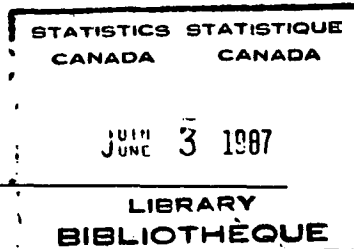


# The Daily

Statistics Canada

Wednesday, June 3, 1987



## Census of Agriculture: 1986

### Major findings

- Census-farms drop 8 % 2
- Total land on farms drops marginally 2
- Cropland up in the West, and down in the East 3
- Fewer young farmers 5
- Management practices change 6
  - Less summerfallow, more specialty crops in West
  - Rapeseed expands in Ontario
  - Soybeans expand in Quebec
  - More acres fertilized
  - More acres sprayed
  - Irrigation increases
  - 39 % of Ontario improved land is drained by sub-surface drainage
  - Larger tractors are adopted
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- Family-controlled farms dominate 11

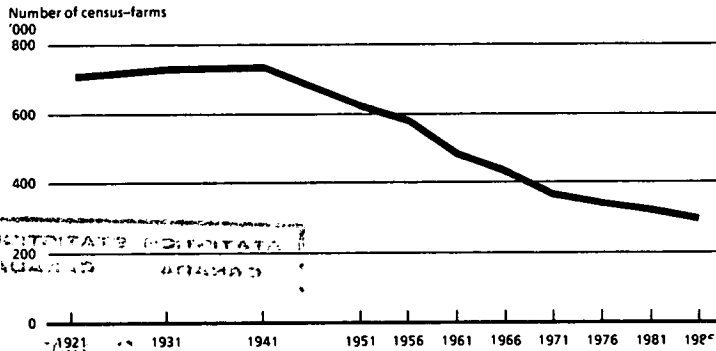


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## Census of Agriculture: 1986

The Number of Farms Continues to Decline



### Farm numbers decline

The 1986 Census of Agriculture recorded 293,089 census-farms, a decline of 8 percent from 1981. A census-farm is any agricultural holding with sales of \$250 or more in the previous year.

Farms in Canada have been declining in number since 1941, when 732,832 census-farms were recorded. The rate of decline has been somewhat lower in the 1980's than in the 1960's. In the 3 five-year periods from 1956 to 1971, census-farms declined 16 percent, 10 percent and 15 percent respectively. However, in the 3 five-year periods from 1971 to 1986, the decline in census-farm numbers has been lower: 8 percent, 6 percent and 8 percent respectively. Between 1981 and 1986, at the Canada level, the number of farms

declined in all size classes as measured by total acres, except for farms of 1120 acres (453 hectares) or greater.

The decline in farm numbers was not even across the provinces. In 1986, Nova Scotia farm numbers declined 15 percent from the 1981 figure but Alberta declined only 0.5 percent. In recent quinquennial periods, farm number declines have been lower in the Prairie provinces than in the eastern

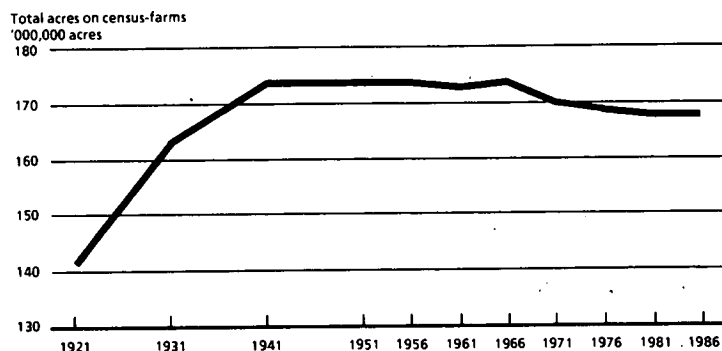
provinces. British Columbia registered an increase in farm numbers from 1971 to 1976 and from 1976 to 1981. ■

