1978 CENSUS OF AGRICULTURE

Volume 1
State and County Data

Part 35
Ohio
AC78-A-35

Issued May 1981

U.S. Department of Commerce
Malcolm Baldrige, Secretary
Joseph R. Wright, Jr.,
Deputy Secretary
William A. Cox,
Acting Chief Economist

BUREAU OF THE CENSUS
Daniel B. Levine,
Acting Director
ACKNOWLEDGMENTS—Many persons participated in the various activities of the 1978 Census of Agriculture. Primary direction was by Shirley Kallek, Associate Director for Economic Fields, and Richard B. Quanrud, 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) and Arnold L. Bollenbacher, his successor. Arnold L. Bollenbacher, assisted by Thomas D. Monroe, Donald R. Jahnke, and John A. Blackledge, was directly responsible for data content of the tables, analysis of the data, and clerical and computer edit, and tabulation specifications. William A. Hartan, Arlon M. Scott, and James C. Vogelsang, directed the resolution of problems with individual census reports.

John E. Adkins, assisted by Stephen M. Schobel, Loyd C. Brown, Billy E. Stark, Lowell Wраucle, Sharon C. Spivey, Martin S. Harahush, Ralph A. Graham, Avon B. Floyd, Kent C. Hoover, and Lee Smallwood, was directly responsible for the systems and processing procedures, including preparation of control systems, clerical procedures, and computer programs. Dana E. Moore and Jay A. Johnson were responsible for the photocopy system. Bobbie E. Catlin and Paulette M. Bonchak were directly responsible for table preparation and publication standards used. Mittie Buchanan, Industry Division (to May 1980), and Helen R. Pugh, her successor, were responsible for coding the Linotron table formats for publication. Carl N. McAllister coordinated the final preparation of the tables. Virginia Crockett, Regina E. Lindsey, and Karin G. Bauer provided editorial services.

Charles E. Rogers, assisted by D. Dean Prochaska, and David D. Chapman, with the additional assistance of Jane Y. Dea and Tommy W. Gaulden, was directly responsible for mailing list acquisition and unduplication, design of sampling procedures for the direct enumeration sample and the sample from the mail list, sampling variability estimates, statistical adjustment for nonresponse, monitoring of processing, and evaluation of coverage. Albert W. Graybill was responsible for the preparation of the operational procedures for the collection and processing of the direct enumeration sample data.

George E. Pierce, assisted by Patricia A. Clark and Richard R. Storm, was directly responsible for overall census planning, the Farm and Ranch Identification Survey, and development of the data collection forms and followup letters. J. Thomas Miller, Consultant, assisted in the design and content of the data collection forms and followup letters, specifications for publication tables, and preparation of text.

Don L. Adams, Chief, Data Preparation Division, Jeffersonville, Ind., assisted by Patricia M. Clark, Rebecca Lamon, Martin Wilson, William L. Pangburn, Les Brown, Darrell L. Farabee, and Keith Lacey, was directly responsible for clerical and data-keying operations, and labeling, sorting, and distribution of the mail and direct enumeration census forms.

The direct enumeration activities were administered by the Field Division, under Forrest P. Cawley, Chief, with the assistance of Darren F. Athose and Thomas J. Manning and the 12 directors of the Bureau’s Regional Offices.

The computer processing facilities used were under the general supervision of C. Thomas DiNenna, Chief, Computer Operations Division.

Forms design was performed under the general supervision of Henry J. Husmann, Chief, Administrative Services Division, assisted by Albert W. Cosner, Cathern S. Kline, and Irene A. Gray.

Within the Publications Services Division, many individuals made significant contributions in the areas of publication planning and design, editorial review, copy editing, and printing procurement.

Important contributions were made by the members of the Census Advisory Committee on Agriculture Statistics in establishing data needs and priorities for collection and publication of the information. Other representatives of both public and private organizations also made significant recommendations and suggestions.

Members of various agencies of the U.S. Department of Agriculture provided advice and counsel during the planning, data collecting, and processing phases of the census and assisted farmers and ranchers who requested help in completing the report form.

The press, farm magazines, and radio and television stations were most helpful in publicizing the census and encouraging cooperation of farm and ranch operators. John W. Ternus and Douglas J. Miller, Agriculture Division, and Richard D. Ritter, Public Information Office, were primarily responsible for developing and coordinating the public relations program.

