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Agriculture Division

Trends and Highlights of Canadian Agriculture and its People

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This publication would not have been possible without the continued support and co-operation of the farm operators and the Canadian public who participated in the 1991 and earlier Censuses of Agriculture and Population.

We would also like to thank a large team of Statistics Canada staff from several divisions. From field collection and map preparation, through data processing and analysis, to developing and producing this publication, many devoted people contributed to the success of the 1991 Census of Agriculture.

All photos in this publication are courtesy of Agriculture Canada.

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HIGHLIGHTS

- The 1991 Census of Agriculture recorded 280,043 census farms, down 4.5% from 1986.
- Family-operated farms accounted for 98% of census farms in 1991, compared to 99% in 1986.
- The number of four-wheel drive tractors increased by one-third in Canada between 1986 and 1991.
- A steady upward trend from 1970 to 1985 in the use of commercial fertilizer and herbicides reversed with the 1991 census.
- In 1991, conservation tillage and "no till" practices were used on one-third of Canadian land prepared for seeding.
- The number of farms using computers to manage the farm business quadrupled from 2.6% in 1986 to 11% in 1991.
- In 1991, Canada's farm population was 867,265 – 3.2% of the total population.
- The 1991 Census of Agriculture recorded a total of 390,870 farm operators managing Canada's farms.
- Sixty-three percent of Canada's farms were managed by 1 operator in 1991. Another 32% had 2 operators, and the remaining 4% had 3 or more operators.
- In 1991, 26% of Canadian farm operators were women.
- In 1991, 14% of sole operators resided off their farm.
- In 1991, the top four languages reported as mother tongue by farm operators were English (68%), French (15%), German (6%) and Ukrainian (3%).

INTRODUCTION

This publication analyzes key agricultural and socio-economic variables from the 1991 Census of Agriculture and the 1991 Census of Population. The analysis often uses data from earlier censuses to put 1991 data into context, and to show trends. Graphs and tables are also used throughout.

The publication's content comes primarily from two sources. Most of the 1991 Census of Agriculture Database section is taken from the June 4, 1992 issue of *The Daily*, Statistics Canada's official release bulletin for statistical information. Similarly, the 1991 Census of Agriculture-Population Database (100%) section comes from the November 17, 1992 Addendum to *The Daily*. (This explains the minor differences in presentation between the two sections.)

A second segment of this publication, will be released in October 1993, and will contain additional analysis from the 1991 Census of Agriculture-Population database.

HOW THIS PUBLICATION IS ORGANIZED

This publication is being released in two segments to give you results from the 1991 censuses as early as possible. This first segment is in two parts, the first of which presents highlights from the 1991 Census of Agriculture database. The second part presents key data from the Census of Agriculture-Population database on age, sex, marital status and mother tongue. These variables were covered by basic questions on the 1991 Census of Population questionnaires completed by 100% of Canada's population. In both parts of the segment, the text is supplemented by graphs and tables.

The second segment will be available in October 1993, and will present socio-economic analysis of additional data from the Census of Agriculture-Population database. These data cover the education, income and occupation of farm operators and their families; they come from the Census of Population Form 2B (often called the "long form"), completed by 20% of Canadian households. Again, the text will be supplemented by graphs and tables.

For help understanding the 1991 Census of Population questionnaires, refer to the Census Terms section in this publication, or to the *1991 Census Handbook*, catalogue number 92- 305E.

Agriculture Division has developed a wide range of publications using 1991 Census of Agriculture and other data. These related publications – as well as 1991 Census of Population publications that may be of interest, are noted in the For Further Reading section.

In addition, there is information on the background of the 1991 Census of Agriculture, and on measures taken to ensure data confidentiality and quality. Notes on rounding procedures, geographic units and selected census definitions are also included.

FOR FURTHER READING

Selected Publications from Statistics Canada

Additional 1991 Census of Agriculture Publications

Data publications

Census Overview of Canadian Agriculture: 1971-1991, catalogue number 93-348, Bilingual, *Available: June 1992*

Part 1 Agricultural Profiles, 11 catalogued publications, Bilingual, *Available: June 1992*

Part 2 Agricultural Profiles, 11 catalogued publications, Bilingual, *Available: January 1993*

Profile of the Canadian Farm Population, catalogue number 93-349, Bilingual, *Available: October 1993*

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1991 Census of Population Publications

Urban and Rural Areas, Canada, Provinces and Territories – Part A, catalogue number 93-339, Bilingual, *Available: First quarter 1993*

People in Canadian Agriculture, catalogue number 96-308, Bilingual, *Available: June 1994*

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BACKGROUND

History

Provisions were made under the British North America Act (BNA) of 1867 for a census to be taken every 10 years starting in 1871. However, Western Canada was rapidly expanding at the turn of the century. To monitor this growth, the Census of Agriculture was taken every five years in Manitoba starting in 1896 and in Alberta and Saskatchewan beginning in 1906. By 1956, rapid economic growth and development created the need for national demographic information at more frequent intervals. To meet this need, the five-year Censuses of Agriculture and Population were extended to the entire country, and have been taken simultaneously ever since.

Each census year, every farm household in Canada receives both the Census of Agriculture and the Census of Population questionnaires. The Census of Agriculture produces a snapshot of Canadian agriculture by providing statistics on such topics as crop areas, number of livestock, weeks of farm labour, number and value of farm machinery, farm expenses and receipts, and land management practices at the national, provincial and subprovincial levels. The Census of Population, on the other hand, provides important information on the Canadian population such as age, sex, education level, languages spoken, income, and type and age of dwellings, to name a few.

Questionnaire Development

Prior to each census, discussions with users are held across Canada to determine the data requirements from the Census of Agriculture. Through this consultation process and extensive testing with respondents, the content of the questionnaire is developed and then approved by Cabinet. Certain basic questions appear on every census, while other questions are either added, modified or dropped.

The Census of Agriculture provincial data publications contain a copy of the questionnaire for that particular census. Differences in questionnaire wording between 1991 and an earlier census can be determined by referring to questionnaires for each of the census years.

Collection Procedures

Conducting the Census of Agriculture jointly with the Census of Population helps streamline collection procedures and reduce costs. Census representatives visit each household and drop off a Census of Population questionnaire. If someone in the household operates a farm, the census representative also leaves a Census of Agriculture questionnaire. Until 1991, the completed questionnaires were picked up by a representative in rural areas. In 1991, however, respondents were asked to complete and mail them in using the pre-addressed envelopes provided for that purpose. Once reviewed by the census representative, the questionnaires were initially processed in regional processing sites and then forwarded to Ottawa. A toll-free telephone service introduced in 1991 helped respondents requiring assistance in completing the questionnaire.

Data Quality

Procedures for collecting complete and accurate information from every agricultural holding in Canada are developed and improved for each Census of Agriculture. To ensure that the data are of consistently high quality, control procedures are incorporated in each census collection and data processing stage.

After processing, the data are thoroughly validated by comparing them with the previous Census of Agriculture results, as well as with other survey results and administrative data. All tabulated data are subject to confidentiality restrictions to prevent disclosing information on any particular farming operation.

NOTES TO DATA USERS

General Notes

Conversion factors

Data in this publication are presented only in imperial units. The conversion factors used by Statistics Canada are:

1 acre	=	0.404 685 6 hectare
1 hectare	=	2.471 acres
1 arpent	=	0.845 acre (for respondents in Quebec who reported land areas in arpents)

Rounding

In the Census of Agriculture Database section of the publication, totals may not equal the sum of their parts due to the use of conversion factors and the rounding of fractions to whole numbers, where applicable.

Geographic Units

Census of Agriculture data are available for various pre-established statistical and administrative areas.

Canada

Canada totals do not include data for the Yukon and the Northwest Territories.

Province/Territory

Refers to the major political divisions of Canada. From a statistical point of view, it is a basic unit for which data are tabulated and cross-classified.

Census Terms

Census Farm

Refers to a farm, ranch or other agricultural holding which produces at least one of the following products intended for sale: crops, livestock, poultry, animal products, greenhouse or nursery products, mushrooms, sod, honey, or maple syrup products. Census farms are also commonly referred to as farm operations or agricultural holdings.

Farm Capital

Includes the value of all land, buildings, machinery, equipment (including passenger vehicles), livestock and poultry. Values for livestock and poultry inventories reported in the census were derived from data on average farm prices for the respective types of livestock and poultry. The values for land and buildings as well as machinery and equipment were reported by respondents on June 4, 1991. Farm capital does not include the value of crops in the field or in storage, or farm inputs on hand, such as fertilizer and seed.

Farm Family

Refers to a family which includes a farm operator. A family refers to two or more household members who are related to each other by blood, marriage, common-law or adoption. Please refer to the *1991 Census Dictionary*, catalogue number 92-301E for more information regarding families.

Farm Operator

Refers to a person responsible for the day-to-day decisions made in the agricultural operation of the holding. In 1991, for the first time, more than one operator could be reported for each agricultural holding.

Farm Operator Household

Refers to a household which includes a farm operator. A household refers to a person or group of persons who occupy the same dwelling. Please refer to the *1991 Census Dictionary*, catalogue number 92-301E for more information regarding households.

Farm Population

Refers to all persons who are members of a farm operator's household and living on a farm in a rural or an urban area.

Farm Type

Each census farm is classified according to the predominant commodity produced. This is done by estimating the potential receipts from the inventories of crops and livestock reported on the questionnaire. The commodity or group of commodities which accounts for 51% or more of the total potential receipts determines the farm type. For example, a

census farm with derived total potential receipts of 60% in dairy, 20% in beef cattle and 20% in small grains, would be classified as a dairy farm.

Mother Tongue

Refers to the first language learned at home in childhood and still understood by the individual at the time of the census. If two languages were learned at the same time, the language spoken most often as a child was selected.

Rural Farm Population

Refers to all persons who are members of a farm operator's household and living on a farm in a rural area.

Information on Data Sources

The Census of Agriculture offers a wide range of products and services to meet your need for agricultural statistics. The completed questionnaires from the Censuses of Agriculture and Population serve as the source of the data. The information from each questionnaire is input into databases from which publications and custom products are created. The two types of databases used are described below.

Census of Agriculture Databases

The 1991 Census of Agriculture database contains all variables from the 1991 Census of Agriculture questionnaire, as well as derived ones such as farm type and farm capital. Similar bases exist for census years 1971 to 1986.

Agriculture-Population Databases

The computerized match of the 1991 Census of Agriculture database to the 1991 Census of Population database results in the creation of the Agriculture-Population database. This database enables the retrieval of socio-economic characteristics of farm operators and their families related to agricultural characteristics, for example the sex and age of dairy farm operators. Databases for the 1971, 1981 and 1986 censuses are also available.

For a better understanding of the Agriculture-Population databases, it is necessary to describe the 1991 Census of Population questionnaires. A general explanation is given below, but refer to the *1991 Census Handbook*, catalogue number 92-305E, for further details.

There are two Census of Population questionnaires – Forms 2A and 2B. The differences between the two forms, for 1991, are outlined below.

Form 2A

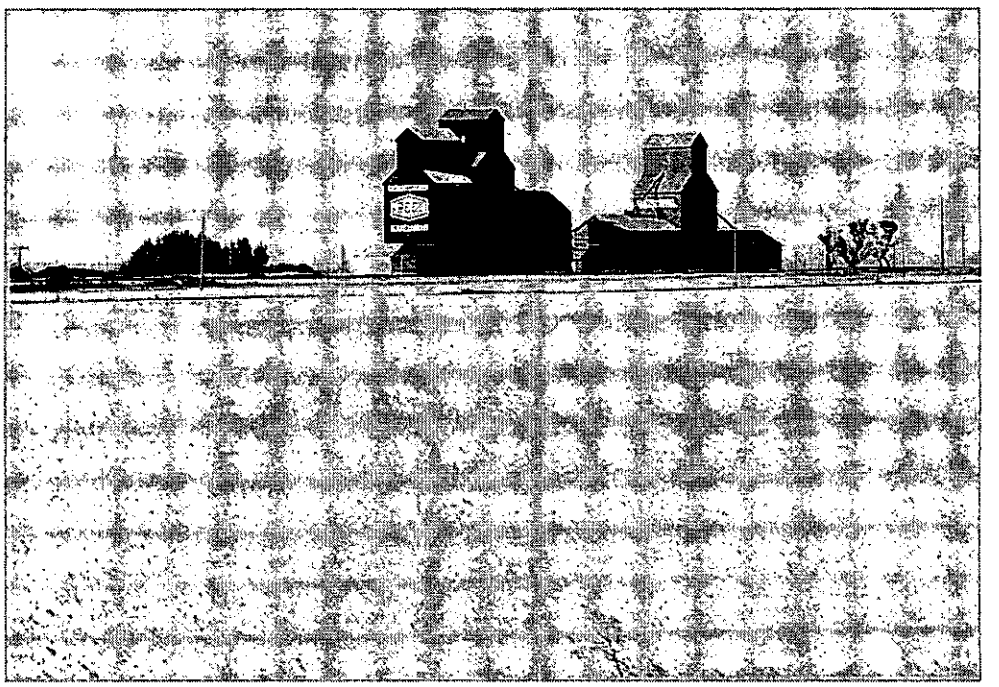
- short form
- distributed to 80% of households
- basic questions:
  - name
  - age
  - sex
  - marital status
  - mother tongue
  - housing information

Form 2B

- long form
- distributed to 20% of households
- all Form 2A basic questions plus:
  - mobility status
  - labour force activity
  - income
  - education
  - disability
  - citizenship
  - housing information
  - ethnic origin

The basic questions are included on both questionnaires; therefore data for 100% of the population are collected for these variables. The additional Form 2B questions result in having more detailed data collected from a 20% sample of Canadian households. Data from the Form 2B however, are used to provide estimates for the total population.

1991 CENSUS OF AGRICULTURE DATABASE

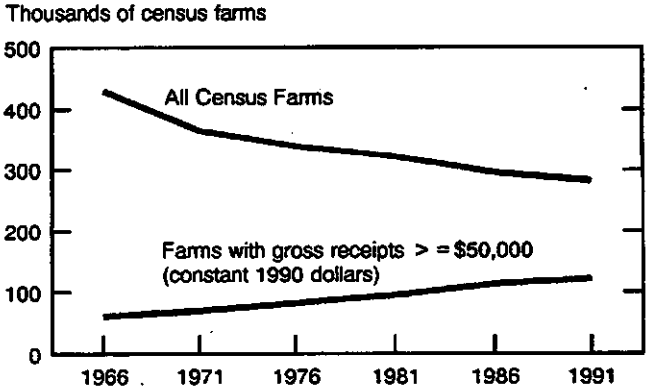


Fewer and larger farms in 1991

- The 1991 Census of Agriculture recorded 280,043 census farms, a 4.5% decrease from the 293,089 census farms in 1986. This continued the 50-year downtrend since 1941 when the number of census farms peaked at 732,832.
- As the overall number of farms decreased, the number of larger farms (gross receipts of $50,000 or more in constant 1990 dollars) increased 6% from 111,414 in 1986 to 118,365 in 1991. Provincially, however, the number of larger farms decreased in three provinces: Prince Edward Island (-4%), New Brunswick (-4%) and Ontario (-1%).
- Since 1986, the overall number of census farms increased in only two provinces – British Columbia (1%) and Newfoundland (11%). In contrast, the number of farms decreased at a rate slower than the national average in Saskatchewan (-4%), and Alberta (-1%).
- All other provinces reported decreases greater than the national average. Prince Edward Island reported the largest decrease in census farms (-17%), continuing the double-digit downward trend between censuses that began in 1961.

