The Newfoundland and Labrador Agricultural Context: A Comparison with the Overall Context in Canada

Chrissy Vincent November 2nd, 2016



Acknowledgements:

This work was funded by Agrivita Canada Inc., which receives funding from Agriculture and Agri-Food Canada through the Growing Forward 2 – Agri-Innovation Program: Industry-led Research and Development Stream, and Memorial University.



INTRODUCTION

Farming is one of the most dangerous occupations globally, with high rates of injury, fatality and occupational disease. Research focused on occupational health and safety within the agricultural sector is, therefore, critical in helping to reduce these risks to agricultural operators and their employees. Although research on this topic has previously been conducted in many parts of the world, including certain regions of Canada, there had been no such studies with a specific focus on the agricultural industry within Newfoundland and Labrador (NL) until SafetyNet undertook the study of which this paper is a part, starting in 2014.

Designing and interpreting the results of research on agricultural safety in NL and comparing those results to the situation elsewhere requires a good background understanding of the province's agricultural industry as a whole, and how it compares to other parts of Canada. This paper uses the statistical information available to the general public from the 2011 Canadian Census of Agriculture to paint a broad picture of our province's agricultural sector, and to compare it with the overall Canadian context. The following is a summary our findings, which we intend to update with new data from the 2016 Census of Agriculture when it becomes available to us.



NUMBER AND SIZE OF FARMS

NL has a small number farms compared to other parts of Canada. The 2011 Census counted a total of 205,730 census farms (defined as operations that produce agricultural products for sale) in Canada. Only 510 of these were located in NL, which means that NL farms comprise only 0.25% of all farms in the country. The province with the next smallest number of farms was PEI, with 1495 farms – still almost triple the number for NL. The province with the largest number of farms was Ontario, with an incredible 51,950.

In addition to comprising a very small share of total Canadian farms, NL farms are also, on average, much smaller in size. The Census counted a total of 160,155,748 acres of farmland in Canada, of which only 77,349 (0.04%) were located in NL. The average reported farm size in NL was 152 acres, as compared to an overall Canadian average of 778 acres. The province with the next smallest average farm size was Ontario, with 244 acres – still over 1.5 times as large as the NL average. The province with the largest average farm size was Saskatchewan with 1668 acres. It should be noted that the distribution of farm sizes among the Canadian provinces is quite bimodal, with Manitoba, Saskatchewan and Alberta all averaging over 1000 acres, and all other provinces may be due to the greater preponderance of grain and cattle farms in the Prairies in comparison to elsewhere.

REGION	NUMBER OF FARMS	AVERAGE FARM SIZE
CANADA	205,730	778
Newfoundland and Labrador	510	152
Prince Edward Island	1,495	398
Nova Scotia	3,905	261
New Brunswick	2,611	359
Quebec	29,437	280
Ontario	51,950	244
Manitoba	15,877	1,135
Saskatchewan	36,952	1,668
Alberta	43,234	1,168
British Columbia	19,759	327

Table 1: Number and Average Size of Farms, Canada and the Provinces

Within NL, over half (267, or 52.35%) of the 510 counted farms were located on the Avalon and Burin Peninsulas – though most of these were on the Avalon, as the Burin Peninsula had too few farms to be separately reported (for reasons relating to confidentiality). Another 132 (25.44%) were located in Central NL, including the South Coast. Of these, only a very small handful were actually located on the South Coast (again, there were too few of them to be reported separately). The rest were distributed relatively evenly across the centre of the island, Bonavista Bay, and the Bay of Exploits. The remaining 111 farms (21.76%) were located in the Codroy Valley, and the rest were located in the other portions of region. The majority of these remaining 77 farms were located in the area of Corner Brook and Deer Lake, though, as both the Northern Peninsula and Labrador had too few farms for separate numbers to be reported.



Figure 1: Geographical Distribution of NL Farms

With respect to size, a full 324 of the 510 counted NL farms (63.53%) were smaller than 70 acres, and of these, 121 were smaller than 10 acres. Only 48 (9.41%) were 400 acres or larger, with 21 (43.75%) of these larger farms being located on the Avalon and Burin Peninsulas, 10 (20.83%) being located in Central NL including the South Coast, and 19 (39.58%) being located on the West Coast, Northern Peninsula, and in Labrador. Only 9 of these larger farms exceeded 1600 acres, of which 5 were located on the Avalon and Burin Peninsulas, 1 was located in Central NL including the South Coast, and 3 were located in the region comprising the West Coast, the Northern Peninsula, and Labrador.

COMMODITIES PRODUCED

Of the 205,730 farms counted in Canada, 71,384 (23.46%) were classified as meat production operations (including cattle ranching, pig farming, poultry and egg production, and sheep farming), 12,207 (5.93%) were classified as cattle-based dairy operations, 14,796 (7.19%) were classified as produce operations, 38,379 (18.66%) were classified as other types of horticultural operations, 391 (0.19%) were classified as fur farms, and 1633 (0.79%) were classified as apicultural operations. The remaining farms were classified as either oilseed/grain farms (61,692 farms or 29.99% of the national total), maple syrup production operations (5248 farms or 2.55% of the national total). The latter category includes operations raising horses, goats, and/or combinations of multiple animal species.