Special tribute is paid to the millions of farm and ranch operators and other agriculture-associated people who furnished the information requested in the census. Only through their cooperation was it possible to collect and publish the data in this report.
TABLES—Con.

CHAPTER 1—Con.

23. Other Livestock and Livestock Products—Inventory and Sales: 1978 and 1974 ........................................ 16
24. Fish Sales: 1978 .................................................................................. 16
28. Crops by Acres Harvested: 1978 .......................................................... 19
30. Summary by Type of Organization: 1978 ............................................... 30
32. Summary by Age and Principal Occupation of Operators for Farms With Sales of Less Than $20,000: 1978 .... 54
33. Summary by Size of Farm: 1978 ............................................................ 70
34. Summary by Value of Agricultural Products Sold: 1978 .............. 96
35. Summary by Standard Industrial Classification of Farm: 1978 ... 102

CHAPTER 2. County Summary Data

2. Land Use: 1978 ...................................................................................... 120
3. Irrigation: 1978 ...................................................................................... 122
5. Farms and Land in Farms by Type of Organization: 1978 ................. 124
7. Farms by Value of Sales and Occupation: 1978 .................................... 126
12. Selected Farm Production Expenses: 1978 .......................................... 132
14. Hired Farm Labor—Expenses and Number of Workers: 1978 .............. 137
16. Cattle and Calves—Inventory and Sales: 1978 .................................... 139
17. Hogs and Pigs—Inventory and Sales: 1978 .......................................... 149
18. Poultry—Inventory and Sales: 1978 ..................................................... 152
20. Sheep and Lambs—Inventory and Sales: 1978 .................................... 155
21. Milk Goats—Inventory and Sales: 1978 ............................................. 157
22. Angora Goats—Inventory and Sales: 1978 ......................................... 157
23. Mink and Their Pelts—Inventory and Sales: 1978 .............................. 157
24. Colonies of Bees and Honey—Inventory and Sales: 1978 .................. 158
25. Fish Sales: 1978 ..................................................................................... 159
26. Miscellaneous Poultry—Inventory and Sales: 1978 .............................. 159
27. Miscellaneous Livestock and Animal Specialties—Inventory and Sales: 1978 .......... 162
32. Fruits and Nuts: 1978 ............................................................................ 178
33. Berries: 1978 ......................................................................................... 185
34. Nursery and Greenhouse Products, Mushrooms, and Sod: 1978 ........ 186
35. Other Crops: 1978 ............................................................................... 188
37. Income From Machine Work, Customwork and Other Agricultural Services: 1978 .... 189
TABLES—Con.

CHAPTER 2—Con.

38. Value of Agricultural Products Sold Directly to Consumers for Human Consumption: 1978

39. Farms Operated by Black and Other Races: 1978

40. Farms Operated by Black and Other Races by Tenure: 1978

41. Operators by Selected Racial Groups: 1978

42. Operators of Spanish Origin: 1978

43. Female Operators: 1978

CHAPTER 3. Individual County Data [The following tables are common to the State and each county]

1. Farms, Land in Farms, and Land Use: 1978 and 1974
3. Farms, Land in Farms, Land Use, and Irrigation, by Size of Farm: 1978 and 1974
5. Selected Farm Production Expenses: 1978 and 1974

Ohio .......................... 194
Farms Not on Mail List .... 199
Adams ....................... 204
Allen ....................... 209
Ashland ................... 214
Ashtabula .................. 219
Athens ..................... 224
Auglaize ................... 229
Belmont .................... 234
Brown ...................... 239
Butler ...................... 244
Carroll ..................... 249
Champaign .................. 254
Clark ....................... 259
Clermont ................... 264
Clinton ..................... 269
Columbiana ................. 274
Coshocton .................. 279
Crawford ................... 284
Cuyahoga ................... 289
Darke ....................... 294
Defiance .................... 299
Delaware .................... 304
Erie ......................... 309
Fairfield .................... 314
Fayette ..................... 319
Franklin ..................... 324
Fulton ...................... 329
Gallia ...................... 334
Geauga ...................... 339
Greene ..................... 344
Guernsey .................... 349
Hamilton .................... 354

