



Fermes JIH Farms

“Every citizen has a responsibility”

Ivan Hale

Fédération
des producteurs
de bovins
du Québec



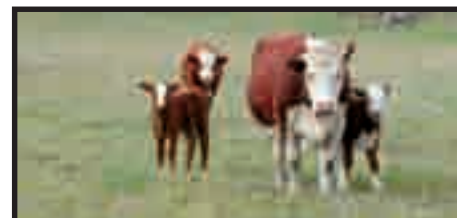
Ivan Hale and his wife Jenny run the cow-calf operation they bought in 1986 after they met at the university. The couple, who now lives in Alcove, in the Outaouais, manages a herd of approximately thirty-five cows, twenty replacement heifers and twenty-eight calves along with cultivating sixty of the 120 hectares they own. They have an “organic” management that they intend to have recognized by applying for certification.

Greenhouse effect: “Every citizen has a responsibility”

Ivan Hale’s concerns about climate changes and greenhouse gas go back a long way. A few years ago, the beef cattle producer was sitting on the National Round Table on the Environment and the Economy (NRTEE), an independent advisory body that advises government and other stakeholders about the integration of the economy and the environment. At that time, the NRTEE defined the climate change as being a major issue for which a long-term management strategy had to be established.

“I was already fully aware of the negative effects of greenhouse gas and this is the reason why I decided to use the calculator to determine the emissions on my farm”.

This electronic calculator was designed by the Canadian Cattlemen’s Association to better understand the emissions of greenhouse gas produced by cattle in Canada.



By comparing herd and pasture management practices in 1990, 2003 and 2012 (projection), the farmer noticed that he had reduced his rate of greenhouse gas emissions. “I had no idea what the calculator would show me. I was pleasantly surprised to learn that my management practices allowed me to be more effective in that respect”.

So, in comparison to the reference year (1990), Ferme JIH Farms are now emitting 66 per cent less greenhouse gas per pound of live weight gain with a 35-cow herd. Ivan Hale is considering increasing his herd to fifty cows and adding the



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finishing part to his operation by finishing some twenty steers in 2012. According to the calculator, even considering the possible increase, the operation would have a 78 per cent increase in effectiveness compared to 1990, taking into account a constant improvement of the practices followed.

Practices in evolution

Better land management was one of the main factors that allowed the operation to improve its greenhouse gas emission balance. Now, part of the sixty hectares is reseeded every year and the producer aims to renew his pasture every five years. “However, I will wait a little longer if a plot is still productive and produces quality forage”, declared Mr. Hale.

In 2003, pasture rotation has gradually been integrated, which will eventually cover the entire area involved. The producer intends to continue to improve this aspect in the future by reducing the size of the plots grazed. “For the time being, the two main obstacles to get around in order to continue the improvements are the installation of fences and watering sites”, he mentioned.

The land has been more productive since Ivan Hale and his wife Jenny purchased the farm in 1986. Among other things, it is by seeding on frozen ground and by avoiding overgrazing that land productivity improved so much.

All the methods allowing better pasture management have a beneficial effect on the emission of methane by the herd. By increasing the quality and digestibility of feed given to the animals, the effectiveness of the rumination process is improved.



In addition, Ivan Hale is already composting manure on a small scale and intends to continue doing so as the operation expands. If done properly, composting can be a manure management practice that is beneficial for the reduction of greenhouse gas emissions.

Ivan Hale believes in the usefulness of the calculator to make beef cattle producers aware of greenhouse gas production. “The tool allows us to see that our practices have a real impact on climate change. But most of all, it shows us that we can be proactive by improving our way of doing things”.

Greenhouse gas in agriculture: the facts

It is estimated that agriculture contributes approximately 10 per cent to the Canadian emissions of greenhouse gas. The greenhouse gases from farm origin come mainly from microbial activities: ruminants' digestion, manure and agricultural soil. Among these gases, there is nitrous oxide (N₂O), methane (CH₄) and carbon dioxide (CO₂).

Gas	Warming potential	Agriculture's contribution
CO ₂	1	<1%
CH ₄	21	38%
N ₂ O	310	61%



To try the calculator, contact the *Fédération des producteurs de bovins du Québec*
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