

1982 Census of Agriculture

AC82-A-21

Volume 1
GEOGRAPHIC AREA SERIES

Part 21

Massachusetts

State and County Data



U.S. Department of Commerce
BUREAU OF THE CENSUS

The publications
from the 1982 Economic and
Agriculture Censuses are dedicated
to the memory of Shirley Kallek,
Associate Director for Economic Fields.
During her career at the Bureau of the
Census (1955 to 1983), she continually
directed efforts to improve
the timeliness and accuracy of
economic statistics.

1982 Census of Agriculture

AC82-A-21

Volume 1
GEOGRAPHIC AREA SERIES

Part 21

Massachusetts State and County Data

Issued September 1984



U.S. Department of Commerce
Malcolm Baldrige, Secretary
Clarence J. Brown, Deputy Secretary
Sidney Jones, Under Secretary for
Economic Affairs

BUREAU OF THE CENSUS
John G. Keane,
Director



BUREAU OF THE CENSUS
John G. Keane, Director
C.L. Kincannon, Deputy Director
Charles A. Waite, Associate Director
for Economic Fields
Michael G. Farrell, Assistant Director for
Economic and Agriculture Censuses

AGRICULTURE DIVISION
John H. Berry, Chief

ACKNOWLEDGMENTS—Many persons participated in conducting the 1982 Census of Agriculture. Primary direction was by **Shirley Kalek**, Associate Director for Economic Fields (to May 1983), **Charles A. Waite**, her successor, and **Michael G. Farrell**, Assistant Director for Economic and Agriculture Censuses.

This report was prepared in the Agriculture Division under the general supervision of **Orvin L. Wilhite**, Chief (to January 1980); **Arnold L. Bollenbacher**, Chief (to June 1982); and **John H. Berry**, Chief (from July 1982).

Many divisions contributed to this report. Data Preparation performed the clerical processing; Administrative Services provided the forms design and other administrative services; Publications Services contributed in publication planning and design, editorial review, composition, and printing procurement; Computer Services provided the computer processing facilities; Field provided selected data collection activities; and Economic Surveys assisted in preparation of data collection and processing procedures and computer programs.

Members of the Census Advisory Committee on Agriculture Statistics and representatives of both public and private organizations made significant recommendations which helped establish data content.

Members of various agencies of the U.S. Department of Agriculture provided valuable advice in the planning, publicizing, and processing phases of the census, and in helping farmers and ranchers complete the report forms.

The press, farm magazines, radio and television stations, and farm organizations were most helpful in publicizing the census and encouraging cooperation of farm and ranch operators.

Special tribute is paid to the millions of farm and ranch operators who furnished the information requested. Only through their cooperation was it possible to collect and publish the data in this report.

Library of Congress Cataloging in Publication Data

Main entry under title:

1982 census of agriculture.

"October 1983."

Includes indexes.

Supt. of Docs. no.: C3.31/4:982/v.1/pt.

1. Agriculture—United States—Statistics. 1. United States. Bureau of the Census.

HD1769.A14 1983

338.1'0973

83-600308

For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

If you have any questions concerning the statistics in this report, call (301) 763-5230.

CONTENTS

	Page
Introduction	V
State Map	VII
Highlights of the State's Agriculture: 1982 and 1978	VIII

