

1964 UNITED STATES CENSUS OF AGRICULTURE

FARMS
FARM CHARACTERISTICS
LIVESTOCK AND PRODUCTS
CROPS
FRUITS
VALUES



VOLUME 1 PART 13

MICHIGAN

U.S. DEPARTMENT OF COMMERCE
Alexander B. Trowbridge, Acting Secretary
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BUREAU OF THE CENSUS
A. Ross Eckler, Director

Reports for the 1964 Census of Agriculture

Preliminary reports

These six page reports, issued for each county and State, contain totals for farms, farm acreage, farm operators, land in farms classified by use, land-use practices, equipment and facilities, expenditures, use of agricultural chemicals, poultry, livestock, poultry and livestock products, and crops harvested, including fruits and nuts, nursery and greenhouse products, and forest products.

VOLUME I. STATE AND COUNTY STATISTICS

A separate part will be issued for each State, Puerto Rico, Guam, and the Virgin Islands.

VOLUME II. GENERAL REPORT

Statistics by subject will be presented, with totals for the U.S. regions, geographic divisions, and States.

VOLUME III. SPECIAL REPORTS

These reports will present data for supplementary surveys for farm workers, hired farm workers, and for the 1965 Sample Survey of Agriculture.

The statistics printed in this report supersede statistics shown in preliminary reports—Series AC64-P1.

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The collection of data by field enumeration was under the direction and supervision of **Jefferson D. McPike**, Chief, Field Division, assisted by **Ivan Munro**, Assistant Chief, and by the Directors of the 12 Regional Offices.

The overall planning for the processing of the census of agriculture was developed by the former Demographic Operations Division under the direction of **Morton A. Meyer**, Chief, and **E. Richard Bourdon**, Assistant Chief, and later in the Systems Division under **Sol Dolleck**, Chief, and **Betty S. Mitchell**, Assistant Chief. Computer programming was under the direction of **Robert J. Connolly**. **James Pepal** was responsible for supervision of the computer processing operations; **Sheldon A. Rubin** was responsible for operational methods and procedures; quality control was planned and supervised by **J. Jack Ingram**. Clerical processing of the questionnaires and computer outputs was performed under the general supervision of **Robert D. Krook, James Werking, and Waller Wynne, Jr.** of the Jeffersonville Census Operations Office. **Kenneth R. Norell, Irvin Holmes, and Margaret Wood** made important contributions in the determination and analysis of subject matter requirements.

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1964 ^{OF} UNITED STATES CENSUS AGRICULTURE

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Introduction

AUTHORITY AND AREA COVERED—The census of agriculture is authorized by an Act of Congress, "Title 13, United States Code—Census," codified August 31, 1954, and amended in August 1957, September 1960, June and October 1962, and August 1964. Section 142 paragraph (a) provides for the census of agriculture to be taken in October 1959 and each fifth year thereafter. Section 191 provides that the census data for Guam and the Virgin Islands may be collected by the Governor, or highest ranking Federal official, in accordance with plans prescribed or approved by the Director of the U.S. Bureau of the Census. The 1964 census covers agriculture in each of the States and in Guam, Puerto Rico, and the Virgin Islands.

ENUMERATION—The statistics presented in this report represent totals obtained by adding information obtained from farm operators in November and December 1964. The information was obtained from the operator of each farm by means of an agricultural questionnaire containing questions and space for answers. (See appendix B for a copy of the agriculture questionnaire.) A few days before the start of the enumeration, a questionnaire was mailed to most households in rural areas and to operators of farms included in the 1959 census in urban areas. A letter attached to each agriculture questionnaire asked the farm operator to fill out the questionnaire and give it to the census enumerator when the enumerator visited his place.

