

Data and Mapping Notes on Agriculture 2001 Maps

The following series of notes provides information on the 2001 Census of Agriculture. The text is used with permission of the Census of Agriculture, Statistics Canada.

2001 Census of Agriculture

Statistics Canada conducts the Census of Agriculture to produce detailed, accurate and timely data of the agriculture industry in Canada. Canadian agriculture is constantly changing and the census informs us of these changes. Statistics Canada uses these data to benchmark estimates of crop area, livestock and financial numbers for the years between censuses. The census also provides a unique source of data for small geographic areas. The Census of Agriculture released all its farm variable data (more than 300 variables) on May 15, 2002, a year from Census Day. With over 247 000 farms reporting across Canada and 16 pages per questionnaire, a significant amount of processing must be completed in that year.

Agriculture and Population Linkage

The Agriculture–Population linkage database matches farm operators (as reported on the Census of Agriculture) with the information they provided on the Census of Population long-form questionnaire. The data from this source provide a wealth of information about farmers, their families and their households that we would not have from just the Census of Agriculture questionnaire. The figures for Agriculture–Population data are derived from a 20% sample from the Census of Population, adjusted to represent the entire population. We use a 20% sample because the Census of Population only asks 1 in every 5 households to fill out the long questionnaire form, the source of all the socio-economic data. Because the farm population can be very small below the provincial level, and taking into consideration the 20% sample size, the numbers are often too small to be reliably accurate.

What is the definition of farm household, farm census family and farm economic family?

A household refers to a person or group of persons who occupy the same dwelling. A farm household must have at least one farm operator, that is, a person responsible for making management decisions in operating a farm or agricultural operation.

The farm family is divided into two general categories: farm census families and farm economic families. In order to be a farm family, at least one household member must be a farm operator. The census family concept requires that family members be a male or female spouse, a male or female common-law partner, a male or female lone parent, or a child with a parent present. By contrast, an economic family

requires only that family members be related to each other by blood, marriage, common law or adoption.

Agriculture Operation

Agricultural operation is a farm, ranch or other agricultural operation producing agricultural products for sale. Other agricultural operations include, for example: feedlots, greenhouses, mushroom houses, nurseries, Christmas tree farms, fur farms, hobby farms, game farms, beekeeping, sod, fruit and berry, maple syrup and poultry hatchery operations. Sales in the past 12 months are not necessary but there must be the intent of sales.

For the Yukon Territory and Northwest Territories only, the definition also includes operations involved in the following:

- herding wild animals (such as caribou, muskox, and so on)
- breeding sled dogs
- horse outfitting and rigging
- harvesting indigenous plants and berries.

Agricultural products include any of the following:

Table 1. Agricultural Products

Crops	Livestock	Poultry	Animal Products	Other Agricultural Products
hay field	cattle	hens	milk or	greenhouse or
crops	pigs	chickens	cream	nursery products
tree fruits or nuts	sheep	turkeys	eggs	Christmas trees
berries or grapes	horses	chicks	wool	mushrooms
vegetables	game animals	game birds	furs	sod
seed	other livestock	other poultry	meat	honey
				maple syrup
				products

Source : Statistics Canada. Census of Agriculture

Alternative livestock (bison, deer, elk, llamas, alpacas, wild boars, etc.) are becoming more commonplace. These are considered agricultural products and therefore questionnaires must be completed for these operations.

Animal Units and Livestock Farms

An animal unit is the means of equally measure farm animals of different sizes based on feed input and manure output. Animal units are used in regulations, codes of

practice and municipal bylaws related to livestock production. Table 2 below illustrates how the number of animal units determine the size of a livestock farm.

Table 2. How the animal units add up?

