ACKNOWLEDGMENTS

This report was prepared in the Agriculture Division. Many other divisions contributed to this preparation: 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; Economic Programming prepared the computer programs; 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.

If you have any questions concerning the statistics in this report, call:
(301) 763-8555 Division Chief
(301) 763-8567 Crops Branch
(301) 763-8569 Livestock Branch
(301) 763-8566 Farm Economics Branch
(301) 763-1113 General Information
(301) 763-8558 Statistical Methodology
CONTENTS

Introduction .................................................................................................................. VII
Highlights of the State’s Agriculture: 1987 and 1982 ...................................................... 1

FIGURES
1. State Map .................................................................................................................. 2
2. Profile of State’s Agriculture: 1987 ........................................................................ 3
3. Percent of Farms and of Value of Products Sold: 1987 ........................................ 4
4. Farms by Value of Agricultural Products Sold: 1959 to 1987 ............................ 4
5. Land Use: 1987 ......................................................................................................... 5
8. Production Expenses: 1987 .................................................................................... 6

TABLES

CHAPTER 1. State Data
1. Historical Highlights: 1987 and Earlier Census Years ........................................... 7
5. Government Payments and Other Farm-Related Income: 1987 and 1982 ............. 13
8. Land in Farms, Harvested Cropland, and Irrigated Land, by Size of Farm: 1987 and 1982 .................................................................................................................................................................................. 16
10. Selected Characteristics of Irrigated and Nonirrigated Farms: 1987 and 1982 .... 17
23. Poultry—Inventory and Sales by Size of Flock: 1987 .............................................. 26
24. Turkeys—Sales by Number Sold Per Farm: 1987 .................................................. 27
27. Cattle and Calves—Inventory and Sales by Size of Herd: 1987 ............................. 28
28. Cattle and Calves—Inventory and Sales by Size of Cow Herd: 1987 ..................... 29
29. Cattle and Calves—Inventory and Sales by Size of Beef Cow Herd: 1987 .......... 29
30. Cattle and Calves—Inventory and Sales by Size of Milking Cow Herd: 1987 ...... 30
31. Cattle and Calves—Sales by Number Sold Per Farm: 1987 ................................. 30
32. Hogs and Pigs—Inventory: 1987 and 1982 ........................................................... 30
33. Hogs and Pigs—Sales: 1987 and 1982 .................................................................. 31

1987 CENSUS OF AGRICULTURE  

CONTENTS III
35. Hogs and Pigs—Inventory and Sales by Size of Herd: 1987
36. Hogs and Pigs—Inventory and Sales by Number Sold Per Farm: 1987
37. Hogs and Pigs—Inventory, Sales, and Litters by Total Farrowed: 1987
38. Sheep and Lambs—Inventory and Sales: 1987 and 1982
39. Sheep and Lambs—Inventory and Sales by Size of Flock: 1987
40. Sheep and Lambs—Inventory and Sales by Size of Ewe Flock: 1987
41. Other Livestock and Livestock Products—Inventory and Sales: 1987 and 1982
42. Crops Harvested and Value of Production: 1987 and 1982
43. Specified Crops Harvested—Yield Per Acre Irrigated and Nonirrigated: 1987
44. Specified Crops by Acres Harvested: 1987 and 1982
47. Farms by Concentration of Market Value of Agricultural Products Sold: 1987
49. Summary by Type of Organization: 1987
50. Summary by Age and Principal Occupation of Operator: 1987
51. Summary by Size of Farm: 1987
52. Summary by Value of Agricultural Products Sold: 1987
53. Summary by Standard Industrial Classification of Farm: 1987

CHAPTER 2. County Data

1. County Summary Highlights: 1987
3. Farm Production Expenses: 1987 and 1982
5. Farms, Land in Farms, and Land Use: 1987 and 1982
6. Harvested Cropland by Size of Farm and Acres Harvested: 1987 and 1982
16. Farms With Sales of $10,000 or More: 1987 and 1982
17. Milk Goats—Inventory and Sales: 1987 and 1982
18. Angora Goats—Inventory and Sales: 1987 and 1982
19. Mink and Their Pelts—Inventory and Sales: 1987 and 1982
20. Colonies of Bees and Honey—Inventory and Sales: 1987 and 1982
22. Miscellaneous Poultry—Inventory and Sales: 1987 and 1982
23. Miscellaneous Livestock and Animal Specialties—Inventory and Sales: 1987 and 1982
32. Farms Operated by Black and Other Races by Value of Sales and Occupation: 1987 and 1982
33. Farms Operated by Black and Other Races by Tenure: 1987 and 1982
36. Farms With Grazing Permits: 1987
APPENDIXES