A census farm is an agricultural holding that produces an agricultural product intended for sale. This broad definition is used to obtain an inventory of all the agricultural products and resources in Canada.

Decline in number of census farms, increase in number of larger farms, Canada, 1966 to 1991



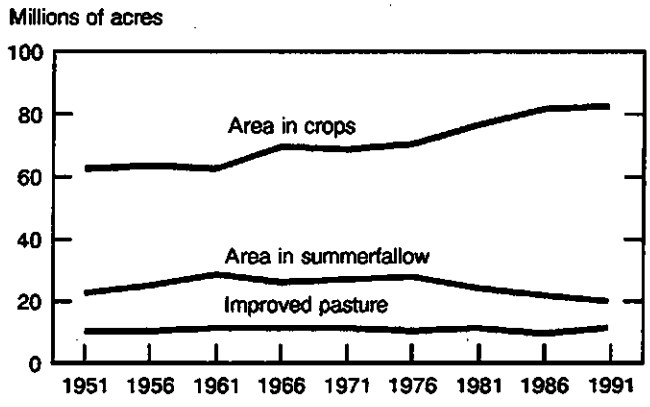
Number of Census Farms

	All census farms			Gross Receipts > = $50,000		
	Number in 1986	Number in 1991	% change since 1986	Number in 1986	Number in 1991	% change since 1986
Newfoundland	651	725	11.4	159	193	21.4
Prince Edward Island	2,833	2,361	-16.7	1,117	1,072	-4.0
Nova Scotia	4,283	3,980	-7.1	1,107	1,172	5.9
New Brunswick	3,554	3,252	-8.5	1,091	1,052	-3.6
Quebec	41,448	38,076	-8.1	18,574	19,008	2.3
Ontario	72,713	68,633	-5.6	27,338	26,996	-1.3
Manitoba	27,336	25,706	-6.0	11,449	11,676	2.0
Saskatchewan	63,431	60,840	-4.1	25,316	28,509	12.6
Alberta	57,777	57,245	-.9	21,357	24,269	13.6
British Columbia	19,063	19,225	.8	3,906	4,418	13.1
Canada	**293,089**	**280,043**	**-4.5**	**111,414**	**118,365**	**6.2**

Improved land continues to increase

- In 1991, the total area of land in crops in Canada was 83 million acres. This was up slightly from 1986, and continued two decades of an upward trend.
- Saskatchewan had the largest share of land in crops (33 million acres or 40% of the Canada total) in 1991.
- The area of summerfallow in Canada continued to decline in 1991. Acreage decreased 7% since 1986, down to 19.5 million acres in 1991.
- Saskatchewan had the largest share of summerfallow acreage (14 million acres or 72% of the Canada total) in 1991.
- Since 1971, the total area of improved pasture in Canada has remained relatively constant at about 10 million acres. In 1986, however, improved pasture acreage dropped to less than 9 million acres. The total area of improved pasture moved back to its former level in 1991.
- Alberta had the largest share of Canada's improved pasture (4.3 million acres, 42%) in 1991, followed by Saskatchewan (2.7 million acres, 26%).

Improved land in Canada continues to increase



Area in Crops, Summerfallow, and Improved Pasture (acres), 1986 and 1991

	Area in crops		Area in summerfallow		Improved pasture		Total improved land	
	1986	1991	1986	1991	1986	1991	1986	1991
Newfoundland	12,049	15,503	951	359	9,444	11,382	22,444	27,244
Prince Edward Island	386,715	380,796	6,541	2,464	55,899	47,636	449,155	430,896
Nova Scotia	270,609	262,503	9,663	2,930	89,542	75,918	369,814	341,351
New Brunswick	319,940	302,079	10,599	3,833	67,222	61,896	397,761	367,808
Quebec	4,310,496	4,048,706	78,586	36,355	744,115	669,468	5,133,197	4,754,529
Ontario	8,544,820	8,430,414	198,517	157,301	1,065,731	964,235	9,809,068	9,551,950
Manitoba	11,167,521	11,764,813	1,258,294	733,899	679,402	843,348	13,105,217	13,342,060
Saskatchewan	32,928,799	33,257,706	13,981,843	14,116,713	2,171,380	2,658,002	49,082,022	50,032,421
Alberta	22,641,092	22,961,142	5,255,965	4,377,212	3,402,183	4,305,760	31,299,240	31,644,114
British Columbia	1,410,584	1,375,873	200,568	142,026	510,095	595,535	2,121,247	2,113,434
Canada	**81,992,625**	**82,799,535**	**21,001,527**	**19,573,092**	**8,795,013**	**10,233,180**	**111,789,165**	**112,605,807**

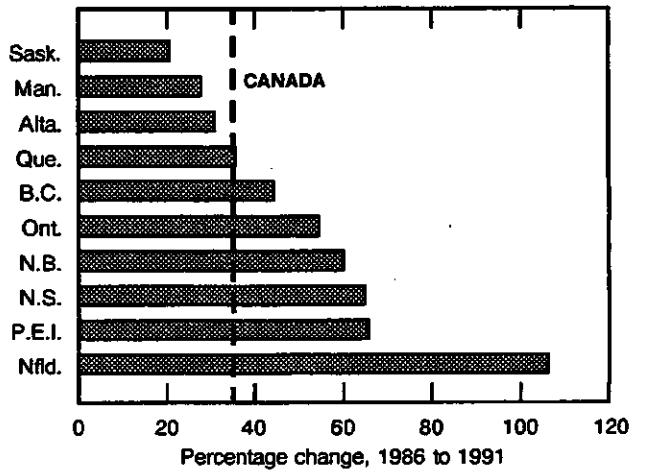
Number of four-wheel drive tractors increases

- Since 1986, the number of four-wheel drive tractors in Canada increased by one-third, while the number of two-wheel drive tractors dropped by 3%.
- In 1991, half of the four-wheel drive tractors were in the 100 horsepower or over category. More than three-quarters of the two-wheel drive tractors were in the less than 100 horsepower category.
- At the provincial level, the number of four-wheel drive tractors in Newfoundland more than doubled, the largest increase for any province.
- The largest proportion of four-wheel drive tractors (to total tractors) in 1991 was reported in Newfoundland (31%), followed by Nova Scotia (22%) and Quebec (20%). Ontario had the single largest number of tractors (185,000) in 1991.

Farms using more round balers

- In 1991, one-third of the balers in use in Canada were large round balers, compared to only one-fifth in 1986.

One-third increase in four-wheel drive tractors at Canada level



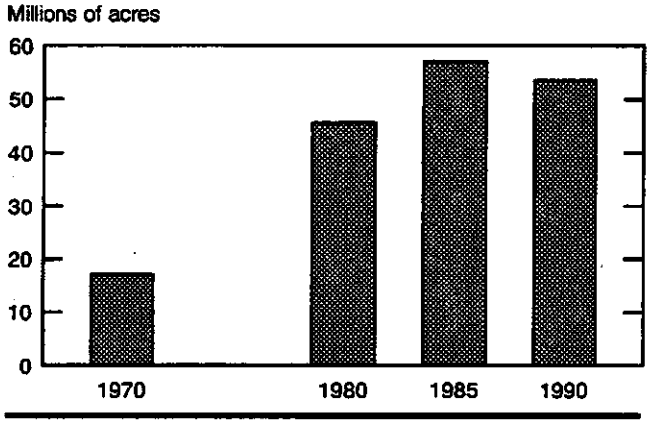
One-third increase in four-wheel drive tractors

	two-wheel drive tractors			four-wheel drive tractors			four-wheel drive tractors – Share of total tractors within each Province (%)	
	1986	1991	% change	1986	1991	% change	1986	1991
Newfoundland	565	580	2.7	128	264	106.3	18.5	31.3
Prince Edward Island	5,674	5,083	-10.4	391	647	65.5	6.4	11.3
Nova Scotia	6,663	6,076	-8.8	1,067	1,758	64.8	13.8	22.4
New Brunswick	6,294	5,831	-7.4	811	1,296	59.8	11.4	18.2
Quebec	81,936	76,650	-6.5	14,154	19,243	36.0	14.7	20.1
Ontario	172,905	162,728	-5.9	14,260	22,033	54.5	6.0	11.9
Manitoba	66,876	64,490	-3.6	7,069	9,033	27.8	9.6	12.3
Saskatchewan	148,427	146,592	-1.2	18,607	22,446	20.6	11.1	13.3
Alberta	131,341	130,796	-0.4	19,138	25,076	31.0	12.7	16.1
British Columbia	27,967	28,039	0.3	3,801	5,488	44.4	12.0	16.4
Canada	**648,648**	**626,865**	**-3.4**	**79,426**	**107,284**	**35.1**	**10.9**	**14.6**

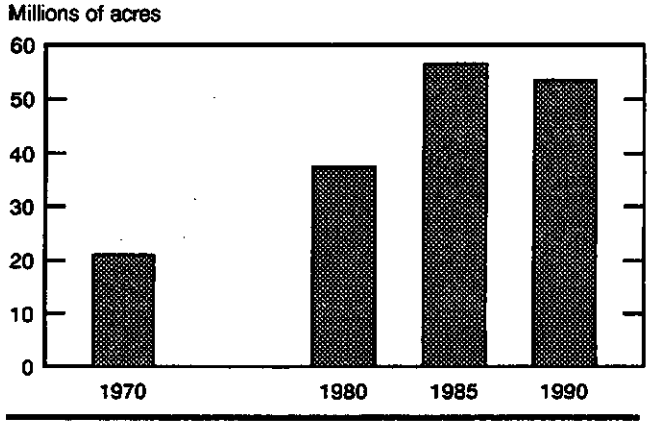
Use of commercial fertilizer and herbicides decreases

- A steady upward trend from 1970 to 1985 in the use of commercial fertilizer and herbicides (both farms reporting and the land areas covered), reversed with the 1991 census.
- The percentage of census farms in Canada using commercial fertilizer declined from 66% in 1985 to 59% in 1990. At the same time, 37% of Canadian census farms reported using manure on more than 5 million acres of land. Over 60% of this land was in Eastern Canada.
- In 1990, Prince Edward Island had the highest percentage (71%) of farms using commercial fertilizer, whereas only 45% of British Columbia's farms reported fertilizer use.
- The proportion of cropland fertilized declined from 70% in 1985 to 64% in 1990, still significantly higher than the 25% fertilized in 1970.
- Newfoundland had the largest percentage (87%) of area in crops being fertilized in 1990, compared to only 57% in Saskatchewan.
- In 1990, 49% of Canadian census farms used herbicides, a significant drop from the 59% in 1985.
- In 1990, Saskatchewan had the highest percentage (68%) of farms using herbicides, whereas only 16% of Newfoundland's farms reported using herbicides.
- The total area of crops and summerfallow treated with herbicides dropped to 52% in 1990, down slightly from 55% in 1985. Nevertheless, the 1990 figure is still more than double the 22% treated with herbicides in 1970.
- Manitoba had the highest percentage (65%) of area in crops and summerfallow treated with herbicides in 1990. Newfoundland had the lowest at 9%.

Decrease in area applied with commercial fertilizer in Canada



Decrease in area applied with herbicides in Canada



Acres applied with fertilizer and herbicides, 1970, and 1980 to 1990

	Commercial fertilizer				Herbicides			
	1970	1980	1985	1990	1970	1980	1985	1990
Newfoundland	5,684	10,906	11,755	13,427	912	1,234	1,660	1,414
Prince Edward Island	138,657	265,494	279,964	252,336	106,608	202,104	211,455	182,322
Nova Scotia	94,271	218,779	210,145	203,287	38,467	51,553	61,145	55,310
New Brunswick	91,879	187,792	207,688	193,079	72,659	99,334	113,171	98,495
Quebec	1,159,810	2,731,505	2,938,659	2,462,953	410,316	990,475	1,337,461	1,394,491
Ontario	3,095,117	6,261,213	6,402,812	5,617,813	2,758,119	4,753,376	4,981,059	4,426,851
Manitoba	2,930,926	7,898,613	9,208,072	9,114,074	4,193,858	6,246,626	8,859,638	8,063,498
Saskatchewan	3,701,960	13,654,683	20,077,392	18,914,810	8,007,853	13,204,633	25,788,378	24,823,839
Alberta	5,583,003	13,603,578	16,938,768	15,690,907	5,454,426	11,761,734	15,005,557	14,012,340
British Columbia	320,244	894,782	924,633	817,762	136,432	299,379	348,830	312,520
Canada	17,121,551	45,727,345	57,199,888	53,280,448	21,179,650	37,610,448	56,708,354	53,371,080

Family-operated farms still predominate

- In 1991, family-operated farms accounted for 98% of all census farms in Canada, compared to 99% in 1986. Non-family corporations represented just over 1% of all farms in 1991, while the remainder were institutional farms, community pastures and Hutterite colonies.

One-quarter of census farms produce most of output

- In 1991, one-quarter of census farms generated three-quarters of gross farm receipts. This situation has remained relatively unchanged over the past three censuses.

- Provincially, the component of gross farm receipts generated by the top 25 percent of farms varies greatly. In Newfoundland and British Columbia in 1991, the top 25% of farms generated over 90% of provincial farm receipts, while in Saskatchewan, these farms generated 62%. Quebec and Manitoba (along with Saskatchewan) were below the national average at 72%.

% of gross farm receipts on top 25% of farms in Canada

Year	% of gross farm receipts
1966	68.7
1971	71.8
1981	74.2
1986	74.0
1991	75.5

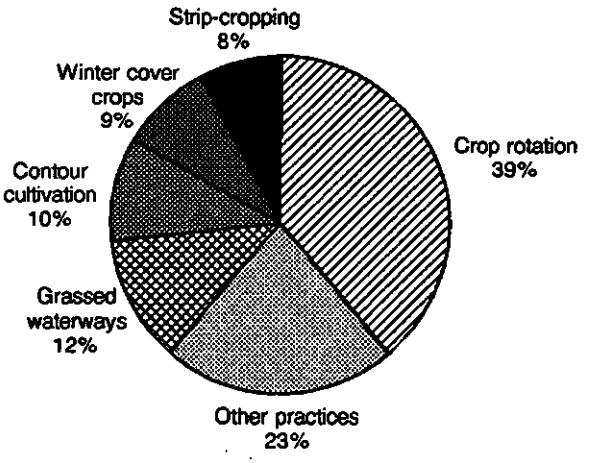
Crop rotation most common soil erosion control method

- Crop rotation (using clovers, alfalfa, etc.) was employed by 37% of Canadian census farms to control soil erosion in 1991.

- In Prince Edward Island, 64% of farms practiced crop rotation compared to 17% of British Columbia farms.

- To control soil erosion, 18% of Ontario farms used winter cover crops, 15% of Alberta farms used grassed waterways and Saskatchewan farms used strip-cropping (20%) and contour cultivation (17%). The most frequently reported "other practice" was conservation tillage.