Animal	One Unit Equals
	1 beef cow or milk heifer
Cattle	0.8 of a dairy cow or bull
	3.3 dairy calves
	4.4 beef calves
	5 boars or sows
Pigs	30.3 nursing pigs
	8 growing pigs
	200 broilers
Poultry	125 laying hens
	83.3 turkeys
	1 bison
	0.8 of a horse
	1.7 elk
	5 ewes
Other livestock	7 goats, rams, ostriches or llamas
	8 deer
	15.9 lambs or emus
	40 rabbits or foxes
	50 ducks

Source: Beaulieu, Martin S. and Frédéric Bédard. A Geographic Profile of Canadian Livestock. Statistics Canada, 1991 – 2004. Catalogue no. 21-601-MIE2003062.

How many units on a farm?

- 300 animal units or more = a very large livestock farm
- 200 to 299 animal units = a large livestock farm
- Fewer than 200 animal units = a small- to medium-sized livestock farm

Livestock farms include all farms that produce at least one of the following products intended for sale: cattle, pigs, sheep, horses, fur-bearing animals, alternative livestock, hens, chickens and other poultry. Very large livestock farm is an operation that has a number of animals equal to 300 or more animal units on the premises. A farm with 200 to 299 animal units is classified as "large," and a farm with fewer than 200 animal units is considered "small- to medium-sized."

Geography

Census of Agriculture data are available for Canada, the provinces and territories, as well as for areas corresponding to counties, crop districts and rural municipalities/townships. Statistics Canada has a standard method of defining geographic areas. Three main levels of geography are available:

Census Division (CD)

Census division is the general term for provincially legislated areas (such as county, regional municipality and regional district) or their equivalents. Census divisions are intermediate geographic areas between the province level and the municipality (census subdivision). Census divisions have been established in provincial law to facilitate regional planning, as well as the provision of services that can be more effectively delivered on a scale larger than a municipality. In Newfoundland and Labrador, Manitoba, Saskatchewan, Alberta, Yukon Territory, the Northwest Territories and Nunavut, provincial/territorial law does not provide for these administrative geographic areas. Therefore, Statistics Canada, in co-operation with these provinces and territories, has created equivalent areas called census divisions for disseminating statistical data.

Census Consolidated Subdivision (CCS)

A census consolidated subdivision is a grouping of adjacent census subdivisions. Generally, the smaller, more urban census subdivisions (for example, towns, villages) are combined with the surrounding, larger, more rural census subdivision to create a geographic level between the census subdivision and the census division. A census subdivision with a land area greater than 25 square kilometres can form a census consolidated subdivision of its own. Also, a census subdivision with a population greater than 100 000 (according to the last census) usually forms a census consolidated subdivision of its own. The name of the census consolidated subdivision usually coincides with its largest census subdivision component in terms of land area.

Agriculture Ecumene

Another geography used to show agriculture data is the agriculture ecumene. The agricultural ecumene can be defined as the agricultural land base in Canada. The agricultural ecumene is used in many projects and publications that employ thematic maps in order to display agricultural data. The agricultural ecumene for the 2001 Census of Agriculture was derived using agricultural data at the dissemination area level.

Geographic Area Amalgamations

The following tables show the geographic amalgamations in alphabetical order, by census division, for each of the western provinces. The name of the census division in which the amalgamation occurred appears in the first column of each table. The second column shows the name of the census consolidated subdivision for which



data are available. In most cases, this name is identical to that of the largest component of the amalgamation. The third column lists the names of all the geographic areas that were merged and the number of farms located in each for 2001. All census division names appear in boldface in each table.

Geographic Area Amalgamation Tables for the Western Provinces

Table 3. Manitoba – Geographic Area Amalgamations and Their Components

Census Division	Census Consolidated Subdivision	Geographic Areas Included in the Amalgamation	
		Name	No. of Farms
Division No. 1	Reynolds	Reynolds	74
		Division No. 1, Unorganized	2
		Ochre River	131
Division No. 17	Ochre River	Division No. 17, Unorganized	1
Division No. 19	Division No. 19, Unorganized	Division No. 19, Unorganized	119
		Division No. 22	3
		Division No. 23	2
		Minitonas	224
Division No. 20	Minitonas	Division No. 20, Unorganized, South Part	1
		Division No. 20, Unorganized, North Part	1

