual housing has long been the accepted standard for better control of disease transmission and calf feeding. For nearly a decade, studies have shown that calves that have been socialized have better growth gains and adaptability to change and stress. This data is encouraging some farms to use pair or group housing for calves.

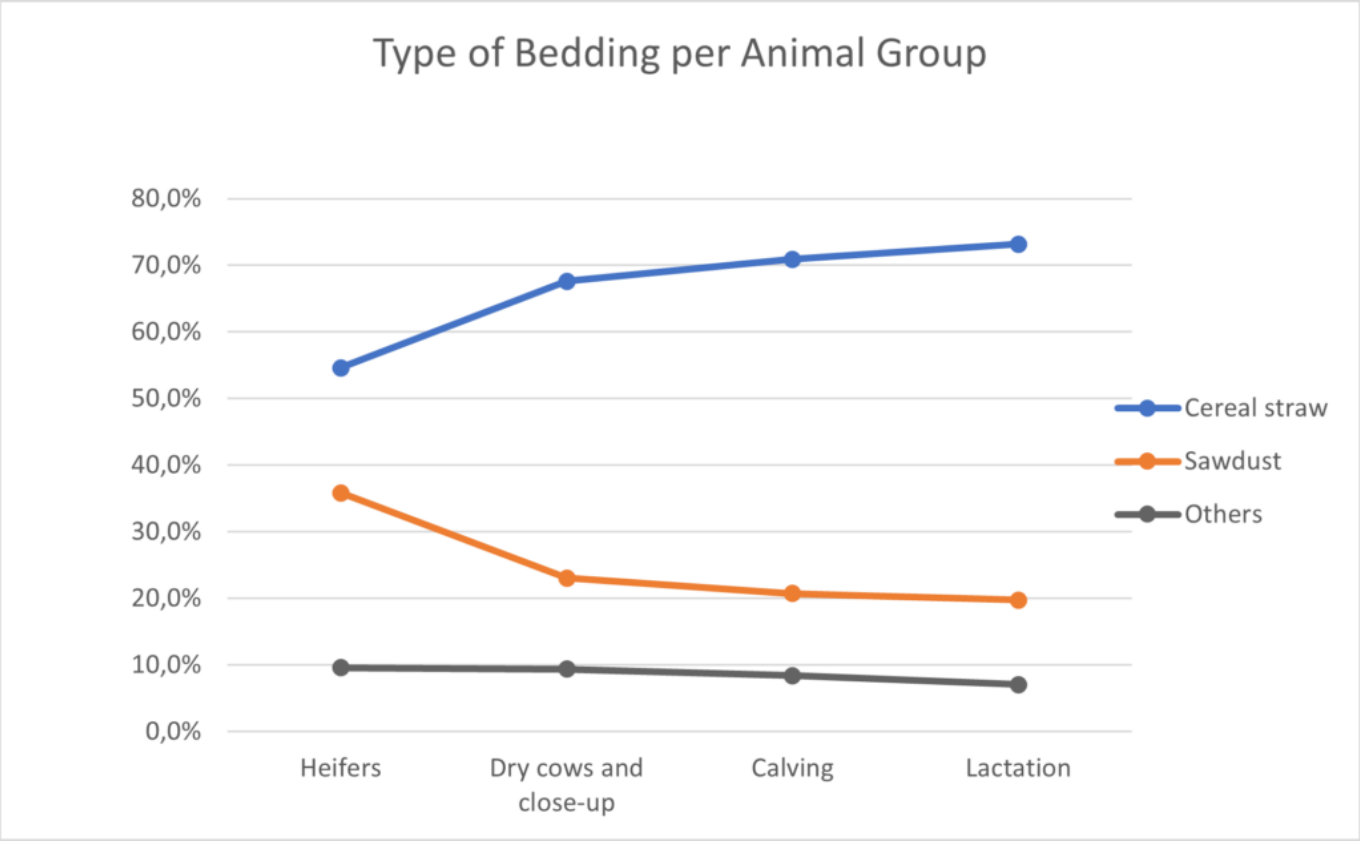
For other groups of animals, 70% of farms favor free-stall housing for post-weaned heifers, and 60% for mature heifers. Moreover, 42% of dry cows up until calving are housed in a free-stall environment. For those who use pens at calving time, it is important to have a large enough space for the cows to position themselves properly. An appropriate calving area will also reduce the risk of problems associated with calving. Group-housed cows usually prefer to be isolated from the rest of the group at calving time. In

individual pens, a minimum of 15 m^2 is recommended.