Hancock ..................... 359
Hardin ...................... 364
Harrison .................... 369
Henry ....................... 374
Highland ................... 379
Hocking ..................... 384
Holmes ...................... 389
Huron ....................... 394
Jackson ..................... 399
Jefferson ................... 404
Knox ......................... 409
Lake ....................... 414
Lawrence ................... 419
Licking ..................... 424
Logan ....................... 429
Lorain ...................... 434
Lucas ....................... 439
Madison ..................... 444
Mahoning ................... 449
Marion ...................... 454
Medina ...................... 459
Meigs ....................... 464
Mercer ...................... 469
Miami ....................... 474
Monroe ...................... 479
Montgomery ................ 484
Morgan ...................... 489
Morrow ...................... 494
Muskingum .................. 499
Noble ....................... 504
Ottawa ...................... 509
Paulding .................... 514
Perry ....................... 519
TABLES—Con.

CHAPTER 3—Con.

Pickaway ................. 524  Summit ....................... 584
Pike ........................ 529  Trumbull .................. 589
Portage ..................... 534  Tuscarawas ............... 594
Preble ...................... 539  Union ....................... 599
Putnam ........................ 544  Van Wert ................ 604
Richland .................. 549  Vinton ..................... 609
Ross .......................... 554  Warren .................... 614
Sandusky .................... 559  Washington ............. 619
Scioto ....................... 564  Wayne .................... 624
Seneca ........................ 569  Williams ............... 629
Shelby ....................... 574  Wood ....................... 634
Stark .......................... 579  Wyandot ................ 639

APPENDIXES

A. General Explanation ................................................. A·1
C. Comparison of 1974 Farm Counts With 1978 Farm Counts ........................................... C·1
D. Report Forms ................................................. D·1

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

HISTORY

The census of agriculture provides a periodic statistical picture of the Nation's farming, ranching, and related activities. The 1978 Census of Agriculture is the 21st 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. From 1840 to 1950, an agriculture census was taken as part of the decennial census of population. A 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. Thereafter, the agriculture census will revert to a 5-year cycle.

AUTHORITY AND AREA COVERED

The census of agriculture is authorized under the provisions of title 13, United States Code. Section 142(a) provides for the census to be taken in 1979, in 1983, and in every fifth year thereafter, the agriculture census will revert to a 5-year cycle.

FARM DEFINITION

Since 1850, when minimum criteria defining a farm for census purposes were first established, the farm definition has been changed nine times, as the Nation has grown and changed. The current definition was announced on August 12, 1975, in accordance with a joint agreement between the U.S. Department of Agriculture, the Office of Management and Budget, and the Bureau of the Census. It defines a farm, for statistical purposes, as 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 county reports) counted as a farm 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.

METHOD OF ENUMERATION

Evaluation studies of the 1969 and 1974 censuses, which were conducted primarily by mail, indicated that the administrative lists used to create the census mailing list were not adequate to assure complete coverage in the census. Also, censuses prior to 1969, conducted by direct enumeration, had been found by evaluation studies (conducted since 1950) to be progressively less and less complete, as increased mobility of farm operators led to increases in the numbers of nonresident operators, operators farming on a part-time basis, and operators farming two or more separate tracts.

The 1978 Census of Agriculture was conducted primarily by mail for maximum economy, supplemented by a personal canvass of a statistical area segment sample for maximum completeness of coverage. The area segment sample, which consists of selected geographic areas completely canvassed by direct enumeration, provides reliable estimates for States of the number and characteristics of any farms not represented in the mail portion of the census. Estimates for such farms are an integral part of the State totals published for the 1978 census. The direct enumeration sample estimates are statistically reliable only for State totals and have not been allocated to counties. Appendix A provides a more detailed description of how the 1978 census was taken and includes a discussion of census coverage.

COMPARABILITY OF DATA

State totals for 1978 are not directly comparable with totals for 1974 or earlier censuses as they include data for farm operations represented on the mail list plus estimates from the direct enumeration sample for farms not represented on the mail list. The 1974 State level data include only operations represented on the mail list.

Coverage evaluation studies for the 1974 census indicated that 10.7 percent of all farms were not included in the census. Farms missed in the census were usually small and accounted for less than 3 percent of the total value of agricultural products sold and less than 6 percent of the land in farms. The proportion of farms missed in the 1974 census was generally higher in...
States having a large proportion of small farms and urbanized areas having a sizable number of part-time farms. Farm counts for 1974, adjusted for the net undercount, are shown in appendix C.