Crop rotation most common soil erosion control method, Canada, 1991



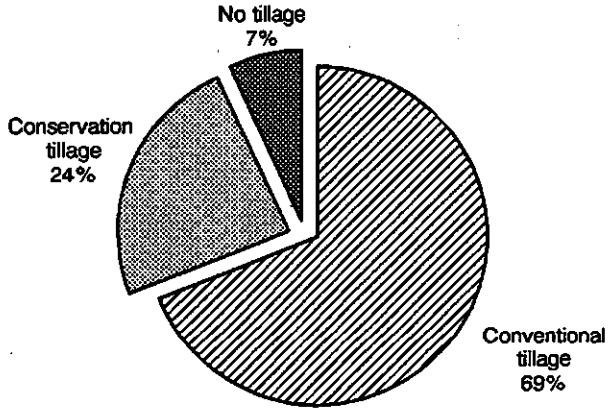
Percentage of Census Farms Reporting Soil Erosion Control Practices, 1991

	Crop rotation using clover, alfalfa, etc.	Winter cover crops	Grassed waterways	Strip-cropping	Contour cultivation	Other practices
Newfoundland	24	4	3	1	5	8
Prince Edward Island	64	8	10	4	9	14
Nova Scotia	28	10	7	2	6	6
New Brunswick	35	8	7	4	7	7
Quebec	42	3	3	2	3	7
Ontario	54	18	14	4	6	18
Manitoba	32	6	11	4	12	34
Saskatchewan	21	6	12	20	17	34
Alberta	38	6	15	8	10	26
British Columbia	17	8	7	1	4	9
Canada	**37**	**9**	**11**	**8**	**9**	**22**

Conservation and "no till" practices used

- In 1991, one-quarter of the land seeded in Canada (17.5 million acres) was prepared using conservation tillage. "No till" seeding was used on an additional 7% of land.
- Conservation tillage and "no till" seeding was most prevalent in the Prairie provinces. Saskatchewan accounted for the largest proportion of conservation tillage and "no till" seeding, where these methods were used on 36% of land prepared for seeding.

Tillage methods on seeded land in Canada, 1991



Soil salinity

In 1991, for the first time, the Census of Agriculture asked farm operators questions about soil salinity.

- Measures to control soil salinity were most prevalent in the Prairie provinces. In Saskatchewan, 24% of census farms reported using some measure to control soil salinity, compared with 15% of Manitoba farms and 11% of farms in Alberta.

Share of Seeded Land according to Tillage Method, 1991

	Conventional tillage	Conservation tillage	No tillage
Newfoundland	84.1	7.7	8.2
Prince Edward Island	91.2	7.9	0.9
Nova Scotia	88.3	7.8	3.8
New Brunswick	85.3	12.5	2.2
Quebec	85.2	12.3	2.5
Ontario	78.2	17.8	4.0
Manitoba	66.3	28.7	5.0
Saskatchewan	63.9	25.7	10.4
Alberta	72.6	24.3	3.1
British Columbia	83.5	11.9	4.6
Canada	**68.9**	**24.4**	**6.7**

Canadian farms use shelterbelts

- In 1991, 13% of all Canadian farms (36 thousand) reported having soil conservation shelterbelts (windbreaks).
- The total length of shelterbelts in Canada in 1991 was 84 thousand kilometres or 2.3 kilometres per reporting farm. If planted in a row, these trees would circle the equator twice.
- In 1991, Prairie provinces reported the most shelterbelts in Canada. In Saskatchewan, 18% of farms reported 34 thousand kilometres of shelterbelts for an average length per reporting farm of 3.2 kilometres. In 1991, 21% of Manitoba farms and 16% of Alberta farms reported having shelterbelts.

Vegetable crop acreage increases

- Total vegetable acreage increased 15 thousand acres (5%) between 1986 and 1991. Acreage increased for 14 vegetable crops and declined for 8.

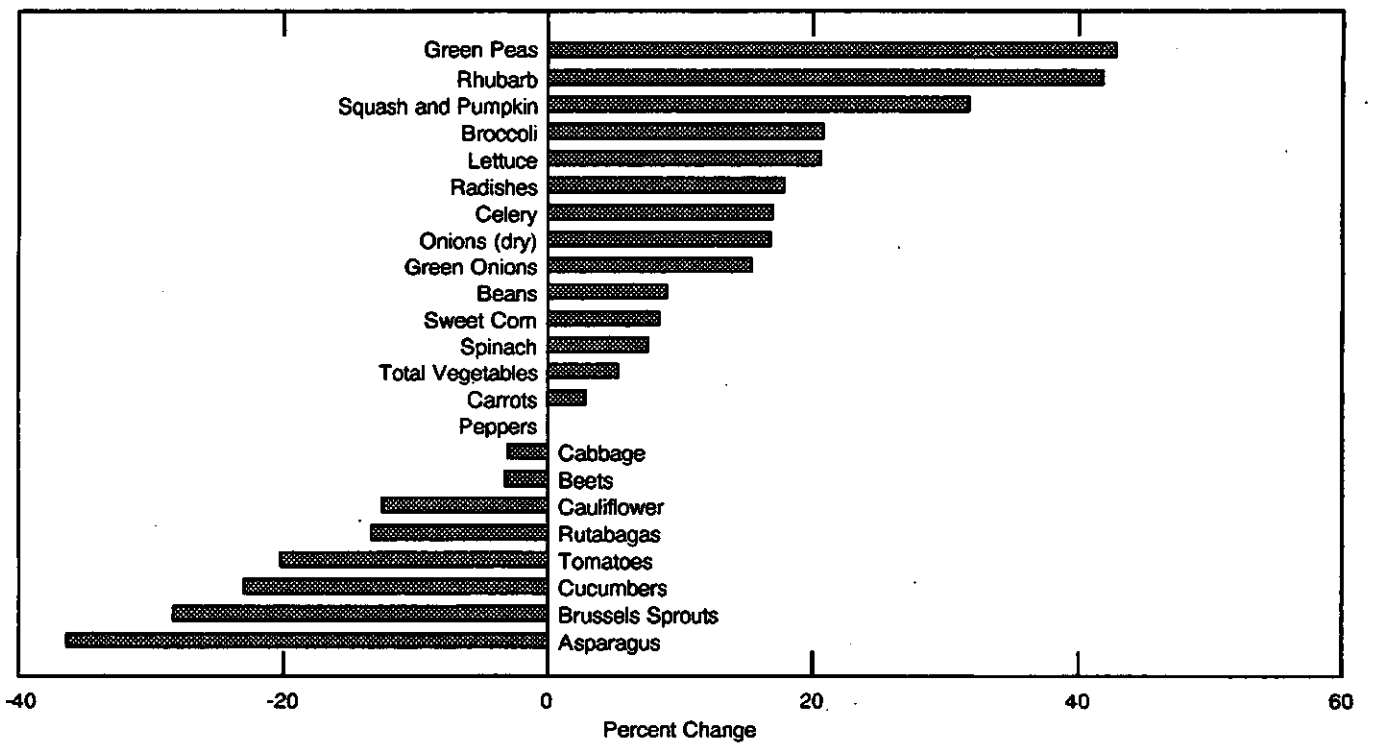
- In 1991, sweet corn (29%), green peas (16%) and tomatoes (10%) accounted for 55% of the vegetable crop acreage. Between 1986 and 1991, sweet corn acreage increased 8%, and green peas 43% (the largest increase of any vegetable crop), but tomatoes decreased 20%.

Total Vegetable Acreage[1]

	1986	1991	% change
Newfoundland	970	1,199	23.6
Prince Edward Island	2,773	3,059	10.3
Nova Scotia	8,916	9,462	6.1
New Brunswick	8,079	7,145	-11.6
Quebec	81,060	90,378	11.5
Ontario	154,046	154,493	.3
Manitoba	3,400	4,174	22.8
Saskatchewan	1,213	1,044	-13.9
Alberta	8,895	11,536	29.7
British Columbia	18,702	20,447	9.3
Canada	**288,058**	**302,936**	**5.2**

[1] *Canada total may not equal sum of provinces due to rounding.*

Fourteen vegetable crops increase acreage, Eight vegetable crops decrease acreage, Canada, 1986 to 1991



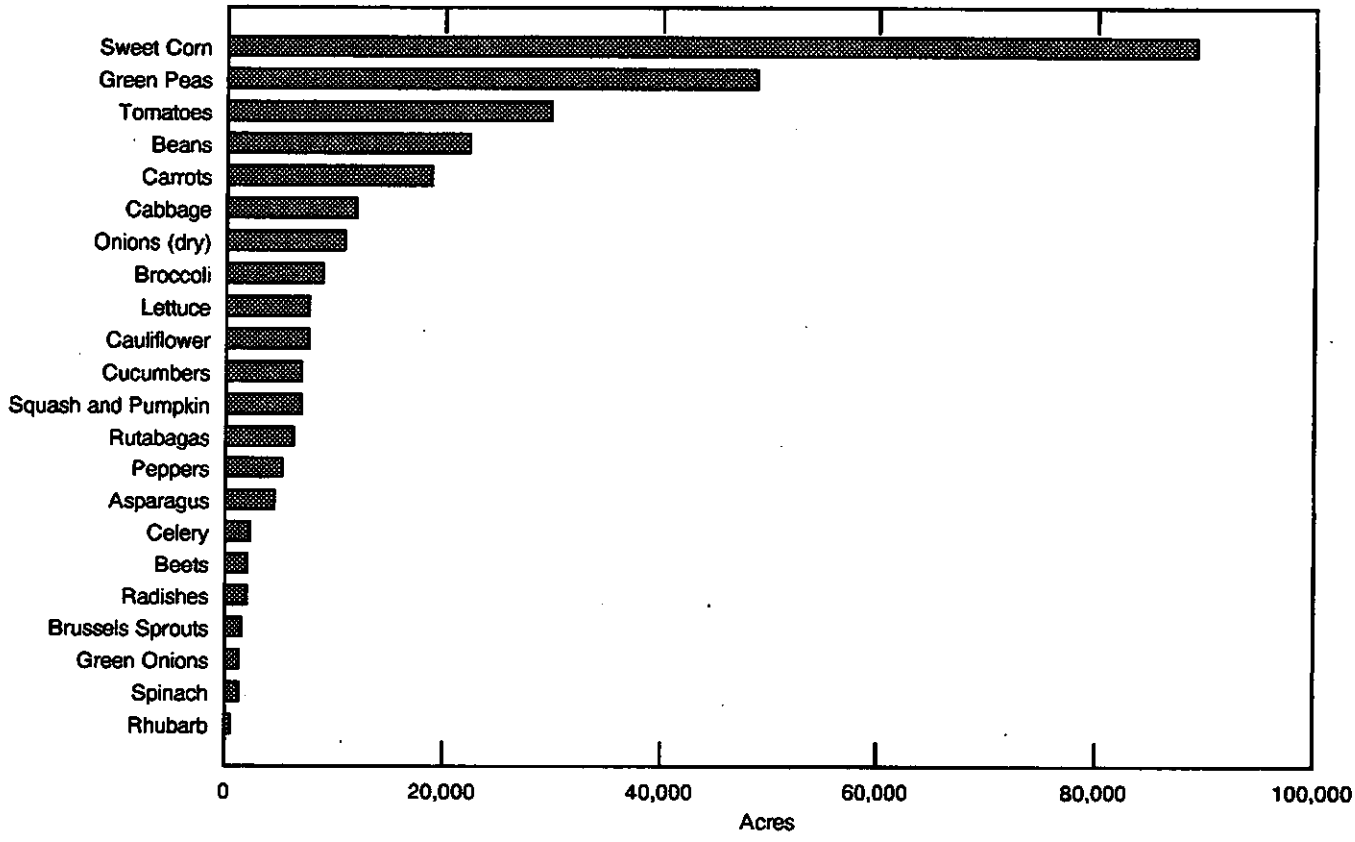
- Some smaller crops showed the largest changes in acreage between 1986 and 1991. Rhubarb, broccoli and lettuce increased over 20%, but asparagus, brussels sprouts and cucumbers declined by more than 20%.

- Sweet corn acreage increased in all provinces. Sweet corn is primarily grown in Ontario and Quebec with 57% and 31%, of the Canadian sweet corn acreage.

- Green peas increased in all provinces with significant acreages, except in New Brunswick where acreage fell marginally (-2%) between 1986 and 1991.

- The Ontario decline in tomato acreage (down 7,000 acres, -20%) accounted for the overall decline, since Ontario has 89% of the tomato acreage in Canada. Tomato acreage in Quebec (9% of the acreage in Canada) also declined by more than 20%.

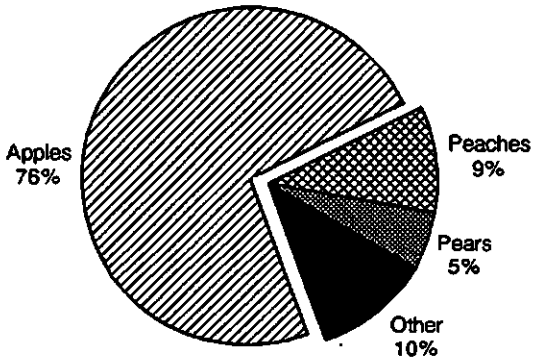
Top three vegetables account for 55% of vegetable acreage, Canada, 1991



Tree fruit area down slightly

- In 1991, tree fruit area in Canada was 113 thousand acres, 2% less than in 1986.
- Ontario, British Columbia, Quebec and Nova Scotia accounted for 98% of the tree fruit area in Canada in 1991. Except for Quebec, all these provinces experienced slight declines in tree fruit area between 1986 and 1991.
- Apples remained the predominant tree fruit grown in Canada in 1991. Apples accounted for three-quarters of the area devoted to tree fruits, increasing slightly by 1% to 86 thousand acres in 1991.
- Peaches ranked second in terms of area in 1991 at 11 thousand acres, a 10% decrease from 1986.
- Sour cherries registered the largest percentage decline in tree fruit area, down 19% from 1986 to 2,600 acres.

Three-quarters of tree fruit area in apples, Canada, 1991

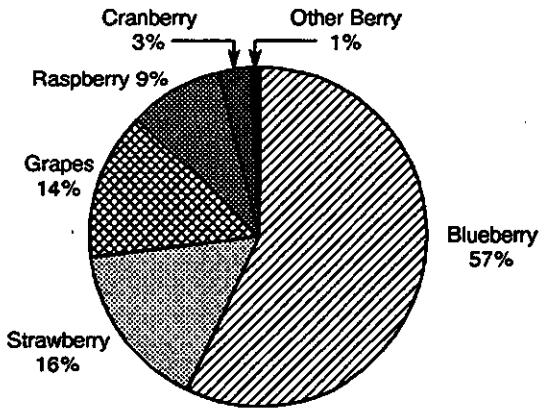


Other	
Plums and Prunes	3%
Sweet Cherries	2%
Sour Cherries	2%
Apricots	1%
Other Tree Fruits	2%

Small fruit acreage increases

- Between 1986 and 1991, small fruit acreage in Canada increased by 13 thousand acres (13%), to 110,000 acres.
- The top three in area were blueberries (57% of total small fruit area), strawberries (16%) and grapes (14%).
- Grapes (-40%) and strawberries (-14%) showed the only decreases in small fruit acreage betweeen 1986 and 1991.
- From 1986 to 1991, cranberry area in Canada increased 71% to roughly 3,400 acres. British Columbia had 84% of Canada's cranberry acreage.

Blueberries represent 57% of small fruit area, Canada, 1991



Prince Edward Island still grows most potatoes

- In 1991, Canada grew 302 thousand acres of potatoes, up 10% from 1986.
- Ontario, with 37% of the Canadian population in 1991, reported only 12% of the total area planted in potatoes. In comparison, Prince Edward Island, with only 0.5% of the population, reported 26% of the total acreage.
- From 1971 to 1991, Prince Edward Island's share of the total area planted in potatoes increased from 17% to 26%. Nova Scotia, Manitoba and Saskatchewan also reported increases, while all other provinces showed decreases.
- In 1991, less than 300 farms (6% of farms with potatoes) accounted for almost half of the potatoes grown in Canada. Twenty-eight percent (83) of these large farms were in Prince Edward Island, 24% (73) in Manitoba, 13% (39) in New Brunswick and 12% (36) in Ontario.

