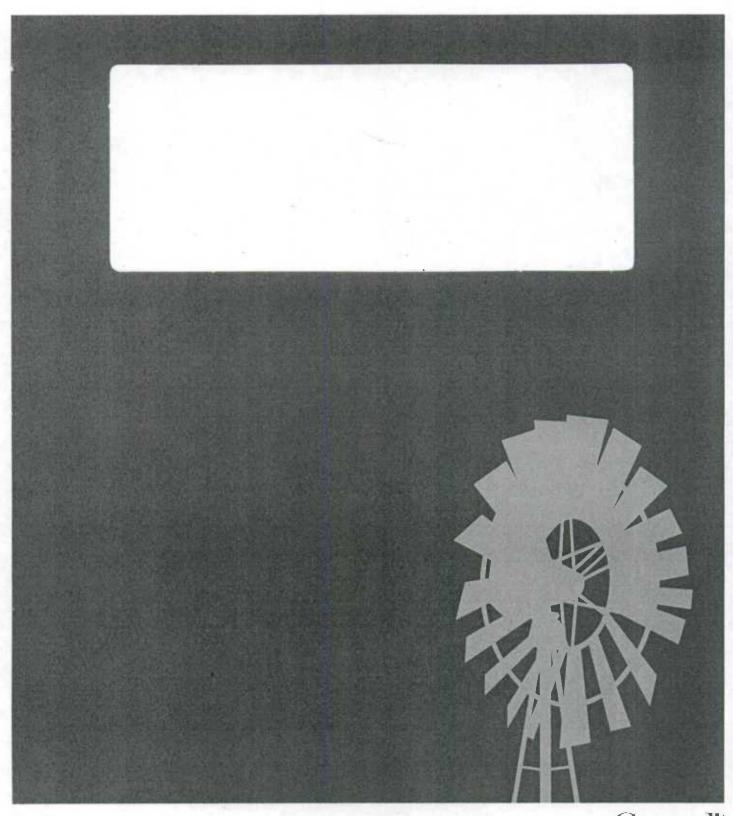


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WORKING PAPER #9

The Changing Profile of the Canadian Pig Sector

Mike Shumsky,

1985



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1. Introduction

The manner in which hogs are produced in Canada has changed dramatically over time. In the earlier years, pigs were popular on Canadian farms for numerous reasons. The animals consume a variety of feeds, convert energy into meat efficiently, are prolific producers and fit well with other farm enterprises especially crop production. Pigs can be raised with little capital investment providing an operator has a supply of feed and adequate labor to devote in caring for the animals. These characteristics made pig production an important source of cash flow requirements for the farm operator. In 1951, cash receipts from the sale of pigs represented 12 percent of total cash receipts².

Changes in the structure of the industry were triggered largely by the introduction of antibiotics to control disease in large herds held in close quarters and the development of specially constructed buildings designed to provide climate control and automated feeding and cleaning facilities. The combination of changes in technology reduced the requirements for operator labor substantially and allowed farmers to expand into large confinement units.

Pig production expanded rapidly in the 1970's. Integrated pig operations, particularly in Quebec were largely responsible for changing the relative inventory of pigs in Eastern Canada. Pig production has been more volatile in the West with inventories tending to follow farm stocks of feed grains. Provincial stabilization schemes have encouraged production in different regions³. International exports increased dramatically in the last ten years to approximately one fifth of total Canadian output.

The structure of the pig sector is likely to undergo further transformation in the future. Changes in the statutory freight rates are expected influence regional production. Trade relations between United States and Japan will determine the level of production that can be absorbed by exports. Alterations in the structure of the meat processing industry can affect the future location of pig production. This analysis traces the changes in structure that have occurred at the Canada, East, West and provincial levels and its primary purpose is to provide a basis for further economic analysis of the pig sector.

Statistics Canada, Farm Net Income Catalogue 21-101.

Douglas J. Clements and Colin A. Carter, Non Tariff Barriers to
Interprovincial Trade in Swine, Extension Bulleting 84-1, University of
Manitoba. March 1984.

Thuck Hassebrook and Marty Strange, Take Hogs, For Example The Iransformation of Hog Farming in America. Centre for Rural Affairs, June 1981 pp. 2-4.

2. Historical Overview of Pig Production Since 19014

Except for cyclical adjustments, pig inventories have grown steadily from 2.4 million head in 1901 to 9.9 million in 1981 (Table 1). The numbers in Eastern Canada during the 1901-61 period were relatively stable, fluctuating between 2-3 million pigs. Significant increases occurred since 1961 with numbers in Eastern Canada rising from 2.7 million in 1961 to 7.0 million pigs in 1981. With the development of agriculture in Western Canada in the early 1900's, pig numbers rose dramatically between 1901-1921, rising to 3.2 million in 1941 and then to a record of 4.1 million in 1971.

Table 1

		NUMBER OF	PIGS ON FAI	RMS		
PROVINCE	1901	1911	1921	1931	1941	1951
			-000-			
Prince Edward		56.4	39.7	39.2	48.2	72.5
Nova Scotia	45.4	63.4	51.3	47.4	44.3	48.2
New Brunswick	51.7	87.4	78.5	75.9	68.0	78.4
Quebec	404.2	794.3	715.9	690.9	808.0	1,108.3
Ontario	1,562.7	1,887.5	1,417.7	1,386.1	1,882.0	1,755.5
East	2,112.0	1,889.0	2,303.1	2,239.5	2,850.5	3,062.9
Manitoba	126.5	188.4	204.4	200.2	503.4	337.9
Saskatchewan	27.8	286.3	424.2	419.7	943.7	533.3
Alberta	46.1	237.5	426.5	423.2	1,705.5	930.7
British Columb		33.6	46.4	41.7	78.2	49.7
West	241.8	745.8	1,101.6	1,084.8	3,230.8	1,851.6

⁴ Newfoundland is excluded from this analysis. A summary of available data is contained in Appendix A.

Table 1

NUMBER OF PIGS ON FARMS CONT'D.

PROVINCE	1961	1966	1971	1976	1981
			-000-	-	
Prince Edward Island Nova Scotia New Brunswick Quebec Ontario East	54.9 46.9 47.1 912.1 1,686.3	82.9 57.5 34.1 1,173.7 1,935.6	100.9 79.7 56.3 1,383.6 2,361.7	78.7 73.4 40.0 1,617.1 1,913.7	116.9 139.4 89.6 3,440.7 3,165.8
Manitoba Saskatchewan Alberta British Columbia	431.5 640.8 1,470.0 41.6	499.2 488.2 1,092.7 37.4	1,070.6 1,145.3 1,815.5 78.6	625.9 491.3 878.2 55.6	875.0 574.3 1,199.4 254.9
West	2,583.9	2,117.5	4,110.0	2,051.0	2,903.6

Table 2
PROVINCIAL DISTRIBUTION OF PIGS ON FARMS

PROVINCE	1901	1911	1921	1931	1941	1951	1961
				-perce	nt-		
Prince Edward Island	2.0	1.6	1.2	1.2	0.8	1.5	1.0
Nova Scotia	1.9	1.7	1.5	1.4	0.7	1.0	0.9
New Brunswick	2.2	2.4	2.3	2.3	1.1	1.6	0.9
Quebec	17.2	21.9	21.0	20.8	13.3	22.6	17.1
Onterio	66.4	51.9	41.6	41.7	30.9	35.7	31.6
East	89.7	79.5	67.6	67.4	46.9	62.3	51.5
Manitoba	5.4	5.2	6.0	6.0	8.3	6.9	8.1
Saskatchewan	1.2	7.9	12.5	12.6	15.5	10.9	12.0
Alberta	1.9	6.5	12.5	12.7	28.0	18.9	27.6
British Columbia	1.8	0.9	1.4	1.3	1.3	1.0	0.8
West	10.3	20.5	32.4	32.6	53.1	37.7	48.5
CANADA	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 2
PROVINCIAL DISTRIBUTION OF PIGS ON FARMS CONT'D.

-					
PROVINCE	1966	1971	1976	1981	
*		-pero	cent-		
Prince Edward Island	1.5	1.2	1.4	1.2	
Nova Scotia	1.1	1.0	1.3	1.4	
New Brunswick	0.7	0.7	0.7	0.9	
Quebec	21.7	17.1	28.0	34.9	
Ontario	35.8	29.2	33.1	32.1	
East	60.8	49.2	64.5	70.5	
Manitoba	9.3	13.2	10.8	8.9	
Saskatchewan	9.0	14.0	8.5	5.8	
Alberta	20.2	22.4	15.2	12.2	
British Columbia	0.7	1.0	1.0	2.6	
West	39.2	50.8	35.5	29.5	
CANADA	100.0	100.0	100.0	100.0	

Source: Statistics Canada, Censuses of Agriculture

Provincially, Ontario has consistently been the largest producer until 1981 when it was surpassed by Quebec (Table 2). Quebec was third in overall production in 1971 and 1961, fourth in 1941 and second during the 1901-1931 period. Alberta is currently the third largest producing province and has held that position since 1921 except for 1941, 1961 and 1971 when it occupied second place. Saskatchewan, whose highest ranking was third in 1911 and again in 1941 is now fifth. Manitoba is the fourth largest producing province, an improvement over their fifth position held since 1911.

Except for two occasions, once in 1941 and then again in 1971, there have been more pigs on farms in Eastern than Western Canada. The high proportion of pigs in Western Canada in 1971 corresponded to record farm inventories of grain. In 1981, Eastern Canada accounted for 70.5 percent of all hogs - the highest proportion since 1911.

The number of farms reporting pigs has been declining steadily from the peak of 477,663 in 1941 to its lowest level of only 55,699 farms reporting pigs in 1981 (Table 3).

Table 3

NUMBER OF FARMS REPORTING PIGS

	1931	1941	1951	1961	1966	1971	1976	1981
P.E.I.	8,416	8,575	7,447	3,874	2,824	2,046	1,169	1,062
N.S.	20,383	17,891	11,552	3,774	2,132	1,271	834	763
N.B.	22,606	19,553	15,009	5,087	2,893	1,728	941	849
Que.	96,805	107,053	88,558	47,599	30,683	17,428	9,067	7,993
Ont.	115,066	121,349	93,564	56,378	41,827	30,626	18,622	18,415
East	263,276	274,421	216,130	116,712	80,359	53,099	30,633	29,082
Man.	35,373	41,477	33,007	22,045	16,048	14,201	6,069	5,098
Sask.	78,477	83,889	58,624	40,693	26,987	26,075	12,246	9,177
Alta.	54,512	69,554	49,660	41,017	28,544	26, 204	12,513	9,994
B.C.	6,199	8,433	6,267	2,799	2,240	2,729	2,057	2,348
West	174,561	203,242	147,558	106,554	73,819	69,209	32,885	26,567
CANADA	437,837	477,663	363,688	223,266	134,178	122,308	63,518	55,699

Source: Statistics Canada, Censuses of Agriculture

Since 1941, the decade to decade declines have accelerated and at the Canada level registered a 55 percent decrease in the number of farms reporting pigs between 1971 and 1981. From 1971 to 1981 the number of farms reporting pigs in the West declined from 69,209 to 26,567 (a decrease of 62 percent). In the East, the 1971-1981 trend indicated a drop from 53,099 farms with pigs to 29,082 (45 percent).

In 1981, 18,415 or 27 percent of all pig producers in Canada were located in Ontario. Alberta was second with 9,944 farms reporting pigs while Saskatchewan was a close third with 9,177 farms with pigs. Quebec, the province which had the highest provincial pig inventory in 1981, ranked fourth in terms of the number of farms (7,993) reporting pigs.

The combined factors of rising inventories and continued reduction in the number of farms engaged in hog production have resulted in increases in the average number of pigs per farm. Prior to 1941, the average number of pigs in Canada remained relatively stable at less than 10 pigs per farm (Table 4).

Table 4

AVERAGE NUMBER OF PIGS PER FARM REPORTING

	1	901	1911	1921	1931	1941
Prince Edward Island		3	4	3	5	6
Nova Scotia		1	1	1	2	2
New Brunswick		1	2	2	2	2
Quebec		3	5	5	7	
Ontario		8	9	7	12	16
East		3	4	4	8	10
Manitoba		4	4	4	. 6	12
Saskatchewan		2	3	4	5	11
Alberta		5	4	5	8	25
British Columbia		7	2	2	7	9
West		5	3	4	6	16
CANADA		5	5	5	8	13

Table 4

AVERAGE NUMBER OF PIGS PER FARM REPORTING CONT'D.

	1951	1961	1966	1971	1976	1981
Prince Edward Island	10	14	29	49	67	110
Nova Scotia	4	12	27	63	88	183
New Brunswick	5	9	12	33	42	106
Quebec	13	19	38	79	178	430
Ontario	19	30	46	77	102	172
East	14	24	41	75	122	239
Manitoba	10	20	31	75	103	172
Saskatchewan	9	16	18	44	40	63
Alberta	19	36	38	69	70	121
British Columbia	8	15	17	29	27	109
West	12	24	29	59	62	109
CANADA	13	24	35	66	91	177

Source: Statistics Canada, Censuses of Agriculture

The Canadian average in the 1941-1961 period varied from 10 to 25 pigs, rose to 66 in 1971 and then accelerated to 177 pigs in 1981. Quebec led the country by averaging 430 pigs per farm while Saskatchewan with an average size of 63 pigs was the only province in Canada with an average of less than 100 pigs in 1981.

3. Size of Pig Operations, 1971-76-81

As indicated in section 2, the most significant changes to the pig sector in Canada occurred in the 1971-81 period. It was for this reason that the 1971, 1976 and 1981 Censuses of Agriculture were selected to study the structure of pig farms in more detail.

Canada's pig industry has at one extreme a large proportion of producers accounting for a relatively small percentage of the pig population while at the other end of the spectrum a small proportion of farmers account for an increasing number of pigs. Farms with less than 20 pigs represented only 4.8 percent of total pigs in 1971, 3.4 percent in 1976 and 1.6 percent in 1981 (Table 5). However, this inventory was held by 44.7 percent of the farms with pigs in 1971, 52.0 percent in 1976 and 43.1 percent in 1981. Farms having 2501 or more pigs represented 15.0 percent of the pigs in 1981, 9.4 percent in 1976 and 2.6 percent in 1971. The proportion of farms in this category has risen from less than 0.1 percent in 1971 to 0.6 percent of all farms with pigs in 1981.