The enumeration of the 1964 Census of Agriculture was completed by a census enumerator. An enumerator was assigned a specific area—such as a township or a combination of adjacent townships—to enumerate. The enumerator was given a detailed map for the area assigned. Except in urban and built-up residential areas, the enumerator was required to visit each dwelling (or place) in his assignment, list the head of each household, and obtain answers regarding agricultural operations on the place. (See appendix C for a facsimile of the A2 listing form used by the enumerator.) For places having agricultural operations, the enumerator was required to obtain a completed agriculture questionnaire. If the agriculture questionnaire had already been filled out by the farm operator, the enumerator examined the agriculture questionnaire for completeness

and accuracy and completed the questionnaire as necessary. In built-up residential areas outside of urban areas, enumerators were required to visit and to list on the A2 listing form only places with agricultural operations. In urban areas, the enumerator was given a list of farm operators in 1959 in his assignment and was required to enumerate only the places operated as farms in 1959.

To assist in obtaining an enumeration as complete as possible, enumerators were required to plot on the detailed map of their assignment the location of each dwelling or place listed on the A2 listing form and in 9 States (Colorado, Kansas, Minnesota, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, and South Dakota) to indicate on a special map the location of the land comprising each place for which an agriculture questionnaire was filled. Enumerators were also given lists of special and large farms located in the assigned area and were required to obtain an agriculture questionnaire for each special or large farm, or give an explanation as to why an agriculture questionnaire was not required. The list of special and large farms included farms with 5,000 acres or more in the Western States, or 1,000 acres or more in the Eastern States, State licensed nurseries, greenhouses, cranberry bogs, citrus groves, institutions, etc.

OFFICE PROCESSING—During the office processing, agriculture questionnaires and A2 listing forms were reviewed for completeness. Missing agriculture questionnaires were obtained by mail, or if the missing questionnaire was for a large agricultural operation, by telephone or personal visit of an enumerator. When a questionnaire representing significant agriculture operations was incomplete, the missing information was obtained from the farm operator by mail or by telephone.

The data for questionnaires representing farms comprising 1,000 acres or more, for farms having a total value of farm products sold of \$100,000 or more, and data on questionnaires for other large agricultural operations were reviewed by an agricultural statistician. The data from each agriculture questionnaire were placed on magnetic tapes by means of punched cards. The data for each agriculture questionnaire were reviewed by an electronic computer to determine that punched data for all items for the questionnaire were consistent and present, to correct data inconsistent or in error, to supply missing data, and to make classifications of the farm necessary for tabulation of data. Changes made by the computer

in order to make data consistent, or to correct errors, or to provide missing data were recorded and the most significant changes were reviewed by an agricultural statistician.

When the changes made during the computer processing appeared to be in error or unreasonable or when data not corrected by the computer were in error, and the errors were large enough to affect totals or distributions significantly, additional changes were made on the computer record for the farm before tabulations were made.

CENSUS DEFINITION OF A FARM—The statistics given in this report relate to places qualifying as census farms. For the 1964 Census of Agriculture, the definition of a farm was based primarily on a combination of "acres in the place" and the estimated value of agricultural products sold.

The word "place" was defined to include all land on which agricultural operations were conducted at any time in 1964 under the control or supervision of one person or partnership. Control may have been exercised through ownership or management, or through a lease, rental, or cropping arrangement.

Places of less than 10 acres in 1964 were counted as farms if the estimated sales of agricultural products for the year amounted to at least \$250. Places of 10 or more acres in 1964 were counted as farms if the estimated sales of agricultural products for the year amounted to at least \$50. Places having less than the \$50 or \$250 minimum estimated sales in 1964 were also counted as farms if they could normally be expected to produce agricultural products in sufficient quantity to meet the requirements of the definition. This additional qualification resulted in the inclusion as farms of some places engaged in farming operations for the first time in 1964 and places affected by crop failure or other unusual conditions.

Some places for which an agriculture questionnaire was obtained did not qualify as a census farm. The calculations and determination whether the place for which an agriculture questionnaire was obtained qualified as a census farm, were made by an electronic computer.

