

QUEBEC CANDIDATE TO THE ENVIRONMENTAL STEWARDSHIP AWARD

Ferme Brylee



Cattle on pasture at Brylee Farm

1- DESCRIPTION OF FARM AND OPERATING ENVIRONMENT

Brylee Farm is a five-generation family farm that engages in grass-fed beef and lamb production, custom grazing, and direct marketing. It is located in Lochaber in the Outaouais region. The family owns three farms and rents a fourth. Over 90 percent of their sales are generated from the on-farm store. The herd size currently sits at 200 head of cattle and 150 sheep.

The people behind Brylee Farm

Owner Brian Maloney sees himself as a grass farmer. He got started in dairy farming with an Ayrshire/Canadienne/Jersey cross herd fed on grass and seasonal feed. Pasture management has been his passion from the beginning, always with the goal of preserving land for future generations—as previous generations did for him.

His passion for pasture management led him on a series of trips around the world to develop his knowledge of pasture and pasture management with a view to reducing on-farm production costs.

Before 2010, Brian has served as a mentor with the Canadian Mentorship Program, sponsored by the Canadian Cattle Association. He has guided a number of farmers as well as two farms in this capacity. He sits on two different provincial committees for pasture information days. Twelve years ago, and more recently last fall, Brian delivered a workshop on pasture management at Expo Bœuf.

Lise Villeneuve, Brian's spouse, is responsible for running the store and processing its products. Because of the farming techniques used, the meat is healthful and of exceptional quality. The farm's customers care about how their meat is produced and place importance on respecting animals and the environment. They have the opportunity to witness the process from field to fork.

Lise and Brian's daughter, Kim Maloney, joined the farm on a full-time basis three years ago. She studied marketing in school and worked as an assistant manager in different breweries. She is currently considering taking over the farm. Kim did an internship in California on Five Marys Farm, which raises cattle and sheep. Motivated and hardworking, she has a concern for the environment and respecting soil.

The family subscribes to a holistic management approach; the members view the business as a unified whole. Brian took the Holistic Resource Management course with Ed Martsolf in 1996. Lise later took the same training under Allison Guichon in 2011.

Kim has also taken courses in holistic management, introduction to ecosystem processes, ecosystem management tools, holistic decision making, and holistic decision evaluation and monitoring. She has also taken holistic financial management training.

Kim Maloney, Brian Maloney, and Lise Villeneuve, the people behind Brylee Farm



2- ACTIONS UNDERTAKEN TO IMPROVE ENVIRONMENTAL MANAGEMENT

Production environment

Brylee Farm does not use any chemical fertilizers, and all manure collected from the sheep herd is composted in the field. The soil has not been tilled in 20 years, and all pastures are permanent. Animals are moved from one pasture to another, naturally fertilizing the fields in the process. This method of pasture management means that the manure is spread uniformly across the paddocks on the farm's 360 acres of pasture land. All water bodies are fenced off. Thanks to permanent plant cover and the increased organic matter/carbon that the land is able to capture, the owners note that their fields retain more water—a principle that can save the day in droughts like those of recent years.