PIG INVENTORY AND FARMS REPORTING
DISTRIBUTED BY SIZE OF PIG HERD IN CANADA,
1971, 1976, 1981

Herd Size	Pig Inventory				Farms Reporting		
	1971	1976	1981		1971	1976	1981
				-percent-			
1-19 20-100	4.8 28.7	3.4 15.5	1.6		44.7	52.0 29.4	43.1 26.7
101 -2 50 251 - 500	26.2 18.5	18.0 20.0	11.7		11.0	10.1	14.8
501-1000 1001-2500	12.2 7.0	18.1 15.6	22.2		1.2	2.3 1.0	5.6 3.0
2501+	2.6	9.4	15.0		-	0.2	0.6
Total	100.0	100.0	100.0		100.0	100.0	100.0

Source: Statistics Canada, Censuses of Agriculture

Since 1971, the proportion of pigs held by farms with less than 250 pigs has tended to decline while herd sizes of greater than 250 have increased to represent a larger proportion of the pig population. Between 1976 and 1981, the percentage of hogs moved further into larger farm sizes with all operations of more than 501 pigs showing increased percentages.

The proportion of farms in the various herd size distributions between 1971 and 1981 has followed a pattern similar to inventory. The percent of farms with less than 250 pigs has tended to decline in favor of larger operations. Surprisingly, the proportion of farms and the inventory they control has not changed significantly. Comparing the top 0.6 percent of farms in 1981 (greater than 2501 pigs) with 0.7 percent of farms in 1971 (greater than 751) reveals that a similar proportion of farms have held 14-15 percent of total inventory. Thus, although the proportion of farms and inventory have not changed for these top producers, their average herd size has risen dramatically from 1,330 in 1971 to 4,203 in 1981.

Although aggregate pig numbers in 1976 were considerably lower than in 1971, a greater proportion of farmers entered the more than 500 category. In 1981, approximately one half of the inventory was on farms with more than 750 pigs and if past trends continue, this group will maintain and increase its share of production in the future regardless of the cycle.

Although the distribution of the inventory on an East and West basis for 1971, 1976 and 1981 is similar to the Canada proportions found in table 5, herd sizes have generally been larger in the East since 1971 (Table 6). Farms with 250 pigs or less in the West represent a larger percentage of the inventory than farms in the East. For farms with more than 250 pigs, the East dominates. The discrepancy in herd sizes (less 100 pigs) is more notable in lower categories where Eastern production is considerably lower than in the West. In the top category (2501+), although the East indicates a higher proportion of pigs, Western numbers are only marginally lower.

PIG INVENTORY DISTRIBUTED BY SIZE OF PIG HERD IN EASTERN AND WESTERN CANADA, 1971, 1976, 1981

Herd Size		EAST				WEST	
	1971	1976	1981		1971	1976	1981
				-percent-			
1-19	4.0	2.2	0.9	× 2	5.6	6.1	3.2
20-100	25.3	13.4	6.0		31.9	19.1	10.8
101-250	25.1	17.5	10.6		27.1	18.9	14.5
251-500	20.2	21.9	16.5		16.9	16.5	17.0
501-1000	15.4	19.9	23.5		9.3	14.6	19.1
1001-2500	7.1	15.3	27.0		6.8	16.1	21.7
2501+	2.9	9.8	15.5		2.4	8.7	13.7
Total	100.0	100.0	100.0		100.0	100.0	100.0

A comparison of the pig industry between Canada and the United States in 1981 reveals that almost two-thirds of Canada's pig inventory is concentrated on farms with more than 500 pigs in contrast to less than half of the inventory on similar sized operations in United States (Table 7). In Canada, 9.2 percent of the farms with pigs have more than 500 pigs on their holdings which is considerably higher than the 4.7 percent of farms with pigs in the greater than 500 category in the United States. In the 1-100 grouping, 9 percent of Canadian inventory is held by 69.8 percent of producers reporting pigs while in the United States, this grouping represents 14.4 percent of their inventory on 76.8 percent of farms with pigs.

Table 7

COMPARISON OF PIG INVENTORIES AND FARMS REPORTING BY SIZE

GROUPS IN 1981 IN CANADA AND THE UNITED STATES

Number of Pigs	Invent	ory		Farms Reporting			
	U. S. A.1	Canada		U. S. A. ¹	Canada		
	- 4		-percent-				
1-100 101-499 500+	14.4 39.9 45.7	9.0 28.4 62.6		76.8 18.5 4.7	69.8 21.0 9.2		
Total	100.0	100.0		100.0	100.0		

U. S. A. figures are for December 1

Sources: U. S. D. A. and Statistics Canada

4. Types of Pig Enterprises, 1971-76-81

Farms with 20 or more pigs were classified into farrow, farrow to finishing and finishing operations. For classification purposes it was necessary to exclude farms with less than 20 pigs as stratification could not be undertaken due to their small size. This group represented 4.8 percent of the inventory in 1971 and only 1.6 percent in 1981. The characteristics of these producers will be discussed in section (8).

⁵ Defined in Appendix B

4.1 Inventory and Farm Numbers

In 1971 and 1976, farrow to finishing operations accounted for approximately 47 percent (3.6 and 2.6 million, respectively) of all pigs in Canada (Table 8). In 1981, this ratio for Canada increased to 56 percent (5.4 million pigs). At the Canada level, 40 percent of the farms with pigs were typed as farrow to finish in 1981. In 1981, these operations had the highest average number of pigs per farm (403). In the East, farrow-finishing operations averaged 444 pigs per farm, the same as finishing farms. In Western Canada, where farrow to finish operations represented 69 percent of the inventory, average herd size in 1981 was 345 pigs.

Table 8

FARMS WITH 20 OR MORE PIGS CLASSIFIED BY TYPE OF ENTERPRISE

		Number of	Pigs	N.	Number of Farms With Pigs			
	1971	1976	1981	1971	1976	1981		
Farrow East West	724,305 431,265	659,721 198,093	1,294,898 313,649	8,912 6,038	6,048 2,854	7,098 3,106		
Canada	1,155,570	857,814	1,608,547	14,950	8,902	10,204		
Farrow/Finishing East West	1,451,934 2,170,488 3,622,422	1,394,926 1,209,816 2,604,742	3,462,918 1,944,530 5,407,448	10,348 17,440 27,788	5,829 5,861 11,690	7,792 5,640		
Finishing East West	1,647,659	1,585,516 517,584	2,133,154 553,217	11,148 13,782	5,898 4,015	4,808 3,333		
Canada	2,923,723	2,103,100	2,686,371	24,930	9,913	8,141		
All Operations with 20 or more Pigs East West	3,823,898 3,877,817	3,640,163 1,925,493	6,890,970 2,811,396	30,408 37,260	17,775 12,730	19,698 12,079		
Canada	7,701,715	5,565,656	9,702,366	67,668	30,505	31,777		

Table 8

FARMS WITH 20 OR MORE PIGS CLASSIFIED BY TYPE OF ENTERPRISE CONT'D

	Avera	of	
	1971	1976	1981
Farrow East West	81	109	182
Canada	77	96	158
Farrow/Finishing			
East	140	239	444
West	124	206	345
Canada	130	223	403
Finishing			
East	148	169	444
West	93	129	166
Canada	117	212	330
All Operations with 20 or more Pigs			
East	126	205	350
West	104	151	233
Canada	114	182	305

Finishing operations represented 38 percent of all pigs in Canada in 1971 and 1976 but declined to 28 percent or 2.7 million pigs in 1981. The number of farms involved in finishing pigs has been declining from 37 percent (24,930) of all operations in 1971 to 32 percent (9,913) in 1976 and to 26 percent (8,141) in 1981. For Canada, the average number of pigs per finishing farm in 1981 was 330, somewhat below the average for farrow to finish farms, mainly because of smaller averages (166 pigs) in Western Canada.

Farrowing operations have accounted for approximately 15-17 percent of all pigs in the 1971-81 period. The number of farmers involved in farrowing has grown proportionately from 22 percent (14,950 farms) in 1971 to 32 percent (10,204 farms) in 1981. The average size of these operations was 158 pigs in 1981 and has generally been lower than for other types of enterprises.

Several East-West differences are evident. In the West, approximately 10 percent of all pigs were on farrowing units while this figure is closer to 20 percent in the East. Farrow to finish operations are more significant in the West at 69 percent of all pigs in 1981 compared to 50 percent in the East. Finishing as an enterprise is more important in the East where in 1981 these units accounted for 2.1 million pigs or 31 percent of eastern inventory. In the West, finishing operations represented 20 percent of their total inventory. Finally, the average number of pigs per farm is higher in the East for each type of enterprise in all three census years.

4.2 Sows

The number of sows⁶ in Canada since 1971 has varied between 587,000 in 1976 to 1,069,000 in 1981 (Table 9). In the 1971-81 period over 90 percent of the sows were on farrow and farrow to finish operations. These farms increased their proportion of sows from 91.1 percent of all sows in 1971 to 96.7 percent in 1981. Compensating losses occurred on farms with less than 20 pigs which accounted for 7.9 percent of all sows in 1971 as compared to 2.5 percent in 1981. The farrow to finish producers represented over 59 percent of all sows in Canada in 1981.

⁶ Includes bred gilts.

Table 9
SOWS DISTRIBUTED BY TYPE OF OPERATION
1971, 1976 and 1981

Type of Operation	1971	1976	1981
		-percent-	
Farrow Farrow to Finish Finish Unclassified (less than 20 Pigs)	35.9 55.2 1.0 7.9	38.8 53.6 1.2 6.4	37.6 59.1 0.8 2.5
Total	100.0	100.0	100.0
Number of Sows	803,063	587,352	1,069,104

A comparison of farrow and farrow to finish operations distributed by the size of the sow herd for 1971-81 indicates the following (Table 10):

- i) the number of sows on farrow and farrow to finish farms having 60 or less sows has been declining since 1971;
- farrowing farms with greater than 60 sows represented 60.5 percent of all sows on farrowing operations in 1981 in contrast to 23.8 percent in 1971;
- iii) farrow to finish operations having more than 60 sows increased from 26.1 percent of all sows in 1971 to 67.7 percent of all sows on farrow to finish units in 1981 and;
- iv) farrow to finish farms with more than 300 sows in 1981 reported 12.5 percent of all sows on farrow to finish operations.

Table 10

NUMBER OF SOWS DISTRIBUTED BY FARROW AND FARROW TO FINISH

OPERATIONS IN CANADA, 1971, 1976 and 1981

Number of Sows		Farro	N	_	Fa	rrow to F	inish
	1971	1976	1981		1971	1976	1981
				-percent-			
1-60 61-300 300+	76.2 23.0 0.8	60.2 36.9 2.9	39.5 53.4 7.1		83.9 23.7 2.4	51.3 41.4 7.3	32.3 55.2 12.5
Total	100.0	100.0	100.0		100.0	100.0	100.0
Number of Sows	288,020	228,207	402,156		443,265	314,873	631,887
Number of Farms	15,022	8,902	10,204		27,782	11,690	13,432

4.3 Market Pigs

For the years 1971, 1976 and 1981, the number of market pigs fluctuated from a low of 5.2 million in 1976 to 8.7 million in 1981 (Table 11). Proportional increases were registered in farrowing and farrow to finish farm types while declines occurred in finishing and unclassified operations. In 1981, the farrow to finish group represented 54.3 percent of all market pigs in Canada, an increase from 43.6 percent in 1971. Finishing operations ranked second at 30.7 percent of all market pigs even though these farms had declined from their 1971 level of 40.0 percent of all market pigs.

MARKET PIGS DISTRIBUTED BY TYPE OF OPERATION,
1971, 1976 and 1981

Type of Operation		Number of Market	Pigs
	1971	1976	1981
		-percent-	
Farrow	11.9	12.1	13.6
Farrow to Finish	43.6	44.2	54.3
Finish	40.0	40.4	30.7
Unclassified (less than 20 pigs)	4.5	3.3	1.4
Total	100.0	100.0	100.0
Number of Market Pigs	7,288,919	5,186,523	8,721,736

Collectively, the farrow to finish and finishing operations have reported approximately 85 percent of all market hogs in Canada in 1971, 1976 and 1981. Farrow to finish operations are increasing in relative importance at a similar rate to the decline of finishing units. A comparison of market pigs distributed by size of herd on farrow to finish and finishing farms indicates that 500 market pigs is a turning point (Table 12). Farms with fewer than 500 market pigs produced a declining share of all market pigs in 1976 and 1981 while farms with more than 500 market pigs increased their proportion of market hogs over 1971. In 1981, 41.5 percent of all market pigs on farrow to finish farms came from farms with more than 1,000 market pigs. Similarly, finishing operations with more than 1,000 market pigs represented 47.5 percent of all market pigs in 1981.

DISTRIBUTION OF MARKET PIGS¹ ON FARROW TO FINISH AND FINISHING OPERATIONS' 1971, 1976 and 1981

Number of Market Pig		Farrow to	Finish		Finis	h
	1971	1976	1981	1971	1976	1981
			-ре	ercent-		
1-19 20-250 251-500 501-1000 1001+	0.9 55.3 19.6 13.0	0.5 31.2 19.7 20.9 27.7	0.2 16.4 17.3 24.6 41.5	53.9 20.4 14.8 10.9	29.2 21.3 19.4 30.1	16.1
Total	100.0	100.0	100.0	100.0	100.0	
Number of Market Pigs	3,179,157	2,289,869	4,738,151	2,915,311	2,096,401	2,676,750

Excludes boars, sows and gilts for breeding.

5. Type and Mix of Farm Enterprises

In 1981, 84 percent of the pigs on farms were located on operations that reported cropland as another farm enterprise (Table 13). Although this is a decline from 93 percent in 1971, the desirability of raising pigs in conjunction with crop production continues.

Table 13
FARMS WITH PIGS IN CANADA CLASSIFIED BY TYPE AND MIX OF ENTERPRISE

	Ni	umber of	f Pigs	Numl	Number of Farms		
	1971	1976	1981	1971	1976	1981	
				-percent-			
Farrow							
Pigs only	3	6	15	2	3	. 6	
Pigs and Cropland	19	25	31	11	13	17	
Pigs and other Livestock	3	4	5	3	3	5	
Pigs, Cropland and other Livestock	75	65	49	84	81	72	
Farrow/All Operations	15	15	16	22	29	32	
Farrow to Finish							
Pigs only	3	5	9	1	2	4	
Pigs and Cropland	20	26	33	11	15	22	
Pigs and other Livestock	2	3	4	2	2	3	
Pigs, Cropland and other Livestock	75	66	54	86	81	71	
Farrow to Finish/All Operations	47	47	56	41	38	42	
Finishing							
Pigs only	6	8	13	2	2	4	
Pigs and Cropland	22	29	35	12	16	21	
Pigs and other Livestock	3	5	4	3	3	4	
Pigs, Cropland and other Livestock	69	58	48	83	79	71	
Finish/All Operations	38	38	28	37	33	26	
All Operations (20 or more Pig	18)						
Pigs only	4	7	11	2	2	5	
Pigs and Cropland	20	27	33	- 11	15	20	
Pigs and other Livestock	3	4	5	3	3	4	
Pigs, Cropland and other Livestock	73	62	51	84	80	71	
TOTAL	100	100	100	100	100	100	

Table 13 is a comparison of farms tabulated by type (farrowing, farrow/finishing and finishing) and mix of enterprise classified as farms having:

- pigs only;
- pigs and cropland;
- pigs and other livestock and;
- pigs, cropland and other livestock.