Lying surface

Cows spend half their day lying down. For calves, it’s nearly 20 hours a day! To keep the animals comfortable and to promote their resting time, the comfort of the stall is essential. It must be soft, dry, and not slippery. There are many ways to achieve this, but bedding is essential regardless of the type of stall lining used.

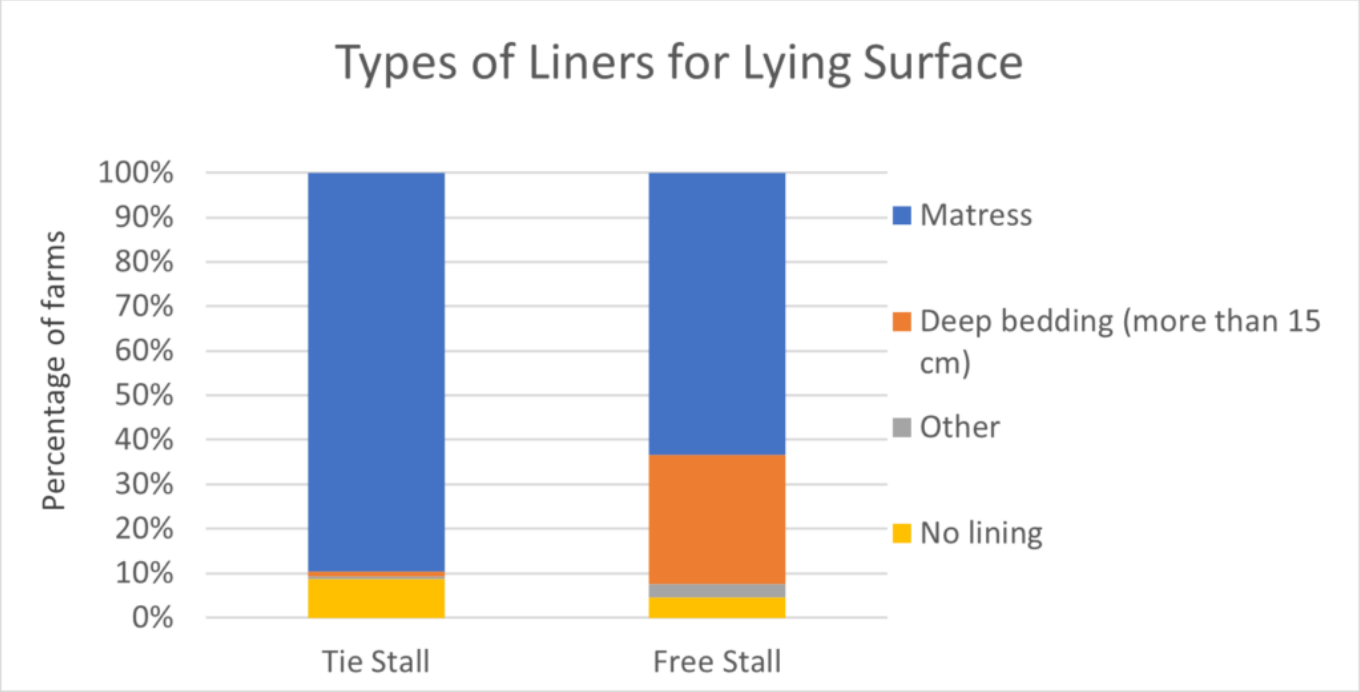
Among the different types of bedding, cereal straw and various forms of wood bedding are the most used in Quebec. They are used on nearly 90% of farms.