The commodity distribution for NL was somewhat different. Of the 510 farms counted in NL, 88 (17.25%) were classified as meat production operations, 36 (7.06%) were classified as cattlebased dairy operations, 177 (34.71%) were classified as produce operations, 144 (28.24%) were classified as other types of horticultural operations, 21 (4.12%) were classified as fur farms, and 3 (0.59%) were classified as apicultural operations. The majority of the remaining farms (39 farms or 7.65% of the provincial total) were other types of animal-based operations, primarily farms raising horses and combinations of multiple animal species. There was only 1 grain farm and 1 maple syrup production operation counted in the province (each comprising 0.20% of the provincial total). In comparison to Canada as a whole, then, the most striking differences are that NL has proportionally more produce, horticultural, and fur operations, and proportionally fewer grain and meat operations.



Figure 3: Commodity Distribution for NL Farms

Within NL, the Census revealed that meat production operations tend to be located mainly on the easternmost side of the province – 59 of the province's 88 counted meat production operations (67.05%) were located on the Avalon and Burin Peninsulas, while 12 (13.64%) were located in the Central NL and South Coast region and 17 (19.32%) were located in the West Coast, Northern Peninsula, and Labrador region. Most cattle-based dairy operations are on the eastern and western sides of the province, with only 7 (19.44%) of the province's counted total of 36 being centrally located. Produce farms are scanty on the western side of the island and in Labrador, but have a large presence on the Avalon and Burin Peninsulas (86 of the province's 177, or 48.59%, were located there) and in Central NL including the South Coast (61 of the province's 177, or 34.46%, were located there). Horticultural operations follow a similar pattern to meat-producing operations, with 72 of the province's 144 (50.00%) located on the eastern side of the province, and the remainder split almost evenly between the central and westernmost parts of the province. Fur farms are very evenly distributed, with 8 (38.10%), 6 (28.57%), and 7 (33.33%) of the province's counted total of 21 being located in the easternmost, central, and westernmost parts of the province, respectively. Of the province's 3 counted apicultural operations, one was on either the Avalon or Burin Peninsula, and two were in the West Coast, Northern Peninsula, and Labrador region. The province's other types of animal-based operations are located primarily on the East Coast, with 22 (56.41%) of the counted 39 located on the Avalon and Burin Peninsulas. Only 6 (15.38%) of these types of farms were located centrally, and the remaining 11 (28.21%) were located on the West Coast, the Northern Peninsula, and in Labrador. The province's one counted grain operation was located in the easternmost portion of the province, and its one counted maple syrup operation was located centrally.



FUR FARMING

Of the 391 fur farms counted in Canada, 128 (32.74%) were in Nova Scotia, 113 (28.90%) were in Ontario, 51 (13.04%) were in Quebec, 24 (6.14%) were in British Columbia, 21 (5.37%) were in Newfoundland and Labrador, 20 (5.12%) were in New Brunswick, 15 (3.84%) were in Prince Edward Island, 13 (3.32%) were in Manitoba, and 6 (1.53%) were in Alberta. There were no fur farms counted in Saskatchewan, the Yukon, or the Northwest Territories. This means that compared to some of the other provinces, Newfoundland and Labrador does not account for a very large share of the country's fur farming operations. In fact, it falls squarely in the middle.

When considering the share of each individual province's total farms that are accounted for by fur farming, however, a different picture emerges. In NL, fur farming accounts for 4.12% of the province's total farming operations. In Nova Scotia, this figure is 3.28%, and in Prince Edward Island, it is 1.00%. In all other provinces, the proportion of total farms accounted for by fur farms is smaller than 1%. Within the context of its own agricultural industry, then, Newfoundland and Labrador has a larger proportion of fur farms than any of the other Canadian provinces.

REGION	# OF FARMS	# OF FUR FARMS	PROPORTION
CANADA	205,730	391	0.19%
Newfoundland and Labrador	510	21	4.12%
Prince Edward Island	1,495	15	1.00%
Nova Scotia	3,905	128	3.28%
New Brunswick	2,611	20	0.77%
Quebec	29,437	51	0.17%
Ontario	51,950	113	0.22%
Manitoba	15,877	13	0.08%
Saskatchewan	36,952	0	0%
Alberta	43,234	6	0.01%
British Columbia	19,759	24	0.12%

Table 2: Proportion of Total Farms Accounted	for by Fur Farms, Canada and the Provinces
--	--

FARM OPERATORS AND EMPLOYEES

The Census counted a total of 293,925 farm operators in Canada – a number which exceeds the total number of farms because not all Canadian farms are sole proprietorships. In fact, of the country's 205,730 counted farms, only 114,006 (55.42%) were reported as being sole proprietorships. Another 50,335 (24.47%) were reported as being partnerships, either with a written agreement (10,672 or 21.20% of partnerships) or without (the remaining 39, 663 or 78.80% of partnerships). Family corporations comprised 35,749 (17.38%) of Canadian farms, while 4,965 (2.41%) were reported as being non-family corporations and 675 (0.33%) were indicated as having other types of operating arrangements. Nationally, the average age of farm operators was 54.0 years, and 27.44% of them were female.