In 1981, 51 percent of the pigs in Canada were on 71 percent of farms with a combination of pigs, cropland and other livestock. Although these farms remained the most significant group, relative production and the number of farms in this category have shown a decline since 1971. At that time, 84 percent of all farms had pigs, cropland and other livestock representing 73 percent of total pig inventory.

During the 1971-81 interval there has been a shift to specialization in hog production. Farms whose sole enterprise was hogs have grown from two (2) to five (5) percent of all farms and now account for 11 percent of the inventory as compared to four (4) percent in 1971. Pig, cropland and other livestock farms have decreased in relative importance while pig and cropland farms have grown in the 1971 to 81 period. In 1971, the 11 percent of the farms which were typed as being pig and cropland units accounted for 20 percent of the pig inventory. The number of farms and the proportion of pigs produced on pigs and cropland combinations increased to 20 and 33 percent respectively in 1981. The number of farms classified as pigs and cropland increased to 20 percent and accounted for 33 percent of the pigs.

In an earlier section it was noted that farrow to finishing farms were the predominant type of pig enterprise. The same conclusion can be drawn when comparing the significance of farrow to finishing operations by mix of enterprise (Table 14). Fifty-nine percent of the pigs produced by operations combining pigs, cropland and other livestock were on farrow to finish holdings.

The pigs only category was greater in percentage terms than all other enterprise mixes for farrowing operations constituting 22 percent of all pigs on farms whose enterprise was only pigs. For finishing types, the pigs only category again had the highest percentage of their pigs in this group. Thirty-two percent of all pigs produced on all pigs only farms was on farms that were described as finishing units.

PIG INVENTORY BY TYPE AND MIX OF ENTERPRISE IN CANADA, 1981

Farm Type	Pigs only	Pigs and Cropland	Pigs and Other Livestock -percent-	Pigs, Crop land and Other Live- stock	All Opera- tions (20 or more Pigs
Farrow (Finish	22 46	16 55	19 55	16 59	16 56
Farrow/Finish Finishing	32	29	26 .	25	28
All Operation (20 or more		100	100	100	100

Several general conclusions can be drawn from the 1981 data (1971 and 1976 trends were similar) when the average number of pigs per farm for each enterprise within each farm type are compared (Table 15):

- the pigs only farms had the highest average number of pigs per farm of all farm types;
- ii) the pigs, cropland and other livestock combinations consistently reported the lowest averages for each farm type;
- iii) finishing operations that had no other farm enterprise recorded the highest average of 990 pigs per farm in 1981 and;
- iv) the lowest average number of pigs in 1981 at 108 was registered in farrowing operations having pigs, cropland and other livestock.

Table 15

AVERAGE NUMBER OF PIGS PER FARM BY MIX OF FARM ENTERPRISE

		Farrow to		
Mix of Enterprise	Farrow	Finish	Finishing	All Operations
Pigs only				
1971	125	340	371	291
1976	236	676	664	525
1981	406	929	990	732
Pigs and Cropland				
1971	134	238	209	205
1976	181	387	395	335
1981	284	613	552	505
Pigs and Other Livestock				
1971	76	130	155	124
1976	100	329	391	264
1981	141	535	363	324
Pigs, Cropland and Other Livest				
1971	69	114	97	98
1976	78	181	154	142
1981	108	304	221	220
All Operations	, 00	,		+"
1971	77	130	117	114
1976	96	223	212	182
1981	158	403	330	305

6. Pigs and Cropland Combinations 7

Since the pigs and cropland combinations represent 91 percent of the farms with pigs and account for 84 percent of the hog inventory in Canada, the pig and cropland enterprises are examined further in this section.

Table 16

PIG INVENTORY AND CROPLAND AREA REPORTED
BY FARMS WITH PIGS AND CROPLAND, BY PROVINCE,
1971, 1976 and 1981

		Pig Inventor	:y		ropland Are	a ¹
	1971	1976	1981	1971	1976	1981
			-perc	cent-		
P.E.I.	95	95	95	49	35	34
N.S.	78	83	75	23	17	17
N.B.	84	87	62	33	21	18
Que.	87	79	74	28	16	15
Ont.	95	95	94	36	24	25
Man.	95	96	90	42	20	18
Sask.	96	97	92	34	17	13
Alta.	95	93	90	42	22	18
B.C.	66	63	62	19	14	11
CANADA	93	90	84	37	20	17

The proportion of total cropland reported by farms with pigs expressed as a percent of total cropland reported by all farms in the Census.

Source: Statistics Canada, Censuses of Agriculture

The number of pigs on farms with cropland in Canada has declined from 93 percent of total inventory in 1971 to 84 percent in 1981 (Table 16). Provincial changes were similar with more significant declines in the percentage of inventory occurring in New Brunswick and Quebec where the inventory dropped from 84 to 62 percent and 87 to 74 percent respectively.

Cropland area in Canada held by farms with pigs decreased substantially from 37 percent of all cropland held by all farms in 1971 to only 17 percent in 1981. The rate of decline was greatest in the 1971 to 1976 period with cropland area falling to 20 percent and the trend slowing in the 1976-81 interval. The Prairie Provinces, New Brunswick and Quebec showed the greatest reductions in cropland area.

Includes the pigs and cropland only farms and holdings with a combination of pigs, cropland and other livestock.

Farrowing operations have remained relatively stable in the 1971-81 period with 14-15 percent of the inventory and 10-12 percent of the cropland held by all farms with pigs (Table 17). The farrow to finish operations, accountable for the majority of the inventory, have increased from 46 to 56 percent of the pigs during the ten year period while cropland area has increased slightly from 29-32 percent. Farms with pigs and cropland that are finishing operations accounted for 27 percent of all pigs in 1981, a drop from 35 percent in 1971 and 1976. Cropland area for these operations fell from 24 to 18 percent. Unclassified operations (less than 20 pigs) reported the largest proportion of cropland in 1981 at 38 percent but were only responsible for 2 percent of the inventory.

Table 17

DISTRIBUTION OF FARMS WITH PIGS AND CROPLAND BY TYPE OF OPERATION .

IN CANADA 1971, 1976 and 1981

	Pig Inventory				Cropland ¹		
	1971	1976	1981		1971	1976	1981
				-percent-			
Farrow/All Operations	14	15	15		10	11	12
Farrow to Finish/All Operations	46	46	56		29	26	32
Finish/All Operations	35	35	27		24	17	18
Unclassified/All Operations	5	4	2		37	46	38
Total	100	100	100		100	100	100

The proportion of total cropland reported by farms with pigs.

Average cropland area for all farms reporting any crop area in Canada in 1981 was 262 acres compared with 253 acres for farms with pigs and cropland. Approximately 57 percent of the pigs are contained on farms between 1-277 acres and 28 percent of the pigs on farms with more than 278 acres (Table 18). Farms with no cropland represent 15 percent of the pig population. Approximately 65 percent of the farms in Canada reporting pigs have between 1-277 acres of cropland, 26 percent have more than 278 acres of crop and 9 percent report zero crop acreage.

Table 18

PIG INVENTORY, CROPLAND AREA AND NUMBER OF FARMS DISTRIBUTED BY CROPLAND RANGES FOR ALL OPERATIONS WITH PIGS IN CANADA, 1981

Acres of Cropland	Pig Inventory	Cropland Area	Number of Farms
		-percent-	
None	15.3	0.0	9.0
1-32 33-72	7.2 11.4	0.7 3.4	10.4 15.0
73-127	16.6	7.4	17.6
128-192 193-277	11.6	8.3 10.1	12.1 9.9
278-362	6.6	10.0	7.3
363-572	7.8	19.4	9.9
573-947	5.4	18.7	6.0
948+	8.4	22.0	2.9
TOTAL	100.0	100.0	100.0

Source: Statistics Canada, 1981 Census of Agriculture

7. Pigs and Cattle Combinations

Although the pigs and cattle enterprises are not as common as pigs and cropland, this combination occurred in approximately 75 percent of farms producing pigs in 1981 (Table 19). This represents a 10 percent decline from 1971 and 1976.

Table 19
FARMS PRODUCING PIGS AND CATTLE, 1971, 1976 and 1981

	1971	1976	1981
		-percent-	
Pigs on Farms with Pigs and Cattle/Total Pigs Cattle on Farms with Pigs and Cattle/Total Cattle Farms Reporting Pigs and Cattle/All Farms with Pigs	68.8 37.5 85.5	59.6 22.3 85.6	46.0 19.1 75.5

In terms of inventory, these farms are responsible for a greater portion of the pig numbers than they are for cattle. In the 10 year period, the pig population on farms reporting cattle declined from a high 69 percent of total pigs in 1971 to 46 percent in 1981. Farms with cattle and pigs represented 38 percent of the total cattle herd in 1971 but dropped to 19 percent in 1981.

In 1981, 4.5 million pigs were on 42,037 farms that reported some (2.6 million) cattle (Appendix H). The distribution of pigs, cattle and number of farms by type of operation indicates that approximately 40 percent of the cattle on farms with pigs are produced by the 49 percent of the farms that have less than 19 pigs (Table 20). These producers account for only three (3) percent of the pig inventory. The farrow to finish category contains 57 percent of the pigs, 27 percent of the cattle and 21 percent of the farms reporting both livestock items. Finishing operations which involve 13 percent of the producers in this classification represent 24 percent of the pigs and 17 percent of the cattle. Seventeen percent of the farms are farrowing types and are responsible for 16 percent of the cattle and pig inventory.

PIG AND CATTLE INVENTORIES AND THE NUMBER OF FARMS REPORTED BY FARMS WITH PIGS AND CATTLE CLASSIFIED BY TYPE OF OPERATION, 1981

Type of Operation	Pigs	Cattle	Number of Farms Reporting
		-percent-	
Farrow	16	16	17
Farrow/Finish	57	27	21
Finish	24	17	13
Unclassified (1-19)	03	40	49
All Farms with Pigs	100	100	100

8. Farms with less than 20 pigs

Approximately 43 percent of the farms reporting pigs were not classified according to type of enterprise in section 4. Because this represented such a large proportion of farms, the characteristics of this group were examined further by comparing inventory, farm numbers, breeding stock and enterprise mix relative to the total sector.

Table 21
FARMS WITH LESS THAN 20 PIGS IN CANADA IN 1981

	Number	of Pigs	Number of Farms		
	On Farms with Less than 20 pigs	Percent of Total For all Farms With Pigs ¹	Farms with Less than 20 Pigs	Percent of Total For all Farms With Pigs ²	
		-percent-		-percent-	
P.E.I. N.S. N.B. Que. Ont.	2,768 1,959 2,834 12,754 41,083	2.4 1.4 3.2 0.4 1.3	405 479 571 2,147 5,782 9,384	38.1 62.8 67.3 26.9 31.4	
Man. Sask. Alta. B.C.	14,428 36,322 32,590 8,885	1.6 6.3 2.7 3.5	2,323 5,751 4,614 1,850	45.6 62.7 46.2 78.8	
WEST	92,225	3.2	14,538	54.6	
CANADA	153,623	1.6	23,922	42.9	

Pig inventory on farms with less than 20 pigs expressed as a percent of total pigs.

Source: Statistics Canada, 1981 Census of Agriculture

In 1981, there were 23,922 farms or 42.9 percent of all farms reporting pigs with less than 20 pigs (Table 21). They maintained an inventory of 153,623 pigs which was only 1.6 percent of all pigs in Canada. The average number of pigs per farm in this category was 6.4 pigs. Provincially, British Columbia, New Brunswick, Nova Scotia and Saskatchewan had more than 60 percent of their farms with pigs indicating fewer than 20 pigs. Quebec was the lowest at 26.9 percent of all farms reporting less than 20 animals. In Saskatchewan, this group accounted for 6.3 percent of the provincial inventory while in all other provinces the inventory was 3.5 percent or lower. Quebec was the lowest of all provinces reporting 0.4 percent of its inventory held by this grouping of farms.

² Farms with less than 20 pigs expressed as a percent of all farms with pigs.

8.1 Breeding Stock

It was recognized that certain operations which fell into the classification of less than 20 pigs could be significant, particularly if all they reported was breeding stock. These farms could be special breeding units or farms which happened to report zero market pigs during the census reference dates.

Table 22

FARMS IN CANADA WITH LESS THAN 20 PIGS REPORTING BREEDING
STOCK ONLY IN 1981

Size		Number of Sows and Gilts	Number of Boars	Number of Farms
1-9		7,287	1,465	2,816 303
10-19	Total	3,563 10,850	332 1,797	3,119

Source: Statistics Canada, 1981 Census of Agriculture

On June 3, 1981, 3,119 farms reported 10,850 sows and gilts and 1,797 boars but no market pigs (Table 22). Ninety percent of those farms (2,816) had less than 10 breeding stock. In relation to the total breeding herd in Canada at that time, this grouping of farmers maintained 1.1 percent of the Canadian breeding herd.

8.2 Mix of Enterprise

Farms with less than 20 pigs tended to have a different mix of farm enterprises than farms with more than 20 pigs (Table 23). The pig, cropland and livestock combination was more prevalent for farms with less than 20 pigs and accounted for 86 percent of the farms and inventory. Eight percent of the farms had pigs and other livestock as compared to 4 percent for farms with 20 or more pigs. Farms consisting of pig and cropland combinations dropped from 20 percent to 5 percent for operations with less than 20 pigs. As well, the pigs only category declined to one percent of the farms compared to 5 percent for the over 20 group and the inventory also fell to one percent versus 11 percent for farms with 20 or more pigs.

Table 23

COMPARISON OF FARMS HAVING LESS THAN 20 PIGS
PIGS WITH FARMS REPORTING 20 OR MORE PIGS, CANADA, 1981

	Number of Pigs		Number of Farms		
	less than 20 pigs	20 or more pigs	less than 20 pigs	20 or more pigs	
		-percent-			
Pigs only	1	11	1	5	
Pigs and Cropland	5	33	5	20	
Pigs and other Livestock	8	5	8	4	
Pigs, Cropland and Livestock	86	51	86	71	
Total	100	100	100	100	

9. Feed Expenditures⁸

Feed expenditures represent a major portion of total cash expenses for hog production. An Alberta Agriculture report indicated that in 1980, feed accounted for 78 percent of total cash costs for farrow to finish units and 52 percent of total cash costs for finishing operations. Farmers involved in hog production purchased \$842.4 million of feed in 1980. This expenditure represented 38 percent of total feed expenditures in Canada 10.