We know that the softness of the bedding surface is influenced by the thickness of the bedding layer. According to Lactanet’s tests with the

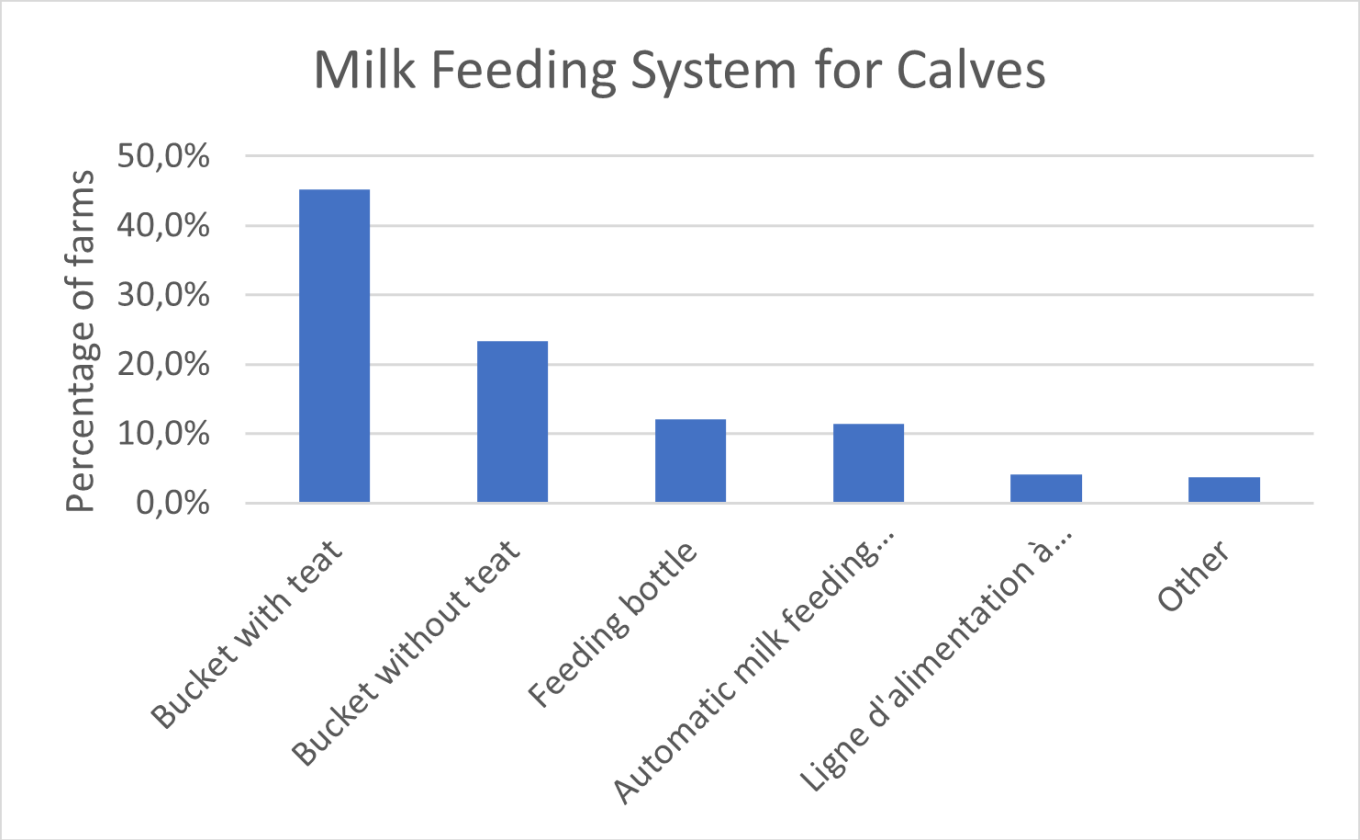
Clegg Impact Meter, we need to have about 8 cm of bedding, regardless of the source, for the impact of the weight of the meter to be completely absorbed by it. The challenge with bedding is that it must be maintained at a sufficient thickness throughout the day.

There are several types of liners on the market that can be added under the bedding. Depending on their softness, the amount of bedding can be reduced and adjusted while maintaining the desired softness of the bedding surface. If we consider deep bedding, we can see that more than 90% of farms add some type of cover for lactating cows.