In NL, the Census counted a total of 665 farm operators. Again, this number exceeds the total number of farms in NL, because only 302 (59.22%) of NL's 510 counted farms were identified as sole proprietorships. Some NL farms (46, or 9.02%) were reported as being partnerships (41 of the 46, or 89.13%, with no written agreement), and a larger number (117, or 22.94%) were reported as being family corporations. Another 24 (4.71%) were reported as being non-family corporations, and 21 (4.12%) were indicated as having other types of operating arrangements. The average age of farm operators in NL was 55.0 years, and 23.31% of them were female.



Figure 4: Farm Operating Arrangements in Canada and NL

In Canada, 69,964 (34.01%) of the country's total farms reported paid labour. The Census counted 297,683 paid employees, of whom 112,059 (37.64%) worked year-round in a full or part-time capacity and 185,624 (62.36%) were seasonal or temporary workers. In NL, 264 (51.76%) of the provinces total farms reported paid labour – a much higher proportion than for Canada as a whole. The Census counted 1395 paid agricultural employees in NL, of whom 466 (33.41%) worked year-round and 929 (66.59%) were seasonal or temporary workers.

TRACTOR OWNERSHIP

Out of the 205,730 counted farms in Canada, 190,162 (92.43%) reported having tractors. These farms reported a total of 685,914 tractors, which works out to an average of 3.61 tractors for each farm reporting their presence. Of these tractors, 311,782 (45.45%) were under 60 horsepower, 164,324 (23.96%) were between 60 and 99 horsepower, 124,127 (18.10%) were between 100 and 149 horsepower, and 85,681 (12.49%) were over 149 horsepower. The average market value of tractors reported in Canada was \$20,464.13 per tractor.

Out of the 510 counted farms in NL, 397 (77.84%) reported having tractors – a smaller percentage than in Canada as a whole. These farms reported a total of 979 tractors, which works out to an average of 2.47 tractors for each farm reporting their presence. So, not only did a smaller proportion of NL farms report tractors, but those farms that did report tractors also reported fewer of them. Of these 979 tractors, 607 (62.00%) were under 60 horsepower, 241 (24.62%) were between 60 and 99 horsepower, 108 (11.03%) were between 100 and 149 horsepower, and only 23 (2.35%) were over 149 horsepower. The average market value of these tractors, however, was \$21,058.57 per tractor. This is interesting because it indicates that although tractors in NL tend to be much smaller, they are also more expensive. This may mean that they are newer (on average) than the tractors in other parts of Canada.



For the sake of comparison, we also looked at the statistics on tractors for the province of Saskatchewan (SK), which has a very different commodity profile from NL. Out of the 36,952 farms in SK, 34,310 (92.85%) reported having tractors – a percentage that is essentially on par with Canada as a whole. These farms reported a total of 132,935 tractors, which works out to an average of 3.87 tractors for each farm reporting their presence. Again, this is on par with the average for Canada overall. Of these 132,935 tractors, 48,395 (36.41%) were under 60 horsepower, 21,790 (16.39%) were between 60 and 99 horsepower, 32,400 (24.37%) were between 100 and 149 horsepower, and 30,350 (22.83%) were over 149 horsepower. The average market value of these tractors was \$22,974.37 per tractor – a little higher than for NL, but not nearly as high as would be expected given how much larger, on average, these tractors are. This may mean that tractors in SK tend to be older than tractors in NL.



Figure 5: Tractor Sizes in Canada, NL, and SK



CONCLUSION

In general, the 2011 Canadian Census of Agriculture statistics presented here seem to indicate that the Newfoundland and Labrador agricultural context is appreciably different from the one that exists in Canada as a whole. The industry is significantly smaller (both in terms of number and size of farms) and produces primarily fruit, vegetables, and horticultural commodities rather than meat and grain, the latter of which are the backbone of the agricultural industry in Canada at large. Additionally, fur farming accounts for a larger proportion of farming activity in NL than it does in any other province in Canada – a fact which may partly explain why, even though NL farms are (on average) the smallest in the country, the proportion of them with full or part-time employees is so much higher than in Canada overall (other differences in commodity proportions may also play a role here). Unsurprisingly, tractors in NL tend to be both smaller and less prevalent. On average, however, those that are in use here have a higher market value, which may mean that they are newer and/or receive less hard use than those in other parts of the country.

The numbers presented here are simply a snapshot of the agricultural sector in Canada and NL as it existed in 2011. Given that these data are now five years out of date, it is possible that the industry may have changed or shifted in important ways since this information was collected and reported. As was mentioned previously, we plan to update this document with the new 2016 Census data when they are made available in an effort to capture any critical changes that may have taken place in the interim.



REFERENCE:

Statistics Canada (2011). *2011 Census of Agriculture*. [Publicly available data tables.] Retrieved from <u>http://www.statcan.gc.ca/eng/ca2011/index</u>.