

# UNITED STATES CENSUS OF AGRICULTURE: 1945

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## VOLUME I

### Part 6

# MICHIGAN

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## STATISTICS FOR COUNTIES

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Farms, Acreage, Value, Characteristics  
Livestock, Livestock Products, Crops, Fruits  
and Value of Farm Products

Prepared under the supervision of

RAY HURLEY

Chief, Agriculture Division

DEPARTMENT OF COMMERCE  
W. AVERELL HARRIMAN, Secretary

BUREAU OF THE CENSUS  
J. C. CAPT, Director

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(II)

# UNITED STATES CENSUS OF AGRICULTURE: 1945

## REPORTS ON AGRICULTURE

Volume I.—Statistics for farms, acreage, value, characteristics, livestock, livestock products, crops, fruits, and value of farm products. This volume is composed of 34 parts: Parts 1 through 33 are State reports with statistics for counties; part 34 is a summary for the United States with statistics for States and geographic divisions.

### Part 1—New England States:

Maine  
New Hampshire  
Vermont  
Massachusetts  
Rhode Island  
Connecticut

### 2—Middle Atlantic States:

New York  
New Jersey  
Pennsylvania

### 3—Ohio

### 4—Indiana

### 5—Illinois

### 6—Michigan

### 7—Wisconsin

### 8—Minnesota

### 9—Iowa

### 10—Missouri

### 11—North Dakota and South Dakota

### 12—Nebraska

### 13—Kansas

### 14—Delaware, Maryland, and District of Columbia

### 15—Virginia and West Virginia

### 16—North Carolina and South Carolina

### 17—Georgia

### 18—Florida

### 19—Kentucky

### 20—Tennessee

### 21—Alabama

### 22—Mississippi

### 23—Arkansas

### 24—Louisiana

### 25—Oklahoma

### 26—Texas

### 27—Montana

### 28—Idaho

### 29—Wyoming and Colorado

### 30—New Mexico and Arizona

### 31—Utah and Nevada

### 32—Washington and Oregon

### 33—California

### 34—United States Summary

Volume II.—General Report—Statistics by subjects for the United States, geographic divisions, and States.

# Letter of Transmittal

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DEPARTMENT OF COMMERCE  
BUREAU OF THE CENSUS  
Washington, D. C.

November 20, 1946

SIR:

I transmit herewith part 6 of volume I of the reports of the United States Census of Agriculture, 1945. Volume I consists of 34 parts; 33 parts, comprised of State reports with statistics for counties; and part 34, a summary for the United States, with statistics for States and geographic divisions. The reports are the results obtained from a tabulation of the information given by farm operators to census enumerators in a personal enumeration of farms in 1945.

Legal provision for the 1945 Census of Agriculture was made by the Act providing for the Fifteenth Decennial Census, approved on June 18, 1929.

Advance plans and schedules for the 1945 Census of Agriculture were prepared under the supervision of Z. R. Pettet, Chief, Agriculture Division, who retired February 28, 1945. Preliminary compilations of the statistics were begun under the supervision of W. F. Callander, Chief, Agriculture Division, who returned to the Department of Agriculture January 8, 1946. The final tabulations and the preparation of this volume were made under the supervision of Ray Hurley, who was appointed Chief, Agriculture Division, January 8, 1946. Assistance was rendered throughout the census period by Irvin Holmes, Assistant Chief, and by Hilton E. Robison, J. A. Hicks, John A. Burroughs, Carl R. Nyman, and Raymond S. Washburn.

Acknowledgment is made of the technical assistance, the loan of technical personnel, and the cooperation of the United States Department of Agriculture in the planning, the enumeration, and the compilation of the 1945 Census of Agriculture.

Respectfully,

J. C. CAPT,  
*Director of the Census.*

HON. W. AVERELL HARRIMAN  
*Secretary of Commerce*

(III)

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# CENSUS OF AGRICULTURE: 1945

## INTRODUCTION

**History of the census of agriculture.**—The first National Census of Agriculture was taken in connection with the Sixth Decennial Census of Population in 1840. Since 1840, a census of agriculture has always been taken in conjunction with the census of population in each decennial enumeration. Congress first provided for a mid-decennial agriculture census to be taken in 1915, but because of World War I this census was not taken. Congress provided for a mid-decennial agriculture census to be taken as of January 1, 1925, and such a census was taken. Another mid-decennial agriculture census was taken in 1935, and the legislation providing for this census continued in effect so that a census of agriculture is taken every fifth year. Therefore, since 1920, there has been a Federal Census of Agriculture every fifth year.