County level data on acreages and inventories for 1978 and 1974 are generally comparable; however, improvements in the coverage of the 1978 census, especially of smaller farms, should be taken into consideration when comparing farm counts.

USE OF SAMPLING

Two types of sampling were used for data collection for the 1978 census. In addition to the State estimates from the direct enumeration sample discussed previously, data for items in sections 22 through 27 of the census report form were collected from only a sample of farms. Data based on a sample are subject to sampling error. Detailed discussions of the census report forms, the use of sampling, and estimates of sampling error are included in appendix A.

GRAPHICS

Several charts and maps presented on the following pages show selected agricultural statistics for this State. The items in the charts and the first four maps are presented for all States. The last four maps present data of particular importance to this State.

TABULAR PRESENTATION

State data—In chapter 1, State tables 1 through 28 show detailed State level data usually accompanied by historical data for one or more censuses. Tables 29 through 35 provide 1978 State data cross-tabulated by various farm classifications.

County summary data—Selected data items are presented by county in chapter 2. Tables 1 through 15 include general data such as land in farms, size of farms, land use, operator characteristics, expenses, and machinery and equipment. Inventory and sales data for livestock, poultry, and animal specialties are contained in tables 16 through 27 and detailed crop data in tables 28 through 35. Tables 36 through 43 present data on foreign ownership, income from customwork, direct sales to consumers, operators by racial group, and female operators.

Individual county data—Five pages of tables are presented in chapter 3 for each county with 10 farms or more in 1978. The tables include final data for each county and are more comprehensive than those in the preliminary reports. Data are provided for all farms and for farms with sales of $2,500 or more for both 1978 and 1974.

This chapter also includes a set of similar tables for the State as a whole and for those farms in the State not on the mailing list and not included in county tables.

PRELIMINARY REPORTS

Preliminary reports have been published separately for all counties in the United States with 10 farms or more in 1978, each State, the four geographic regions, and the United States. This series provided, at the earliest possible date, information on major data items, with comparable final data from the 1974 census. The data items were standard for each State and county except in table 3 where the selected crops varied by State according to their relative importance in the State. The State preliminary report also included a full set of tables providing data derived from the direct enumeration sample on the estimated number and characteristics of farms not included in county totals because they were not represented on the mailing list.

For major data items at the county level differences between the preliminary and final figures are in general less than 5 percent. At the State level, differences are significantly less.

CENSUS DISCLOSURE RULES

In keeping with the provisions of title 13, United States Code, data that would disclose the operations of an individual farm are not published. However, the number of farms in a given size category or other classification is not considered a disclosure. Appendix A presents additional information on disclosure rules.

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.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used throughout the tables:

- Zero.
- (D) Data withheld to avoid disclosing information for individual farms.
- (X) Not applicable.
- (Z) Less than half of the unit reported.
- (NA) Not available.