TABLES

CHAPTER 1. State Data

1. Farms, Land in Farms, and Land Use: 1982 and Earlier Census Years	1
2. Irrigation: 1982, 1978, and 1974	2
3. Selected Characteristics of Irrigated and Nonirrigated Farms: 1982 and 1978	2
4. Farms, Land in Farms, and Land Use, by Size of Farm: 1982 and 1978	3
5. Tenure and Characteristics of Operator and Type of Organization: 1982, 1978, and 1974	3
6. Selected Characteristics of Farms Operated by Females, Persons of Spanish Origin, and Specified Racial Groups: 1982 and 1978	4
7. Selected Farm Production Expenses: 1982, 1978, and 1974	6
8. Energy and Petroleum Products Expenses: 1982 and 1978	7
9. Storage Capacity and Fuel Expenses by Kind of Fuel: 1982	7
10. Farm Payroll, Employment, and Contract Labor Expenses: 1982 and 1978	7
11. Market Value of Agricultural Products Sold: 1982, 1978, and 1974	8
12. Commodity Credit Corporation Loans, Agricultural Services, and Direct Sales of Agricultural Products: 1982, 1978, and 1974	8
13. Value of Machinery and Equipment on Place: 1982 and 1978	9
14. Selected Machinery and Equipment on place: 1982 and 1978	9
15. Selected Characteristics of Farms by Standard Industrial Classification: 1982	9
16. Agricultural Chemicals Used, Including Fertilizer and Lime: 1982 and 1978	10
17. Livestock and Poultry—Inventory and Sales: 1982, 1978, and 1974	11
18. Poultry—Inventory and Sales: 1982 and 1978	11
19. Broilers and Started Pullets—Sales: 1982 and 1978	12
20. Poultry—Inventory and Sales by Size of Flock: 1982	12
21. Turkeys—Sales by Number Sold Per Farm: 1982	12
22. Cattle and Calves—Inventory: 1982 and 1978	13
23. Cattle and Calves—Sales: 1982 and 1978	13
24. Cattle and Calves—Inventory and Sales by Size of Herd: 1982	14
25. Cattle and Calves—Inventory and Sales by Size of Cow Herd: 1982	14
26. Cattle and Calves—Inventory and Sales by Size of Beef Cow Herd: 1982	14
27. Cattle and Calves—Inventory and Sales by Size of Milk Cow Herd: 1982	15
28. Cattle and Calves—Sales by Number Sold Per Farm: 1982	15
29. Hogs and Pigs—Inventory: 1982 and 1978	16
30. Hogs and Pigs—Sales: 1982 and 1978	16
31. Hogs and Pigs—Litters Farrowed: 1982 and 1978	16
32. Hogs and Pigs—Inventory and Sales by Size of Herd: 1982	17
33. Hogs and Pigs—Inventory and Sales by Number Sold Per Farm: 1982	17
34. Hogs and Pigs—Inventory, Sales, and Litters by Total Litters Farrowed: 1982	17
35. Sheep and Lambs—Inventory and Sales: 1982 and 1978	18
36. Sheep and Lambs—Inventory and Sales by Size of Flock: 1982	18
37. Sheep and Lambs—Inventory and Sales by Size of Ewe Flock: 1982	18
38. Other Livestock, Livestock Products, and Animal Specialties—Inventory and Sales: 1982 and 1978	19
39. Crops Harvested and Value of Production: 1982 and 1978	19
40. Specified Crops Harvested—Yield Per Acre Irrigated and Nonirrigated: 1982	20

41.	Specified Crops by Acres Harvested: 1982 and 1978	20
42.	Specified Fruits and Nuts by Bearing and Nonbearing Acres: 1982 and 1978	21
43.	Nursery and Greenhouse Products, Mushrooms, and Sod Grown for Sale by Value of Sales: 1982 and 1978	22
44.	Summary by Tenure of Operator: 1982	24
45.	Summary by Type of Organization: 1982	32
46.	Summary by Age and Principal Occupation of Operator: 1982	40
47.	Summary by Age and Principal Occupation of Operators for Farms With Sales of Less Than \$20,000: 1982	56
48.	Summary by Size of Farm: 1982	72
49.	Summary by Value of Agricultural Products Sold: 1982	88
50.	Summary by Standard Industrial Classification of Farm: 1982	104