**Scope and schedule of the census of agriculture.**—The census of agriculture has been increased in scope, and the methods of enumerating and tabulating the data have been improved greatly since 1840. The scope of the first census of agriculture (1840) was limited to such items as the production of the principal crops, an inventory of the principal classes of domestic animals, the production of wool, and the value of dairy and poultry products. The 1945 Census of Agriculture covers not only these items, but also such items as farm land classified according to use, characteristics of the farm operator, value of land and buildings, farm dwellings, farm population, farm labor, farm facilities and equipment, sales of farm products, and the production of fruits, nuts, and many minor crops.

The general form of the schedule for the census of agriculture has also undergone a change. In 1840, agricultural items were included in the general schedule for "mines, agriculture, commerce, manufacture, etc." This schedule was columnar in type; i.e., questions were listed in the column headings and the names of the enumerated persons were listed down the left-hand side of the schedule. The schedules from 1850 through 1890 were also columnar in type, but the agricultural items were listed in a separate schedule from mines, commerce, etc. From 1900 through 1940, the columnar type of schedule was abandoned and an individual schedule was required for each farm. In 1945, however, the columnar schedule was used again. Space was provided in each schedule book for the enumerator to enter information for 25 farms except for the South Eastern and South Central States. In these States, space was left

for only 20 individual farms or subunits of multiple-unit or plantation operations, while 4 lines were available for entering data on multiple-unit operations as a whole. The columnar book-type schedule was chosen in order to facilitate the work of enumeration and tabulation of the data.

In addition to the 239 questions asked for all farms, 73 supplementary questions on expenditures, machinery, interest on mortgage debt, livestock, farm gardens, the farm household, farm employment, and related items were also asked for a sample of approximately 1 farm in each 18 and for specified large farms in the United States. All the information for farms included in this sample was listed in separate schedule books. Data for the supplementary questions for these farms will be published in volume II, General Report.

A facsimile of the schedule or schedules and accompanying instructions used for all farms in 1945 in the State or States to which this report relates are given in the appendix.

**Legal basis for the 1945 Census of Agriculture.**—Provision for the 1945 Census of Agriculture was made in the Act of Congress providing for the Fifteenth Decennial Census, approved June 18, 1929.

**Presentation of statistics.**—This bulletin presents all the data from the 1945 Census of Agriculture to be published for all farms by counties. The data for the various States are being published in 34 parts or separate bulletins as indicated on page II.

**Data by minor civil divisions.**—Data for minor civil divisions (townships, precincts, etc.) will not be published. However, a large part of the data for the 1945 Census of Agriculture was tabulated by minor civil divisions. The following data by minor civil divisions have been placed in statistical tables, copies of which may be obtained from the Bureau of the Census, by payment of the cost of making copies of such tables:

Number of farms

Total acres in farms

Farm land classified according to use

Value of land and buildings

Number of farm operators by color (Southern States only)

Number of farm operators by tenure

Number of occupied and unoccupied dwellings

Number of persons living on farms classified by sex and age

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# CENSUS OF AGRICULTURE: 1945

Number of farms reporting running water, electricity, radio, and telephone in farm dwelling

Number of farms reporting electric distribution line within 1/4 mile of farm dwelling

Number of farms classified according to distance to nearest all-weather road

Farms reporting and number of motortrucks, tractors, and automobiles

Farms reporting and acres harvested for the following crops: corn for all purposes, sorghums for all purposes, oats threshed, barley, rye, flax, rice, soybeans harvested for beans, all dry field and seed peas, peanuts grown alone for all purposes, clover and timothy hay, lespedeza hay, lespedeza seed, vetch seed, alfalfa seed, red clover seed, sweetpotatoes, hops, sugar beets, and sugarcane for sugar

Farms reporting, acres harvested, and production for the following crops: corn harvested for grain, wheat, peanuts picked or threshed, alfalfa hay, Irish potatoes, cotton, and tobacco

Farms reporting and acres of the following small fruits (available only for areas where these crops are important commercially): strawberries, raspberries, blackberries and dewberries, boysenberries, loganberries, and youngberries

Farms reporting, total number of trees, and production of the following fruits (available only for areas where these fruits are important commercially): apples, peaches, pears, plums and prunes, grapes, apricots, oranges, grapefruit, and lemons

Farms reporting and acres of land in orchards, vineyards, and planted nut trees

Farms reporting and number for the following classes of livestock or poultry: mules and mule colts, horses and colts, all cattle and calves, cows and heifers, all hogs and pigs, sows and gilts for spring farrowing, cows and heifers milked, chickens raised, and turkeys raised

**Comparability of data for various censuses.**—The 1945 Census of Agriculture was taken as of January 1, 1945; consequently, data for all inventory items relate to that date. Data on crop acreage and production are for the crop year 1944. Data on livestock production, unless specifically noted otherwise, and on value of farm products, work off farm, etc., are for the calendar year 1944. Likewise, for other censuses, data for inventory items relate to the date of the census and data for production items generally relate to the preceding crop year or calendar year.