* Independent city.
### Highlights of the State's Agriculture: 1978 and 1974

<table>
<thead>
<tr>
<th></th>
<th>1978</th>
<th>1974</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Not on mail list</td>
</tr>
<tr>
<td>Farms</td>
<td>95,937</td>
<td>6,806</td>
</tr>
<tr>
<td>Land in farms</td>
<td>16,090,902</td>
<td>302,989</td>
</tr>
<tr>
<td>Harvested cropland</td>
<td>10,289,516</td>
<td>75,658</td>
</tr>
<tr>
<td>Average size of farm</td>
<td>107</td>
<td>11</td>
</tr>
<tr>
<td>Farms by size</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 to 49 acres number</td>
<td>26,361</td>
<td>4,577</td>
</tr>
<tr>
<td>50 to 99 acres number</td>
<td>63,488</td>
<td>2,229</td>
</tr>
<tr>
<td>100 acres or more</td>
<td>4,960</td>
<td>846</td>
</tr>
<tr>
<td>Value of land and buildings</td>
<td>2,490,345</td>
<td>62,849</td>
</tr>
<tr>
<td>Average per acre dollars</td>
<td>483</td>
<td>146</td>
</tr>
<tr>
<td>Value of machinery and equipment on farms</td>
<td>$1,000,000</td>
<td></td>
</tr>
<tr>
<td>Average per farm dollars</td>
<td>31,532</td>
<td>8,104</td>
</tr>
<tr>
<td>Value of agricultural products sold</td>
<td>$1,000,000</td>
<td></td>
</tr>
<tr>
<td>Average per farm dollars</td>
<td>2,876,936</td>
<td>16,902</td>
</tr>
<tr>
<td>Cropped sold</td>
<td>1,610,371</td>
<td>8,997</td>
</tr>
<tr>
<td>Livestock and livestock products sold</td>
<td>$1,000,000</td>
<td></td>
</tr>
<tr>
<td>Average per farm dollars</td>
<td>11,663</td>
<td>1,155</td>
</tr>
<tr>
<td>Poultry and poultry products sold</td>
<td>$1,000,000</td>
<td></td>
</tr>
<tr>
<td>Average per farm dollars</td>
<td>1,539</td>
<td>6</td>
</tr>
<tr>
<td>Farms by value of agricultural products sold</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $2,500 number</td>
<td>22,058</td>
<td>4,619</td>
</tr>
<tr>
<td>$2,500 to $5,999 number</td>
<td>28,299</td>
<td>977</td>
</tr>
<tr>
<td>$10,000 to $39,999 number</td>
<td>26,082</td>
<td>210</td>
</tr>
<tr>
<td>$40,000 to $99,999 number</td>
<td>13,027</td>
<td>-</td>
</tr>
<tr>
<td>$100,000 to $199,999 number</td>
<td>4,653</td>
<td>-</td>
</tr>
<tr>
<td>$200,000 or more number</td>
<td>1,800</td>
<td>-</td>
</tr>
<tr>
<td>Abnormal forms number</td>
<td>58</td>
<td>0</td>
</tr>
<tr>
<td>Value of agricultural products sold by farms having sales of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $2,500 number</td>
<td>26,255</td>
<td>3,741</td>
</tr>
<tr>
<td>$2,500 to $5,999 number</td>
<td>154,003</td>
<td>10,010</td>
</tr>
<tr>
<td>$10,000 to $39,999 number</td>
<td>548,998</td>
<td>2,151</td>
</tr>
<tr>
<td>$40,000 to $99,999 number</td>
<td>825,863</td>
<td>-</td>
</tr>
<tr>
<td>$100,000 to $199,999 number</td>
<td>629,421</td>
<td>-</td>
</tr>
<tr>
<td>$200,000 or more number</td>
<td>664,581</td>
<td>-</td>
</tr>
<tr>
<td>Abnormal forms number</td>
<td>8,235</td>
<td>0</td>
</tr>
<tr>
<td>Farm production expenses for selected items</td>
<td>$1,000,000</td>
<td></td>
</tr>
<tr>
<td>Feed for livestock and poultry</td>
<td>283,695</td>
<td>3,238</td>
</tr>
<tr>
<td>Seeds, bulbs, plants, and trees</td>
<td>113,689</td>
<td>693</td>
</tr>
<tr>
<td>Commercial fertilizer</td>
<td>267,139</td>
<td>927</td>
</tr>
<tr>
<td>Other agricultural chemicals</td>
<td>90,421</td>
<td>561</td>
</tr>
<tr>
<td>Petroleum products - gasoline, diesel, etc.</td>
<td>140,472</td>
<td>1,553</td>
</tr>
<tr>
<td>Hired farm labor</td>
<td>140,163</td>
<td>2,214</td>
</tr>
<tr>
<td>Livestock and poultry inventory:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cattle and calves number</td>
<td>1,690,050</td>
<td>31,462</td>
</tr>
<tr>
<td>Hogs and pigs number</td>
<td>2,137,680</td>
<td>11,514</td>
</tr>
<tr>
<td>Sheep and lambs number</td>
<td>324,970</td>
<td>9,688</td>
</tr>
<tr>
<td>Chickens 3 months old or older number</td>
<td>11,376,472</td>
<td>60,098</td>
</tr>
<tr>
<td>Crops harvested:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corn for grain or seed acres</td>
<td>2,369,184</td>
<td>13,993</td>
</tr>
<tr>
<td>Wheat for feed acres</td>
<td>352,103,399</td>
<td>1,114,588</td>
</tr>
<tr>
<td>Soybeans for beans acres</td>
<td>3,866,310</td>
<td>19,656</td>
</tr>
<tr>
<td>Hay crops tons dry</td>
<td>1,472,777</td>
<td>33,552</td>
</tr>
</tbody>
</table>

1Not fully comparable because of direct enumeration sample in 1978 totals; see text.

1978 data are based on a sample of farms; see text.