A. General Explanation ........................................................................................................... A-1
B. Places With All Cropland in the Conservation Reserve Program ......................................... B-1
C. Statistical Methodology .................................................................................................... C-1
D. Report Form and Information Sheet .................................................................................. D-1

Index ....................................................................................................................................... Index 1
Publication Program .............................................................................................................. Inside back cover

*Not published for this State.
INTRODUCTION

HISTORY

The 1987 Census of Agriculture is the 23rd 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 so that it coincided with the economic censuses covering manufacturing, mining, construction, retail trade, wholesale trade, service industries, and selected transportation activities. This adjustment in timing established the agriculture census on a 5-year cycle collecting data for years ending in 2 and 7.

USES OF THE CENSUS

The census of agriculture is the leading source of statistics about the Nation's agricultural production and the only source of consistent, comparable data 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 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 agricultural 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 a census be taken in 1979, 1983, and in every fifth year after 1983 covering the prior year. The 1987 census includes each State, Puerto Rico, Guam, and the Virgin Island of the United States. A census of agriculture will be conducted in American Samoa and the Commonwealth of the Northern Mariana Islands in conjunction with the 1990 Census of Population and Housing.

FARM DEFINITION

Since 1850, when minimum criteria defining a farm for census purposes first were established, the farm definition has been changed nine times. The current definition, first used for the 1974 census, is any place from which $1,000 or more of agricultural products were produced and sold or normally would have been sold during the census year. The farm definition used for the outlying areas varies according to area. The report for each area includes a discussion of the farm definition.

COMPARABILITY OF DATA

Data on acreages and inventories for 1987 and 1982 are generally comparable. Dollar figures shown for expenses and agricultural product sales are expressed in current dollars and have not been adjusted for inflation or deflation. In general, data for censuses since 1974 are not fully comparable with data for 1969 and earlier censuses due to changes in the farm definition.

The 1978 U.S., region, and State data shown in the 1978 Census of Agriculture publications included data for farms on the mail list plus estimates from an area sample for farms not on the mail list. For comparability, the 1978 data in the 1987 publications include only farms on the mail list.

TABULAR PRESENTATION

State data—Tables 1 through 47 in chapter 1 show detailed State-level data usually accompanied by historical data for one or more past censuses. Tables 48 through 53 provide 1987 State data cross-tabulated by various farm classifications.

County data—Chapter 2 presents selected data items by county. Tables 1 through 16 include general data for all counties. The counties are listed in alphabetical order in the column headings. Tables 17 through 36 include only
counties reporting the data item. Counties not having the
item, or with a limited number of farms reporting the item,
have data combined and presented as “all other counties.”

ADVANCE REPORTS

Advance reports of 1987 census data have been pub­
lished separately for each county with 10 farms or more,
each State, and the United States. This series provided, at
the earliest possible date, final data on major data items
together with comparable final data from the 1982 census.
Data items are standard across States except information
on selected crops harvested, which vary by State accord­
ing to their relative importance in the State.

ELECTRONIC DATA DISSEMINATION

The volume 1 data are available on computer tapes and
compact disc. The advance report data are available on
computer tapes, computer diskettes, and through elec­
tronic data services such as the AGRIDATA network, the
CENDATA package on Dialog, CompuServe on-line ser­
vices, and the Census Bureau's State Data Center Bulletin
Board. Computer tapes, diskettes, and compact discs are
sold by the Customer Services Branch, Data User Services
Division, Bureau of the Census, Washington, D.C. 20233
(telephone (301) 763-4100).

SPECIAL TABULATIONS

Custom designed tabulations can be developed to
individual user specifications on a programming cost reim­
bursable basis. Inquiries about special tabulations should
be directed to the Chief, Agriculture Division, Bureau of the

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, such
as size of farm, is not considered a release of confidential
information and is provided even though other information
is withheld.