CHAPTER 2. County Data

1.	Farms, Land in Farms, and Land Use: 1982 and 1978	120
2.	Irrigation: 1982 and 1978	123
3.	Market Value of Agricultural Products Sold and Farms by Standard Industrial Classification: 1982 and 1978	124
4.	Land in Farms, Harvested Cropland, and Irrigated Land: 1982 and 1978	128
5.	Tenure and Characteristics of Operator and Type of Organization: 1982 and 1978	131
6.	Selected Farm Production Expenses and Fuel Storage Capacity: 1982 and 1978	134
7.	Agricultural Chemicals Used, Including Fertilizer and Lime: 1982 and 1978	136
8.	Machinery and Equipment on Place: 1982 and 1978	137
9.	Hired Farm Labor—Workers and Payroll: 1982 and 1978	140
10.	Commodity Credit Corporation Loans, Agricultural Services, and Direct Sales of Agricultural Products: 1982 and 1978	143
11.	Cattle and Calves—Inventory and Sales: 1982 and 1978	144
12.	Hogs and Pigs—Inventory, Litters, and Sales: 1982 and 1978	148
13.	Sheep and Horses—Inventory and Sales: 1982 and 1978	150
14.	Poultry—Inventory and Sales: 1982 and 1978	151
15.	Selected Crops: 1982 and 1978	153
16.	Farms With Sales of \$10,000 or More: 1982 and 1978	155
17.	Milk Goats—Inventory and Sales: 1982 and 1978	164
18.	Angora Goats—Inventory and Sales: 1982 and 1978	*
19.	Mink and Their Pelts—Inventory and Sales: 1982 and 1978	164
20.	Colonies of Bees and Honey—Inventory and Sales: 1982 and 1978	164
21.	Fish Sales: 1982 and 1978	164
22.	Miscellaneous Poultry—Inventory and Sales: 1982 and 1978	165
23.	Miscellaneous Livestock and Animal Specialties—Inventory and Sales: 1982 and 1978	166
24.	Grains—Corn, Sorghum, Wheat, and Other Small Grains: 1982 and 1978	167
25.	Cotton, Tobacco, Soybeans, Dry Beans and Peas, Potatoes, Sugar Crops, and Peanuts: 1982 and 1978	167
26.	Field Seeds, Grass Seeds, Hay, Forage, and Silage: 1982 and 1978	168
27.	Vegetables, Sweet Corn, and Melons Harvested for Sale: 1982 and 1978	169
28.	Fruits and Nuts: 1982 and 1978	175
29.	Berries Harvested for Sale: 1982 and 1978	176
30.	Nursery and Greenhouse Products, Mushrooms, and Sod Grown for Sale: 1982 and 1978	178
31.	Other Crops: 1982 and 1978	*
32.	Farms Operated by Black and Other Races: 1982 and 1978	179
33.	Farms Operated by Black and Other Races by Tenure: 1982 and 1978	180
34.	Operators by Selected Racial Groups: 1982 and 1978	180
35.	Operators of Spanish Origin: 1982 and 1978	180
36.	Commodity Credit Corporation Loans by Commodity Group: 1982	*

APPENDIXES

A.	General Explanation	A-1
B.	Effect of the Area Sample on Census Comparability	B-1
C.	Report Form and Information Sheet	C-1

Index	Index 1
Publication Program	Inside back cover

*Not applicable.

INTRODUCTION

	Page
HISTORY	V
USES OF THE CENSUS	V
AUTHORITY AND AREA COVERED	V
FARM DEFINITION	V
COMPARABILITY OF DATA	V
TABULAR PRESENTATION	V
PRELIMINARY REPORTS	VI
MICROFICHE AND COMPUTER TAPES	VI
UNPUBLISHED DATA	VI
CENSUS DISCLOSURE RULES	VI
DEFINITIONS AND EXPLANATIONS	VI
"SEE TEXT" REFERENCE	VI
INVENTORIES, PRODUCTION, AND SALES DATA	VI
ABBREVIATIONS AND SYMBOLS	VI

HISTORY

The census of agriculture provides a periodic statistical picture of the Nation's farming, ranching, and related activities. The 1982 Census of Agriculture is the 22d taken by the U.S. Department of Commerce, Bureau of the Census.