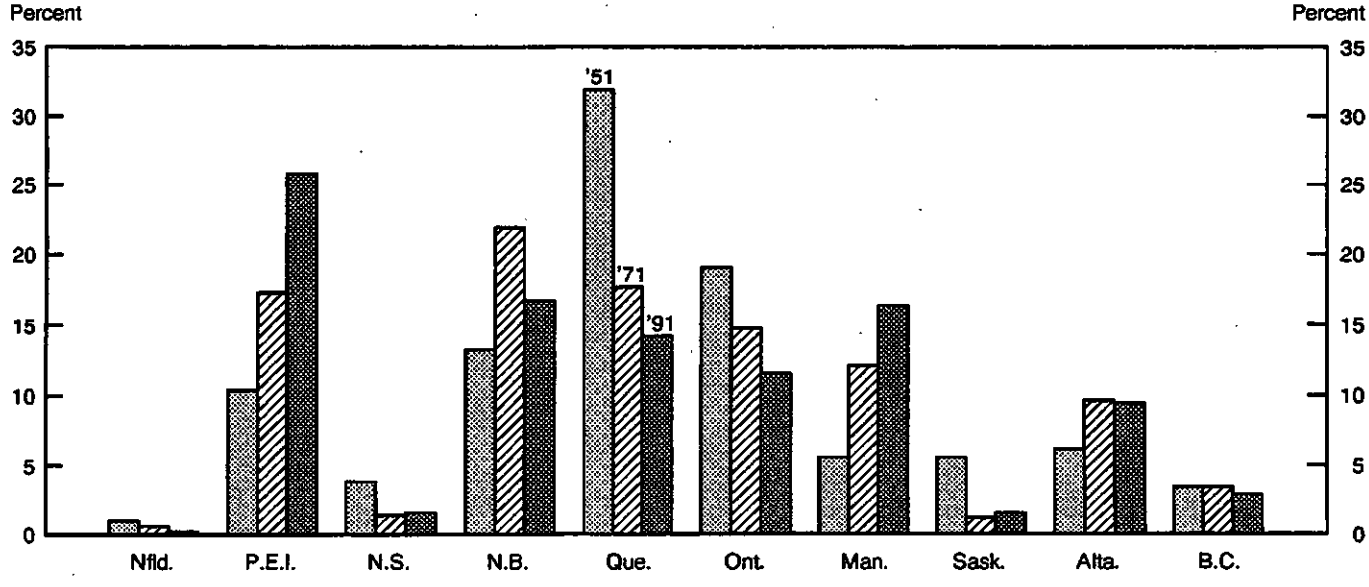
Total Potato Acreage, 1951, 1971 and 1991

	1951	1971	1991
Newfoundland	2,505	1,194	667
Prince Edward Island	29,607	46,752	77,809
Nova Scotia	11,331	3,487	4,386
New Brunswick	38,123	59,421	50,621
Quebec	92,024	47,535	43,280
Ontario	54,894	40,055	35,070
Manitoba	15,846	32,678	49,478
Saskatchewan	15,709	3,255	4,461
Alberta	17,730	26,139	28,339
British Columbia	9,792	9,083	8,324
Canada	**287,561**	**269,599**	**302,435**

Share of Total Potato Acreage Among the Provinces, 1951, 1971 and 1991

	1951	1971	1991
Newfoundland	0.9	0.4	0.2
Prince Edward Island	10.3	17.3	25.7
Nova Scotia	3.9	1.3	1.5
New Brunswick	13.3	22.0	16.7
Quebec	32.0	17.6	14.3
Ontario	19.1	14.9	11.6
Manitoba	5.5	12.1	16.4
Saskatchewan	5.5	1.2	1.5
Alberta	6.2	9.7	9.4
British Columbia	3.4	3.4	2.8
Canada	**100.0**	**100.0**	**100.0**

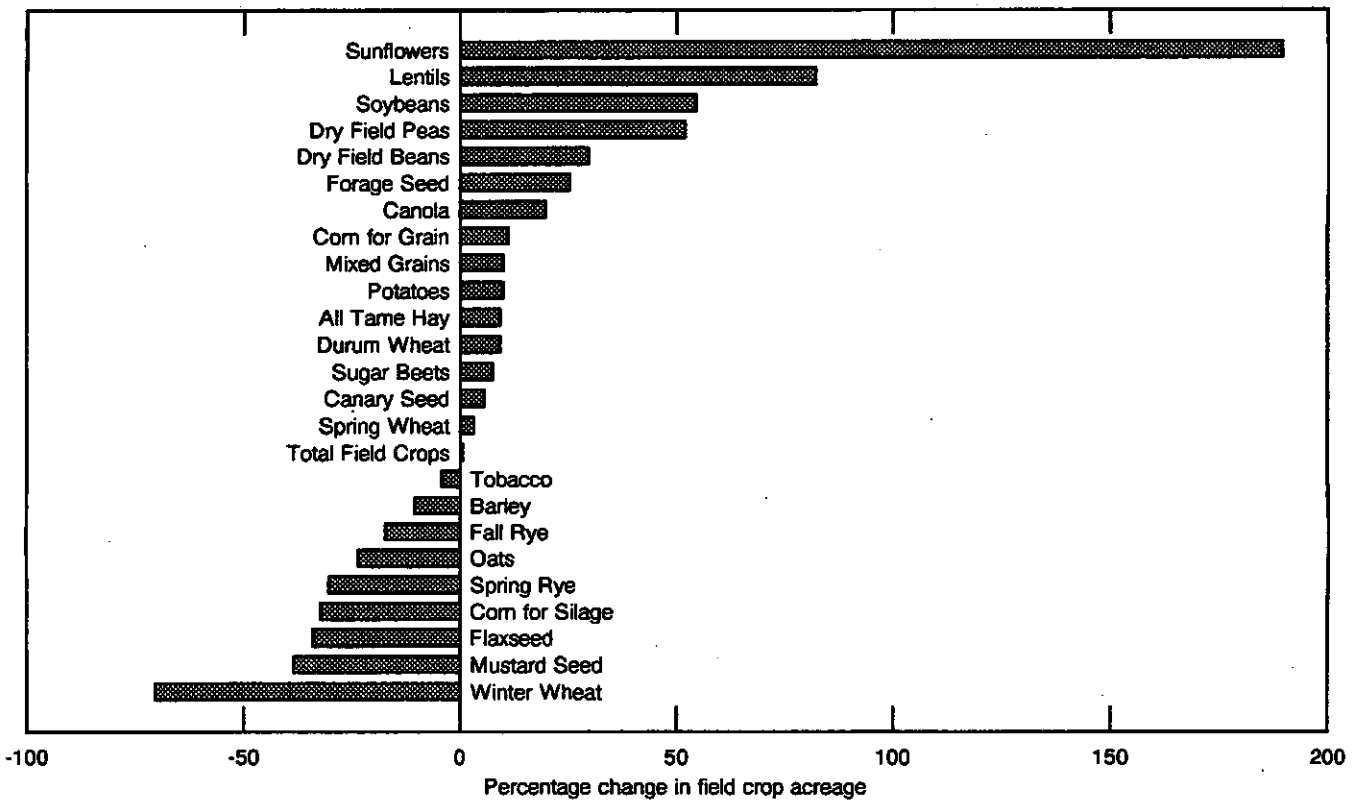
Largest share of potato area in Prince Edward Island



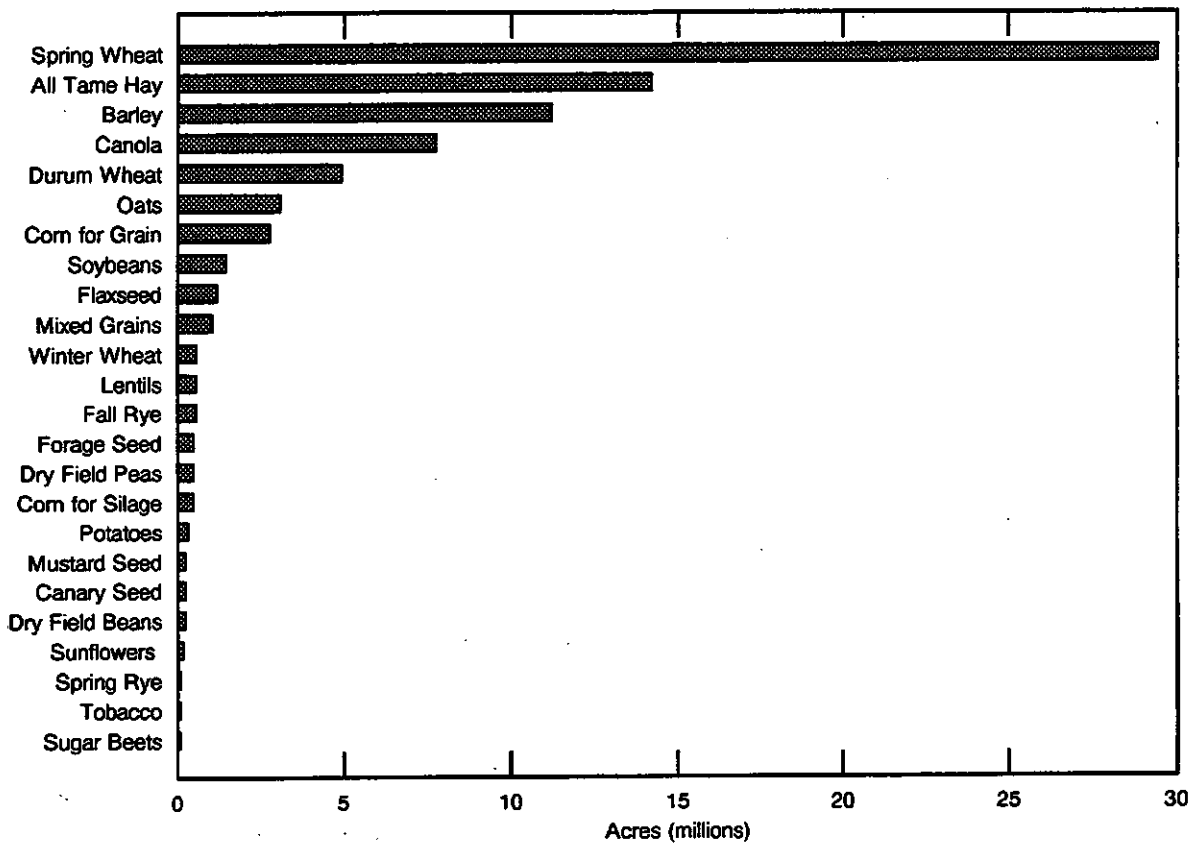
Area of field crops remains constant

- Canada's area of field crops in 1991 was just over 82 million acres, a 0.9% increase from 1986.
- Wheat remains the number one field crop accounting for 35 million acres, or 43% of total field crop area. Spring wheat makes up 84% of total wheat area, followed by durum (at 14%) and winter wheat (at 2%).
- Tame hay is the largest field crop after wheat, with 17% of field crop area (14.2 million acres). Alberta has the largest provincial share of hay (30 percent of all land in hay) with 4.2 million acres. Ontario, Saskatchewan and Quebec rank second, third and fourth, with just over 2 million acres each.
- Sunflowers showed the largest increase (189%) between 1986 and 1991, to a level of 206,049 acres. Manitoba accounted for nine-tenths of the total Canadian area of sunflowers.
- Soybean area was up in the two major producing provinces. Ontario, with the largest area of soybeans (1.4 million acres in 1991) increased 50% from 1986. Quebec's area of soybeans increased almost six-fold between 1986 and 1991, to 62,445 acres.
- Tobacco area declined by 5% between 1986 and 1991, to 74 thousand acres. Ontario, with 90% of tobacco area, registered the only provincial increase, up 3% to 67 thousand acres.

Area of total field crops remains constant, Canada, 1986 to 1991



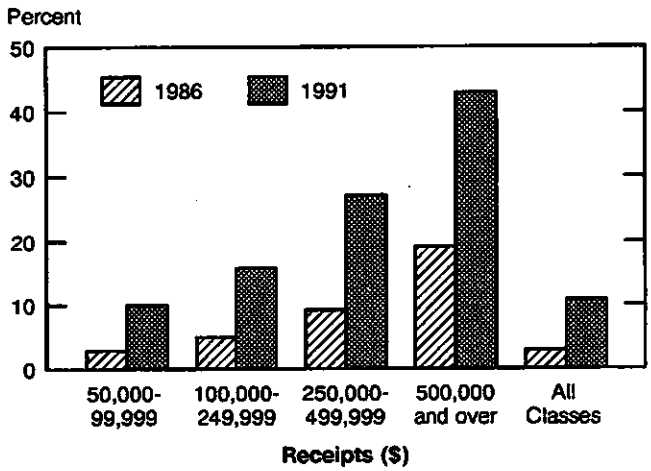
Spring Wheat has largest area, Canada, 1991



Computer use on farms quadruples since 1986

- The number of farms using computers to manage the farm business quadrupled from 2.6% in 1986 to 11% in 1991.
- Farms with receipts of $500,000 or more were most likely to use a computer to manage their business. In 1991, 43% of this category of farm reported using a computer, up from 19% in 1986.
- Among the provinces, British Columbia had the highest proportion (14%) of farms using computers.

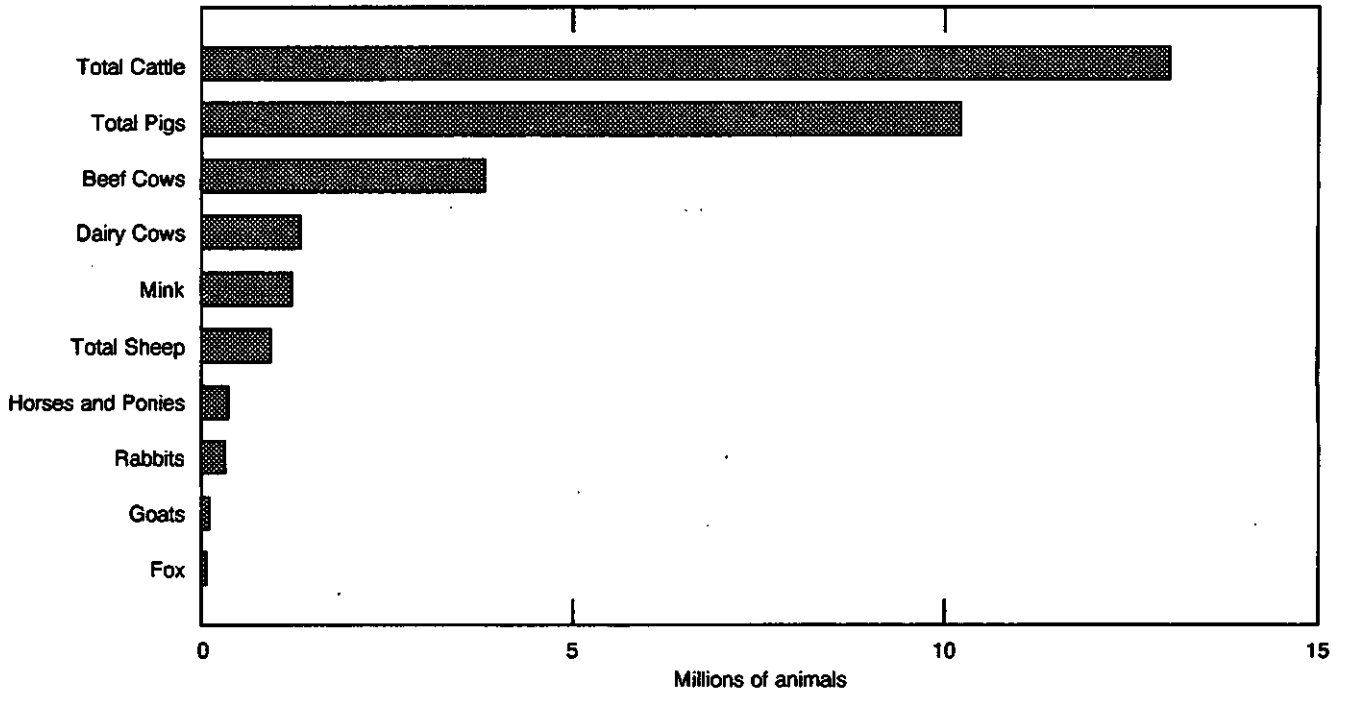
Computer use on Canadian farms quadruples since 1986