Entreprise	051102-000	Client	06077	No Rapport	COA-183023	
La Coop Agrodor 340, rue Lyons Thurso J0X3B0 (Québec)		Brylee (ferme) 469 rang 7 est Thurso J0X3B0 (Québec)		Émission originale	18-09-2017	
				Émis le	18-09-2017	
				Rapport Final		
Copie conforme						
No Échantillon	Échantillonné le	Reçu le	Bon de commande	Description	Demandeur	
483466	11-09-2017	12-09-2017		Catégorie sol Bovin	Robineau David	
Paramètre	Résultats sur sol séché	Unité	Méthode d'analyse	Description	Référence externe	Procédure interne
CEC estimée	30.0	meq/100g		Estimation	CRAAQ 2 e édition	
pH eau (1:1)*	5.7		pH	pH-mètre	MA. 100-pH 1.1	ILCAG-002
pH tampon*	6.1		pH	pH-mètre	MA. 100-pH 1.1	ILCAG-002
Indice en chaux	61		pH	pH-mètre	MA. 100-pH 1.1	ILCAG-002
Ca (Mehlich III)*	5650	Kg/ha		Balayage de métaux	ICP-OES	MA. 200-Mét-P ass. 1.0
Saturation Ca	42	%			Estimation	CRAAQ 2 e édition
P (Mehlich III)*	29	Kg/ha		Balayage de métaux	ICP-OES	MA. 200-Mét-P ass. 1.0
ISP	1.0	%			Estimation	CRAAQ 2 e édition
Formule de calcul	ISP1				Estimation	CRAAQ 2 e édition
Al (Mehlich III)*	1362	ppm		Balayage de métaux	ICP-OES	MA. 200-Mét-P ass. 1.0
K (Mehlich III)*	744	Kg/ha		Balayage de métaux	ICP-OES	MA. 200-Mét-P ass. 1.0
Saturation K	2.8	%			Estimation	CRAAQ 2 e édition
Mg (Mehlich III)*	1055	Kg/ha		Balayage de métaux	ICP-OES	MA. 200-Mét-P ass. 1.0
Saturation Mg	13.09	%			Estimation	CRAAQ 2 e édition
Zn (Mehlich III)*	4.4	ppm		Balayage de métaux	ICP-OES	MA. 200-Mét-P ass. 1.0
Cu (Mehlich III)*	1.55	ppm		Balayage de métaux	ICP-OES	MA. 200-Mét-P ass. 1.0
Mn (Mehlich III)*	5.6	ppm		Balayage de métaux	ICP-OES	MA. 200-Mét-P ass. 1.0
B (Mehlich III)*	0.6	ppm		Balayage de métaux	ICP-OES	MA. 200-Mét-P ass. 1.0
Fe (Mehlich III)	297.46	ppm		Balayage de métaux	ICP-OES	MA. 200-Mét-P ass. 1.0
Na (Mehlich III)	102	Kg/ha		Balayage de métaux	ICP-OES	MA. 200-Mét-P ass. 1.0
Matière organique (comb.)*	14.2	%		Matière organique	Perte de feu	MA. 100-S.T. 1.1
Saturation -K+Mg+Ca	58.0	%			Estimation	CRAAQ 2 e édition

Water flowing through Brylee Farm

Soil analysis from Brylee Farm

Minimal machinery

Minimal machinery is required to manage the fields, which means little in the way of pollutants from burning fossil fuel. The livestock come from a producer located 10 kilometres from the farm, which means less stress for the animals and a minimum of fuel consumed to transport them. The owners are conscious of greenhouse gas (GHG) emissions and their impact on the environment. Everything is designed to reduce the impacts.



Different pastures on Brylee Farm



Some improvements made to the farm

The owners of Brylee Farm rehabilitated their rented land, which they call King Ranch. This land is considered some of the worst in their region; the soil was very poor and overgrazed. They began renting it seven years ago. Initially, only blackberries, goldenrod, and wild strawberries grew. They installed fences and water lines and began managing the paddocks by rotating the animals through, starting with those most in need of organic matter.



Aerial view of paddocks

Bale grazing is another improvement that has been made.

Furthermore, no mineral fertilizer or seeds are used; the only inputs come from the animals and the carbon that is fixed naturally.

The farm uses mob grazing. In this method, a large number of animals graze a small area for short periods before being moved to another pasture. This operation is performed four times per day. The animals graze the best, trample on the rest, and leave their droppings on the ground, which allows for plant regeneration, carbon capture, root conservation, and water retention for soil biology.



**Illustration of the mob grazing concept:
a grazed paddock appears on the left,
with the animals having just been moved to the paddock on the right**

With this pasture management method, the owners have noticed that the roots of the grasses reach deeper into the soil, sometimes to the point of blocking the tile drainage.



