

Species at risk in Canada: Dairy producers who know how to produce low-cost milk from pasture



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I didn't write the above headline merely to be sensational, but because I believe what I am about to describe.

As you probably know, few dairy farms in Canada use pasture now for milk production. Recent data from Valacta—Quebec's dairy production centre of expertise—stated that less than 500 Quebec dairy farms provided more than 500 kg of dry matter/ per cow from pasture on an annual basis. In my experience, you can easily get a dairy cow to consume 10 kg of dry matter from pasture per day if you provide her with access to pasture both day and night and more than an acre /per cow annually. This 500 kg of dry matter per cow would easily be consumed by a dairy cow in less than two months of grazing, providing the dairy cow has access to pasture where the standing forage at turn in exceeds about (six to eight inches normally) 2,800 lbs of dry matter/acre at each grazing. Certified organic dairy farms are the only dairy producers required to provide grazing for their herds in Canada and the U.S. In Ontario and Quebec, there are about 160 certified organic dairy farms. Consequently, it could be argued that in an industry of about 11,000 dairy operations in those two provinces, the 160 farms using pasture constitute a "species at risk." Why is it important to maintain this "species" that produces milk from pasture?

For three years now, I have had the privilege of following several certified organic dairy farms. On several of these organic farms, pasture is the only forage offered during the grazing season. As a result, they feed very low amounts of grain while maintaining milk production above 25 kg/cow per day at very low cost. Others in the same group only manage to provide enough pasture for the 30 per cent of the forage ration for 120 days as required by the Canadian organic standards. To comply with those standards, the grain is fed as heavily during the pasture season as during the winter season when pasture is not available.

The best performing dairy farm in the group I follow produces over 90 per cent of their milk from pasture while maintaining production over 25 kg per cow with one to two kg

of concentrate/cow/day for a 150-day grazing season. On this farm, the cows have access to pasture over 22 hours per day with water in every parcel and more than one acre per cow of dense pasture available for grazing. The dairy cows on this farm are trained and selected for grazing and the ability to digest forage fibre from pasture. The net result is much more profitable dairy production. Dairy cow health and longevity is maintained with a lower replacement rate. Nutrient recycling of animal manures is improved so much that natural fertility is maintained.

Perhaps you think that survival of low-cost dairy production in Canada from pasture is not necessary. Dairying is a business and “species” are going extinct every year. While milk can only be produced from pasture for 120 to 150 days during the growing season, why not use the economy of the grazing systems while it is available? Even if you are not an organic consumer, the dairy industry needs to maintain the knowledge of low-cost dairy production methods to stay competitive with imports from other countries where milk is produced on pasture.

If you want the argument in farmer’s arithmetic, here is an example. Our best dairy pasture system produces about a kilogram of milk (worth about 0.75\$/litre) from one kg of dry matter quality pasture. With good pasture produced for about 7.5 cents per kg of dry matter, this produces 75 cents worth of milk. This compares with forage rations at 14 cents per kg of dry matter and grains at 30 cents/ kg of dry matter or more. The other feature is that during the grazing season, the cows do all the work, producing milk, harvesting their forages and spreading their manures with no fuels, no tractor operation and less greenhouse gas production and little or no mineral fertilizer and no pesticides. Let’s not lose this species of dairy producer.

Hubert McClelland grew up on a farm in Cantley, Quebec and was educated at Macdonald College. For over thirty years, he worked for the Outaouais sector of the Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec as an agronome and pasture specialist. Currently, he is working with the National Sustainable Grazing Mentorship Program as a grazing mentor.

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