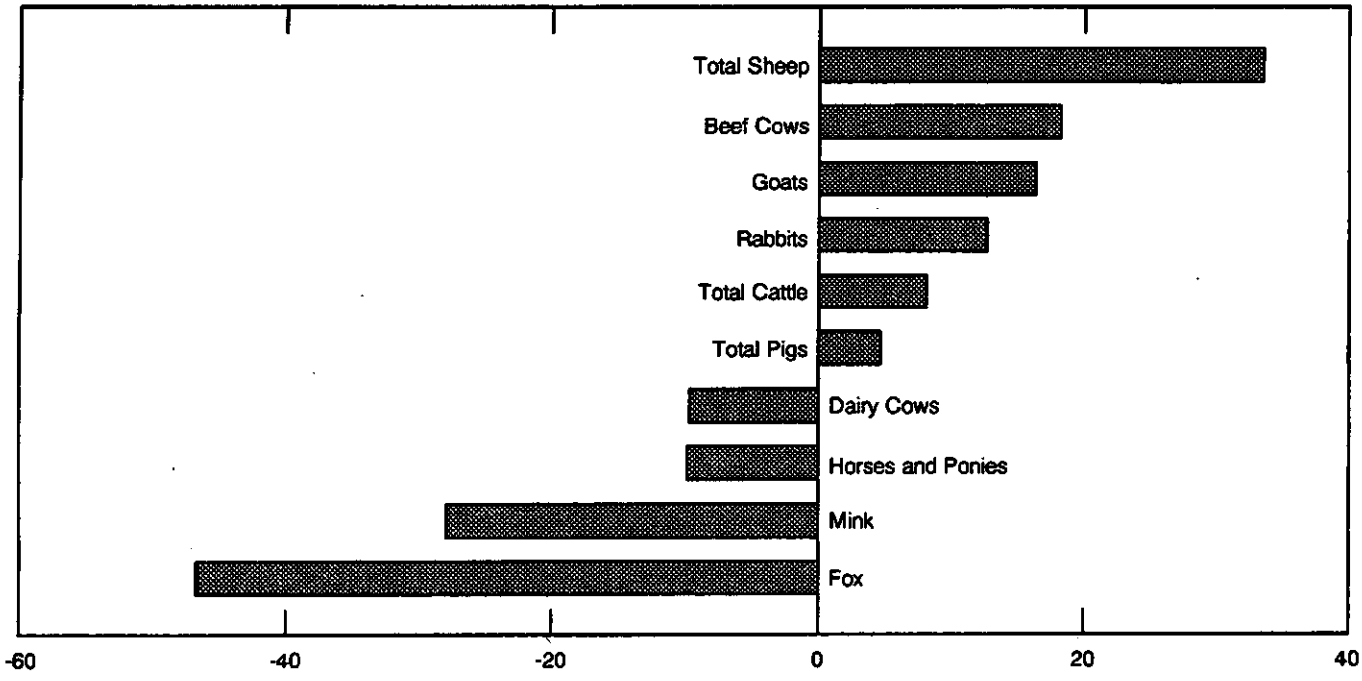
Cattle, pig and sheep herds increase

- In 1991, numbers of sheep showed the largest increase of any livestock category, up one-third since 1986 to almost 936,000 head.
- The number of beef cows in 1991 reached 3.8 million, an 18% increase from 1986. Alberta's share of the Canadian beef cow herd was 43%, and Saskatchewan had 23%.
- In addition to beef cows and sheep, the numbers of goats, rabbits and pigs also increased between 1986 and 1991.
- The number of fox, at 60,000, showed the largest drop of all livestock categories since 1986, down 47%.
- Between 1986 and 1991, decreases were also registered in numbers of mink, horses and ponies, and dairy cows.

Livestock Numbers, Canada, 1991



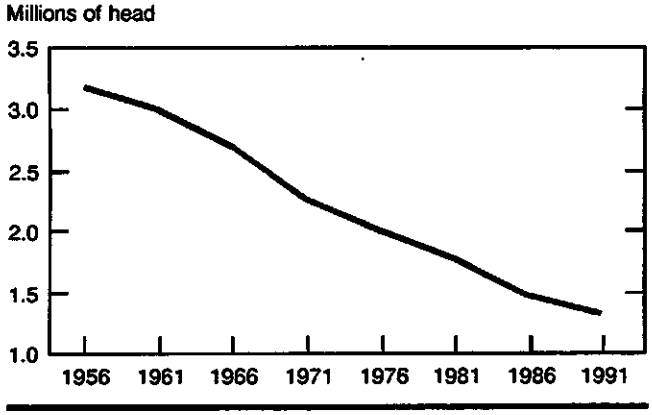
Cattle, pig and sheep herds increase, Canada, 1986 to 1991, Percentage Change



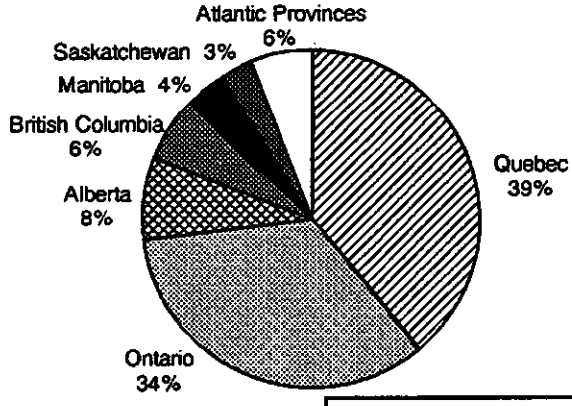
Fewer dairy cows on Canadian farms

- In 1991, there were 1.3 million dairy cows in Canada, a 10% decrease since 1986.
- From 1986 to 1991, the number of farms with dairy cows dropped by 22% to 40,000.

Fewer dairy cows on Canadian farms



Provincial share of dairy cows, 1991



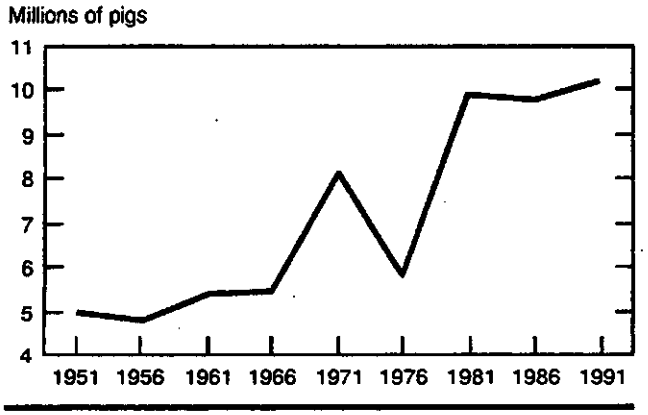
Atlantic Provinces	
Newfoundland	1%
Prince Edward Island	1%
Nova Scotia	2%
New Brunswick	2%

- The average dairy farm had 34 dairy cows in 1991 compared to 29 cows in 1986 and only 16 cows in 1971. In 1991, nearly half of the dairy cows were in herds of fewer than 50.

Number of pigs at census high

- In 1991, 10.2 million pigs were reported on farms in Canada, a census-record and a slight increase over 1986.
- At the same time, the number of farms reporting pigs dropped to a record low of 30,000 in 1991, down 76% since 1971. In 1991, 8% of these farms accounted for half the pigs in Canada. Of these larger farms, 40% were in Quebec, 23% in Ontario and 17% in Alberta.

Number of pigs in Canada



- Between 1986 and 1991, hog production shifted from Eastern to Western Canada. In 1991, Eastern hog producers lost 5% of total hog production (just over 0.5 million) to Western producers.
- In 1991, Quebec accounted for 28% of the number of pigs, yet had only 12% of the farms reporting pigs. In contrast, Ontario accounted for the same number of pigs, but had nearly three times as many farms reporting pigs.

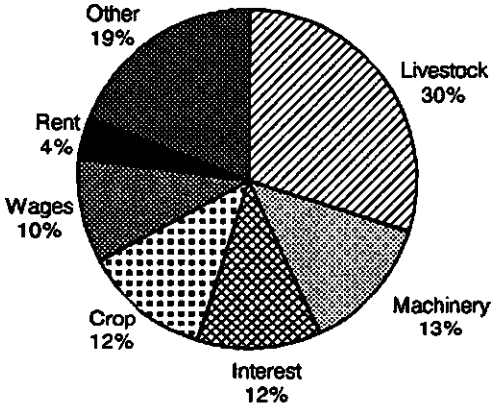
Provincial Share of Total Pigs, 1986 and 1991

	1986	1991
Newfoundland	0.2	0.2
Prince Edward Island	1.2	1.0
Nova Scotia	1.4	1.3
New Brunswick	1.0	0.7
Quebec	30.0	28.5
Ontario	32.0	28.6
East	**65.8**	**60.4**
Manitoba	11.0	12.6
Saskatchewan	6.1	7.9
Alberta	14.9	16.9
British Columbia	2.2	2.2
West	**34.2**	**39.6**
Canada	**100**	**100**

Expenses

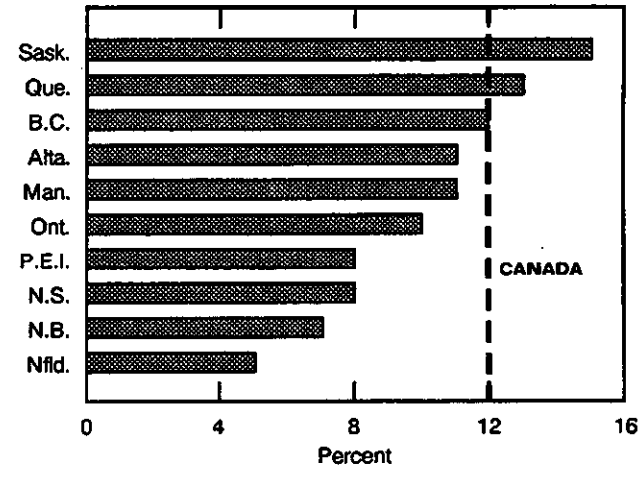
- In 1990, total farm business operating expenses in constant 1990 dollars increased marginally (3%) from 1985.
- In 1990, interest expenses were $2.4 billion or 12% of total farm business expenses in Canada. The average amount of interest paid per reporting farm was $13,700.
- At the national level, 15% of farms with receipts of $50,000 or more were debt-free and reported no interest expenses. For farms with receipts of less than $50,000, however, 55% were without interest expenses in 1990.

Share of Farm Expenses, Canada, 1990



- In the Atlantic provinces, interest expenses accounted for less than 10% of total farm expenses, with Newfoundland the lowest at just over 5%. Saskatchewan reported the highest share of interest to total farm expenses (15%).
- Livestock expenses (feed, supplements, livestock, poultry, and veterinary expenses) were the largest component (30%) of total expenses at the national level. This proportion varied among provinces, from a low in Saskatchewan of 13% to a high in Newfoundland of 52%.
- Crop expenses (fertilizer, lime, herbicides, insecticides, fungicides, seed and seedlings) made up 12% of all farm expenses in 1990.
- Wages and salaries ($2 billion) accounted for 10% of farm expenses in Canada. Half of all wages and salaries were paid to family members.

Interest as a percentage of total expenses highest in Saskatchewan in 1990



Expenses, 1990

	Canada		Newfoundland		Prince Edward Island		Nova Scotia		New Brunswick		Quebec	
	($'000)	% of total expenses	($'000)	% of total expenses	($'000)	% of total expenses	($'000)	% of total expenses	($'000)	% of total expenses	($'000)	% of total expenses
Rent	767,911	4	241	0	6,714	3	2,824	1	2,544	1	33,178	1
Wages	2,039,667	10	10,330	17	33,244	16	55,462	18	44,981	18	357,221	12
Interest	2,373,734	12	3,190	5	17,064	8	23,532	8	18,585	7	391,976	13
Machinery	2,729,776	13	3,234	5	25,448	12	26,809	9	28,759	11	306,424	10
Crop	2,486,984	12	2,045	3	37,779	18	19,367	6	30,853	12	272,037	9
Livestock	6,088,997	30	31,682	52	52,867	25	109,735	36	76,600	31	1,128,559	36
Other	3,824,485	19	10,087	17	36,583	17	63,228	21	48,278	19	612,460	20
Total Expenses	**20,311,554**	**100**	**60,809**	**100**	**209,699**	**100**	**300,957**	**100**	**250,600**	**100**	**3,101,855**	**100**

	Ontario		Manitoba		Saskatchewan		Alberta		British Columbia	
	($'000)	% of total expenses	($'000)	% of total expenses	($'000)	% of total expenses	($'000)	% of total expenses	($'000)	% of total expenses
Rent	164,235	3	94,788	5	244,740	7	193,582	4	25,063	2
Wages	665,354	12	130,644	7	209,292	6	303,857	7	229,282	20
Interest	572,873	10	200,909	11	487,673	15	517,105	11	140,828	12
Machinery	536,593	10	310,404	17	735,614	22	641,715	14	114,775	10
Crop	603,870	11	362,695	20	544,234	16	534,930	11	79,173	7
Livestock	1,779,670	33	410,813	23	446,395	13	1,712,842	37	339,833	30
Other	1,139,993	21	306,528	17	659,899	20	749,453	16	197,978	18
Total Expenses	**5,462,588**	**100**	**1,816,781**	**100**	**3,327,847**	**100**	**4,653,484**	**100**	**1,126,932**	**100**

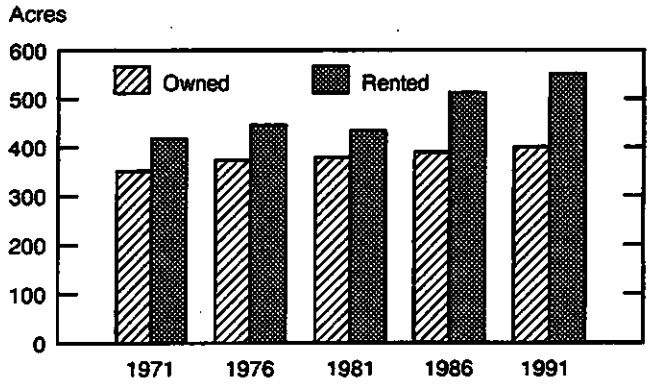
Switch to rented land stabilizes

- In 1991, Canadian farm operators rented about 61 million acres of land, 37% of the total farmed in Canada. Both the total and the percentage were almost unchanged since 1986 - the first time in two decades that the percentage did not rise. Since 1901, this percentage has quadrupled.