The first agriculture census was taken in 1840 as part of the sixth decennial census of population. From 1840 to 1950, an agriculture census was taken as part of the decennial census. A separate mid-decade census of agriculture was conducted in 1925, 1935, and 1945. From 1954 to 1974, a census of agriculture was taken for the years ending in 4 and 9. In 1976, Congress authorized the census of agriculture to be taken for 1978 and 1982 to adjust the data reference year to coincide with the 1982 Economic Censuses covering manufacturing, mining, construction, retail trade, wholesale trade, service industries, and selected transportation activities. After 1982, the agriculture census will revert to a 5-year cycle and be taken covering years ending in 2 and 7.

USES OF THE CENSUS

The census of agriculture is the leading source of statistics about the Nation's agriculture and the only source of consistent, comparable data about agriculture at the county, State, and national levels. Census statistics are used by Congress in developing and changing farm programs and for determining the effects of these programs. Many national and State programs affecting agriculture are designed or allocated on the basis of census data, such as funds for extension services, research, and soil conservation projects. Private industry uses census statistics to provide a more effective production and distribution system for the farm community.

AUTHORITY AND AREA COVERED

The census of agriculture is required by law under title 13, United States Code, sections 142(a) and 191, which directs that the census be taken in 1979, in 1983, and in every fifth year after 1983 covering the prior year. The 1982 census includes each State, Puerto Rico, Guam, and the Virgin Islands of the United States.

FARM DEFINITION

Since 1850, when minimum criteria defining a farm for census purposes were first established, the farm definition has been changed nine times. The current definition, first used for the 1974 final reports, is any place from which \$1,000 or more of agricultural products were sold or normally would have been sold during the census year. The previous definition (used for the 1959, 1964, and 1969 censuses, and for the 1974 preliminary reports) was any place with less than 10 acres from which \$250 or more of agricultural products were sold or normally would have been sold during the census year, or any place of 10 acres or more from which \$50 or more of agricultural products were sold or normally would have been sold during the census year.

COMPARABILITY OF DATA

All censuses since 1969 were conducted primarily by mail. To improve the coverage of the 1978 census, especially in counting the number of small farms, the mailout/mailback enumeration was supplemented by the direct enumeration of all households in approximately 6,400 sample segments in rural areas in all States, except Alaska and Hawaii. Due to budget reductions, the direct enumeration area sample was eliminated for 1982.

The U.S., region, and State data for 1978 shown in the 1978 Census of Agriculture publications included data for farms represented on the mail list plus estimates from the area sample for farms not on the mail list. The 1978 county data included only farms represented on the mail list as the sample was not large enough to provide reliable estimates for each county.

To provide comparable data for 1982 and 1978, estimates from the 1978 area sample have been subtracted from the 1978 data. Thus, the 1978 data in this report include only farms represented on the mail list. Appendix B includes a detailed discussion of the effect of the area sample on census comparability.

In general, data for 1982, 1978, and 1974 are not fully comparable with data for 1969 and earlier censuses due to changes in the farm definition. Data on acreages and inventories for 1982 and 1978 are generally comparable. Dollar figures shown for expenses and agricultural product sales have not been adjusted for changes in price levels between census years.

TABULAR PRESENTATION

State data—In chapter 1, State tables 1 through 43 show detailed State level data usually accompanied by historical data for one or more past censuses. Tables 44 through 50 provide 1982 State data cross-tabulated by various farm classifications.

County data—Selected data items are presented by county in chapter 2. Tables 1 through 16 include general data for all counties. The counties are listed in alphabetical order in the

column headings. In tables 17 through 36, only counties reporting the data item are included in the table stub. Counties not having the item, or with a limited number of farms reporting the item, are not listed separately. Data for these counties are combined and presented as "all other counties."

PRELIMINARY REPORTS

Preliminary reports have been published separately for each county with 10 farms or more in 1982, each State, and the United States. This series provided, at the earliest possible date, information on major data items together with comparable final data from the 1978 census. The data items were standard except in tables 4 and 5 where the selected crops varied by State according to their relative importance.

For farms, land in farms, livestock inventories, and other major items at the county level, differences between the preliminary and final figures are generally less than 5 percent. At the State level, differences are significantly less.