COMPARISON OF DATA FOR THE 1964 AND 1959 CENSUSES—Generally the data for the 1964 and the 1959 censuses are comparable. The definitions and explanations given in appendix A for individual items explain some of the limitations regarding the comparability of data for the two censuses. More detailed statements will be found in the Introduction to Volume II of the reports for the 1964 Census of Agriculture.

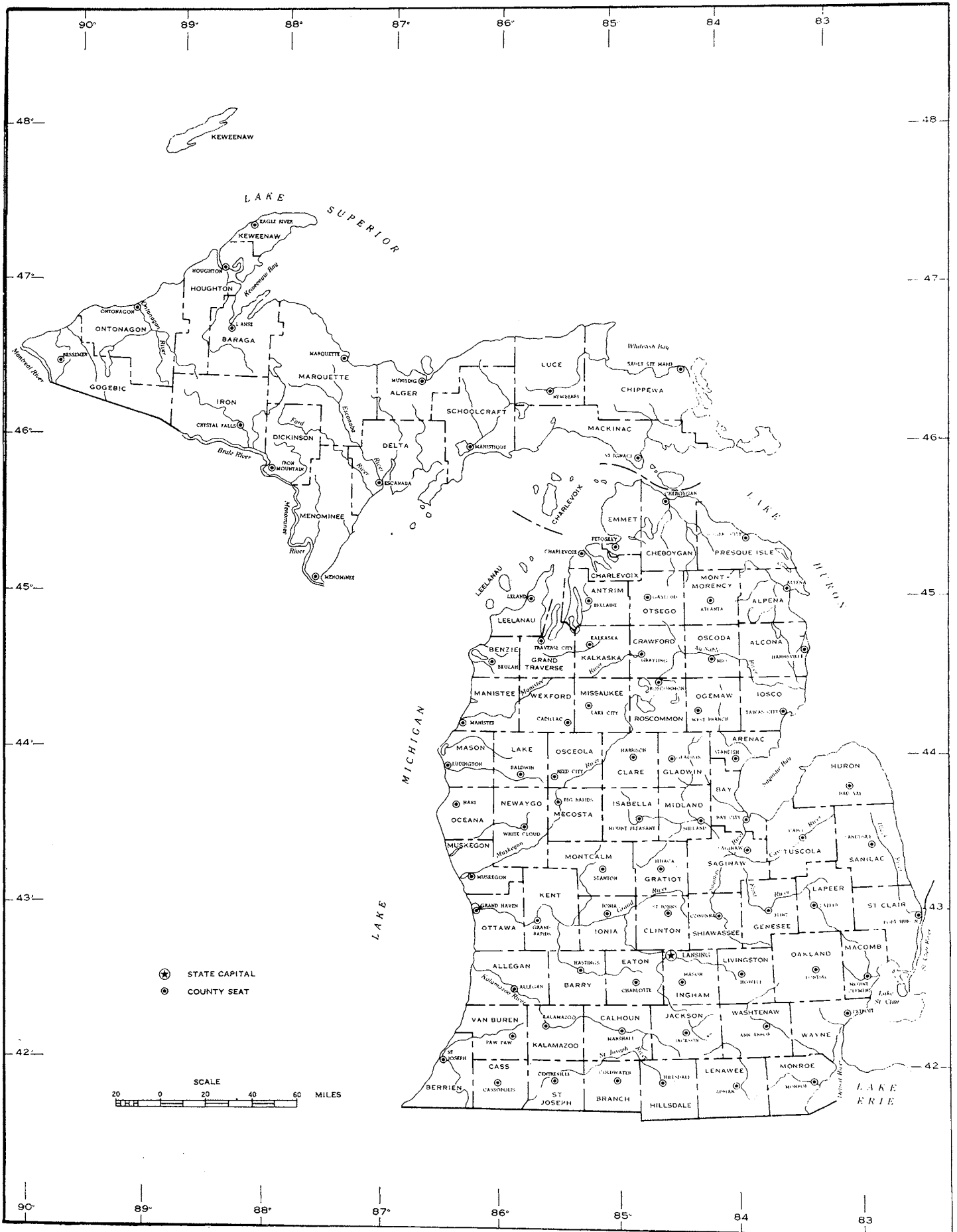
COMPLETENESS OF THE CENSUS—A complete and fully accurate count of farms, farm land, and farm production has never been obtained in a general and nationwide census. The causes of the incompleteness are related to the large number of farms to be enumerated; the variety of arrangements under which farms are operated; the continuing changes in the relationship of farm operators to the land they operate because of expirations of leases and the making of new leases, or the renewal of other leases; the widespread leasing of agricultural lands without written leases; the employment of a large number of temporary personnel to take and to supervise the taking of a nationwide census; the reluctance of some farm operators to provide information to census enumerators; the problems of locating and identifying places that might be farms; the unavailability of information, locally, for some agricultural operations; the absence from their farms during the period of enumeration of some farmers and their families; the failure of some enumerators to perform a thorough job; the opinion of some farm operators that their agricultural operations should not be included in the census; errors during office processing, etc. For a more detailed statement of the incompleteness of the 1964 and the 1959 Censuses of Agriculture, reference may be made to the Introduction, Volume II, of the reports for the 1964 and 1959 Censuses of Agriculture.