Approximately 87 percent of all farms with pigs in Canada reported some feed expenses (Table 24). Ninety-five percent of all farrow to finish farms purchased feed followed by farrowing units at 91 percent, finishing at 87 percent and farms with less than twenty pigs at 81 percent. More than 90 percent of all farms with pigs reported feed purchases in Prince Edward Island, Nova Scotia and Ontario. In the finishing category more than 85 percent of all farms purchased feed the exception being the province of Quebec where only 69 percent of farms with hogs reported feed purchases. In Quebec, the finishing operations accounted for 1.4 million pigs (41 percent of total provincial inventory) and were reported by 1,399 farm operators.

Table 24

FARMS WITH PIGS REPORTING FEED EXPENSES IN 1980

Province	F	Farms with 20 or more pigs			Farms with less than 20 pigs	All Farms	
	Farrow	Farrow/Finish	Finish	TOTAL			
		-percent-					
P.E.I.	94	96	95	95	88	92	
N.S.	97	97	95	96	91	93	
N.B.	87	96	89	91	85	87	
Que.	91	92	69	86	83	85	
Ont.	94	96	92	94	85	91	
East	93	96	85	93	85	90	
Man.	92	96	93	94	79	87	
Sask.	88	93	89	90	74	80	
Alta.	87	93	91	91	79	85	
B.C.	92	93	88	92	88	89	
West	89	93	91	91	78	84	
Canada	91	95	87	92	81	87	

Source: Statistics Canada, 1981 Census of Agriculture

Represents purchased feed expense.

Carlyle Ross, Economics of Hog Production in Alberta, 1980, August 1982.

Statistics Canada, 1981 Census of Agriculture, Canada, 96-901.

Average costs for purchased feed per farm in Canada in 1980 for all pig farm types was \$17,400 (Table 25). Farms with less than 20 pigs spent an average of \$3,500 for feed while finishing types reported an average expenditure of \$35,200. Farms in the Eastern Provinces had an average feed expense of \$23,100 in contrast to an average of \$10,700 spent by Western operators.

Table 25

AVERAGE FEED EXPENDITURES PER FARM BY TYPE OF OPERATION, 1980

	Canada	East	West
		-\$-	
Farrow	14,300	17,300	7,200
Farrow/Finish	27,300	35,500	16,200
Finish	35,200	41,500	26,300
Unclassified (less than 20 pigs)	3,500	4,100	3,000
All Operations	17,400	23,100	10,700

Source: Statistics Canada, 1981 Census of Agriculture

The pigs, cropland and livestock combination which accounted for 51 percent of the total pig inventory had the lowest average feed expenditure for all types of operations having 20 or more pigs (Table 26). The pigs only classification registered the highest average feed expenditures. These producers did not grow any of their own feed and since they did not have any other livestock enterprise, all feed expenses can be attributed solely to hog production. Farms with pigs and cropland represented holdings which had the potential to produce feed grains and the average of this group was considerably lower than for other enterprise mixes.

Table 26

AVERAGE FEED EXPENDITURES IN 1980 BY TYPE AND MIX OF OPERATION IN CANADA FARMS WITH 20 OR MORE PIGS

	Farrow	Farrow/Finish	Finish	Less than 20 Pigs	TOTAL
Pig only Pigs and Cropland Pigs and other Livestock	33,200 19,600 16,400	86,700 43,300 84,100	100,100 32,100 56,400	2,100 2,400 4,900	59,000 31,100 21,400
Pigs, Livestock and Cropland	11,500	28,300	21,800	3,400	13,400
All Operations	14,300	27,300	35,200	3,500	17,400

Source: Statistics Canada, 1981 Census of Agriculture

10. Gross Farm Sales 11

Farmers with pigs reported gross sales from all farm products of \$3.2 billion for 1980 or 21 percent of total sales for all farm operators. Average sales for all farms with pigs in Canada were \$58,200 and on a regional basis \$54,200 in the West and \$61,200 in the East (Table 27).

Table 27

AVERAGE TOTAL SALES PER FARM BY TYPE OF OPERATION, 1980

Type of Operation	Canada	East	West
		-\$-	
Farrow	44,200	45,900	40,200
Farrow/Finish	98,200	96,300	100,900
Finish	103,700	112,000	91,600
Unclassified (less than 20 pigs)	26,200	17,700	31,700
All Operations	58,200	61,200	54,200

Source: Statistics Canada, 1981 Census of Agriculture

At the Canada level, finishing operations had the highest average sales of \$103,700, while farms with less than 20 pigs averaged only \$26,200 in farm sales. Farm operations in the East realized higher average sales for farrowing and finishing operations but the West led the East in average sales in the farrow and less than 20 pig categories. Finishing operations in the east reported the highest average sales (\$112,000) in contrast to small holdings with less than 20 pigs showing the lowest gross farm sales (\$17,700).

¹¹ Value of all agricultural products sold.

Farms with sales less than \$2,500 represented 10.8 percent of the farms and 1.6 percent of the pig inventory (Table 28). The majority of farms (58.2 percent) fell in the three classifications from \$10,000 to \$100,000 and collectively represented 39.1 percent of total sales and 43.3 percent of the pigs. The highest sales category, (greater than \$250,000 sales) was only achieved by 3.2 percent of the farms but they were responsible for 31.5 percent of all sales and 24.2 percent of the pig numbers.

Table 28

TOTAL SALES FOR ALL OPERATIONS WITH PIGS IN CANADA, 1980

Sales Classification	Total Sales	Number of Pigs	Number of Farms
		-percent-	
Less than \$2,500.	0.2	1.6	10.8
\$ 2,500 4,999.	0.5	1.4	7.4
\$ 5,000 9,999.	1.2	2.3	9.8
\$ 10,000 24,999.	5.7	7.3	19.8
\$ 25,000 49,999.	12.6	14.0	20.5
\$ 50,000 99,999.	21.4	22.0	17.9
\$100,000249,999.	26.9	27.2	10.7
\$250,000.+	31.5	24.2	3.1
Total	100.0	100.0	100.0

Source: Statistics Canada, 1981 Census of Agriculture

The farrow to finish and finishing operations are very significant at this sales level (greater than \$250,000+) generating 40.5 percent of total sales and 30.1 percent of the pigs (Table 29). The farrow to finish group had 42.8 percent of their total sales and 24.7 percent of the inventory reported by farms with more than \$250,000 sales. The farrowing and unclassified types were less significant. Farrowing farms at over \$250,000 sales represented 13.4 percent of total sales and 5.7 of the pig population. Farms with less than 20 pigs contributed only 10.4 percent of total sales and 0.5 percent of the pigs.

Approximately 7.6 percent of farms in the finishing business had annual sales of more than \$250,000 in 1980, followed closely behind by farrow to finish units at 6.7 percent of farms. Only 0.5 percent of the unclassified farms were at this income level and 1.1 percent of the farrowing operations generated over \$250,000 sales.

Table 29

FARMS WITH 1980 SALES GREATER THAN \$250,000 CLASSIFIED BY TYPE OF OPERATION

<u>I</u>	otal Sales	Number of Pigs	Number of Farms
		-percent-	
Farrow	13.4	5.7	1.1
Farrow/Finish	40.5	30.1	6.7
Finish	42.8	24.7	7.6
Unclassified (less than 20 pigs)	10.4	0.5	0.5

Source: Statistics Canada, 1981 Census of Agriculture

11. Farm Capital 12

Capital Investment in land, buildings, machinery, livestock and poultry for operations with pigs in 1981 was \$22.6 billion (Table 30). Approximately 76 percent of the total investment was for land and buildings, 13 percent for machinery and 11 percent for livestock and poultry.

Table 30

TOTAL INVESTMENT IN LAND BUILDINGS MACHINERY LIVESTOCK AND POULTRY FOR ALL HOG OPERATIONS IN CANADA IN 1981

Province	Land and Buildings	Machinery	Livestock and Poultry	Total
		-	\$ Million-	
P.E.I. N.S. N.B. Que. Ont.	150.9 117.2 85.8 1,190.3 5,264.7	45.7 24.9 23.7 277.6 746.4		227.8 177.1 131.7 1;896.9 5,788.3
East	6,808.9	1,118.2	1,284.7	9,211.8
Man. Sask. Alta. B.C.	1,450.1 3,250.7 5,051.3 698.5	326.8 638.0 751.2 69.6	309.0 531.5 80.5	1,984.9 4,197.7 6,334.0 848.6
West Canada	10,450.6 17,259.5	1,785.6 2,903.8		3,365.2 2,577.0

Source: Statistics Canada, 1981 Census of Agriculture

Farm capital investment by farmers reporting pigs in Western Canada was \$13.4 billion or 59 percent of total Canadian farm investment, while Eastern Canada accounted for 41 percent of total investment in Canada. The land and buildings component for farms in the East represented 74 percent of total farm investment but was slightly higher at 78 percent of total investment for Western farms. Livestock and poultry investment was 14 and 8 percent respectively of all farm capital for Eastern and Western Canada.

¹² Represents total farm investment of farms reporting pigs and not the portion used to support the pig operation.

Table 31

AVERAGE TOTAL INVESTMENT PER FARM IN LAND, BUILDINGS AND MACHINERY
BY TYPE OF HOG ENTERPRISE, 1981

Type of Operation	East	West	Canada
		-\$000-	
Farrow	234.1	356.2	271.3
Farrow/Finish	375.8	726.4	523.0
Finish	374.5	605.0	468.9
Unclassified (less than 20 pigs)	163.7	345.0	273.9
All Operations	272.6	459.7	362.0

Source: Statistics Canada, 1981 Census of Agriculture

At the Canada level, average investment in land, buildings and machinery was \$362,000 per farm for all hop operations (Table 31). Farrow to finish farms had the highest farm capital value of \$523,000 per farm. Average investment in Western Canada for all operations was \$459,700, considerably higher than the \$272,600 value reported in Eastern Canada. Farm capital values were substantially higher in the West for all four types of hop operations. Farms with less than 20 pigs had the lowest investment in land, buildings and machinery in both Eastern and Western Canada.

PER ACRE VALUES OF FARMLAND BY PROVINCE BY TYPE OF HOG ENTERPRISE IN CANADA, 1981

Type of Operation	East	West	Canada
		-\$/acre-	
Farrow	1,217	452	727
Farrow/Finish	1,585	660	873
Finish	1,542	611	856
Unclassified (less than 20 pigs)	765	431	480
All operations	1,243	519	674

Source: Statistics Canada, 1981 Census of Agriculture

Although total investment and average capital value per farm was higher in the West, average per acre values of farmland in the East were, except for unclassified farms, at least twice the per acre values reported in the West (Table 32). For all pig operations, land was valued at \$674 per acre in Canada, \$1,243 per acre in the Eastern Provinces and only \$519 per acre in the West. The per acre values for farrow to finish and finishing farm types tended to be similar. Farrowing operations generally had lower per acre values than the farrow to finish and the finishing types, while farms with less than 20 pigs reported the lowest average per acre values.

12. Age of Operator

Farm operators between the ages 25-44 represented the majority of farmers reporting pigs as well as the largest proportion of the pig inventory (Table 33). In 1981, 45 percent of all farm operators with pigs were between 25-44 years of age. These operators reported 57 percent of the pig inventory. Since 1971, the relative number of operators in the 25-44 category has grown from 40.3 percent to 45.2 percent in 1981. In 1971, these farms had 48.7 percent of the inventory but in 1981 held 57.3 percent of the pigs. Slight increases in 1976 and in 1981 in both farms reporting and pig inventory occurred on farms where the operator was under 25 years of age.

NUMBER OF FARMS REPORTING PIGS AND NUMBER OF PIGS
CLASSIFIED BY AGE OF OPERATOR - CANADA - 1971, 1976 and 1981

Age of Operator	Number of Farms			Nu	mber of	Pigs	
	1971	1976	1981		1971	1976	1981
				-percen	t-		
under 25	2.4	3.0	3.6		2.7	3.1	5.0
25-44	40.3	40.8	45.2		48.7	50.5	57.3
45-54	30.2	29.4	26.7		29.4	28.0	23.8
55-64	20.6	20.2	18.7		15.4	14.4	11.4
65+	6.5	6.6	5.8		3.8	4.1	2.5
Total	100.0	100.0	100.0		00.0	100.0	100.0

Source: Statistics Canada, Censuses of Agriculture

The significance of the younger (25-44) operator was more evident on operations that reported 20 or more pigs (Table 34). In 1981, 48 percent of all operators with pigs were in this group compared to 43.4 in 1976 and 43.8 in 1971. Similar increases occurred on holdings with 19 pigs or less which in 1981 represented 41.6 percent of all farms. Operators over 55 generally represented a decreasing proportion of operators in 1976 and 1981. In percentage terms, the under 25 age category having 20 or more pigs increased, while those operators reporting less than 20 pigs tended to decrease.

NUMBER OF FARMS REPORTING PIGS ON HOLDINGS WITH LESS THAN 20 PIGS
COMPARED WITH HOLDINGS WITH MORE THAN 20 PIGS
BY AGE OF OPERATOR - CANADA - 1971, 1976 and 1981

Age of Operator	Numbe	r of Far 1-19 P		ting		of Farms or more	Reporting Pigs
19	1971	1976	1981		1971	1976	1981
				-percent-			
under 25 25-44	1.9	2.9 38.4	2.6		2.7	3.1 43.4	4.4 48.0
45-54	30.6	29.5	27.0		29.9	29.4	26.4
55-64 65+	23.1 8.4	21.5	21.0 7.8		18.7	18.8	16.9 4.3
Total	100.0	100.0	100.0		100.0	100.0	100.0

Source: Statistics Canada, Censuses of Agriculture

13. Hired Labour

In 1981, 33 percent of all farms with pigs reported some hired labour compared to 32 percent in 1971 and 26 percent in 1976. In 1981, the majority of farms regardless of the type of operation, hired less than one person year of hired labour (Table 35). Unclassified (less than 20 pigs) farms were the highest at 86 percent of all farms hiring less than one person year while farrow to finish operations reported the lowest percentage at 71. Only one percent of the farms for all types except farrow to finish, indicated five or more person years of hired labour.