INVENTORIES, PRODUCTION, AND SALES
DATA

Inventories of livestock, poultry, and machinery and
equipment are measured 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 through­
out the tables:

- Represents zero.
(D) Withheld to avoid disclosing data for individual
farms.
(IC) Independent city.
(NA) Not available.
(S) Withheld because estimate did not meet pub­
lication standards on the basis of either the
response rate (associated relative standard
error) or a consistency review.
(X) Not applicable.
(Z) Less than half of the unit shown.
cwt Hundredweight.
sq ft Square feet.
### Highlights of the State's Agriculture: 1987 and 1982

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

<table>
<thead>
<tr>
<th>Item</th>
<th>1987</th>
<th>1982</th>
<th>Percent change from 1982 to 1987</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farms</td>
<td>6,216</td>
<td>5,401</td>
<td>15.1</td>
</tr>
<tr>
<td>Land in farms</td>
<td>615,185</td>
<td>612,819</td>
<td>-0.4</td>
</tr>
<tr>
<td>Average size of farm</td>
<td>89</td>
<td>113</td>
<td>-24.7</td>
</tr>
<tr>
<td>Value of land and buildings</td>
<td>3,553</td>
<td>1,963</td>
<td>44.3</td>
</tr>
<tr>
<td>Average per farm</td>
<td>346,530</td>
<td>205,677</td>
<td>68.5</td>
</tr>
<tr>
<td>Average per acre</td>
<td>8</td>
<td>3</td>
<td>-66.7</td>
</tr>
<tr>
<td>Farms by size:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 to 9 acres</td>
<td>1,105</td>
<td>920</td>
<td>20.1</td>
</tr>
<tr>
<td>10 to 49 acres</td>
<td>2,725</td>
<td>1,952</td>
<td>28.6</td>
</tr>
<tr>
<td>50 to 179 acres</td>
<td>2,016</td>
<td>1,814</td>
<td>11.1</td>
</tr>
<tr>
<td>180 to 499 acres</td>
<td>813</td>
<td>856</td>
<td>-5.0</td>
</tr>
<tr>
<td>500 to 999 acres</td>
<td>126</td>
<td>130</td>
<td>-3.1</td>
</tr>
<tr>
<td>1,000 to 1,999 acres</td>
<td>26</td>
<td>21</td>
<td>23.8</td>
</tr>
<tr>
<td>2,000 acres or more</td>
<td>5</td>
<td>8</td>
<td>-27.5</td>
</tr>
<tr>
<td>Harvested cropland</td>
<td>5,084</td>
<td>4,608</td>
<td>10.3</td>
</tr>
<tr>
<td>Irrigated land</td>
<td>194,674</td>
<td>197,769</td>
<td>-1.5</td>
</tr>
<tr>
<td>Market value of agricultural products sold</td>
<td>340,464</td>
<td>291,496</td>
<td>17.0</td>
</tr>
<tr>
<td>Average per farm</td>
<td>574</td>
<td>52,108</td>
<td>13.1</td>
</tr>
<tr>
<td>Crops, including nursery and greenhouse crops</td>
<td>215,655</td>
<td>139,428</td>
<td>38.7</td>
</tr>
<tr>
<td>Grains</td>
<td>78,655</td>
<td>45,665</td>
<td>71.4</td>
</tr>
<tr>
<td>Cotton and cottonseed</td>
<td>4,567</td>
<td>2,494</td>
<td>62.9</td>
</tr>
<tr>
<td>Tobacco</td>
<td>7,603</td>
<td>5,624</td>
<td>36.7</td>
</tr>
<tr>
<td>Hay, silage, and field seeds</td>
<td>7,007</td>
<td>5,624</td>
<td>36.7</td>
</tr>
<tr>
<td>Vegetables, sweet corn, and melons</td>
<td>25,179</td>
<td>19,159</td>
<td>30.9</td>
</tr>
<tr>
<td>Fruits, nuts, and berries</td>
<td>92,349</td>
<td>60,625</td>
<td>35.8</td>
</tr>
<tr>
<td>Nursery and greenhouse crops</td>
<td>86,697</td>
<td>46,465</td>
<td>74.0</td>
</tr>
<tr>
<td>Other crops</td>
<td>4,285</td>
<td>3,776</td>
<td>11.1</td>
</tr>
<tr>
<td>Livestock, poultry and their products</td>
<td>124,609</td>
<td>142,008</td>
<td>-13.9</td>
</tr>
<tr>
<td>Poultry and poultry products</td>
<td>23,149</td>
<td>25,456</td>
<td>-9.1</td>
</tr>
<tr>
<td>Dairy products</td>
<td>83,303</td>
<td>80,544</td>
<td>-3.4</td>
</tr>
<tr>
<td>Cattle and calves</td>
<td>11,297</td>
<td>12,212</td>
<td>-7.5</td>