ABBREVIATIONS AND SYMBOLS—The following abbreviations and symbols may occur in the tables:


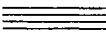
- Zero.
- X Not applicable.
- NA Not available.
- D Data withheld to avoid disclosing figures for an individual farm or farm operations.

MICHIGAN

Counties, County Seats, and Rivers



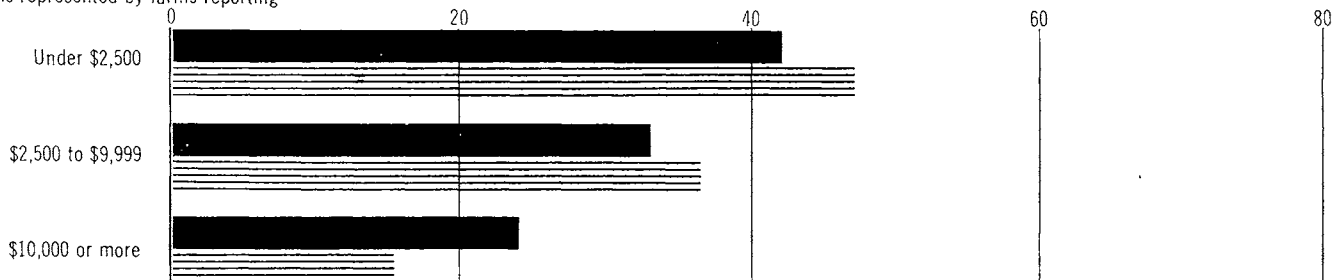
SELECTED MEASURES OF AGRICULTURE: 1964 and 1959