Table 35

NUMBER OF FARMS REPORTING HIRED LABOUR CLASSIFIED BY

TYPE OF OPERATION AND PERSON YEARS HIRED - 1981

Person Years Hired	Farrow	Farrow/Finish	Finish	Unclassified	All Opera- tions
			-perce	nt-	
Less than 1 1-2 2.1-4.9 5+	82 15 02 01	71 21 05 03	76 19 04 01	86 11 04 01	79 16 04 01
All farms with pigs hiring labour	100	100	100	100	100
Percent of all farms with pigs hiring la	18 abour	30	18	34	33

Source: Statistics Canada 1981 Census of Agriculture

Hired labour on farms with pigs in 1981 represented 13 percent of total weeks of farm labour for all farms in Canada. Farrow to finish units accounted for 43 percent of total weeks hired by holdings reporting pigs followed by unclassified farms at 23 percent, finishing operations at 19 percent and farrowing enterprises at 15 percent (Table 36). Farms employing five or more person years were most significant for farrow to finish farms reporting 32 percent of total weeks hired.

Number of weeks of Hired Labour Classified By Type of Operation and Person Years Hired - 1981

Person Years Hired	Farrow	Farrow/Finish	Finish	Unclassified	All Opera- tions
6			-per	cent-	
Less than 1 1-2 2.1-4.9	35 34 13	20 29 19	28 34 20	42 32 17	29 31 18
5+	18	32	18	09	22
All farms with pigs hiring labour	100	100	100	100	100
Percent of all farms with pigs hiring l		43	19	23	13

Source: Statistics Canada, 1981 Census of Agriculture

Fifty-one percent of the total pig inventory came from farms that also reported some hired labour (Table 37). Fifty-nine percent of the inventory on farrow to finish farms was on operations which hired some labour. Fifty percent of the pigs were found on operations having less than one person year of hired labour, 28 percent of the pigs on farms with 1-2 person years of paid labour and 11 percent each for the 2.1-4.9 and 5 and over intervals. Farrow to finish operations were the only farm type to report less than half their inventory (46 percent) on farms hiring less than one person year in contrast to finishing at 53 percent, farrowing at 63 percent and unclassified at 86 percent. Twelve percent of the pigs on farrow to finish units with some labour were on farms hiring more than five person years of labour.

PIG INVENTORY CLASSIFIED BY TYPE OF OPERATION AND PERSON YEARS HIRED-1981

Person Years Hired	Farrow	Farrow/Finish	Finish	Unclassified	All Operations
			-per	cent-	
Less than 1 1-2 2.1-4.9 5+	63 23 07 07	46 29 13 12	53 27 11 09	86 11 02 01	50 28 11 11
All farms with pigs hiring labou	100 Jr	100	100	100	100
Pigs on all farms reporting hired l	13 abour	59	27	1	51

Source: Statistics Canada, 1981 Census of Agriculture

In summary, this section clearly indicates that hired labour is more important to farrow to finish operations than it is to all other farm types. Thirty percent of the farrow to finish farms reported some hired labour; they represented 43 percent of total weeks hired for all pig farms; and 59 percent of the inventory for farms with pigs and hired labour.

14. Off-Farm Work

Approximately 37 percent of all farms with pigs reported some operator off-farm work. This is virtually the same proportion as reported by all farms in Canada (38 percent) regardless of their farm type (Table 38).

NUMBER OF FARMS WITH PIGS CLASSIFIED BY FARMS REPORTING OFF-FARM WORK

Province	Number of Farms with Pigs	Number of Pigs
	•	
	-percent-	
Prince Edward Island	36	21
Nova Scotia	51	22
New Brunswick	49	32
Quebec	26	15
Ontario	42	27
East	38	21
Manitoba	31	18
Saskatchewan	29	22
Alberta	38	19
British Columbia	60	30
West	35	20
Canada	37	21

Source: Statistics Canada, 1981 Census of Agriculture

British Columbia has the highest proportion (60 percent) of their operators indicating off-farm work while Quebec at 26 percent was the lowest. In Ontario, New Brunswick and Nova Scotia over 40 percent of the operators with pigs also worked off the farm while Manitoba and Alberta were between 30 and 40 percent. Saskatchewan and Quebec were the only two provinces with less than thirty percent of their operators involved in off-farm work.

Farms with off-farm employment represented 21 percent of the pig inventory in 1981 (Table 39). Provincially, most provinces indicated that between 20-30 percent of the pigs were produced by farms having an off-farm work characteristic. Quebec at 15 percent, Manitoba at 18 percent and Alberta at 19 percent were the only three provinces to register less than 20 percent of total pigs. British Columbia and New Brunswick at 30 and 32 percent respectively, held the highest proportions in this classification.

Table 39

OPERATOR OFF-FARM WORK ON FARMS REPORTING PIGS IN CANADA-1981

Number of Days Worked	Number of Farms	Number of Days	Number of Pigs
	-percent-		
1-96	34	8	48
97-126	8	6	8
127-156	6	5	8 5
157-228	19	23	14
229-365	33	57	26
All farms with pigs reporting off-farm work	100	100	100
All farms with pigs reporting off-farm work/all farms with	37 pigs	100	21

Source: Statistics Canada, 1981 Census of Agriculture

Of the farms involved in off-farm work there was a tendency to either be employed for a short period (1 to 96 days) or full time (229 days or more). Thirty-four percent of the farms worked less than 97 days off the farm while 52 percent of the farms were occupied off the farm for more than 157 days. The 157-228 day classification accounted for 23 percent of total person day employment off the farm with the greater than 229 class generating 57 percent of total person days.

With respect to pig inventory, 48 percent of the pigs on farms where the operator worked at least one day off the farm in the previous year were on farms with less than 97 days of off-farm work. Farms with 157-228 days were responsible for 14 percent of the pigs and operators with full time work off the farm (229 days or more) reported 26 percent of total pig inventory.

NUMBER OF FARMS CLASSIFIED BY OFF-FARM WORK
AND TYPE OF OPERATION, CANADA, 1981

Number of Days Worked	Farrow	Farrow to Finish	Finish	Unclass- ified	All Opera- tions
		-percent-			
1-96 97-126 127-156 157-228 229-365	36 9 6 17 32	43 8 5 16 28	43 8 5 16 28	28 9 6 21 36	34 8 6 19 33
All farms with pigs reporting off-farm work	100	100	100	100	100
All farms with pigs re off-farm work/all fa with pigs		18	12	52	37

Source: Statistics Canada, 1981 Census of Agriculture

Fifty-two percent of all pigs on farms with off-farm work were reported on unclassified (less than 20 pigs) farms (table 40), 18 percent on farrow to finish and farrowing enterprises and only 12 percent on finishing operations. The majority of farms regardless of the farm type worked either less than 97 days or 229 days or more off the farm.

Table 41

NUMBER OF PIGS CLASSIFIED BY OFF-FARM WORK

AND TYPE OF OPERATION, CANADA, 1981

Number of Days Worked	Farrow	Farrow to Finish	Finish	Unclass- ified	All Opera- tions
		-percent-			
1-96	41	52	48	30	48
97-126	10	7	9	9	8
127-156	6	4	5	6	5
157-228	15	13	14	21	14
229-365	28	24	25	35	26
Number of pigs on farms with operator off-far		100	100	100	100
work	100	100	100	100	100
Number of pigs on farms with operator off-far work/all farms with					
pigs	21	47	29	3	21

Source: Statistics Canada, 1981 Census of Agriculture

The majority of the inventory is held by farms reporting off-farm work of less than 97 days for the farrow, farrow to finish and finishing farm types (Table 41). Unclassified farms reported most of their pigs (35 percent) in the over 229 day category. Once again the 96 to 126 and 127 to 156 intervals were the least dominant classifications.

15. Type of Farm Organization

The individual proprietorship dominates farms involved in pig production. In 1981, 87.3 percent of all farms with pigs were operated as an individual or family operation (Table 42). Partnerships accounted for 9.3 percent of farms, corporations 2.9 percent and other farm types (Hutterites, institutions and co-operative farms) represented 0.5 percent percent of all farms with pigs.

PERCENTAGE OF FARMS AND PIG INVENTORY ON FARMS
CLASSIFIED AS PRIVATE OPERATOR HOLDINGS BY PROVINCE, 1971, 76, 81

Province	Nu	mber of Fa	rms		Number of P	igs
	1971	1976	1981	1971	1976	1981
			-percent-			
Prince Edward Island	91	94	85	-80	87	68
Nova Scotia	91	92	86	71	54	58
New Brunswick	93	94	89	87	72	69
Quebec	96	95	91	91	79	69
Ontario	91	93	85	86	84	72
East	92	93	87	87	81	7 0
Manitoba	92	93	87	77	61	54
Saskatchewan	93	92	89	86	73	66
Alberta	90	92	87	82	70	63
British Columbia	90	91	85	71	55	57
West	91	92	88	81	68	60
Canada	92	93	87	84	76	67

Source: Statistics Canada, Censuses of Agriculture

For Canada, the number farms operating as individual proprietorships has declined from 92 percent in 1971 to 87 percent in 1981 with all provinces exhibiting similar patterns. In 1971 all provinces tended to report more than 90 percent of their farms in the individual category and by 1981 all provinces except Quebec were in the high 80's. In percentage terms Quebec at 91 percent has the highest number of individual farm types.

The number of pigs on single proprietorships decreased significantly faster than the number of farms. In 1971, these holdings reported 84 percent of the pigs, but declined to 76 percent in 1976 and decreased further to 67 percent in 1981. The East-West distributions show that the East accounts for a greater percentage of pigs than the West. In 1981, individual farms in the East were responsible for 70 percent of the inventory while in the West the proportion was only 60 percent.

The 1971-81 trend to larger operations has resulted in farms that operate as partnerships and family corporations rather than as individual family farms. As well, Hutterites in the Prairie Provinces have increased their hog operations.

Individual farm type holdings were the most significant form of farm organization with unclassified farms accounting for 90.1 percent of all pigs in the unclassified group (Table 43). Farrow to finish farms were the lowest at 59.6 percent of their inventory being held by individual farms.

Partnerships represented 12.6 percent of the inventory for all operations. Farrow/finish farms had the highest inventory in percentage terms at 14.5 percent while unclassified farms were the lowest at 8.2 percent. Approximately 15 percent of the pigs were on corporate farms with family corporations being significantly more dominant than other non-family corporations. Other farm types reported 4.7 percent of the inventory.

NUMBER OF PIGS CLASSIFIED BY TYPE OF FARM ORGANIZATION AND TYPE OF PIG OPERATION, 1981

Type of Organization	Farrow	Farrow/Finish	Finish	Unclassified	All Operations
		-perce	nt-		
Individual Partnership	81.7	59.6	73.5	90.1	67.5
-written -unwritten	6.4 3.9	8.1 6.4	6.8 3.7	2.3 5.9	7.4 5.2
Corporation -family -other	6.4	15.4 2.0	12.6	1.3 0.2	13.0
Other	0.4	8.5	0.2	0.2	4.7
Total	16.3	54.9	27.2	1.6	100.0

Source: Statistics Canada, 1981 Census of Agriculture

16. Conclusions

- 1. The number of pigs on farms in Canada, except for cyclical variations caused by the hog cycle, has risen from 2.4 million head in 1901 to 9.9 million in 1981. Except for two brief occasions in 1941 and 1971, the farm inventory of pigs has always been greater in Eastern Canada. In 1981, approximately 71 percent of all pigs were reported in the East in contrast to 29 percent in the West.
- 2. Since 1941 the number of farms raising pigs has declined sharply. Sixty-five percent of all farms in Canada produced pigs in 1941. In 1981 only 18 percent (55,699) of the farms indicated pigs on their farm holdings.
- 3. Average herd sizes were generally less than 25 pigs per farm prior to 1961, rising to 66 in 1971 and accelerating to 177 in 1981. Quebec led the country with an average of 430 pigs per farm in 1981 while Saskatchewan with an average size of 63 pigs was the only province in Canada with an average of less than 100 pigs.
- 4. Canadian pig production consists of three major groupings:
 - In 1981, approximately 43 percent of the farms with pigs reported less than 20 pigs. These producers accounted for less than two (2) percent of the Canadian inventory. Since 1971, operations in this category have been losing ground and are not a significant factor in the industry;
 - The top 9 percent of farms with more than 500 pigs per farm produced 62 percent of the pigs in 1981. These large operations appear to have greater stability and tend to be less influenced by the hog cycle. In the last ten years, they have continued to increase their share of the Canadian inventory. Fifteen percent of all pigs were reported by 0.6 percent (351 farms) of the farms in 1981:
 - The middle group (20-500 pigs) consisted of 48 percent of all farms with pigs and 36 percent of the inventory. These operators maintained a sizeable but declining share of the overall inventory.
 - 5. Farrow to finish operations were the dominant farm type in Canada in 1981 consisting of 56 percent of the inventory and 42 percent of the farms with 20 or more pigs.
 - 6. Finishing farm types maintained by 26 percent of the farms with 20 or more pigs held 28 percent of the pig population in 1981.
 - 7. For farrowing units, approximately 32 percent of farms (20 or more pigs) accounted for 16 percent of all pigs in 1981.
 - 8. In 1981, farrow to finish enterprises reported over 59 percent of all female breeding stock while 38 percent of the sows and bred gilts were on farrowing operations. Farms with more than 200 sows and bred gilts represented over 45 percent of the female breeding herd in Canada.

- 9. The farrow to finish grouping of operators accounted for 54 percent of all market pigs in 1981 compared to 31 percent for finishing units. In 1981, 41.5 percent of all market pigs on farrow to finish farms and 47.5 percent of all market animals on finishing operations were reported on farms with more than 1,000 market pigs.
- 10. Farms having pigs, crupland and other livestock represented 71 percent of all farms with pigs and 51 percent of the inventory in 1981.
- 11. The pigs and cropland only combination occurred on 20 percent of farms with pigs and accounted for 33 percent of the inventory.
- 12. The pigs only category consisted of 5 percent of the farms and 11 percent of the pigs.
- 13. The desirability of raising pigs in conjunction with crop production continues as 84 percent of all pigs were on 91 percent of operations that reported cropland as another enterprise. These producers were responsible for 17 percent of total Canadian cropland area.
- 14. The pigs and cattle combination occurred in 75 percent of the farms with pigs reporting 46 percent of the pig inventory and 19 percent of all cattle in Canada.
- 15. Ninety-two percent of all farms with 20 or more pigs reported feed expenses in 1980. Average per farm feed expenditures ranged from \$14,300 for farrowing operations to \$35,200 for finishing units.
- 16. Average per farm gross sales of all agricultural products for farms with pigs in 1980 were \$58,200. Finishing operations had the highest average sales of \$103,700 in contrast to farms with less than 20 pigs whose average 1980 sales were \$26,200.
- 17. Farms with with pigs and average sales of more than \$250,000 (1,745 farms) from the sale of agricultural products reported 24.2 percent of total pig inventory and 31.5 percent of total farm sales for all farms with pigs.
- 18. Total capital investment in land, buildings, machinery and livestock was \$22.6 billion in 1981 (\$410,000 per farm). Land and buildings represented 76 percent of total investment, machinery 13 percent and livestock and poultry 11 percent. The average age of farm operators reporting pigs has declined in the last ten years. In 1981, 45.2 percent of the farmers were between 25-44 years of age. This category of operators reported 57.3 percent of the inventory.
- 20. Approximately 33 percent of the farms with pigs reported some (79 percent) was for less than one person year. Operators reporting hired labour recorded 51 percent of the inventory.