### Land on farms declines slightly

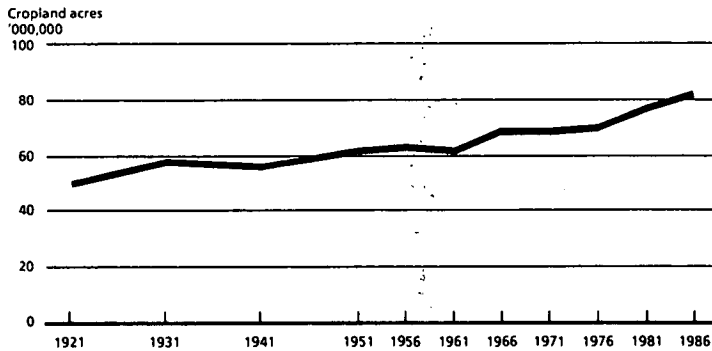
In 1986, the total land on census-farms was 168 million acres (68 million hectares). This was a decline of 0.2 percent since 1981. Land on census-farms reached 174 million acres in 1941 and held this level through to 1966 before starting to decline through to 1986.

However, total land on farms continued to increase in the Prairie provinces. Thus, the decline registered at the national level was due to the removal of more land from census-farms outside the Prairies than the amount of new land that is appearing on Prairie census-farms.

Total Land on Census-farms Continues to Decline



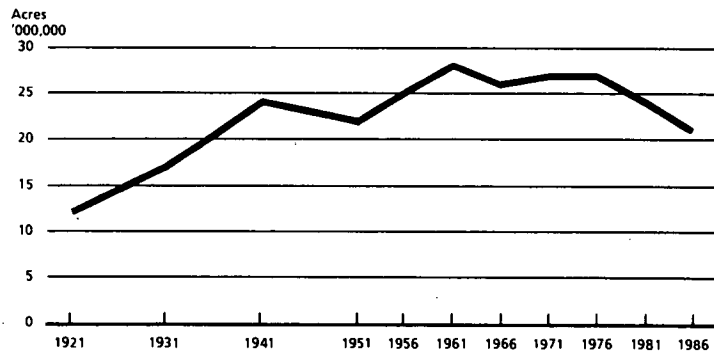
### Area Under Crops Continues to Increase



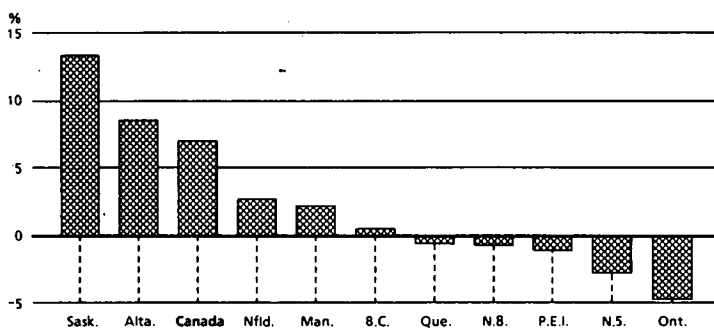
### Increase in area under crops

Although total land has declined, the area under crops is increasing. This is partly due to the decline in summerfallow acreage in the Prairies. However, cropland plus summerfallow acreage is also increasing at the national level. Because of the decline in summerfallow acreages in the Prairies, each Prairie province registered an increase in 1986 area under crops compared to the 1981 levels. However, in Ontario, Quebec, and the three Maritime provinces, the 1986 area under crops was lower than 1981 levels. In the case of Ontario, the decline was nearly 5 percent. The 1986 Ontario cropland is now at 8.5 million acres (3.4 million hectares) which is slightly below the level of cropland reported in 1976. In British Columbia, area under crops increased 0.4 percent to 1.4 million acres (0.57 million hectares) in 1986. Newfoundland area under crops in 1986 was 3 percent above the 1981 level.