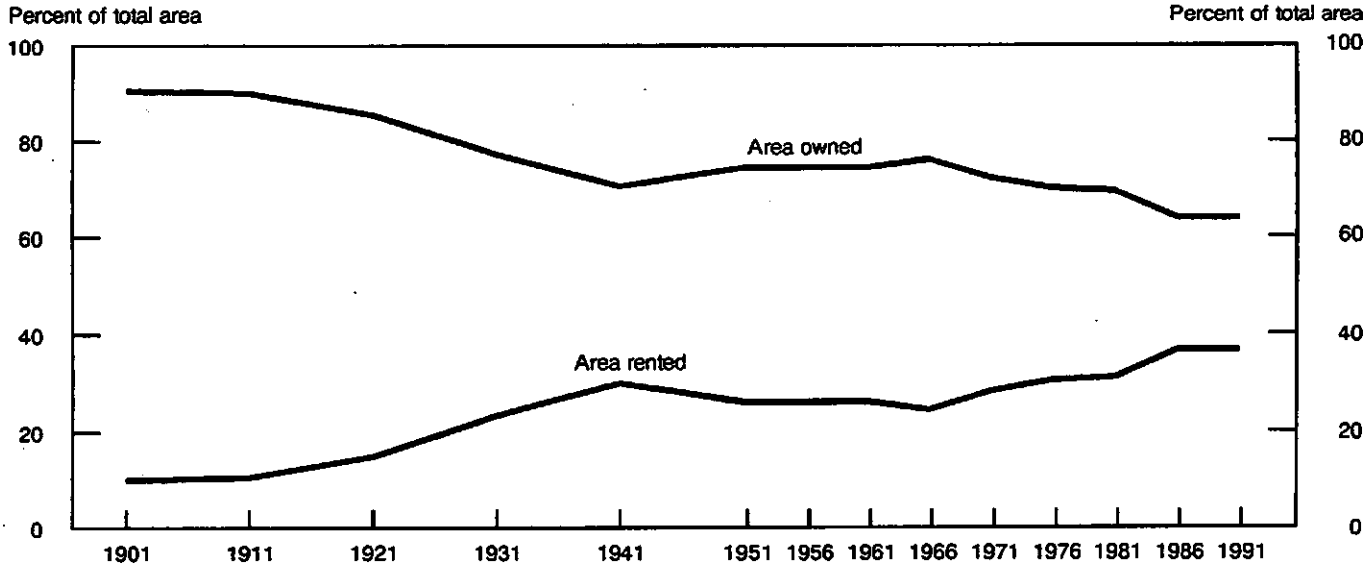
- In 1991, although 40% of farm businesses rented land, only 5% owned none of the land they farmed. Quebec had the lowest proportion of farms renting land in 1991, at 23%. Saskatchewan had the highest proportion, at 54%. Saskatchewan also had the largest share of rented land – 26 million acres, 42% of the Canadian total.

- Average area rented per farm has increased 33% in Canada since 1971; average area owned has increased only 14%. In 1991, Alberta had the highest average area rented, at 800 acres; Nova Scotia had the lowest, at 100 acres. The Canadian average was 550 acres.

Average area of owned and rented land increases in Canada



Switch to rented land stabilizes in Canada



More poultry reported by fewer farms

- On June 4, 1991, there were a record 94.9 million hens and chickens in Canada, a 7.9% increase over Census Day in 1986. However, the number of farms with hens and chickens had dropped 24% since 1986 to a record low of 43,000.

- Laying hens accounted for 23% of hens and chickens in Canada in 1991, and pullets intended for laying accounted for 11%. The "all other chickens" category, which includes broilers and roasters, accounted for 66%. The number of birds in this category increased by 16.2% from 1986 to 1991, offsetting declines in the two other categories.

- In 1991, Ontario had the largest provincial share (35% or more) for all three categories of hens and chickens, and for turkeys (41%). Quebec was second for every category.

Provincial share of poultry, 1991

	Laying hens and pullets intended for laying	All other chickens	Turkeys
Newfoundland	1.4	1.4	0.1
Prince Edward Island	0.5	0.4	--
Nova Scotia	4.6	3.4	2.8
New Brunswick	3.2	2.2	1.9
Quebec	17.5	27.9	21.2
Ontario	36.6	35.5	40.7
Manitoba	11.0	4.5	9.8
Saskatchewan	4.5	3.4	3.5
Alberta	9.2	9.2	10.1
British Columbia	11.5	12.1	9.9
Canada	**100**	**100**	**100**

– *Amount too small to be expressed.*

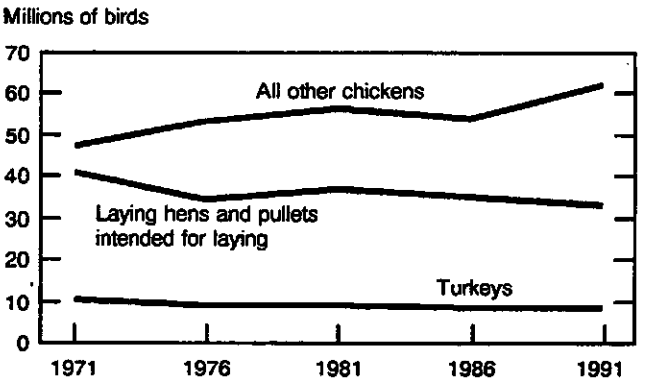
- The average number of laying hens and pullets intended for laying in 1991 was 1,038 per reporting farm. Newfoundland accounted for only 1% of the national total but had the highest average number of birds per reporting farm, at 5,208. Saskatchewan had the lowest, at 246.

- The average for "all other chickens" in Canada was 2,558 per reporting farm in 1991. Newfoundland had the highest average for this category, at 29,543 birds per reporting farm, followed by Quebec at 8,882. Saskatchewan had the lowest average, at 337.

Average size of poultry flocks, 1991

	Laying hens and pullets intended for laying	All other Chickens	Turkeys
Newfoundland	5,208	29,543	289
Prince Edward Island	847	1,662	62
Nova Scotia	2,870	6,613	1,696
New Brunswick	2,789	5,804	1,555
Quebec	2,314	8,882	2,512
Ontario	1,412	3,980	1,871
Manitoba	1,612	1,163	1,308
Saskatchewan	246	337	120
Alberta	450	1,059	402
British Columbia	850	3,913	1,075
Canada	**1,038**	**2,558**	**954**

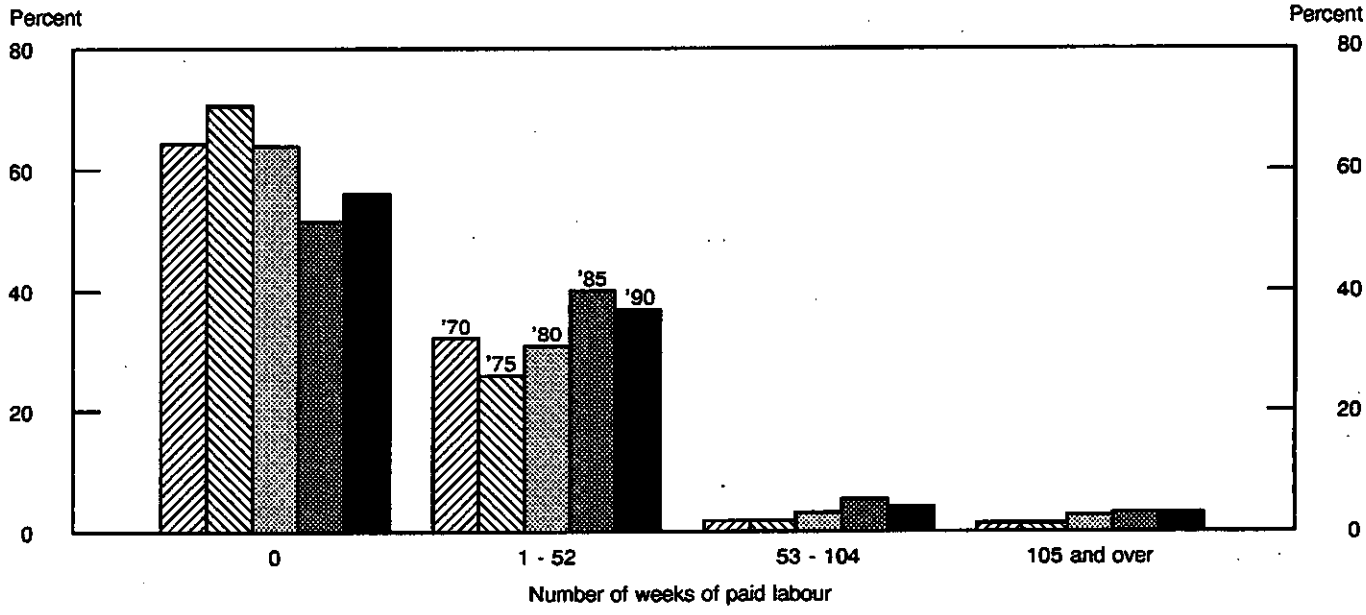
Poultry on farms in Canada



Fewer than half of farms use paid labour

- In 1990, 44% of Canadian farms used paid agricultural labour. Wages and salaries totalled $2 billion, of which 47% went to family members. Canada-wide, paid agricultural labourers worked a total of 5.3 million weeks.
- The average number of weeks of paid labour has increased steadily on Canadian farms, rising from 30 per reporting farm in 1970 to 43 in 1990.
- Farms in Ontario used 1.7 million weeks of paid agricultural labour in 1990, about one-third of the Canadian total. Quebec followed with 16% of the total.
- In 1990, 37% of farms in Canada used from one to 52 weeks of paid labour (down from 40% in 1985); 4% used from 53 to 104 weeks (down from 5% in 1985); and 3% used 105 or more weeks (unchanged from 1985). Since 1970, the proportion of farms in both of the last two categories has doubled.

Fewer than half of farms in Canada use paid labour



Eight percent of farms have 43% of farmland

- The percentage of Canadian farms with 1,600 acres of land or more doubled from 1971 to 1991, reaching 8%. These farms accounted for 43% of total Canadian farm area, up from 28% in 1971. Saskatchewan had 51% of the farms in this category in 1991.

- In 1991, average farm size in Canada was 598 acres. This average has increased with each census this century. Since 1956, it has almost doubled.

- The proportion of Canadian farms with gross receipts of $100,000 or more (in 1990 constant dollars) climbed from 7% to 24% from 1970 to 1990. These farms accounted for 75% of gross receipts in 1990. Quebec had the highest percentage of farms in this category at 33%, British Columbia had the lowest, at 16%.

- In 1991, 10% of Canadian farms growing spring wheat (excluding durum) had at least 700 acres of the crop, and together accounted for 34% of the total area in spring wheat. In 1971, only 1% of farms grew 700 acres or more of spring wheat, accounting for 7% of the total area.

- In 1991, the largest 10% of farms raising dairy cows in Canada owned 28% of all such livestock. This concentration was not as high as for other livestock or for poultry; for example, the largest 10% of farms with pigs had 58% of all these animals on Canadian farms. From 1971 to 1991, average dairy herd size doubled to 34 cows. In 1991, 28% of farms with dairy cows had herds of 17 cows or fewer, down from 65% in 1971. These farms accounted for only 4% of Canada's dairy cows in 1991, compared with 26% in 1971.

Concentration of crops in Canada, 1991

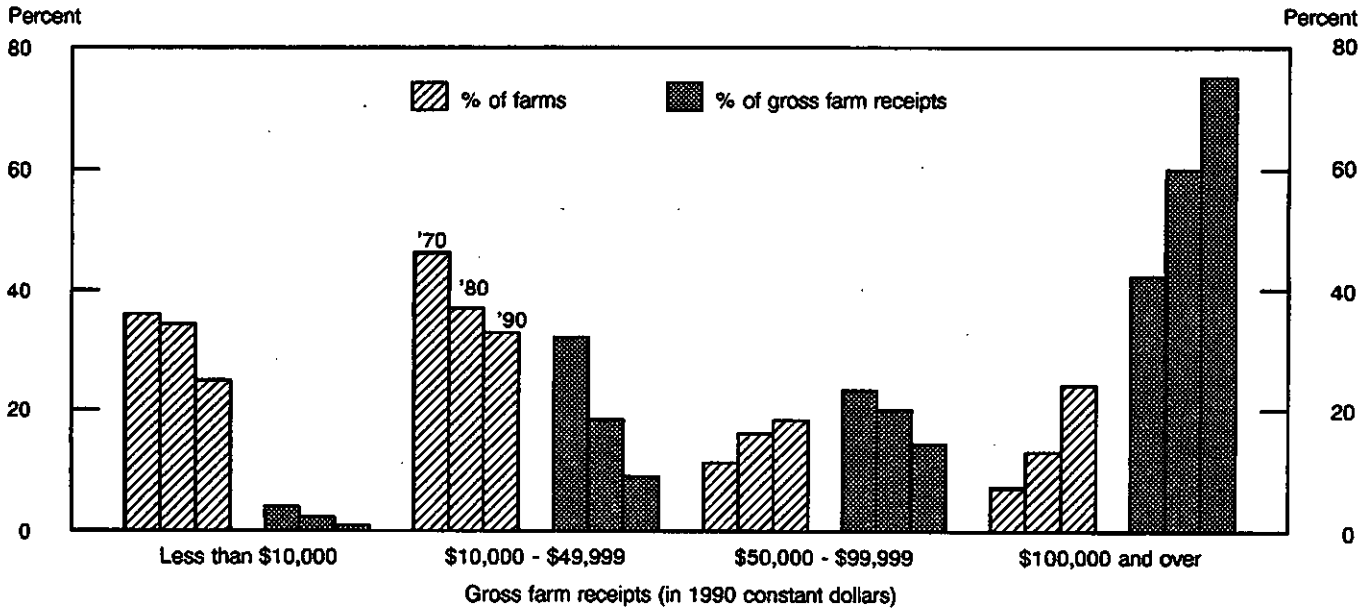
Largest 10% of farms	% of area
Spring wheat (excluding durum)	34
Corn for grain	43
Potatoes	61
Tree fruits	54
Berries and grapes	70
Vegetables	62

Concentration of livestock and poultry in Canada, 1991

Largest 10% of farms	% of inventory
Cattle and calves	43
Beef cows	41
Dairy cows	28
Pigs	58
Sheep and lambs	55
Laying hens	96

- In 1991, the largest 2% of farms with laying hens accounted for 15 million hens, or two-thirds of the Canadian total. From 1971 to 1991, the number of farms reporting laying hens fell 72%, from 100,000 to 28,000. The number of birds, however, decreased only 20% to 22 million, and egg production fell only slightly as productivity per laying hen rose.

Continued increase in farms with higher gross receipts in Canada



Over 20,000 acres of farmland in the Yukon

- In 1991, the Yukon's 113 farms had a total area of 20,421 acres. Average farm size was 181 acres, compared with the Canadian average of about 600 acres. Forty percent of the Yukon's total farm area was unimproved land for pasture, grazing or hay.

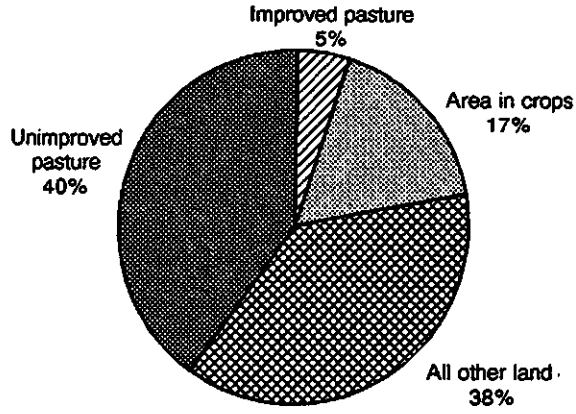
- The major field crop in the Yukon in 1991 was tame hay, accounting for 59% of all land in crops. Oats ranked second, at 29%. Fruits and vegetables were grown on 3% of the area in crops.

- Commercial fertilizer was used on 34% of Yukon farms in 1990; manure was used on 28%. Herbicides and insecticides or fungicides were used on fewer than 5% of farms.