Source : Statistics Canada. 2001 Census of Agriculture

Table 4. Saskatchewan – Geographic Area Amalgamations and Their Components

Census Division	Census Consolidated Subdivision	Geographic Areas Included in the Amalgamation	
		Name	No. of Farms
Division No. 6	Sherwood No. 159	Sherwood No. 159	194
		Regina	54
Division No. 11	Corman Park No. 344	Corman Park No. 344	983
		Saskatoon	57
		Paddockwood No. 520	160
Division No. 15	Paddockwood No. 520	Lakeland No. 521	6
Division No. 16	Big River No. 555	Big River No. 555	101
		Division No. 18	63

Source : Statistics Canada. 2001 Census of Agriculture

Table 5. Alberta – Geographic Area Amalgamations and Their Components

Census Division	Census Consolidated Subdivision	Geographic Areas Included in the Amalgamation	
		Name	No. of Farms
Division No. 5	Starland County	Starland County	380
		Drumheller	22
Division No. 12	Lakeland County	Lakeland County	373
		Division No. 16	14
		Ranchland No. 66	49
		Crowsnest Pass	24
		Kananaskis	12
Division No. 15	Ranchland No. 66	Improvement District No. 9	1
		Improvement District No. 12	1
Division No. 17	Lesser Slave River No. 124	Lesser Slave River No. 124	175
		Opportunity No. 17	3

Source : Statistics Canada. 2001 Census of Agriculture

Table 6. British Columbia – Geographic Area Amalgamations and Their Components

Census Division	Census Consolidated Subdivision	Geographic Areas Included in the Amalgamation	
		Name	No. of Farms
Alberni-Clayoquot Regional District	Alberni-Clayoquot D	Alberni-Clayoquot D	20
Bulkley-Nechako Regional District	Bulkley-Nechako C	Alberni-Clayoquot C	2
		Bulkley-Nechako C	37
		Stikine Region	7
Capital Regional District	Saanich	Saanich	235
		Victoria	11
Central Coast Regional District	Central Coast A	Central Coast A	19
		Central Coast C	12
Columbia-Shuswap Regional District	Columbia-Shuswap A	Columbia-Shuswap A	57
		Columbia-Shuswap B	17
		Comox-Strathcona H	13
Comox-Strathcona Regional District	Comox-Strathcona H	Mount Waddington	7
Cowichan Valley Regional District	Cowichan Valley F	Cowichan Valley F	14
		Cowichan Valley I	5
Fraser-Fort George Regional District	Fraser-Fort George F	Fraser-Fort George F	54
		Fraser-Fort George G	8
		Fraser Valley B	30
Fraser Valley Regional District	Fraser Valley B	Fraser Valley C	10
		Fraser Valley A	5
Greater Vancouver Regional District	Burnaby	Burnaby	41
		Vancouver	10
Kitimat-Stikine Regional District	Kitimat-Stikine C (Part 1)	Kitimat-Stikine C (Part 1)	64
		Kitimat-Stikine A	2

		Kitimat-Stikine D	1
		Skeena-Queen Charlotte Regional District	18
Kootenay Boundary Regional District	Kootenay Boundary B	Kootenay Boundary B	41
		Kootenay Boundary C	10
Peace River Regional District	Peace River B	Peace River B	628
		Northern Rockies Regional District	24
Powell River Regional District	Powell River A	Powell River A	17
		Powell River B	17
	Powell River E	Powell River E	13
		Powell River D	10
	Squamish- Lillooet B	Squamish-Lillooet B	43
Squamish-Lillooet Regional District	Squamish- Lillooet C	Squamish-Lillooet A	1
		Squamish-Lillooet C	65
		Squamish-Lillooet D	12
Thompson-Nicola Regional District	Thompson- Nicola A	Thompson-Nicola A	63
		Thompson-Nicola B	3
Source : Statistics Canada. 2001 Census of Agriculture			