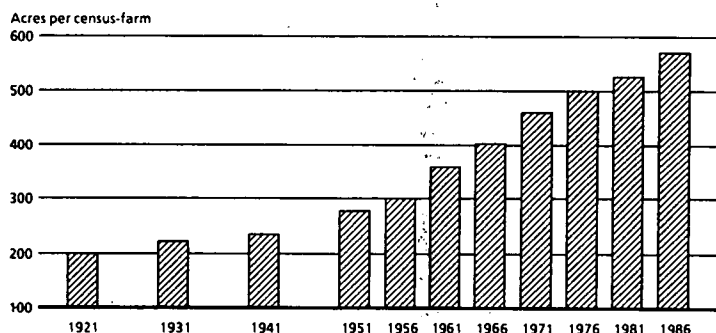
### Summerfallow Area Decreases



### Change in Land Under Crops, 1981-1986



### Average Farm Size Continues to Increase

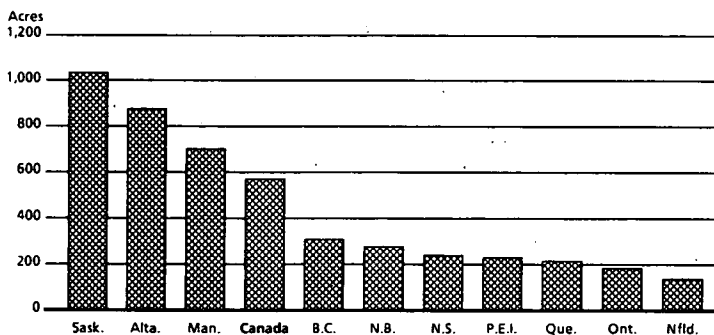


### Acres per farm increases

In 1986, total land area per census-farm reached 572 acres (231 hectares). Average farm area has been increasing since 1921.

In 1986, the largest farms were in Saskatchewan, averaging 1036 acres (419 hectares per farm). As with all averages highlighted in this summary of the results of the 1986 Census of Agriculture, an "average area per census-farm" conceals a wide dispersion in farm sizes within Saskatchewan. In 1986, 14 percent of Saskatchewan census-farms were under 240 acres (97 hectares) and 17 percent were over 1600 acres (647 hectares). ■

Acres Per Census-farm, 1986  
Largest farms are in Saskatchewan

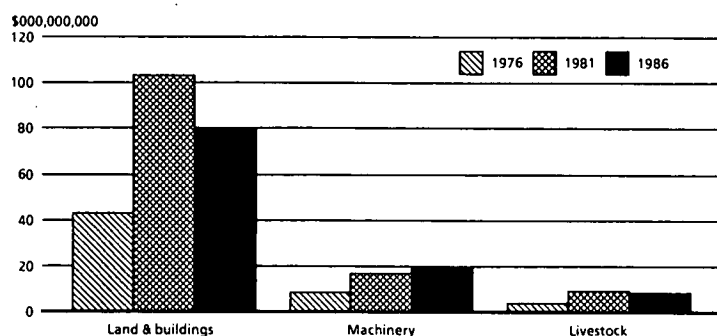


### Farm Resources: land, machinery, livestock, workforce

In 1986, land and buildings on census-farms were valued at \$80 billion, down 22 percent from 1981. This reflects the decline in the per acre price of land that peaked in 1981.

In 1986, the value of machinery and equipment on census-farms was \$21 billion, up from \$17 billion in 1981. The aggregate value of livestock inventory in 1986 was \$8.8 billion, down somewhat from \$9.6 billion in 1981. The lower 1986 inventory of livestock on census-farms is the main reason for a lower aggregate value of livestock capital.

Value of Farm Capital, 1976 to 1986



## Fewer young farmers

The workforce in agriculture represents another important dimension of farm resources. The number of operators in 1986 was 8 percent lower than in 1981. Since 1971, the proportion of operators under 35 years of age had increased to 21 percent in 1981 from 15 percent in 1971 but the proportion reversed to 19 percent in 1986.

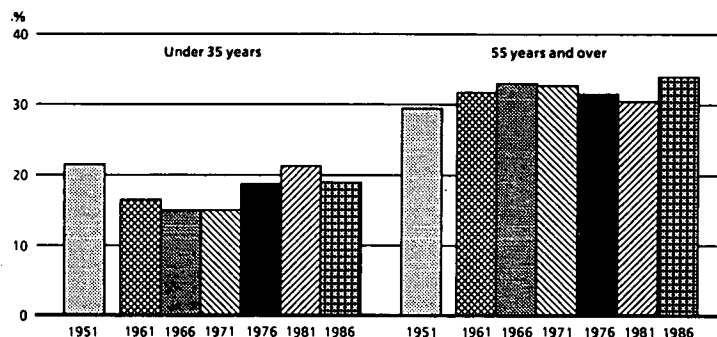
Average Value of Capital per Census-farm