**Soil profile illustrating the depth to
which plant roots reach**

Brylee Farm uses a grazing board as a management and assessment tool. It records the yield of each paddock, the grass growth, the length of the grazing season, the precipitation, and any impacts on the soil from week to week. Tracking these elements ensures optimal and accurate management and provides a reference to be used in subsequent years. This year, the farmers are aiming for a 192-day grazing season.



The grazing board at Brylee Farm

3- ENVIRONMENTAL LEADERSHIP/COLLABORATION/INVOLVEMENT

Training, knowledge sharing, involvement

Farm tours are available. The owners have hosted farmers from Australia, New Zealand, France, the United States, and many regions across Quebec who are interested in learning more about high-density pasture management. The business also hosts an intern each year from the Purpan agricultural engineering school in Toulouse, France. The interns learn a

lot during their stay at Brylee Farm. The interns seek to learn English, of course, but they also come away with experience in pasture, pasture management, animal handling, and preservation of soil life.



Examples of activities offered on the farm

For several years in a row, Brylee Farm has hosted Ian Mitchell-Innes, a farmer from South Africa, as a speaker. The owners have also been fortunate to use him as a business consultant for teaching high-density grazing.



Brian Maloney with Ian Mitchell-Innes



Discussion group members discussing on the pasture

Following a visit from Mr. Mitchell-Innes, Brylee Farm initiated the formation of a group of five farms in the region. Each month, the group meets on one of the farms to discuss how their grazing season is going. The goal is for participants to

share experiences and create a farmer-to-farmer support group to address the challenges of the grazing season on their farms.

Brian is a member of the local ALUS committee. Brylee Farm decided to create a pasture reserve that will not be grazed until July 1 in order to protect eastern meadowlarks and bobolinks, two bird species that are threatened in Canada.

Brylee Farm also works with Docterre, a Quebec-based soil life laboratory and consulting service whose goal is to help regenerate soil ecosystem services and functions. Work at Brylee Farm has been done on compost extracts to improve the balance of bacteria and fungi in the soil.

4- MEASURABLE RESULTS

Thanks to minimal use of machinery, zero use of mineral fertilizers or seeds, and an approach in which the animals do the work, Brylee Farm is able to keep on-farm production costs very low.

With its permanent vegetation cover and increased levels of organic matter/carbon, the land captures water. The owners report that they are able to retain more water in their fields—a principle that can save the day in droughts like those of recent years.

The grazing board enables the farmers to extend the grazing season.

They have regenerated poor soil that is now ready to accommodate high-density rotational grazing

A business that champions pasture

The owners of Brylee Farm enjoy sharing the resources their farm has to offer. They allow snowmobilers on their land, and the river that runs through their property gives people a chance to kayak and swim in the hot weather!

The overriding goal of Brylee Farm has always been healthy soil, a clean environment, and livestock management that respects the cycles of nature.



Brian, Kim, and Lise speaking with visitors

5- FUTURE GOALS

This summer, the owners are hoping to organise a grazing/soil caravan in collaboration with Odette Ménard from the Ministère de l'agriculture, des pêcheries et de l'alimentation du Québec to teach farmers about the importance of soil health in their pastures.

They also plan to build ponds in order to recreate the original landscape from 150 years ago, when beaver dams were common. This will increase biodiversity by creating the ideal environment for birds, insect, mammal, and native flora species.

Another project is tree planting. The owners have already begun working with a forestry engineer to better manage the health and quality of their forests.

The farm has been featured on the television program *Arrive en campagne* and in an article in the UtiliTerre section of *La Terre de chez nous*.

Not a day goes by without Brian or Kim being asked for advice about pasture management, whether it be in a regional, national, or international context.



Discussing pasture management

6- LETTERS OF RECOMMENDATION

- Letter from Maria José Maezo, M.Sc., Biologist, no. ABQ 3176, Coordinator of the ALUS-Outaouais program
- Letter from Odette Ménard, p.Eng. and P.Ag., Soil and Water Conservation Advisor, Montérégie regional office, Ministère de l'Agriculture, des Pêcheries et de l'Alimentation