- In 1991, irrigation was used on 24% of farms in the Yukon. The same proportion of farms used crop rotation to control soil erosion.

- In 1991, 46% of Yukon farms raised hens and chickens, for a total of about 4,700 birds. Just over half of these were laying hens. Yukon farms had 143 cattle and calves and 70 pigs.

Use of farmland in the Yukon, 1991



- The capital value of farms in the Yukon was $23 million in 1991, with land and buildings accounting for 84% of this total. The average capital value was $205,000 per farm.

- In 1990, the costs for wages and salaries and for farm machinery both accounted for 22% of total farm business operating expenses on Yukon farms. Livestock expenses were 20% of the total.

Capital value of Northwest Territories farms averages $1.4 million

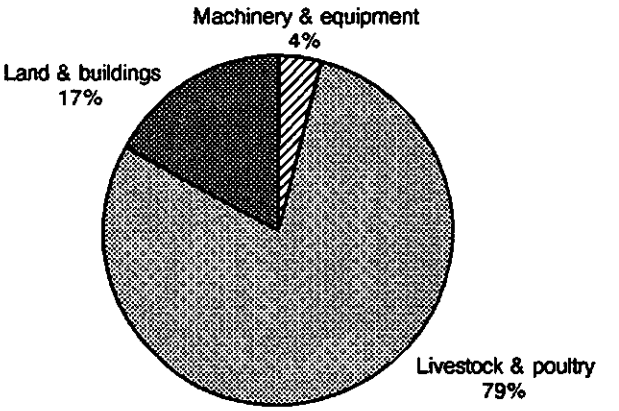
- In 1991, the 27 farms in the Northwest Territories had a total capital value of $38 million, for an average of $1.4 million per farm. Livestock and poultry accounted for 79% of this total; a large number of game animals are raised in the Territories, and there are also large operations raising poultry.

- Farms in the Northwest Territories had 2,853 acres of land in 1991. (This total does not include the large amount of land on which game herds roam and graze.) Sixty-five percent of the 2,853 acres was unimproved land for pasture, grazing or hay; 11% was used for crops, mostly hay.

- In 1990, commercial fertilizer was used on 15% of farms in the Northwest Territories. Irrigation, herbicides, and insecticides or fungicides were all used by fewer than 12% of farms.

- The most numerous type of livestock on farms in the Northwest Territories in 1991 were game animals, such as muskox and reindeer, at 47,000 head. Few operations had traditional livestock, such as cattle and pigs, but 19% had hens and chickens.

Share of farm capital, Northwest Territories, 1991



- In 1990, livestock expenses accounted for 36% of total farm business operating expenditures in the Northwest Territories, followed by wages and salaries at 22%, and interest payments at 14%.

- Just over half the farms in the Northwest Territories had tractors in 1991; slightly under half had pick-up trucks or cargo vans.

1991 CENSUS OF AGRICULTURE-POPULATION DATABASE (100%)

New data on Canadian farm operators

In 1991, for the first time in the history of the Census of Agriculture, respondents could cite more than one person as farm operator[1] on the census questionnaire. This change responded to requests made during client consultations across Canada, and it will help measure women's contribution to Canadian agriculture.

This new information produces a more complete picture of the men and women who make the day-to-day decisions on Canadian farms. As well, it offers insights into how farms managed by one operator compare with those managed by two or more operators.

This section of the publication provides a look at these new data on the age, sex, marital status and mother tongue of Canadian farm operators and farm population. As well, it examines relationships between farm operator characteristics and farm variables such as days of off-farm work and residence status.

These data offer a profile of management resources in Canadian agriculture. Coupled with the second Agriculture-Population database release (scheduled for October 1993) – which will outline education levels and areas of study, and incomes by sources and occupations – the 1991 Census will provide a comprehensive portrait of Canadian agriculture.

Previous Censuses of Agriculture identified only one operator per farm, while in 1991, data on up to three farm operators per holding were captured and tabulated.

[1] *A farm operator is a person responsible for the day-to-day decisions made in the agricultural operation of the farm holding.*

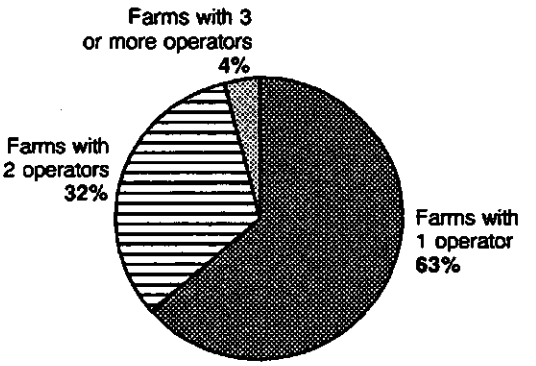
In 1991, second and third operators, not previously represented on the Census of Agriculture, were younger and had a larger component of women than those reported as first operators.

Because of these differences, the farm operator and farm population data presented here should not be compared to data published from previous censuses. However, more information on data comparability is available by contacting the Census of Agriculture or your nearest Statistics Canada Regional Reference Centre.

Most Canadian farms managed by 1 farm operator

In 1991, of the 280,040 farms in Canada, 63% were operated by 1 operator. On these 176,935 farms, 94% of operators were male and 6% were female. Prince Edward Island and Manitoba reported the lowest percentages of female sole operators at 4%. British Columbia had the highest percentage of female sole operators, at 13%.

Two-Thirds of Canada's Farms Managed by 1 Operator in 1991



Confidentiality and Random Rounding

The figures shown in the tables of this section have been subjected to a confidentiality procedure known as **"random rounding"**. This is done to prevent the possibility of associating statistical data with any identifiable individual. Under this method, all figures including totals are randomly rounded either up or down to a multiple of "5" or "10". While providing strong protection against disclosure, this technique does not add significant error to the census data. However, there are some consequences for the users. Since totals are independently rounded, they do not necessarily equal the sum of individually rounded figures in distributions. Also, minor differences can be expected in corresponding totals and cell values in various census tabulations. Similarly, percentages, which are calculated on rounded figures, do not necessarily add up to 100. Percentage distributions and rates for the most part are based on rounded data, while averages are based on unrounded data.

Two-operator farms accounted for one-third of Canadian farms in 1991. Of these 90,630 farms, 87% were managed by 1 male and 1 female operator, 13% by 2 male operators, and less than 1% by 2 female operators.

Farms with 3 or more operators[2] were the minority in Canada in 1991, accounting for 4% of all farms. Combinations of male and female operators (for example, 2 males and 1 female, or 1 male and 2 females) represented three-quarters of these multi-operator farms. Farms managed by 3 males accounted for 24%, and less than 1% were managed by 3 female operators.

[2] *For farms that reported more than 3 farm operators, data on only the first three were captured and tabulated.*

95% of Canadian farms managed by 1 or 2 operators in 1991

	Total farms		Farms with 1 operator		Farms with 2 operators		Farms with 3 or more operators	
	Number	%	Number	%	Number	%	Number	%
Canada	**280,040**	**100**	**176,935**	**63**	**90,630**	**32**	**12,480**	**4**
Newfoundland	725	100	565	78	140	19	20	3
Prince Edward Island	2,360	100	1,685	71	565	24	115	5
Nova Scotia	3,980	100	2,900	73	945	24	135	3
New Brunswick	3,250	100	2,380	73	740	23	125	4
Quebec	38,075	100	24,530	64	11,500	30	2,050	5
Ontario	68,635	100	39,020	57	25,925	38	3,680	5
Manitoba	25,705	100	17,200	67	7,450	29	1,055	4
Saskatchewan	60,840	100	43,900	72	15,005	25	1,935	3
Alberta	57,245	100	34,565	60	20,145	35	2,530	4
British Columbia	19,225	100	10,180	53	8,210	43	830	4

Male-female management combinations dominated farms with multiple operators in 1991

	Farms with 1 operator		Farms with 2 operators			Farms with 3 or more operators		
	Male	Female	2 Males	2 Females	1 Male and 1 Female	3 Males	3 Females	Male/ Female combinations
	Percent							
Canada	**94.0**	**6.0**	**13.0**	**0.4**	**86.6**	**24.2**	**0.2**	**75.6**
Newfoundland	92.9	7.1	22.2	--	77.8	25.0	--	75.0
Prince Edward Island	96.1	3.9	40.2	0.9	58.9	43.5	--	56.5
Nova Scotia	91.7	8.3	21.6	1.1	77.4	33.3	--	66.7
New Brunswick	94.7	5.3	26.8	0.7	72.5	32.0	--	68.0
Quebec	93.5	6.5	14.9	0.4	84.7	22.5	--	77.5
Ontario	93.0	7.0	12.2	0.5	87.3	19.8	0.1	80.0
Manitoba	96.1	3.9	15.8	0.4	83.8	29.9	--	70.1
Saskatchewan	95.5	4.5	15.0	0.2	84.8	30.7	0.3	69.1
Alberta	94.9	5.1	11.5	0.4	88.1	26.1	0.2	73.7
British Columbia	86.6	13.4	6.0	0.7	93.4	14.5	0.6	84.9

– *Amount too small to be expressed.*

Canada's farm population 3.2% of the total population in 1991

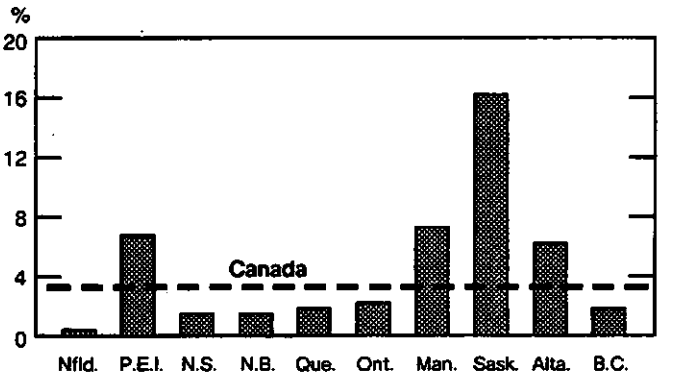
A total of 867,265 people, 3.2% of Canada's population, resided on farms in the households of farm operators in 1991. The highest proportion of farm to total population was reported in Saskatchewan (16.2%). Newfoundland had the lowest proportion (0.4%). Ontario had the largest farm population[1] at 226,750.

In 1991, the rural farm population[2] was 13.1% of the total rural population in Canada. Again, Saskatchewan had the largest share of its rural population on farms (41.5%).

1 *Farm population is all persons who are members of a farm operator's household, living on a farm in a rural or urban area.*

2 *Rural farm population is all persons who are members of a farm operator's household, living on a farm in a rural area.*

Saskatchewan's Farm Population 16.2% of Total Population in 1991



Ontario reported highest farm population in 1991

	Total farm population		Rural farm population		
	Number of persons	as a % of total population	Number of persons	as a % of rural population	as a % of total population
Canada	**867,265**	**3.2**	**830,425**	**13.1**	**3.1**
Newfoundland	2,045	0.4	1,645	0.6	0.3
Prince Edward Island	8,670	6.7	8,570	11.0	6.6
Nova Scotia	12,785	1.4	12,455	3.0	1.4
New Brunswick	10,970	1.5	10,625	2.8	1.5
Quebec	128,370	1.9	122,685	7.9	1.8
Ontario	226,750	2.2	220,330	12.0	2.2
Manitoba	79,610	7.3	78,000	25.6	7.1
Saskatchewan	159,725	16.2	151,630	41.5	15.3
Alberta	177,190	7.0	171,860	33.4	6.8
British Columbia	61,135	1.9	52,625	8.2	1.6

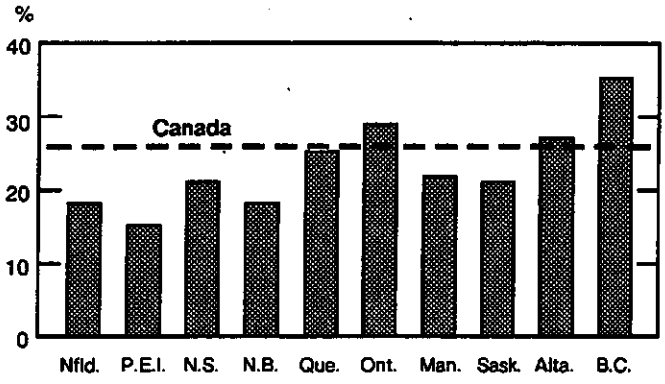
One-quarter of Canadian farm operators in 1991 were female

At the time of the 1991 Census of Agriculture, 390,870 operators were managing Canada's 280,040 farms. Of these operators, 100,320 were female – one-quarter of the total.

British Columbia reported the highest percentage of female operators in 1991, at 35%; Prince Edward Island reported the lowest, at 15%.

Women were best represented on 2-operator farms, on which they accounted for 44% of operators. On farms with 3 or more operators, females accounted for 30% of operators. The lowest representation of women was on farms with 1 operator – 6% of sole operators were female.

Proportion of Female Farm Operators Varied From Province to Province in 1991



Women represented just under half of operators on farms with 2 operators, 1991

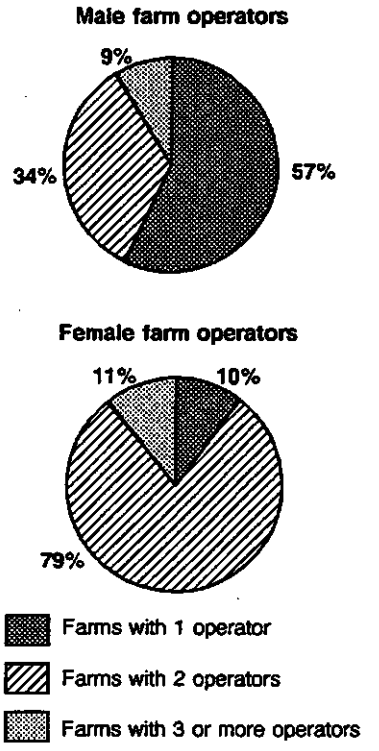
	Total farms		Farms with 1 operator		Farms with 2 operators		Farms with 3 or more operators	
	Male	Female	Male	Female	Male	Female	Male	Female
	Percent							
Canada	**74**	**26**	**94**	**6**	**56**	**44**	**70**	**30**
Newfoundland	82	18	93	7	62	38	67	33
Prince Edward Island	85	15	96	4	69	30	79	21
Nova Scotia	79	21	92	8	60	40	74	26
New Brunswick	82	18	95	5	63	37	75	25
Quebec	75	25	93	7	57	43	70	29
Ontario	71	29	93	7	56	44	69	31
Manitoba	78	22	96	4	57	43	73	27
Saskatchewan	79	21	96	4	56	44	72	28
Alberta	73	27	95	5	55	45	71	29
British Columbia	65	35	87	13	52	47	64	36

Female farm operators more likely to share farm management responsibilities

In 1991, most female farm operators in Canada were in fact co-operators of their farm businesses: 79% on farms with 2 operators and 11% on farms with 3 or more operators. The remaining 10% reported being the sole operator of their farm business. However, the proportion of women who were sole operators varied among provinces, ranging from 24% in Newfoundland to 8% in Manitoba and Alberta.

Male farm operators were more likely to be sole operators. Nationally, 57% of all male farm operators were sole operators in 1991. An additional 34% were on farms with 2 operators, and 9% were on farms with 3 or more operators.