	1981	1986
current dollars		
Land and Buildings	324,000	273,000
Machinery and Equipment	55,000	71,000
Livestock and Poultry	30,000	30,000
Total Value of Capital	409,000	374,000

The 1986 Census is the first census in decades wherein the number of older census-farm operators increased in absolute terms. The proportion of operators

aged 55 years or older had been declining from 1966 to 1981 but in 1986, 34 percent of census-farm operators were 55 years of age or older. This is a higher proportion than on any Census of Agriculture in the post-war period.

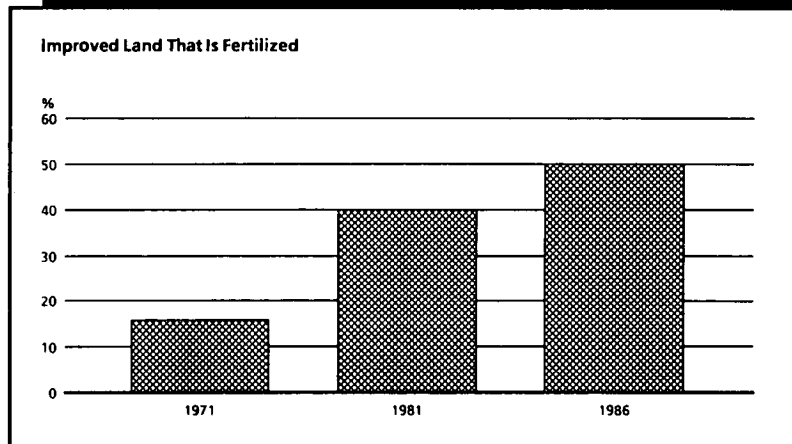
Fewer Young Farmers in 1986



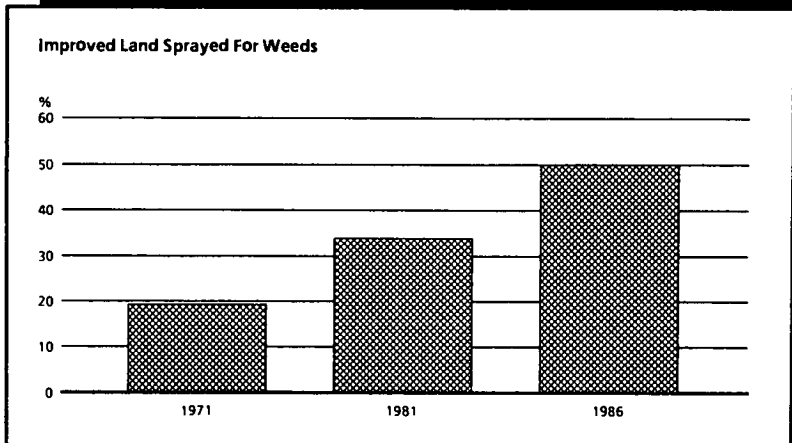
Another aspect of the agriculture workforce is hired labour. In 1986, the aggregate person-weeks of paid labour in agriculture was 5.7 million weeks, up 26 percent since 1981. ■

## Changes in farming practices

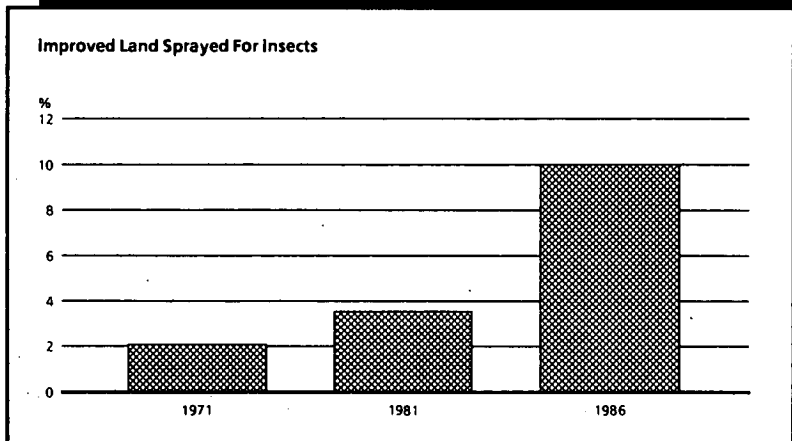
The 1986 Census of Agriculture documents some of the changes in management practices of census-farm operators. In 1986, fertiliser was applied to one-half of all improved land. In 1971, only 16 percent was fertilized.