- 21. In Canada, 37 percent of the operators reported some off-farm work. Approximately one third of the operators worked less than 96 days off the farm while a similar number worked full time (more than 229 days) off the farm. The remaining one third worked between 97-228 days off the farm. Farmers with off-farm work reported 21 percent of the pigs in Canada.
- 22. In 1981, 67 percent of the pig inventory was on 87 percent of the farms with pigs that were classified as individual or family type farms.

17 APPENDICES

APPENDIX A

NEWFOUNDLAND STATISTICS

Table A.1

NEWFOUNDLAND PIG STATISTICS

Year	Number of Pigs	Numbe	r of Far	ms Report	ting Pigs	Tota	l Number	of Farms
1951	1,712			380			3,6	26
1956	1,820			219			2,3	
1961	1,554			135			1,7	
1966	7,307			150			1,7	
1971	14,639			171			1,0	
1976	15,795			84			8	78
1981	19,076			66			6	79
Type o	of Operation	Num 1971	ber of P	<u>1981</u>	Number	of Far	1976	ting Pigs
Farrow	vina	826	_	121		2	-	2
	v to Finish	9,682	13,214	17,736		19	18	10
Finish		3,731 400	2,423 158	1,049 170		22 128	7 59	6 38
All Fa	arms with Pigs	14,639	15,795	19,076		171	84	66

NUMBER OF PIGS AND NUMBER OF FARMS DISTRIBUTED BY SIZE OF HERD, 1971, 1976 and 1981, NEWFOUNDLAND

Size of Pig Herd	Number of Pigs		Pigs	Farms F	Reporting Pigs		
	1971	1976	1981	1971	1976	1981	
1-19	400	158	170	128	59	38	
20-100	814	283	355	19	5	6	
101-250	2,164	773	987	11	4	5	
251-500	2,005	1,077	3,159	6	3	8	
501-1000	3,067	6,246	1,413	4	9	2	
1001+	6,189	7,258	12,992	3	4	7	
Total	14,639	15,795	19,076	171	84	66	

Source: Statistics Canada, Censuses of Agriculture

APPENDIX B

Definitions

Definitions

Farrowing Operations

- breeding stock (sows and gilts) greater than zero.
- market pigs greater than 45 lbs. (20 kgs) must be less or equal to the sum of sows and gilts.
- holdings must have 20 or more pigs.

Finishing Operations

- sows and gilts are less or equal to 5 percent of total pigs.
- holdings must have 20 or more pigs.

Farrow to Finish Operations

- all holdings with 20 or more pigs not classified as farrowing or finishing units.

Unclassified Operations

- all holdings with less than 20 pigs.

APPENDIX C

Herd Size Distributions

Number of Pigs for All Operations by Size of Herd - 1971

	1-19	20-50	51-100	101-150	151-250	251-500
Canada	390,267	977,139	1,342,868	913,725	1,202,985	1,495,327
P.E.I.	7,962	15,834	14,133	9,475	8,808	18,247
N.S.	3,468	4,322	5,808	4,234	9,490	14,058
N.B.	6,453	6,820	7,372	4,621	6,940	10,422
Que.	55,360	121,427	159,176	116,274	186,421	278,058
Ont.	85,138	267,107	407,481	279,999	375,234	481,476
East	158,381	415,510	593,970	414,603	586,893	802,261
Man.	45,105	104,727	147,356	107,905	157,273	214,078
Sask.	101,082	199,051	228,196	140,792	173,869	170,015
Alta.	75,637	248, 364	366,437	244,671	280,147	. 298,306
B.C.	10,062	9,487	6,909	5,754	4,803	10,667
West	231,886	561,629	748,898	499,122	616,092	693,066
	501-750	751-1000	1001-1500	1501-2500	2501 & over	Total
Canada	619,157	373,832	319,715	242,812	214,155	8,091,982
P.E.I.	13,398	4,850	4,761	3,468		100,936
N.S.	11,374	6,128	12,344	5,339	3,200	79,765
N.B.	5,730	2,708	3,714	1,550	-	56,330
Que.	145,110	96,396	86,024	62,370	76,965	1,383,581
Ont.	211,133	116,845	60,494	43,428	33,332	2,361,667
East	386,745	226,927	167,337	116,155	113,497	3,982,279
Man.	77,033	46,203	40,188	59,041	71,662	1,070,571
Sask.	46,490	33,028	26,254	17,390	9,107	1,145,274
Alta.	102,009	63,299	81,128	44,131	11,108	1,815,237
B.C.	6,880	4,375	4,808	6,095	8,781	78,621
West	232,412	146,905	152,378	126,657	100,658	4,109,703

Source: 1971 Census of Agriculture

<u>Table C. 2</u>

Number of Pigs for All Operations According to Size Ranges - 1976

_						
	1-19	20-50	51-100	101-150	151-250	251-500
Canada	208,225	383,408	509,410	403,272	637,383	1,153,172
P.E.I.	4,059	8,915	10,287	6,544	10,073	16,563
N.S.	2,194	2,284	2,466	3,090	4,367	13,403
N.B.	3,537	3,949	2,020	2,043	2,628	8,520
Que.	. 23,716	47,797	74,582	72,020	125,419	287,365
Ont.	49,247	130,750	217,697	166,615	260, 299	489,561
East	82,753	193,695	307,052	250,312	402,786	815,412
Man.	19,236	32,262	40,559	38,381	75,137	117,442
Sask.	52,019	64,384	60,891	48,221	59,674	68,666
Alta.	46,571	89,437	98,098	64,026	95,860	145,294
B.C.	7,646	3,630	2,810	2,332	3,926	6,358
West	125,472	189,713	202,358	152,960	234,597	337,760
	501-750	751-1000	1001-1500	1501-2500	2501 & over	Total
Canada	605,053	435,449	438,547	459,121	540,841	5,773,881
P.E.I.	11,779	5,171	3,600	1,700	-	78,691
N.S.	10,647	8,020	11,096	9,766	6,100	73,433
N.B.	3,640	3,456	4,684	5,495	-	39,972
Que.	161,569	148,770	194,641	172,652	308,628	1,617,159
Ont.	244,728	142,075	97,614	66,728	48,347	1,913,661
East	432,363	307,492	311,635	256,341	363,075	3,722,916
Man.	60,804	34,282	26,764	68,153	112,914	625,934
Sask.	32,364	18,905	27,111	35,690	23,344	491,269
Alta.	73,901	71,183	68,222	97,382	28,239	878,213
B.C.	5,621	3,587	4,815	1,555	13,269	55,549
West	172,690	127,957	126,912	202,780	177,766	2,050,965

Source: 1976 Census of Agriculture

Number of Pigs for All Operations According to Size Ranges - 1981

	1-19	20-50	51-100	101-150	151-250	251-500
Canada	153,623	289,177	439,808	412,672	743,698	1,645,866
P.E.I. N.S. N.B. Que. Ont.	2,768 1,959 2,834 12,754 41,083	7,253 2,011 3,446 30,126 108,712	10,968 2,160 2,888 59,687 188,193	9,153 2,747 2,274 67,045 180,168	15,626 6,976 3,585 129,052 316,797	27,868 17,730 11,318 363,785 731,210
East	61,398	151,548	263,896	261,387	472,036	1,151,911
Man. Sask. Alta. B.C.	14,428 36,322 32,590 8,885	23,238 46,595 62,764 5,032	35,902 53,343 83,386 3,281	41,540 39,748 66,577 3,420	77,825 70,907 115,628 7,302	164,835 107,539 201,681 19,900
West	92,225	137,629	175,912	151,285	271,662	493,955
Canada	501-750 1,273,799	751-1000 912,188	1001-1500 1,225,789	1501-2500 1,283,804	2501 & over	<u>Total</u> 9,855,989
P.E.I. N.S. N.B. Que. Ont.	19,804 23,506 11,587 349,494 522,154	13,837 15,513 17,868 320,572 339,232	9,566 15,859 23,272 563,683 316,876	34,879 10,548 686,439 218,804	16,004 858,087 202,608	116,843 139,344 89,620 3,440,724 3,165,837
East	926,545	707,022	929,256	950,670	1,076,699	6,952,368
Man. Sask. Alta. B.C.	102,113 65,021 149,180 30,940	55,851 15,117 109,330 24,868	60,286 46,905 125,540 63,802	74,572 45,136 161,513 51,913	224,405 47,701 91,208 35,552	874,995 574,334 1,199,397 254,895
West	347,254	205,166	296,533	333,134	398,866	2,903,621

Source: 1981 Census of Agriculture

<u>Table C. 4</u>

Number of Farms for All Operations by Size of Herd - 1971

	1-19	20-50	51-100	101-150	151-250	251-500
Canada	54,640	29,580	18,508	7,333	6,120	4,248
P.E.I.	1,143	499	200	77	43	- 51
N.S.	899	129	80	34	48	40
N.B.	1,287	220	102	37	35	31
Que.	8,441	3,707	2,191	920	934	774
Ont.	10,921	7,977	5,619	2,257	1,920	1,369
East	22,691	12,532	8,192	3,325	2,980	2,265
Man.	6,473	3,195	2,006	861	800	604
Sask.	14,149	6,122	3,144	1,136	885	492
Alta.	9,134	7,418	5,066	1,966	1,431	857
B.C.	2,193	313	100	45	24	30
West	31,949	17,048	10,316	4,008	3,140	1,983
	501-750	751-1000	1001-1500	1501-2500	2501 & over	Total
Canada	1,014	426	259	126	54	122,308
P.E.I.	22	5	4	2	-	2,046
N.S.	19	7	11	3	1	1,271
N.B.	9	3	3	1	-	1,728
Que.	234	109	68	33	17	17,428
Ont.	348	134	49	23	9	30,626
East	632	258	135	62	27	53,099
Man.	127	53	32	29	21	14,201
Sask.	77	38	21	9	2	26,075
Alta.	167	72	67	23	. 3	26,204
B.C.	11	5	4	3	1	2,729
West	382	168	124	64	27	69,209

Source: 1971 Census of Agriculture

<u>Table C. 5</u>

Number of Farms for All Operations by Size of Herd - 1976

	1-19	20-50	51-100	101-150	151-250	251-500
Canada	33,013	11,701	6,975	3,201	3,219	3,212
P.E.I.	580	274	139	52	49	46
N.S.	606	72	31	. 24	22	37
N.B.	716	127	30	16	13	22
Que.	3,904	1,428	1,007	572	628	790
Ont.	7,052	3,890	2,982	1,325	1,322	1,361
East	12,858	5,791	4,189	1,989	2,034	2,256
Man.	3,296	998	540	303	377	330
Sask.	8,369	2,036	843	377	302	198
Alta.	6,664	2,759	1,364	514	486	411
B.C.	1,826	117	39	18	20	` 17
West	20,155	5,910	2,786	1,212	1,185	956
	501-750	751-1000	1001-1500	1501-2500	2501 & over	Total
Canada	986	494	353	242	122	63,518
P.E.I.	19	6	3	1	_	1,169
N.S.	17	9	9	5	2	834
N.B.	6	4	4	3	-	941
Que.	261	167	158	90	62	9,067
Ont.	399	163	80	36	12	18,622
East	702	349	254	135	76	30,633
Man.	99	39	22	34	31	6,069
Sask.	55	22	22	17	5	12,246
Alta.	121	80	51	55	8	12,513
B.C.	9	4	4	1	2	2,057
West	284	145	99	107	46	32,885

Source: 1976 Census of Agriculture

Number of Farms for All Operations by Size of Herd - 1981

	MOUNDET OF	raims for	All operatio	is by size o	1 neru - 1701	
	1-19	20-50	51-100	101-150	151-250	251-500
Canada	23,922	8,821	6,064	3,334	3,802	4,595
P.E.1.	405	216	154	75	79	77
N.S.	479	61	28	21	37	46
N.B.	571	106	39	19	19	30
Que.	2,147	893	817	541	657	1,002
Ont.	5,782	3,240	2,586	1,456	1,622	2,049
East	9,384	4,516	3,624	2,112	2,414	3,204
Man.	2,323	723	491	329	391	461
Sask.	5,751	1,476	750	323	369	307
Alta.	4,614	1,941	1,152	542	591	569
B.C.	1,850	165	47	28	37	54
West	14,538	4,305	2,440	1,222	1,388	1,391
	501-750	751-1000	1001-1500	1501-2500	2501 & over	Total
Canada	2,086	1,044	1,007	673	351	55,699
P.E.1.	32	16	8	1-	-	1,062
N.S.	37	18	13	18	5	763
N.B.	19	20	20	6	-	849
Que.	567	364	457	359	189	7,993
Ont.	857	390	265	118	50	18,415
East	1,512	808	763	501	244	29,082
Man.	170	64	51	39	56	5,098
Sask.	108	18	38	23	14	9,177
Alta.	244	126	103	84	28	9,994
B.C.	52	28	52	26	9	2,348
West	574	236	244	172	107	26,617

Source: 1981 Census of Agriculture

APPENDIX D

Farms Classified by Type of Operation

<u>Table D. 1</u>

Pig Inventory Classified by Type of Operation - 1971

		Farms With	Farms With			
		Farrow/		A11	Less Than	All Farms
	Farrow	Finish	Finish	Operations	20 Pigs	With Pigs
Canada	1,155,570	3,622,422	2,923,723	7,701,715	390,267	8,091,982
P.E.I.	20,507	26,657	45,810	92,974	7,962	100,936
N.S.	12,600	32,155	31,542	76,297	3,468	79,765
N.B.	7,727	23,524	18,626	49,877	6,453	56,330
Que.	225,448	391,401	711,372	1,328,221	55,360	.1,383,581
Ont.	458,023	978,197	840,309	2,276,529	85,138	2,361,667
East	724,305	1,451,934	1,647,659	3,823,898	158,381	3,982,279
Man.	113,008	550,713	361,745	1,025,466	45,105	1,070,571
Sask.	119,224	591,814	333,154	1,044,192	101,082	1,145,274
Alta.	190,627	985,871	563,102	1,739,600	75,637	1,815,237
B.C.	8,406	42,090	18,063	68,559	10,062	78,621
West	431,265	2,170,488	1,276,064	3,877,817	231,886	4,109,703