The date on which the enumerator makes his canvass affects the statistics because of changes between census date and the date of actual enumeration. The Act providing for the census of agriculture requires that no enumerator be assigned a larger area than he can enumerate completely within 30 days from the date of

assignment. Under normal conditions this provision insures promptness in the completion of the enumeration. Because of wartime conditions at the time of the 1945 Census enumeration, a longer period was required for the canvass. The average date of enumeration, as well as the percentage distribution of enumeration districts by periods when the enumeration was completed, is given in table A on page XVII.

**Comparability of data for small geographic areas.**—No two enumerators assigned the same territory to canvass would obtain identical results. The influence of enumerators on the statistics is most pronounced for those items which are the most difficult to define with exactness, or those items calling for quantitative data not generally measured or evaluated by the farm operator. An enumerator may have found it advantageous to rephrase the inquiry, especially if it and the accompanying explanation were rather long. He may have assisted the respondent in determining the replies, or, in some instances, he may have resorted to estimating the item from other information furnished by the farm operator or from his general knowledge of local conditions. Occasionally, when he had difficulty in obtaining a reply or when he considered the inquiry relatively unimportant, the enumerator may have failed to enter an answer for the inquiry. In such cases, the comparability of the statistics is affected by the character of the work performed by individual enumerators.

The average county was canvassed by several enumerators. Thus, for most counties, there were a sufficient number of enumerators so that the variation in the work of various enumerators does not affect, to any appreciable extent, the comparability of totals for various counties, or for the same county for the different censuses. However, some counties with a relatively small number of farms were enumerated by only a few enumerators, and in some instances entire counties were canvassed by a single enumerator.

Comparability of statistics for small geographic areas, such as counties and minor civil divisions, may also be affected by the policy of crediting to the political area in which the farm headquarters is located all the land in that farm including any land in that farm which is located in other political areas. (See enumeration of farms with land located in more than one county, page IX.)

## DEFINITIONS AND EXPLANATIONS

Only those items for which the table descriptions are considered inadequate are discussed. The descriptive terms and explanations refer principally to the 1945 Census of Agriculture, although, in general, they are also applicable to the statistics presented for earlier censuses. The definitions consist primarily of a resume of the schedule wording, occasionally

supplemented by the more essential parts of instructions given to the enumerators. For the exact phrasing of the inquiries and of the instructions to enumerators, reference should be made to the facsimile of the 1945 Farm and Ranch Schedule shown in the appendix.

A more complete explanation of the data will be possible after reviewing the figures for all enumeration

districts in the United States, and reference should be made to volume II, General Report, which will present statistics for States by subject matter and which will include a more comprehensive discussion of the comparability and reliability of the statistics.

**A farm.**—The schedule book for 1945 was entitled "Farm and Ranch Schedule." The following definition appeared in each schedule book:

A farm, for Census purposes, is all the land on which some agricultural operations are performed by one person, either by his own labor alone or with the assistance of members of his household, or hired employees. The land operated by a partnership is likewise considered a farm. A "farm" may consist of a single tract of land, or a number of separate tracts, and the several tracts may be held under different tenures, as when one tract is owned by the farmer and another tract is rented by him. When a landowner has one or more tenants, renters, croppers, or managers, the land operated by each is considered a farm. Thus, on a plantation the land operated by each cropper, renter, or tenant should be reported as a separate farm, and the land operated by the owner or manager by means of wage hands should likewise be reported as a separate farm.

Include dry-lot or barn dairies, nurseries, greenhouses, hatcheries, fur farms, mushroom cellars, apiaries, cranberry bogs, etc.

Do not include "fish farms," "fish hatcheries," "oyster farms," and "frog farms." Do not report as a farm any tract of land of less than 3 acres, unless its agricultural products in 1944 were valued at \$250 or more.

Farming, or agricultural operations, consists of the production of crops or plants, vines, and trees (excluding forestry operations) or of the keeping, grazing, or feeding of livestock for animal products (including serums), animal increase, or value increase. Livestock, as here used, includes poultry of all kinds, rabbits, bees, and fur-bearing animals in captivity, in addition to mules, asses, burros, horses, cattle, sheep, goats, and hogs. Frequently, certain operations are not generally recognized as farming. This is especially true where no crops are grown or where the establishments are not commonly considered as farms.