Also in 1986, one-half of improved land was sprayed for the control of weeds. In 1971, 20 percent of improved land was sprayed.

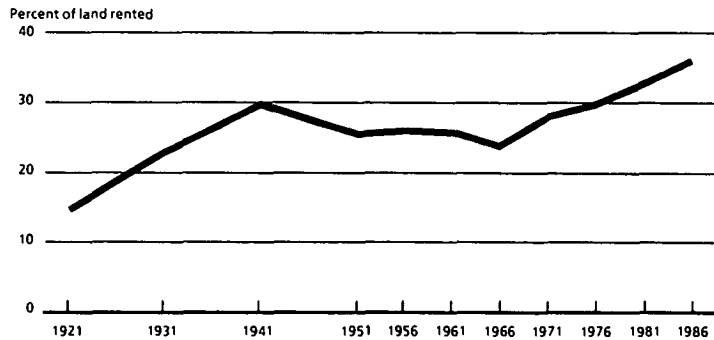


At the national level, 10 percent of improved land was sprayed to control for insects. In 1971, 2 percent of improved land was sprayed to control for insects. A large proportion of the increase in land sprayed for insects was to control the grasshopper infestation in the Prairies in 1985. For example in Saskatchewan in 1986, 6.9 million acres (2.8 million hectares) were sprayed for insect control compared to 1.5 million acres (0.6 million hectares) in 1981.



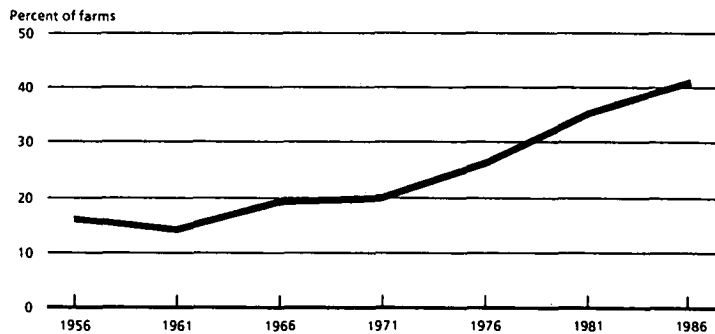
Another change that operators are making is the rental of more land. The 1986 Census of Agriculture showed the trend to more rental is continuing. In 1986, the amount of rented land surpassed one-third of total land (36 percent) for the first time in history.

Rented Land Increases as Percent of Total

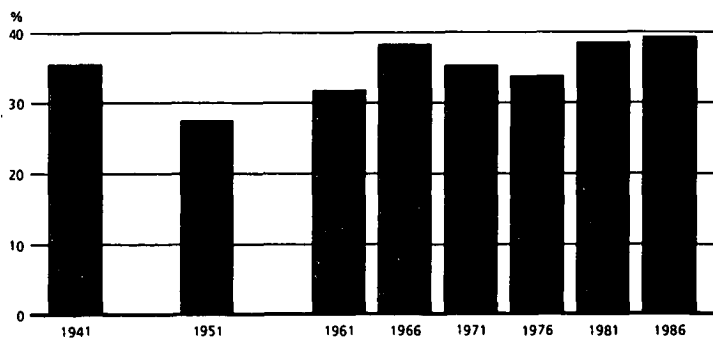


Another trend confirmed by the 1986 Census of Agriculture is the tendency towards continuous cropping. In 1986, 41 percent of Prairie census-farm operators reported no summer-fallow, up from 20 percent in 1971.

Prairie Farms Without Summerfallow  
Continuous cropping increases



One-third of Operators Work Off-farm



A constant proportion of census-farm operators are working off the farm. About one-third of census-farm operators have worked off the farm in each census since 1941. The average days of off-farm work per farm reporting has continued to increase however. ■

## Complete input profile

The 1986 Census of Agriculture is the first Census to obtain a complete profile of expenditures since 1941. The data are expected to be extensively used by farm organisations and policy analysts to understand the present cost structure of farms by type and to determine the potential of farmers making adjustments to remain viable with low prices for some commodities.