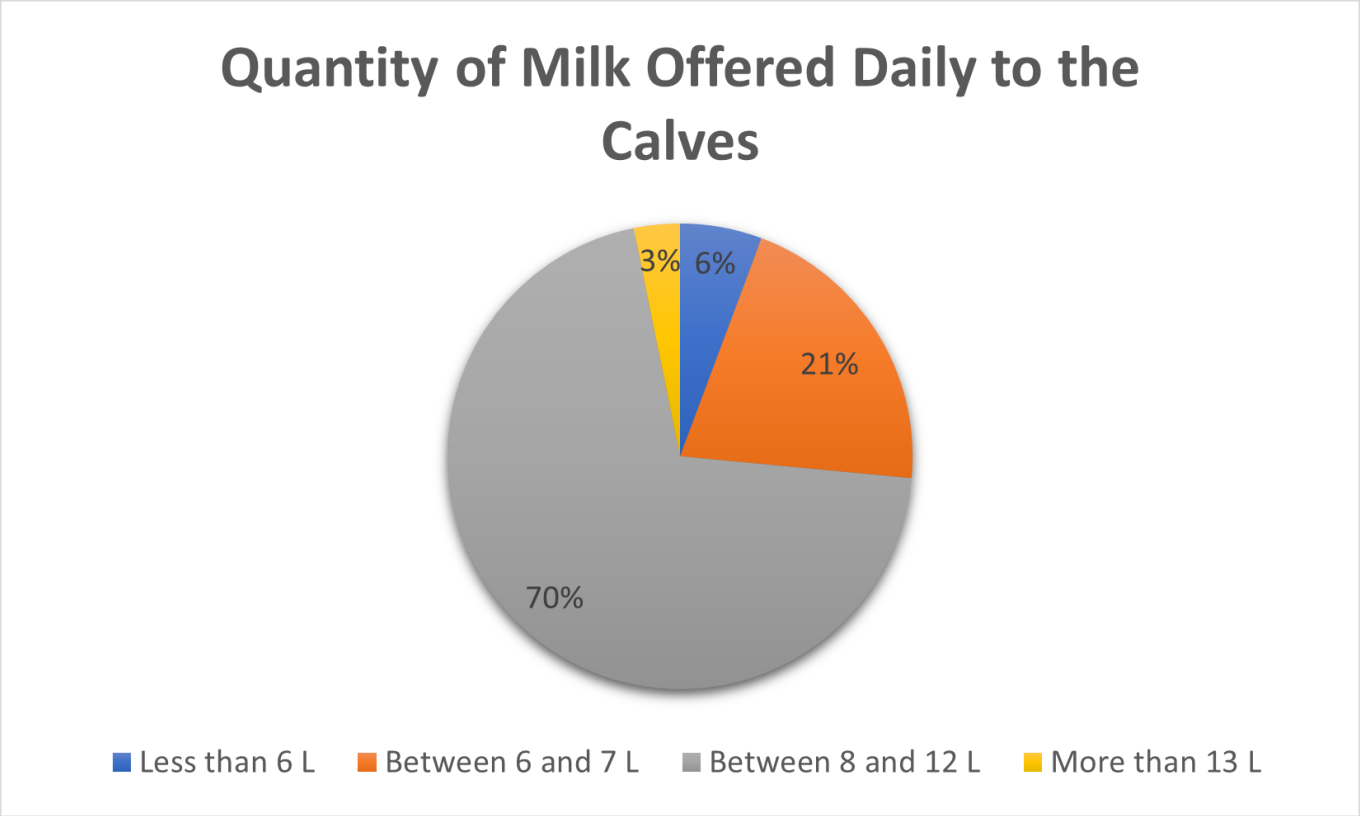


Calf management

Calf feeding has been, and still is studied, by researchers. It has been shown that allowing calves to drink by sucking their milk slows the rate of milk consumption and improves digestion. In addition, offering a teat allows the calf to satisfy its need to suckle and increases the production of saliva and digestive enzymes. Over 73% of farms in Quebec are now feeding milk to calves by means of a teat.



The 2009 Code of Practice for the Care and Handling of Dairy Cattle recommends that calves be fed amounts of milk equivalent to 20% of their body weight. This represents between 6 and 8 liters of milk per day depending on the breed of animal. Previously, the usual recommendations were around 4 liters per day. This higher amount of milk ensures a good supply of nutrients and a good growth of the calves. Since then, studies have proven that the growth rate of the calves has a positive impact on the milk production of these future cows. We note that Quebec farms have adopted these recommendations in large numbers. More than 94% of farms offer more than 6 liters of milk to their calves.



Acknowledgements

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By Steve Adam, agr.

A graduate of Laval University in agronomy, Steve has developed an expertise in the comfort and well-being of dairy herds. In 2017, he received the OAQ's Medal of Agronomic Merit for his contribution to the development of the training program 'The Barn, a source of Comfort''. As an expert in dairy production, he shares his knowledge as an author and speaker throughout Quebec and Canada.