Source: 1971 Census of Agriculture

<u>Table D. 2</u>

Pig Inventory Classified by Type of Operation - 1976

		Farms Wi	Farms With			
	Farrow	Farrow/ Finish	Finish	All Operations	Less Than 20 Pigs	All Farms With Pigs
Canada	857,814	2,604,742	2,103,100	5,565,656	208,225	5,773,881
P.E.I. N.S. N.B. Que. Ont.	15,411 10,501 4,590 257,318 371,901	28,503 38,579 22,979 444,172 860,693	30,718 22,159 8,866 891,953 631,820	74,632 71,239 36,435 1,593,443 1,864,414	4,059 2,194 3,537 23,716 49,247	78,691 73,433 39,972 1,617,159 1,913,661
East	659,721	1,394,926	1,585,516	3,640,163	82,753	3,722,916
Man. Sask. Alta. B.C.	61,202 53,330 77,272 6,289	382,606 272,473 523,738 30,999	162,890 113,447 230,632 10,615	606,698 439,250 831,642 47,903	19,236 52,019 46,571 7,646	625,934 491,269 878,213 55,549
West	198,093	1,209,816	517,584	1,925,493	125,472	2,050,965

Source: 1976 Census of Agriculture

<u>Table D. 3</u>

Pig Inventory Classified by Type of Operation - 1981

7	Fa	rms With 20	or More Pi	gs	Farms with		
		Farrow/		A11	Less Than	All Farms	
	Farrow	Finish	Finish	<u>Operations</u>	20 Pigs	With Pigs	
Canada	1,608,547	5,407,448	2,686,371	9,702,366	153,623	9,855,989	
P.E.I.	26,641	49,955	37,479	114,075	2,768	116,843	
N.S.	10,432	99,105	27,848	137,385	1,959	139,344	
N.B.	16,218	56,198	14,370	86,786	2,834	89,620	
Que.	765,595	1,260,765	1,401,610	3,427,970	12,754	3,440,724	
Ont.	476,012	1,996,895	651,847	3,124,754	41,083	3,165,837	
East	1,294,898	3,462,918	2,133,154	6,890,970	61,398	6,952,368	
Man.	109,046	563,310	188,211	860,567	14,428	874,995	
Sask.	65,400	366,984	105,628	538,012	36,322	574,334	
Alta.	119,658	817,267	229,882	1,166,807	32,590	1,199,397	
B.C.	19,545	196,969	29,496	246,010	8,885	254,895	
West	313,649	1,944,530	553,217	2,811,396	92,225	2,903,621	

Source: 1981 Census of Agriculture

<u>Table D. 4</u>
Farms Reporting Pigs Classified by Type of Operation - 1971

	Fax	rms With	20 or More	Pigs	Farms With			
	Farrow	Farrow/ Finish	Finish	All Operations	Less Than 20 Pigs	All Farms With Pigs		
Canada	14,950	27,788	24,930	67,668	54,640	122,308		
P.E.I. N.S. N.B. Que. Ont.	348 111 130 3,018 5,305	229 135 163 2,633 7,188	326 126 148 3,336 7,212	903 372 441 8,987 19,705	1,143 899 1,287 8,441 10,921	2,046 1,271 1,728 17,428 30,626		
East	8,912	10,348	11,148	30,408	22,691	53,099		
Man. Sask. Alta. B.C.	1,376 1,957 2,558 147	3,266 5,649 8,295 230	3,086 4,320 6,217 159	7,728 11,926 17,070 536	6,473 14,149 9,134 2,193	14,201 26,075 26,204 2,729		
West	6,038	17,440	13,782	37,260	31,949	69,209		

Source: 1971 Census of Agriculture

<u>Table D. 5</u>

Farms Reporting Pigs Classified by Type of Operation - 1976

	F	arms With 20	Pigs	Farms With		
		Farrow/		All	Less Than	All Farms
	Farrow	Finish	Finish	Operations	20 Pigs	With Pigs
Canada	8,902	11,690	9,913	30,505	30,013	63,518
P.E.I.	248	150	191	589	580	1,169
N.S.	73	94	61	228	606	834
N.B.	87	80	58	225	716	941
Que.	2,061	1,254	1,848	5,163	3,904	9,067
Ont.	3,579	4,251	3,740	11,570	7,052	18,622
East	6,048	5,829	5,898	17,775	12,858	30,633
Man.	701	1,189	883	2,773	3,296	6,069
Sask.	962	1,732	1,183	3,877	8,369	12,246
Alta.	1,114	2,850	1,885	5,849	6,664	12,513
B.C.	77	90	64	231	1,826	2,057
West	2,854	5,861	4,015	12,730	20,155	32,885

Source: 1976 Census of Agriculture

<u>Table D. 6</u>

Farms Reporting Pigs Classified by Type of Operation - 1981

	Fa	rms With	20 or More	e Pigs	Farms With	
	Farrow/			All	Less Than	All Farms
	Farrow	Finish	Finish	Operations	20 Pigs	With Pigs
Canada	10,204	13,432	8,141	31,777	23,922	55,699
P.E.I.	325	188	144	657	405	1,062
N.S.	78	151	55	284	479	763
N.B.	115	108	55	278	571	849
Que.	3,060	1,387	1,399	5,846	2,147	7,993
Ont.	3,520	5,958	3,155	12,633	5,782	18,415
East	7,098	7,792	4,808	19,698	9,384	29,082
Man.	819	1,112	844	2,775	2,323	5,098
Sask.	942	1,526	958	3,426	5,751	9,177
Alta.	1,212	2,731	1,437	5,380	4,614	9,994
B.C.	133	271	94	498	1,850	2,348
West	3,106	5,640	3,333	12,079	14,538	26,617

Source: 1981 Census of Agriculture

APPENDIX E

SOWS AND BRED GILTS ON FARROWING AND FARROW TO FINISH OPERATIONS

Number of Sows on Farrowing Operations Classified by
Number of Sows and Province - 1981

Province	1-10	11-20	21-60	61-100	101-200	201-300	301+	Total
Canada	19,832	32,728	106,199	78,397	110,473	25,821	28,706	402,156
P.E.I. N.S. N.B. Que. Ont.	668 99 366 2,877 7,694	1,562 259 316 8,642 12,762	3,582 945 492 38,198 36,241	1,335 683 1,162 37,000 23,200	758 1,409 74,583 20,211	515 17,984 5,119	20,223 4,737	7,147 2,744 4,230 199,507 109,964
East	11,674	23,541	79,458	63,380	96,961	23,618	24,960	323,592
Man. Sask. Alta. B.C.	1,567 2,848 3,401 342 8,158	2,415 2,911 3,590 271 9,187	10,395 5,944 9,429 973 26,741	6,176 2,469 5,676 696	5,297 1,578 4,920 1,717	510 228 1,000 465 2,203	2,895 - 851 - 3,746	29,255 15,978 28,867 4,464 78,564
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Number of Farms Reporting Sows on Farrowing Operations Classified by
Number of Sows and Province - 1981

Province	1-10	11-20	21-60	61-100	101-200	201-300	301+	Total
Canada	3,282	2,125	2,894	961	784	104	54	10,204
P.E.I.	103	101	104	17	-	_	-	325
N.S.	18	18	27	9	6		-	78
N.B.	54	21	14	14	10	2	-	115
Que.	425	546	1,004	448	524	73	40	3,060
Ont.	1,223	837	995	288	148	20	9	3,520
East	1,823	1,523	2,144	776	688	95	49	7,098
Man.	259	156	284	77	38	2	3	819
Sask.	532	191	176	31	11	1	-	942
Alta.	603	237	262	69	35	4	2	1,212
B.C.	65	18	28	8	12	2	-	133
West	1,459	602	750	185	96	9	5	3,106

Number of Sows on Farrow to Finish Operations Classified by
Number of Sows and Province - 1981

Province	1-10	11-20	21-60	61-100	101-200	201-300	301+	Total
Canada	25,364	35,527	143,466	116,478	170,514	61,357	79,181	631,887
P.E.I. N.S. N.B. Que. Ont.	461 182 173 1,132 10,116	525 211 131 2,087 17,017	2,440 1,414 1,022 12,017 76,497	1,740 3,123 1,824 21,133 56,130	645 4,021 2,994 54,724 56,016	1,968 - 20,242 11,060	29,166 21,903	5,811 11,222 6,144 140,501 248,739
East	12,064	19,971	93,390	83,950	118,400	33,270	51,372	412,417
Man. Sask. Alta. B.C.	1,886 4,081 7,015 318	3,022 4,872 7,284 378	13,333 12,739 22,089 1,915	8,225 5,283 15,673 3,347	10,150 8,418 24,012 9,534	8,213 3,804 12,611 3,459	17,835 2,469 3,679 3,826	62,664 41,666 92,363 22,777
West	13,300	15,556	50,076	32,528	52,114	28,087	27,809	219,470

Number of Farms Reporting Sows on Farrow to Finish Operations
Classified by Number of Sows and Province - 1981

Province	1-10	11-20	21-60	61-100	101-200	201-300	301+	Total
Canada	4,332	2,289	3,744	1,449	1,212	245	161	13,432
P.E.I. N.S. N.B. Que. Ont.	66 28 31 193 1,651	31 13 8 134 1,103	64 34 24 298 1,991	22 40 22 257 706	5 27 23 374 417	80 44	1 - 51 46	188 151 108 1,387 5,958
East	1,969	1,289	2,411	1,047	846	132	98	7,792
Man. Sask. Alta. B.C.	316 731 1,250 66	192 309 474 25	354 342 590 47	103 66 190 43	73 57 166 70	31 16 52 14	43 5 9 6	1,112 1,526 2,731 271
West	2,363	1,000	1,333	402	366	113	63	5,640

APPENDIX F

MARKET PIGS ON FARROW TO FINISH AND FINISHING OPERATIONS

Number of Market Pigs on Farrow to Finish Operations Classified by
Market Pigs and Province - 1981

-			-9-			
Province	1-19	20-50	51-100	101-150	151-250	251-500
Canada	7,262	89,968	176,309	177,349	337,208	819,008
P.E.I. N.S. N.B. Que. Ont.	113 69 100 411 2,689	1,317 739 688 4,267 35,995	2,500- 527- 835- 9,792- 83,370	2,585 1,423 796 8,689 86,531	5,974 3,013 609 25,534 163,260	11,864 9,410 5,618 78,670 432,187
East	3,382	43,006	97,024	100,024	198,390	537,749
Man. Sask. Alta. B.C.	556 1,457 1,554 313	6,064 14,725 24,883 1,290	12,420 22,512 42,758 1,595	14,542 24,847 36,923 1,013	33,282 36,884 64,888 3,764	80,047 63,044 121,635 16,533
West	3,880	46,962	79,285	77,325	138,818	281,259
	501-750	751-1000	1001-1500	1501-2500	2501+	Total
Canada	641,415	525,843	664,086	636,553	663,150	4,738,151
P.E.I. N.S. N.B. Que. Ont.	8,980 18,456 9,387 107,538 304,846	5,791 11,088 20,065 138,257 206,760	4,680 15,313 8,504 246,705 170,661	24,705 3,130 230,405 104,887	2,523 263,829 141,706	43,804 87,266 49,732 1,114,097 1,732,892
East	449,207	381,961	445,863	363,127	408,058	3,027,791
Man. Sask. Alta. B.C.	46,455 33,212 95,917 16,624	38,986 14,718 66,941 23,237	37,373 39,060 94,434 47,356	66,676 40,642 125,959 40,149	160,158 31,118 42,692 21,124	496,559 322,219 718,584 172,998
West	192,208	143,882	218,223	273,426	255,092	1,710,360

Number of Farms Reporting Market Pigs on Farrow to Finish Operations
Classified by Market Pigs and Province - 1981

Province	1-19	20-50	151-100	101-150	51-250	251-50
Canada	429	2,632	2,352	1,408	1,695	2,237
P.E.I.	7	38	. 33	21	31	32
N.S.	4	21	7	11	15	24
N.B.	6	21	11	6	3	14
Que.	24	126	130	68	126	210
Ont.	160	1,031	1,104	689	820	1,187
East	201	1,237	1,285	795	995	1,467
Man.	33	183	166	116	166	219
Sask.	85	443	304	195	188	178
Alta.	92	727	575	294	327	331
B.C.	18	42	22	8	19	42
West	228	1,395	1,067	613	700	770
	501-750	751-1000	1001-1500	1501-2500	2501+	Total
Canada	1,041	602	540	332	164	13,432
P.E.I.	15	7	4	-	-	188
N.5.	30	13	12	13	1	151
N.B.	15	23	7	2		108
Que.	173	156	199	121	54	1,387
Ont.	495	239	140	57	36	5,958
East	728	438	362	193	91	7,792
Man.	76	44	30	34	45	1,112
Sask.	56	16	32	20	9	1,526
Alta.	154	77	76	64	14	2,731
B.C.	27	27	40	21	5	271
West	313	164	178	139	73	5,640

Number of Market Pigs on Finishing Operations Classified by
Market Pigs and Province - 1981

		TIGE ROC !	190 and 11012	1701		_
Province	1-19	20-50	51-100	101-150	151-250	251-500
Canada	107	84,885	103,423	92,539	179,202	431,849
P.E.I.	-	1,343	1,471	1,500	3,712	12,855
N.S.	-	331	175	838	1,845	4,231
N.B.	-	634	1,030	379	582	2,114
Que.	16	4,545	6,704	10,953	23,767	95,882
Ont.	52	33,731	48,701	40,391	78,661	167,467
East	68	40,584	58,081	54,061	108,567	282,549
Man.	-	7,579	10,481	12,811	23,791	58,252
Sask.	1	15,304	13,197	9,838	17,837	28,386
Alta.	38	20,282	20,929	15,343	26,928	58,223
B.C.	-	1,136	735	486	2,079	4,439
West	39	44,301	45,342	38,478	70,635	149,300
	501-750	751-1000	1001-1500	1501-2500	2501+	Total
Canada	272,209	240,153	337,669	410,595	524,119	2,676,750
P.E.I.	7.020	6,136	3,325	_	_	37,362
N.S.	5,059	1,655	1,500	4,310	7,900	27,844
N.B.	1,157	1,000	5,027	2,300	_	14,223
Que.	82,842	118,242	234,673	343,440	475,768	1,396,943
Ont.	93,998	72,006	59,012	42,960	12,651	649,630
East	190,076	199,150	303,537	393,010	496,319	2,126,002
Man.	33,502	16,146	9,386	3,400	12,300	187,648
Sask.	14,383	3,390	1,200	1,600	_	105,136
Alta.	27,947	20,567	20,171	8,460	9,700	228,588
B.C.	6,301	900	3,375	4,125	5,800	29,376
West	82,133	41,003	34,132	17,585	27,800	550,748