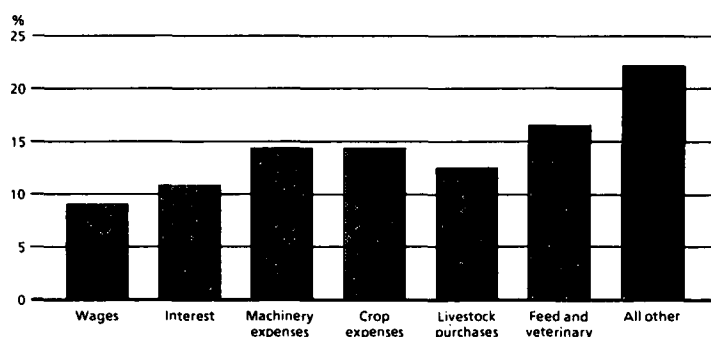
One expenditure item that will be carefully analysed is the interest paid by census-farm operators. ■

## Over one-third of operators are debt free

The 1986 Census of Agriculture reports that 39 percent of all census-farm operators reported no interest payments in 1985. Thus, over one-third of census-farm operators are debt free. The remaining two-thirds pay interest expenditures totalling \$ 2 billion, or nearly \$11,000 per farm reporting.

The proportion reporting no interest expenditure varied considerably by size of gross farm sales. For farms with gross sales under \$10,000, 69 percent report no interest paid in 1985 whereas for larger farms, with gross sales of \$250,000 or over, 11 percent report no interest expenditure.

Expenses As a Percent of Total, 1986



The proportion reporting no interest expenditure also varies by age of operator. For younger operators under 35 years of age, 26 percent reported no interest expense whereas for older operators, 55 years of age and over, 61 percent reported no interest expense. ■

## Output per farm increases

The value of sales per census-farm in 1986 was \$71,000, up by 43 percent from \$50,000 in 1981. Considerable changes in the mix of outputs were recorded. ■

## Change in output mix

The 1986 Census of Agriculture recorded the area of each crop and the number of livestock.

The major results may be summarized as follows:

### Wheat remains King

Wheat acreage reached 35 million acres (14 million hectares) in 1986, representing 43 percent of all land under crops. In 1981, 31 million acres (12 million hectares) were planted to wheat, representing 40 percent of all land under crops.

### Specialty crops increase in Saskatchewan

#### Mustard seed:

349 thousand acres (141 thousand hectares) in 1986  
129 thousand acres (52 thousand hectares) in 1981

#### Lentils:

267 thousand acres (108 thousand hectares) in 1986  
85 thousand acres (34 thousand hectares) in 1981



**Specialty crops increase in Saskatchewan - Concluded**

**Dry field peas:**

164 thousand acres (66 thousand hectares) in 1986  
39 thousand acres (16 thousand hectares) in 1981

**Canola increases in Ontario**

93 thousand acres (37 thousand hectares) in 1986, planted by 1400 operators. Only 100 operators grew canola in Ontario in 1981.

**Soybeans increase in Quebec**

11 thousand acres (4 thousand hectares) in 1986  
4 thousand acres (1,400 thousand hectares) in 1981

**Corn for grain increases in Quebec, declines in Ontario**

**Quebec's share of national corn area:**

1986: 24 percent                      1981: 15 percent

**Ontario's share of national corn area:**

1986: 74 percent                      1981: 77 percent

**Corn for grain declines in Manitoba**

34 thousand acres (14 thousand hectares) in 1986  
221 thousand acres (89 thousand hectares) in 1981

**Manitoba potato acreage ranks third after Prince Edward Island and New Brunswick**

Prince Edward Island:	64 thousand acres (26 thousand hectares)
New Brunswick:	48 thousand acres (20 thousand hectares)
Manitoba:	46 thousand acres (19 thousand hectares)
Quebec:	43 thousand acres (17 thousand hectares)