</tr>
<tr>
<td>Hogs and pigs</td>
<td>4,320</td>
<td>4,497</td>
<td>-4.1</td>
</tr>
<tr>
<td>Sheep, lambs, and wool</td>
<td>864</td>
<td>445</td>
<td>-49.9</td>
</tr>
<tr>
<td>Other livestock and livestock products (see text)</td>
<td>21,749</td>
<td>18,559</td>
<td>17.2</td>
</tr>
<tr>
<td>Farms by type of organization:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual or family (sole proprietorship)</td>
<td>5,124</td>
<td>4,541</td>
<td>12.9</td>
</tr>
<tr>
<td>Corporation</td>
<td>544</td>
<td>413</td>
<td>25.0</td>
</tr>
<tr>
<td>Other—cooperative, estate or trust, institutional, etc.</td>
<td>67</td>
<td>70</td>
<td>-4.3</td>
</tr>
<tr>
<td>Operators by principal occupation:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farming</td>
<td>3,174</td>
<td>2,941</td>
<td>7.9</td>
</tr>
<tr>
<td>Other</td>
<td>3,042</td>
<td>2,460</td>
<td>23.7</td>
</tr>
<tr>
<td>Operators by days worked off farm:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any</td>
<td>3,516</td>
<td>2,867</td>
<td>21.4</td>
</tr>
<tr>
<td>200 days or more</td>
<td>2,283</td>
<td>1,838</td>
<td>24.2</td>
</tr>
<tr>
<td>Average age of operator</td>
<td>52.6</td>
<td>51.5</td>
<td>2.1</td>
</tr>
<tr>
<td>Total farm production expenses</td>
<td>6,216</td>
<td>(NA)</td>
<td>(NA)</td>
</tr>
<tr>
<td>Selected farm production expenses</td>
<td>251,496</td>
<td>(NA)</td>
<td>(NA)</td>
</tr>
<tr>
<td>Livestock and poultry purchased</td>
<td>11,441</td>
<td>11,468</td>
<td>-0.2</td>
</tr>
<tr>
<td>Feed for livestock and poultry</td>
<td>33,525</td>
<td>47,203</td>
<td>-29.0</td>
</tr>
<tr>
<td>Commercial fertilizer</td>
<td>8,953</td>
<td>7,155</td>
<td>25.1</td>
</tr>
<tr>
<td>Agriculture chemicals</td>
<td>7,319</td>
<td>4,865</td>
<td>49.3</td>
</tr>
<tr>
<td>Petroleum products</td>
<td>12,042</td>
<td>18,641</td>
<td>-37.6</td>
</tr>
<tr>
<td>Hired farm labor</td>
<td>66,579</td>
<td>43,189</td>
<td>54.4</td>
</tr>
<tr>
<td>Interest expenses</td>
<td>13,788</td>
<td>10,141</td>
<td>36.0</td>
</tr>
<tr>
<td>Livestock and poultry inventory:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cattle and calves</td>
<td>2,112</td>
<td>2,311</td>
<td>-8.6</td>
</tr>
<tr>
<td>Milk cows</td>
<td>102,368</td>
<td>102,368</td>
<td>-18.9</td>
</tr>
<tr>
<td>Sheep and lambs</td>
<td>1,111</td>
<td>1,111</td>
<td>-24.6</td>
</tr>
<tr>
<td>Hogs and pigs</td>
<td>499</td>
<td>619</td>
<td>-23.6</td>
</tr>
<tr>
<td>Chickens 3 months old or older</td>
<td>499</td>
<td>619</td>
<td>-23.6</td>
</tr>
<tr>
<td>Selected crops harvested:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corn for grain or seed</td>
<td>1,522</td>
<td>1,655</td>
<td>-8.7</td>
</tr>
<tr>
<td>Corn for silage or green chop</td>
<td>5,681</td>
<td>6,077</td>
<td>-6.5</td>
</tr>
<tr>
<td>Irish potatoes</td>
<td>504</td>
<td>586</td>
<td>-16.8</td>
</tr>
<tr>
<td>Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)</td>
<td>2,874</td>
<td>2,665</td>
<td>7.8</td>
</tr>
<tr>
<td>Vegetables harvested for sale (see text)</td>
<td>121,498</td>
<td>116,729</td>
<td>4.1</td>
</tr>
<tr>
<td>Land in orchards</td>
<td>572</td>
<td>489</td>
<td>17.0</td>
</tr>
<tr>
<td>Hired farm labor</td>
<td>9,379</td>
<td>9,352</td>
<td>-0.2</td>
</tr>
</tbody>
</table>

*Data are based on a sample of farms.
*Data for 1987 include cost of custom applications.
*Data for 1982 do not include imputation for item nonresponse.

1987 CENSUS OF AGRICULTURE

MASSACHUSETTS 1