Number of Farms Reporting Market Pigs on Finishing Operations
Classified by Market Pigs and Province - 1981

_						
Province	1-19	20-50	51-100	101-150	151-250	251-500
Canada	7	2,656	1,383	721	890	1,175
P.E.I.		39	20	12	18	34
N.S.		11	2	6	10	11
N.B.	-	21	14	3	3	6
Que.	1	130	. 83	85	116	253
Ont.	3	1,019	655	313	394	464
East	4	1,220	774	419	541	768
Man.	-	246	137	98	117	160
Sask.	1	502	181	80	89	75
Alta.	2	649	280	120	133	160
B.C.	-	39	11	4	10	12
West	3	1,436	609	302	349	407
	501 -750	751-1000	1001-1500	1501-2500	2501+	Total
Canada	437	267	270	212	118	8,136
P.E.I.	11	7	3	_		144
N.S.	8	2	1	2	2	55
N.B.	2	1	4	1	_	55
Que.	131	130	186	176	106	1,397
Ont.	151	80	47	23	4	3,153
East	303	220	241	202	112	4,804
Man.	55	18	8	2	2	843
Sask.	24	4	1	1	-	958
Alta.	45	24	17	5	2	1,437
B.C.	10	1	3	2	2	94
West	134	47	29	10	6	3,332

APPENDIX G

Pigs and Cropland

<u>Table G. 1</u>

Number of Pigs Distributed by Cropland Area - 1981

Province	1-32	33-72	73-127	128-192	193-277
Canada	718,831	1,122,847	1,636,159	1,140,979	954,611
	•				Í
P.E.I.	6,005	16,040	21,350	16,004	15,242
N.S.	18,574	18,611	16,971	14,726	13,424
N.B.	11,185	11,650	10,484	7,799	9,780
Que.	383,909	614,660	714,357	340,679	253,845
Ont.	145,494	369,109	734,367	597,480	443,209
East	565,167	1,030,070	1,497,529	976,688	735,500
Man.	26,331	21,952	24,917	40,734	63,230
Sask.	7,354	10,343	17,374	24,935	44,605
Alta.	33,469	42,544	73,858	83,764	107,387
B.C.	86,510	17,938	22,481	14,858	3,889
West	153,664	92,777	138,630	164,291	219,111
Province	278-362	363-572	573-947	948+	Total
Canada	4,057	5,524	3,357	1,593	55,699
P.E.I.	37	41	15	6	1,062
N.S.	13	4	3	4	763
N.B.	10	12	2	2	849
Que.	143	61	24	3	7,993
Ont.	688	554	172	58	18,415
East	891	672	216	73	29,082
Man.	595	906	595	326	5,098
Sask.	1,341	2,142	1,506	593	9,177
Alta.	1,190	1,746	1,018	589	9,994
B.C.	40	58	22	12	2,348
West	3,166	4,852	3,141	1,520	26,617

<u>Table G. 2</u>

Number of Farms Reporting Pigs Distributed by Cropland Area - 1981

Province	No Cropland	1-32	33-72	73-127	128-192	193-277
Canada	5,008	5,751	8,342	9,777	6,747	5,543
P.E.I.	47	130	291	262	145	88
N. S.	119	281	178	93	36	32
N.B.	117	255	202	151	67	- 31
Que.	1,173	1,171	2,144	2,016	855	403
Ont.	1,279	2,250	4,012	4,918	2,881	1,603
East	2,735	4,087	6,827	7,440	3,984	2,157
Man.	441	240	319	470	544	662
Sask.	378	166	296	602	877	1,266
Alta.	719	429	639	1,068	1,218	1,378
B.C.	735	829	261	197	114	80
West	2,273	1,664	1,515	2,337	2,763	3,386
Province	278-362	363-57	12 57	73-947	948+	Total
0 - 1	/- 057	5 50/		167	4 507	55 (00
Canada	4,057	5,524		3,357	1,593	55,699
P.E.I.	37	41		15	6	1,062
N.S.	13	4	-	3	4	763
N.B.	10	12		2	2	849
Que.	143	61		24	3	7,993
Ont.	688	554		172	58	18,415
East	891	672		216	73	29,082
Man.	595	906		595	326	5,098
Sask.	1,341	2,142	1	,506	593	9,177
Alta.	1,190	1,746		,018	589	9,994
B.C.	40	58		22	12	2,348
West	3,166	4,852	3	,141	1,520	26,617

Table G. 3

Cropland Distributed by Cropland Area - 1981

Province	1-32	33-72	73-127	128-192	193-277
			-acres-		
Canada	90,365	443,061	949,646	1,061,304	1,281,918
P.E.I.	2,249	15,565	25,117	22,925	20,271
N.S.	4,428	8,706	9,013	5,455	7,155
N.B.	4,133	10,165	14,234	10,205	6,945
Que.	19,555	114,001	195,059	132,209	89,866
Ont.	36,963		472,161	450,228	366,652
one.	70,707	210,110	4/2,101	450,220	200,022
East	67,328	363,555	715,584	621,022	490,889
Man.	3,954	16,642	47,175	87,191	155,423
Sask.	2,847	15,971	60,532	143,173	296,009
Alta.	7,229		107,264	192,463	321,307
		•		17,455	18,290
B.C.	9,007	12,679	19,091	17,433	10,270
West	23,037	79,506	234,062	440,282	791,029
Province	278-362	363-572	573-947	948+	Total
			-acres-		
Canada	1,285,400	2,497,465	2,402,2932	, 815,765	12,827,21
P.E.I.	11,895	18,428	10,535	6,793	133,77
N.S.	4.120	1,696	2,080	4,067	46,72
N.B.	3,282	5,004	1,238	2,715	57,92
Que.	44,687	26,433	16,658	3,203	641,67
Ont.	217,127	242,581	121,766	46,435	2,169,03
East	281,111	294,142	152,277	63,213	3,049,12
Man.	188,958	412,932	429,519	618,931	1,960,72
Sask.	425,988	972,582	1,072,576	923,575	3,913,25
Alta.	376,665	791,645	732,3441		3,746,92
B.C.	12,578	26,164	15,577	26,249	157,19
0.0.	12,010	20, 104	12,277	20,24)	121912
West	1,004,289	2,203,323	2,250,0162	752,552	9,778,09

APPENDIX H

Pigs and Cattle

Number of Pigs Distributed by Size of Cattle Herd for Farms Reporting Cattle and Pigs - 1981

Province	1-17	18-77	78-177	178-272	273-527	528+	Total
Canada	987,356	1,836,797	1,154,528	194,280	196,060	165,046	4,534,067
P.E.I.	13,858	35,530	18,442	2,320	3,067	20	73,237
N.S.	17,715	26,691	14,257	2,293	514	-	61,470
N.B.	14,201	14,568	9,902	1.454	1,625	-	41,750
Que.	177,097	623,625	265,870	16,846	17,935	2,838	1,104,211
Ont.	354,082	606,133	364,226	65,000	53,829	29,337	1,472,607
East	576,953	1,306,547	672,697	87,913	76,970	32,195	2,753,275
Man.	123,420	126,564	165,698	25,296	11,550	1,526	454,054
Sask.	87,574	113,276	95,680	14,116	18,109	24,661	353,416
Alta.	110,917	250,240	198,846	63,977	87,173	104,136	815,289
B.C.	88,492	40,170	21,607	2,978	2,258	2,528	158,033
West	410,403	530,250	481,831	106,367	119,090	132,851	1,780,792

Number of Cattle Distributed by Size of Cattle Herd for Farms Reporting Cattle and Pigs - 1981

Province	1-17	18-77	78-177	178-272	273-527	528+	Total
Canada	94,304	864,281	865,892	274,494	243,779	233,528	2,576,278
P.E.I.	2,143	20,331	12,241	1,222	2,284	650	38,871
N.5.	2,148	9,696	6,718	1,282	579	-	20,423
N.B.	2,629	12,123	6,162	1,300	1,623	-	23,837
Que.	10,277	146,306	68,342	7,463	4,107	2,664	239,159
Ont.	29,207	280,352	252,963	58,554	61,556	41,518	724,150
East	46,404	468,808	346,426	69,821	70,149	44,832	1,046,440
Man.	9,398	69,919	88,835	29,925	22,900	3,999	224,976
Sask.	15,818	157,861	172,698	52,107	34,022	31,089	463,595
Alta.	15,204	152,320	237,686	111,475	105,377	124,328	746,390
B.C.	7,480	15,373	20,247	11,166	11,331	29,280	94,877
West	47,900	395,473	519,466	204,673	173,630	188,696	1,529,838

<u>Table H. 3</u>

Number of Farms Reporting Cattle and Pigs by Size of Cattle Herd - 1981

Province	1-17	18-77	78-177	178-272	273-527	528+	Total
Canada	11,945	20,138	7,773	1,276	679	226	42,037
P.E.I. N.S. N.B. Que. Ont.	224 285 313 1,236 3,765	506 252 322 3,341 6,542	115 56 59 657 2,328	6 6 36 273	7 2 5 11 169	1 - - 4 44	859 601 705 5,285 13,121
East	5,823	10,963	3,215	327	194	49	20,571
Man. Sask. Alta. B.C.	1,164 1,891 1,930 1,137	1,615 3,651 3,486 423	783 1,543 2,063 169	142 242 514 51	66 95 292 32	35 122 14	3,776 7,457 8,407 1,826
West	6,122	9,175	4,558	949	485	177	21,466

APPENDIX I

Feed Expenditures

Table I. 1
Feed Expenses by Type of Operation

Province	Farrow	Finishing	Finish
Canada	133,549,704	194,471,863	447,593,123
P.E.I.	2,356,326	3,991,595	4,393,809
N.S.	1,183,745	4,535,849	11,584,688
N.B.	1,688,639	1,848,711	6,136,487
Que.	66,941,944	64,405,468	127,016,485
Ont.	41,586,301	70,602,237	160,229,037
East	113,756,955	145,383,860	309,360,506
Man.	6,635,904	13,081,171	40,286,521
Sask.	3,455,792	13,100,765	23,601,940
Alta.	7,699,841	18,762,284	56, 267, 910
B.C.	2,001,212	4,143,783	18,076,246
West	19,792,749	49,088,003	138,232,617
	Farms Greater	Farms Less	
	Than 20	Than 20	
Province	Pigs	Pigs	All Farms
Canada	775,614,690	66,802,696	842,417,386
P.E.I.	10,741,730	1,240,342	11,982,072
N.S.	17,304,282	1,946,262	19,250,544
N.B.	9,673,837	1,699,289	11,373,126
Que.	258,363,897	7,855,285	266,219,182
Ont.	272,417,575	20,068,907	292,486,482
East	568,501,321	32,810,085	601,311,406
Man.	60,003,596	5,097,626	65,101,222
Sask.	40,158.497	8,948,844	49,107,341
Alta.	82,730,035	12,020,365	94,750,400
B.C.	24,221,241	7,925,776	32,147,017
West	207,113,369	33,992,611	241,105,980

<u>Table I. 2</u>

Number of Farms Reporting Feed Expenses by Type of Operation - 1981

Province	Farrow	Farrow Finishing	Finish	Farms Greater Than 20 Pigs	Farms Less Than 20 Pigs	All Farms
Canada	9,325	12,711	7,118	29,154	19,359	48,513
P.E.I. N.S. N.B.	306 76 100	180 146 104	137 52 49	623 274 253	355 434 484	978 708 737
Que. Ont.	2,787 3,297	1,281 5,738	961 2,895	5,029 11,930	1,788 4,906	6,817 16,836
East	6,566	7,449	4,094	18,109	7,967	26,076
Man. Sask. Alta. B.C.	752 833 1,052 122	1,065 1,415 2,530 252	788 851 1,302 83	2,605 3,099 4,884 457	1,843 4,256 3,659 1,634	4,448 7,355 8,543 2,091
West	2,759	5,262	3,024	11,045	11,392	22,437

APPENDIX J

Gross Farm Sales

<u>Iable J. 1</u>

<u>Gross Farm Sales - 1981</u>

		Farrow/	
Province	Farrow	Finish	Finish
Canada	450,598,834	1,319,170,658	844,178,793
P.E.I.	11,911,871	13,115,655	14,554,294
N.S.	2.791,232	20,044,643	10,095,083
N.B.	3,183,380	9,641,275	4,088,318
Que.	148,570,507	202,216,989	150,316,090
Ont.	159, 157, 961	505,217,710	359,654,443
East	325,614,951	750,236,272	538,708,228
		1/0 504 057	75 047 777
Man.	33,627,385	148,581,257	75,816,667
Sask.	37,762,571	119,246,910	84,456,264
Alta.	46,869,822	270,593,814	133,972,803
B.C.	6,724,105	30,512,405	11,224,831
West	124,983,883	568,934,386	305,470,565
	Farms Greater	Farms Less	
	Than 20	Than 20	
Province	Pigs	Pigs	All Farms
Canada	2,613,948,285	626,210,005	3,240,158,290
P.E.I.	39,581,820	6,554,459	46,136,279
N.S.	32,930,958	6,517,922	39,448,880
N.B.	16,912,973	6,141,607	23,054,580
Que.	501,103,586	28,621,620	529,725,206
Ont.	1,024,030,114	118,043,026	1,142,073,140
East	1,614,559,451	165,878,634	1,780,438,085
Man.	258,025,309	69,690,507	327,715,816
Sask.	241,465,745	210,254,628	451,720,373
Alta.	451,436,439	152,732,073	604, 168, 512
B.C.	48,461,341	27,654,163	76,115,504
West	999,388,834	460,331,371	1,459,720,205
Source:	1981 Census of Agriculture		

<u>Table J. 2</u>

Number of Farms Reporting Gross Farm Sales - 1981

Province	Farrow	Farrow/ Finish	Finish	Farms Greater Than 20 Pigs	Farms Less Than 20 Pigs	All Farms	
Canada	10,204	13,432	8,141	31,777	23,922	55,699	
P.E.I. N.S. N.B.	325 78 115	188 151 108	144 55 55	657 284 278	405 479 571	1,062 763 849	
Que. Ont.	3,060 3,520	1,387 5,958	1,399 3,155	5,846 12,633	2,147 5,782	7,993 18,415	
East	7,098	7,792	4,808	19,698	9,384	29,082	
Man. Sask. Alta. B.C.	819 942 1,212 133	1,112 1,526 2,731 271	958 1,437 94	2,775 3,426 5,380 498	2,323 5,751 4,614 1,850	5,098 9,177 9,994 2,348	
West	3,106	5,640	3,333	12,079	14,538	26,617	

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