Most Male Farm Operators Were on Farms With 1 Operator, Canada, 1991



Most Canadian female farm operators on farms with 2 or more operators, 1991

	Male Number of farm operators			Female Number of farm operators		
	1	2	3 or more	1	2	3 or more
	Percent					
Canada	**57**	**34**	**9**	**10**	**79**	**11**
Newfoundland	71	23	5	24	64	12
Prince Edward Island	61	29	10	14	72	15
Nova Scotia	65	28	7	22	68	10
New Brunswick	65	27	8	17	71	12
Quebec	57	33	11	12	74	14
Ontario	50	40	10	9	79	12
Manitoba	61	31	8	8	81	10
Saskatchewan	67	27	6	12	79	9
Alberta	54	37	9	8	82	10
British Columbia	46	45	8	14	78	9

Female farm operators younger than their male counterparts

Of Canada's 390,870 farm operators, 48% were between the ages of 35 and 54 in 1991. Operators aged 55 or over constituted the next largest group with 32% of all operators, while those under 35 accounted for only 20%.

This ranking held for both male and female farm operators; however, female farm operators were on average younger than their male counterparts. In 1991, 21% of Canada's female farm operators were under 35, compared with 19% of male operators.

The 35 to 54 age group accounted for 52% of female and 47% of male farm operators. The 55 and over age category accounted for 26% of female and 34% of male operators.

Quebec had the largest proportion of operators in the under 35 age category, with 25%. Thirty-one percent of the province's female farm operators were in this age group, almost double the proportion for British Columbia and Prince Edward Island at 16% each.

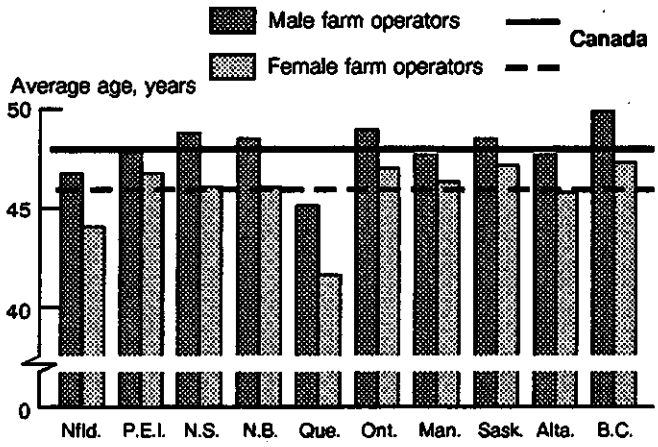
Saskatchewan had the highest proportion of farm operators in the 55 and over age group in 1991, with 35% - 37% of male and 30% of female operators.

In 1991, the average age of Canadian farm operators was 47.5. For males, the average was 48.0; for females, it was 46.0.

Quebec had the youngest farm operators, with an average age of 41.7 for females and 45.2 for males. The overall average in Quebec was 44.3.

British Columbia reported the oldest average age for farm operators in 1991, at 47.2 for females, and 49.8 for males. The overall average for British Columbia farm operators was 48.9.

Female Operators Younger than Males on Average in All Provinces in 1991



Most Canadian farm operators between 35 and 54 years of age in 1991

	Total operators			Male operators			Female operators		
	Less than 35	35 to 54	55 and over	Less than 35	35 to 54	55 and over	Less than 35	35 to 54	55 and over
	Percent								
Canada	**20**	**48**	**32**	**19**	**47**	**34**	**21**	**52**	**26**
Newfoundland	15	59	26	14	58	27	21	62	18
Prince Edward Island	20	47	33	21	45	34	16	58	26
Nova Scotia	17	51	33	17	49	35	18	58	24
New Brunswick	16	52	31	16	52	33	19	56	24
Quebec	25	52	22	23	52	25	31	54	15
Ontario	18	48	34	18	46	36	19	52	29
Manitoba	21	47	32	21	45	34	21	52	28
Saskatchewan	20	45	35	20	43	37	20	49	30
Alberta	20	48	32	20	46	34	22	52	26
British Columbia	14	51	34	14	49	37	16	56	28

About one-third of farm operators work off the farm

Most of Canada's farm operators (63%) reported no off-farm employment during 1990.

The next largest group of farm operators (21%) reported working 190 days or more off the farm. This group accounted for 18% of female and 22% of male operators.

Male farm operators worked more days on average at off-farm jobs. Male operators in Canada averaged 72 days off the farm in 1990, compared with 63 days for female operators.

Prince Edward Island and Saskatchewan reported exceptions to this national trend: female farm operators in these provinces worked more days off the farm on average than did their male counterparts. In Prince Edward Island, female farm operators worked an average of 61 days off the farm in 1990, compared with 58 days for male operators. In Saskatchewan, female farm operators reported 63 days of off-farm work on average, while males reported 58 days.

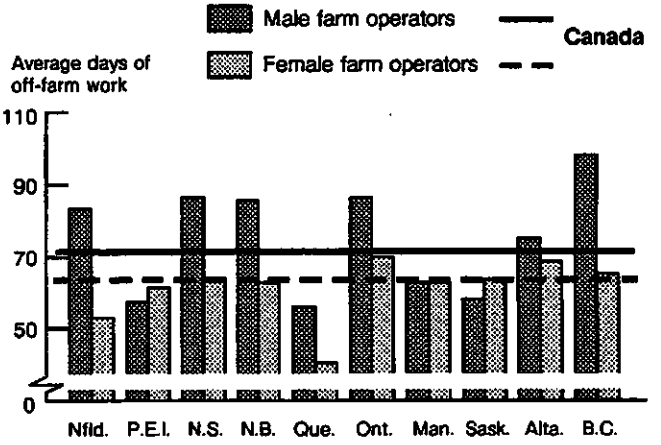
In Manitoba, male and female farm operators worked on average virtually the same number of days off the farm; 63 days for males, 62 days for females.

Off-farm employment varied depending on the number of operators in the farm business. On farms with one operator, 63% of operators worked exclusively on the farm in 1990. Female sole operators were more likely to work only on the farm – 68% compared with 62% of male sole operators.

On farms with two operators, 61% of operators reported no off-farm work during 1990 – 62% of female and 60% of male operators.

Operators on farms with 3 or more operators were least likely to work off the farm: 73% reported no off-farm work during 1990, with little difference between male and female operators.

Male Farm Operators Worked More Days Off the Farm on Average in 1990



Quebec had the highest proportion of operators without off-farm work in 1990. On Quebec farms with a sole operator, 69% of operators reported no days of off-farm work – 75% of female and 69% of male sole operators. On farms with 2 operators, over 77% of operators had no off-farm work in 1990. Farms run by 3 or more operators in Quebec had a substantially higher percentage of operators without off-farm work, at 84%.

The group with Canada's highest rate (52%) for off-farm work was males on 2-operator farms in British Columbia. This was the only group with a rate of more than 50%.

About one-third of farm operators in Canada worked off the farm in 1990

Days of off – farm work	Total		Male		Female	
	Number	%	Number	%	Number	%
No days	**245,865**	**63**	**181,790**	**63**	**64,075**	**64**
1 or more days	**145,000**	**37**	**108,760**	**37**	**36,245**	**36**
1-19	6,140	4	4,395	4	1,745	5
20-59	13,150	9	9,305	9	3,845	11
60-189	45,055	31	32,175	30	12,880	36
190 and over	80,655	56	62,885	58	17,775	49

In 1991, most Canadian farm operators were married

In 1991, 82% of Canadian farm operators were married, 11% were single, 4% were divorced or separated, and 3% were widowed.

More female farm operators were married – 87% compared with 81% for males.

For female farm operators, the next largest category was widowed at 6%, followed by single (4%) and divorced or separated (3%).

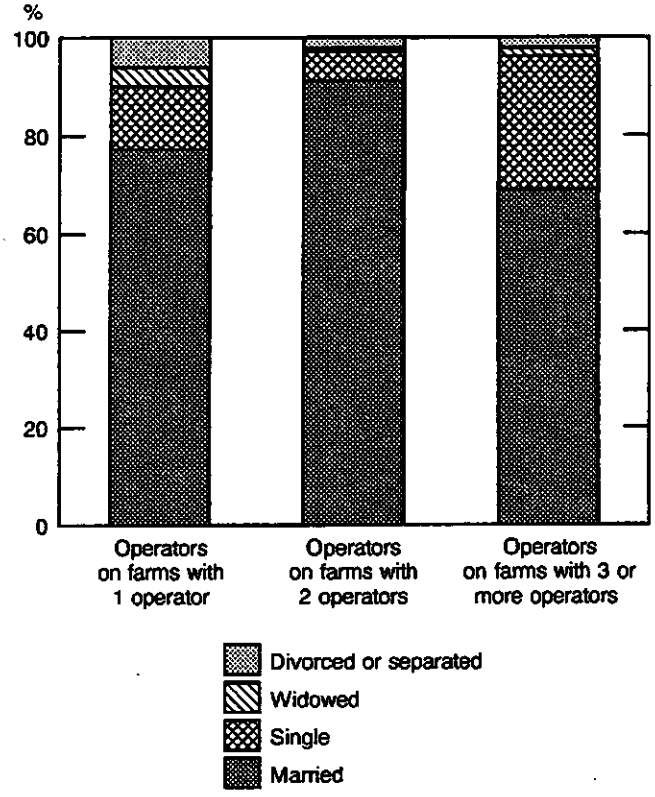
For male operators, the single category ranked second at 13%, followed by divorced or separated (4%) and widowed (2%).

Marital status also varied depending on the number of operators on the farm. On 1-operator farms, 79% of male operators were married and 13% were single in 1991. By contrast, less than half (42%) of female sole operators were married. More female sole operators were widowed than single – 34% compared with 10%.

The highest proportion of married farm operators in 1991 was found on 2-operator farms, with over 91% – 94% of females and 89% of males.

The lowest proportion of married male farm operators was found on farms with 3 or more operators, at 64%, compared with 81% of females and 69% overall. These farms also had the largest proportion of male farm operators who were single, at 33%, compared with 11% of females and 27% overall.

In 1991, Highest Proportion of Married Farm Operators in Canada Found on 2-Operator Farms



Female farm operators more likely to be married, 1991

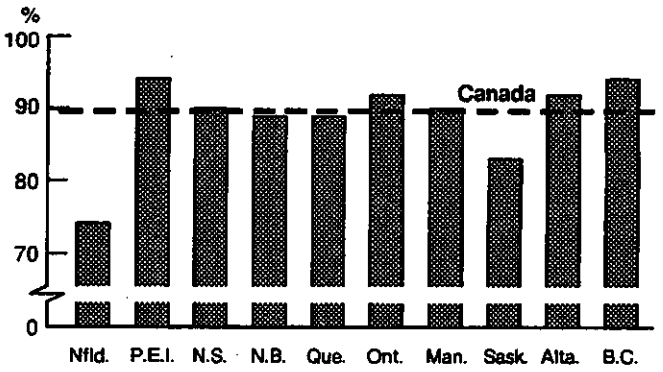
Canada	Total operators		Male operators		Female operators	
	Number	%	Number	%	Number	%
Total	**390,870**	**100**	**290,550**	**100**	**100,320**	**100**
Married	322,405	82	234,895	81	87,510	87
Single	43,135	11	39,005	13	4,130	4
Divorced or separated	15,140	4	12,275	4	2,865	3
Widowed	10,190	3	4,375	2	5,815	6

Ninety percent of farm operators in Canada resided on their farms

In 1991, the highest percentage of operators living on their farms occurred for 2-operator farms (93%), followed by farms with 3 or more operators (90%). On farms with 1 operator, 86% of operators reported living on the farm.

Newfoundland had the lowest percentage of operators living on the farm in 1991, at 74%. Prince Edward Island and British Columbia had the highest percentage, at 94%.

Ninety Percent of Farm Operators in Canada Resided on their Farms, 1991



Highest rate of farm residency occurred on 2-operator farms in British Columbia and 1-operator farms in Prince Edward Island, 1991

	Percentage of operators residing on the farm			
	Total	Farms with 1 operator	Farms with 2 operators	Farms with 3 or more operators
	Percent			
Canada	**90**	**86**	**93**	**90**
Newfoundland	74	72	80	75
Prince Edward Island	94	95	94	91
Nova Scotia	90	89	92	88
New Brunswick	89	90	90	81
Quebec	89	86	93	87
Ontario	92	91	94	91
Manitoba	90	87	93	93
Saskatchewan	83	78	89	89
Alberta	92	88	94	93
British Columbia	94	92	95	92

Language profile of Canadian farm operators differs from the general population

Over two-thirds (68%) of Canadian farm operators reported English as their mother tongue in 1991. French was the mother tongue of the second largest group of operators (15%). German and Ukrainian ranked next.

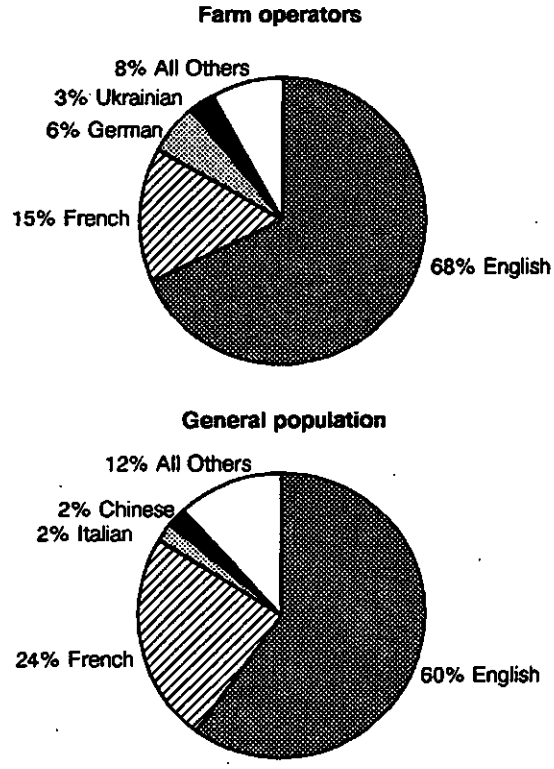
This profile differed from that of the general Canadian population. Farm operators were more likely to speak English as their mother tongue than was the general population (68% versus 60%), and less likely to speak French (15% versus 24%). In the general population, English and French were followed by Italian and Chinese.

Manitoba was the only province that had the same top four mother tongues for the general population and for farm operators.

The percentage of operators with English as their mother tongue was highest in Newfoundland (99%), Prince Edward Island (92%) and Nova Scotia (91%). Quebec reported the lowest percentage (7%).

In Quebec, 90% of operators reported French as their mother tongue. New Brunswick ranked second for French with 18% of operators. British Columbia was the only province in which French was not in the top four mother tongues for farm operators.

The Mother Tongues of Farm Operators and the General Population, Canada, 1991



Over two-thirds of Canadian farm operators reported English as their mother tongue in 1991

	Rank									
	First		Second		Third		Fourth		Remainder	
	Mother Tongue	%	Mother Tongue	%	Mother Tongue	%	Mother Tongue	%	Mother Tongue	%
Can.	**English**	**68**	**French**	**15**	**German**	**6**	**Ukrainian**	**3**	**All Others**	**8**
Nfld.	English	99	French	1	–		–		–	
P.E.I.	English	92	Dutch	3	French	2	German	1	All others	2
N.S.	English	91	Dutch	4	French	2	German	1	All others	2
N.B.	English	77	French	18	German	2	Dutch	2	All others	1
Que.	French	90	English	7	German	1	English & French	1	All others	1
Ont.	English	79	Dutch	5	German	5	French	4	All others	7
Man.	English	68	German	13	Ukrainian	7	French	5	All others	7
Sask.	English	80	German	6	Ukrainian	5	French	3	All others	6
Alta.	English	80	German	6	Ukrainian	5	French	3	All others	6
B.C.	English	74	German	8	Dutch	4	Punjabi	2	All others	12

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