**Manitoba farms have largest potato acreage, per farm reporting**

Manitoba:	228 acres (92 hectares) per farm reporting
Prince Edward Island:	98 acres (40 hectares) per farm reporting
New Brunswick:	89 acres (36 hectares) per farm reporting
Alberta:	84 acres (34 hectares) per farm reporting

**Tobacco acreage declines**

78 thousand acres (31 thousand hectares) in 1986  
134 thousand acres (54 thousand hectares) in 1981

**Number of farms growing tobacco declines**

2102 farms in 1986  
3058 farms in 1981

### Prince Edward Island farms have largest tobacco acreage per farm reporting

Prince Edward Island:	57 acres (23 hectares) per farm reporting
New Brunswick:	49 acres (20 hectares) per farm reporting
Nova Scotia:	38 acres (15 hectares) per farm reporting
Quebec:	37 acres (15 hectares) per farm reporting
Ontario:	36 acres (15 hectares) per farm reporting

### Total cattle numbers decline to just below 12 million head

This is the first time since the 1960's that the number of cattle in Canada has been below 12 million head.

### The number of dairy cows declined to 1.4 million head

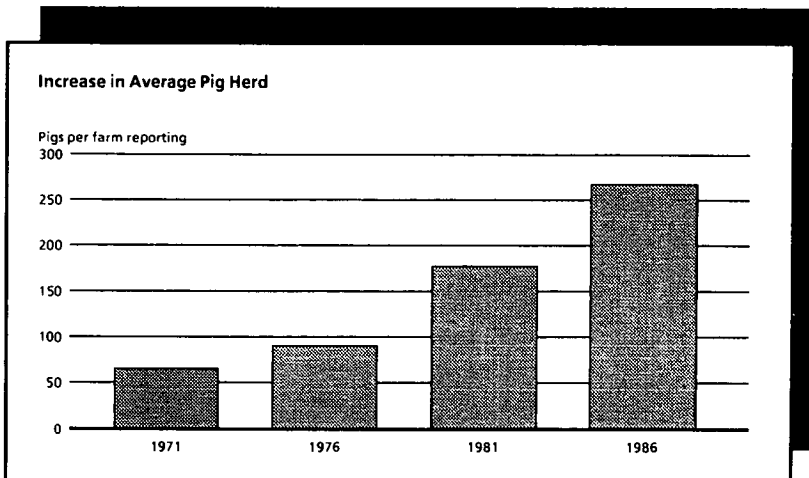
This is the lowest number of dairy cows in this century.

### Total pigs declined to 9.8 million head in 1986

This is down 1 percent from the 9.9 million head recorded in 1981.

### Average herd size increases

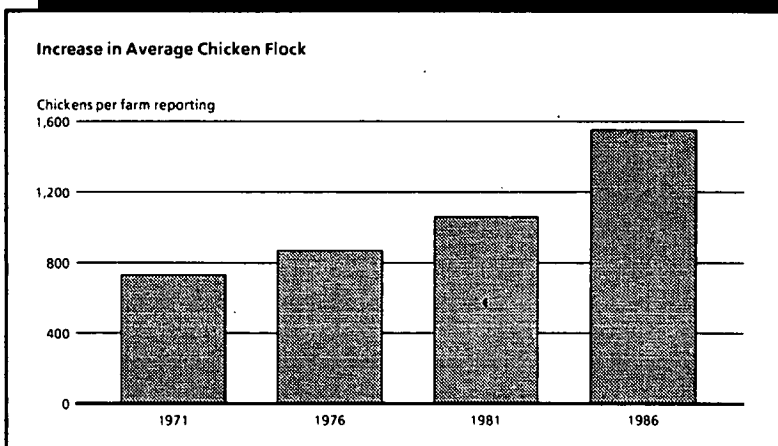
One continuing trend within the livestock sector is the reduction in the number of farms reporting livestock. In 1986, the number of operators reporting dairy cows was **one-third** of the number reporting dairy cows 15 years earlier. The number of 1986 operators reporting pigs was **one-third** of the number reporting pigs 15 years earlier. Farmers are tending to specialize in livestock or in crop enterprises. As a result, livestock production is becoming concentrated on fewer, larger farms. In 1986, the average farm reporting pigs had 268 pigs, compared with 66 pigs per farm reporting pigs 15 years earlier. Similarly in



poultry, the average 1986 farm reporting chickens had 1557 birds, up from 732 chickens per farm reporting in 1971.