MICROFICHE AND COMPUTER TAPES

The data in this report and final data for individual counties are available on microfiche. The final microfiche county tables have the same format as the county preliminary report. Also, computer tapes are available for the same summary statistics that are found in the preliminary and volume 1 reports. Microfiche reports are sold by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Computer tapes are sold by the Customer Services Branch, Data User Services Division, Bureau of the Census, Washington, D.C. 20233.

UNPUBLISHED DATA

Copies of computer printouts of the following unpublished county summary tables are available:

- Land in Farms With Cropland Harvested and Land in Farms and Cropland Harvested on Irrigated Farms, by Size of Farm: 1982
- Owned and Rented Land—Farms, Land in Farms, and Value of Land and Buildings: 1982
- Farms With Grazing Permits: 1982

Other special unpublished tables and summaries on computer tape can be developed to individual user specifications.

Inquiries about the availability and cost of unpublished tabulations should be directed to the Chief, Agriculture Division, Bureau of the Census, Washington, D.C. 20233.

CENSUS DISCLOSURE RULES

In keeping with the provisions of title 13, United States Code, no data are published that would disclose the operations of an individual farm. However, the number of farms in a given size category or other classification is not considered a disclosure, so this information may be given even though other information is withheld.

DEFINITIONS AND EXPLANATIONS

Appendix A includes definitions and explanations of selected terms used in the tables.

"SEE TEXT" REFERENCE

Items in the tables which are followed by the reference "see text" are explained or defined in appendix A.

INVENTORIES, PRODUCTION, AND SALES DATA

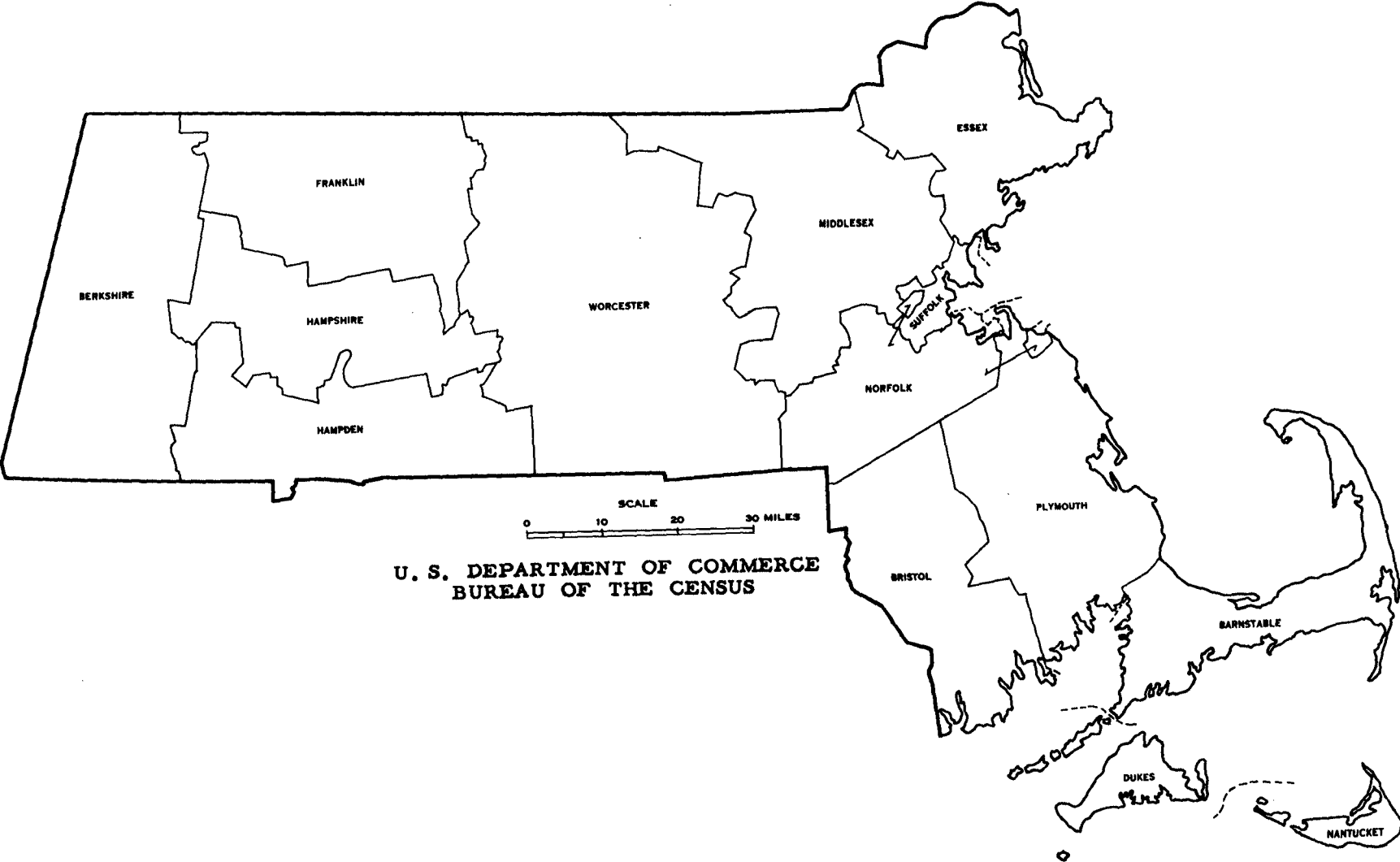
Inventories of livestock, poultry, and machinery and equipment are as of December 31 of the census year. Crop and livestock production, sales, and expense data are for the calendar year, except for a few crops (such as citrus) for which the production year overlaps the calendar year.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used throughout the tables:

- | | |
|---------|---|
| — | Represents zero. |
| (D) | Withheld to avoid disclosing data for individual farms. |
| (X) | Not applicable. |
| (Z) | Less than half of the unit shown. |
| (NA) | Not available. |
| (IC) | Independent city. |
| cwt. | Hundredweight. |
| sq. ft. | Square feet. |

MASSACHUSETTS



Highlights of the State's Agriculture: 1982 and 1978

[Dollar figures are in current dollars with no adjustment for price changes. For meaning of abbreviations and symbols, see introductory text]

Item	All farms			Farms with sales of \$10,000 or more		
	1982	1978	Percent change from 1978 to 1982	1982	1978	Percent change from 1978 to 1982
Farms..... number..	5 401	4 946	9.2	2 401	2 222	8.1
Land in farms..... acres..	612 819	617 359	-7	393 235	401 577	-2.1
Average size of farm..... acres..	113	125	-9.6	164	181	-9.4
Value of land and buildings ¹ :						
Average per farm..... dollars..	205 677	183 339	12.2	299 123	259 290	15.4
Average per acre..... dollars..	1 963	1 443	36.0	1 967	1 382	42.3
Farms by size:						
1 to 9 acres.....	920	798	15.3	279	251	11.2
10 to 49 acres.....	1 652	1 399	18.1	575	429	34.0
50 to 179 acres.....	1 814	1 698	6.8	836	796	5.0
180 to 499 acres.....	856	883	-3.1	572	607	-5.8
500 to 999 acres.....	130	137	-5.1	117	115	1.7
1,000 to 1,999 acres.....	21	25	-16.0	17	20	-15.0
2,000 acres or more.....	8	6	33.3	5	4	25.0
Harvested cropland..... farms..	4 608	4 397	4.8	2 218	2 046	8.4
acres.....	197 769	197 405	.2	156 813	150 761	4.0
Irrigated land..... farms..	1 000	966	3.5	704	603	16.7
acres.....	17 331	16 753	3.5	16 418	15 306	7.3
Market value of agricultural products sold..... \$1,000..	281 436	211 994	32.8	271 392	202 133	34.3
Crops, including nursery and greenhouse products..... farms..	3 260	3 077	5.9	1 594	1 357	17.5
\$1,000.....	139 428	100 079	39.3	133 925	94 119	42.3
Livestock, poultry, and their products..... farms..	2 904	2 631	10.4	1 293	1 265	2.2
\$1,000.....	142 008	111 915	26.9	137 467	108 014	27.3
Farms by standard industrial classification:						
Cash grains (011).....	17	12	41.7	9	2	350.0
Field crops, except cash grains (013).....	714	702	1.7	149	129	15.5
Vegetables and melons (016).....	650	588	10.5	332	254	30.7
Fruits and tree nuts (017).....	769	706	8.9	452	336	34.5
Horticultural specialties (018).....	535	592	-9.6	331	353	-6.2
General farms, primarily crop (019).....	195	131	48.9	38	26	46.2
Livestock, except dairy, poultry, and animal specialties (021).....	1 101	931	18.3	177	171	3.5