1964 
 1959 

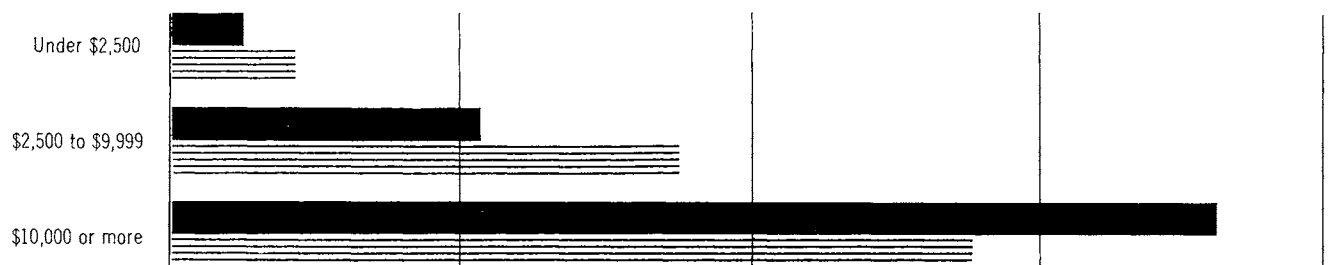
MICHIGAN

VALUE OF ALL FARM PRODUCTS SOLD

Percent of all farms represented by farms reporting—

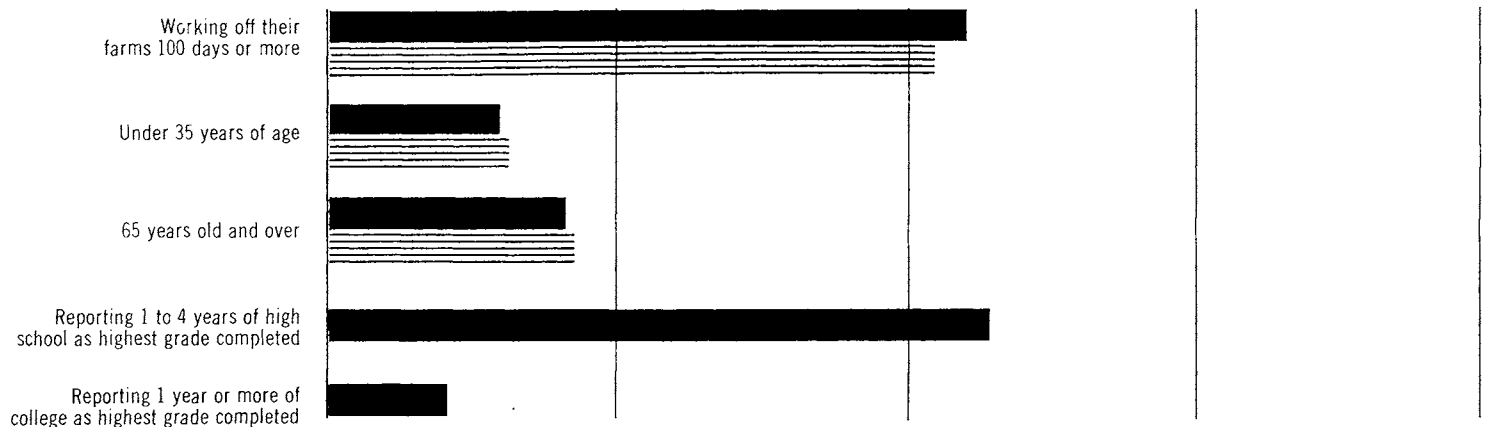


Percent of total dollar value represented by farms reporting—



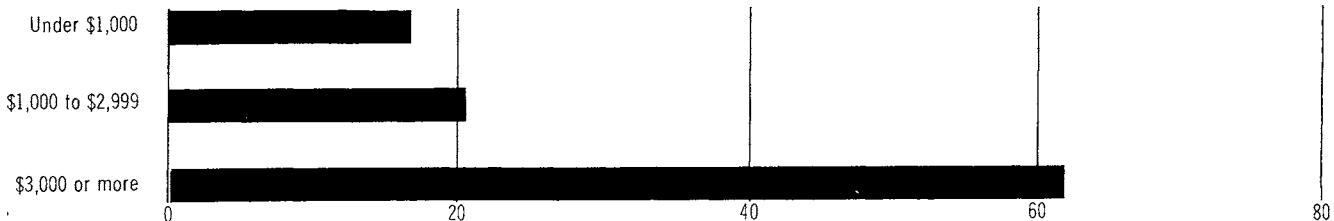
FARM OPERATOR CHARACTERISTICS

Percent of all farm operators represented by operators—



INCOME FROM SOURCES OTHER THAN THE FARM OPERATED

For farm operator households reporting, percent represented by households with—



P E R C E N T

PERCENT CHANGE IN SELECTED MEASURES OF AGRICULTURE: 1959 to 1964

MICHIGAN