Average herd and flock sizes vary by province. In 1986, the average farm reporting pigs in Quebec

had 622 pigs while in Saskatchewan, the average farm reporting pigs had 104 pigs. The largest poultry farms in 1986, on average, were in Newfoundland with 10,900 chickens per farm reporting. In Saskatchewan in 1986, the average farm reporting chickens had 300 chickens. ■



## New information in 1986

A total of 7,799 operators (2.7 percent) reported having a computer on their farm holding used principally for managing their farm business.

The 1986 Census of Agriculture asked for the area drained by a subsurface drainage system. Ontario reported the largest area drained, 3.9 million acres (1.6 million hectares) representing 39 percent of improved land in Ontario.

Farm operators were asked to report the amount of land irrigated by type of irrigation system. Alberta had the largest area under irrigation, 1.2 million acres (0.47 million hectares) and the major type of irrigation system being used in Alberta was a wheel roll system. Wheel roll systems were used to irrigate 42 percent of all

Alberta land under irrigation. The province with the second-largest area irrigated is British Columbia, 291 thousand acres (118 thousand hectares). The major type of irrigation system is a hand move system, used on 42 percent of the irrigated land.

Farm operators were also asked to report the total area fertilized and the tonnes of fertilizer applied by type. At the Canada level, 4 million tonnes of fertilizer were applied by farmers. Of this, 78 percent was dry granular fertilizer, 13 percent was pressurized liquid, 8 percent was non-pressurized liquid, and 0.7 percent were suspensions (i.e. a liquid requiring agitation).

Ontario registered the highest proportion of purebred registered cattle (20 percent). Newfoundland had the highest proportion of purebred registered pigs

(3 percent). The province with the highest proportion of purebred registered sheep was Prince Edward Island (20 percent).

The 1986 Census of Agriculture obtained more detail on farm machinery. The trend towards higher-horsepower tractors is continuing. In Saskatchewan in 1986, 30 percent of all census-farms reported owning a tractor over 150 horsepower, up from 18 percent in 1981. ■

## Family-controlled farms dominate

In 1986, 99.1 percent of census-farms were controlled by farm families. Included in this group are farms that are:

- Individual or family holdings
- Partnerships: with a written agreement
- Partnerships: with no written agreement
- Corporations: with the majority of the shares owned by the operator or operator's family

These farms contributed 94.6 percent of aggregate gross farm sales. Corporations with the majority of shares not owned by the operators family represented 0.5 percent of all farms and contributed 4.4 percent of aggregate gross sales. ■



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The Daily, June 3, 1987

## Sub-provincial data

The Census of Agriculture can provide detailed information for small areas within provinces. These data will be released on June 26, 1987. ■

## 1966 to 1986 Census of Agriculture Match

The 1966 to 1981 Census of Agriculture Match has identified high rates of entry into farming and high rates of exit out of farming. These data for 1986 will be available in the fall of 1987. ■

## 1986 Agriculture - Population Linkage

The 1981 Agriculture-Population Linkage showed that families associated with farms with gross sales under \$56,000 (representing three-quarters of all farms) had similar total family incomes.

Considerable useful information about the present farm family income situation can be obtained from an analysis of the 1981 Agriculture-Population Linkage. The 1986 Agriculture-Population Linkage will be available early in 1989. ■

## Further information

The information summarised here is only a sample of highlights from the 1986 Census of Agriculture. Summary Tabulations of Canada and Provincial data are available June 3, 1987. Sub-provincial tabulations will be available on June 26, 1987. The formal printed publications will be available in the fall of 1987. User-specified tabulations that cross-tabulate any variable by any other variable can be provided on a cost-recovery basis. Please address your enquiries to:

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Manager,  
Census of Agriculture  
(613) 991-8712

Rick Burroughs,  
User Services Unit,  
Census of Agriculture  
(613) 991-8711

(Note that the conversion to hectares was done before the figures were rounded. Percent changes were calculated on the unrounded numbers.) ■