Dairy farms (024).....	761	815	-4.2	747	780	-4.2
Poultry and eggs (025).....	176	185	-4.9	83	115	-27.8
Animal specialties (027).....	407	224	81.7	70	42	66.7
General farms, primarily livestock (029).....	56	60	-6.7	13	14	-7.1
Farms by type of organization:						
Individual or family.....	4 541	4 087	11.1	1 779	1 644	8.2
Partnership.....	377	439	-14.1	267	250	6.8
Corporation.....	413	358	15.4	333	314	6.1
Other—cooperative, estate or trust, institutional, etc.	70	62	12.9	22	14	57.1
Tenure of operator:						
Full owners.....	3 521	3 160	11.4	1 231	1 103	11.6
Part owners.....	1 481	1 465	1.1	953	942	1.2
Tenants.....	399	321	24.3	217	177	22.6
Operators by principal occupation:						
Farming.....	2 941	2 852	3.1	1 970	1 887	4.4
Other.....	2 460	2 094	17.5	431	335	28.7
Selected farm production expenses ² :						
Feed for livestock and poultry..... \$1,000..	47 203	39 491	19.5	43 891	37 580	16.8
Commercial fertilizer..... \$1,000..	7 155	7 148	-.1	6 468	6 363	1.6
Other agricultural chemicals ² \$1,000..	4 885	3 882	25.8	4 590	3 462	32.6
Energy and petroleum products..... \$1,000..	22 993	15 685	46.6	20 998	14 200	47.9
Hired farm labor..... \$1,000..	43 109	40 380	6.8	41 441	38 942	6.4
Livestock and poultry inventory:						
Cattle and calves..... farms..	2 311	2 073	11.5	1 075	1 027	4.7
number.....	102 366	96 951	5.6	88 223	82 692	6.7
Milk cows..... farms..	1 111	1 156	-3.9	829	845	-1.9
number.....	49 891	49 728	.3	48 470	48 103	.8
Hogs and pigs..... farms..	619	628	-1.4	218	227	-4.0
number.....	39 570	54 586	-27.5	33 627	47 217	-28.8
Chickens 3 months old or older..... farms..	727	685	6.1	197	238	-17.2
number.....	1 276 406	1 465 853	-12.9	1 241 102	1 422 557	-12.8
Crops harvested:						
Corn for silage or green chop..... farms..	886	912	-2.9	675	703	-4.0
acres.....	37 553	38 482	-2.4	35 309	35 852	-1.5
Irish potatoes..... farms..	136	151	-9.9	91	95	-4.2
acres.....	3 759	3 479	8.1	3 691	3 357	9.9
Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)..... farms..	2 663	2 520	5.7	1 106	1 081	2.3
acres.....	116 729	118 929	-1.8	81 992	80 664	1.6
Vegetables harvested for sale (see text)..... farms..	1 011	968	4.4	566	479	18.2
acres.....	15 307	14 812	3.3	13 717	12 448	10.2
Land in orchards..... farms..	489	426	14.8	208	169	23.1
acres.....	9 332	8 111	15.1	7 976	6 745	18.2

¹Data are based on a sample of farms.

²Data for 1978 include the cost of lime which was not collected in 1982.