There was provided a partial list of types of specialized agriculture and of operations not generally recognized as farming but for which a report was required. This list included such operations as apiaries (bee farms), feed lots, greenhouses, hatcheries, mushroom cellars, etc.

The definition of a farm used in the 1945 Census of Agriculture was essentially the same as that used in the 1940, 1935, 1930, and 1925 Censuses. Those used for the 1920 and 1910 Censuses were similarly worded but were somewhat more inclusive. In those years farms of less than 3 acres with products valued at less than \$250 were to be included, provided they required the continuous services of at least one person. Because of the difference in price level, the \$250 limit for the minimum value of products for farms of under 3 acres resulted in the inclusion in 1945 of more farms at or near the lower limits of value or acreage than were included in the earlier censuses. Comparability, particularly on a county level, in the number of farms for the different censuses is affected by such marginal farms.

**Farm operator.**—A "farm operator," according to the Census definition, is a person who operates a farm, either performing the labor himself or directly supervising it. The number of farm operators is identical with the number of farms.

**Color of operator.**—Farm operators are classified as "white" and "nonwhite." White includes Mexicans and "nonwhite" (designated as "other" on the schedule) includes Negroes, Indians, Chinese, Japanese, and all other nonwhite races.

**Tenure of operator.**—Farm operators are also classified according to the tenure under which they operate their farms.

*Full owners* own all the land they operate.

*Part owners* own a part and rent from others the remaining part of the land they operate.

*Managers* operate farms for others and are paid wages or salaries for their services. Persons acting merely as caretakers or hired as laborers are not classified as managers.

*Tenants* operate hired or rented land only. *Cash* tenants pay a cash rental, such as \$4.50 per acre for the cropland or \$500 for the use of the whole farm. *Share-cash* tenants pay a part of their rental in cash and part as a share of crop or livestock production. *Share* tenants pay a share only of either the crop or livestock production or both. *Croppers* have been defined as share tenants to whom their landlords furnish all the work animals or tractor, power in lieu of work animals. In some of the cropper areas, tenants pay cash rent for noncash crops and a share of the crop for the cash crop. These tenants, as well as those for whom the method of rental was not reported, were classified in 1945 and 1940 as croppers, if the work power was furnished by the landlord. *Other and unspecified* tenants include those whose rental agreement was unspecified and those who could not be included in one of the other subclasses.

For the Northern and Western States, except for specified counties in Southeastern Missouri, croppers are not shown separately but are included with other and unspecified tenants. For the Southern States and for specified counties in Missouri, information by color and tenure of operator is presented by counties in a supplemental table; i.e., a tenure classification is shown for white and for "other" farm operators. For the Northern and Western States, information by tenure of operator by color is presented only for the State.

**Age of operator.**—Farm operators have been classified by age for several censuses, and the absolute figures for six age groups are shown in State table 1. Averages are also given in this table by tenure of operator for 1945 and 1940, the only years for which averages are available.

**Years on farm.**—The answer to the question on the 1945 Farm and Ranch Schedule, "Year the operator began

## VIII

# CENSUS OF AGRICULTURE: 1945

to operate this farm (continuously) \_\_\_\_\_ (Year)," reflects, in part, the stability or instability of operators on particular farms.

In both 1945 and 1940, the question on years on farm called for the year in which the operator began to operate his farm. Since the Census of 1945 was taken as of January 1 and that of 1940 as of April 1, it is impossible to classify the data so as to make exact comparison between the two years. The figures given for less than 1 year for the Census of 1945 include all farm operators reporting 1944 or 1945 as the year they began to operate the farm. A figure for 1945 is shown separately for the State in a footnote to State table 1 and county table I. This figure will give some indication of the effect on the less than 1 year group which may have resulted from the fact that the date of enumeration did not coincide with the census date. For the Census of 1940, taken as of April 1, the figures for less than 1 year include only those operators reporting 1940 as the year they began to operate the farm. For the censuses prior to 1940, the data given in State table 1 on years on farm are, in general, comparable with those for the Census of 1945.

In reporting the year when the operator began to operate the farm, there was a noticeable tendency to report the year the operator first lived on the farm regardless of whether he was the operator at that time, whether he had operated the farm continuously since that date, or whether the farm qualified as a farm under the Census definition prior to the 1945 Census. Insofar as the results of this inquiry are used to reflect the stability of operators on particular farms, this tendency has had no appreciable effect on the usefulness of the figures.

In State table 1 and in county table I, averages are presented for all operators. These averages were obtained by making a summation of all years reported and dividing the total by the total number of operators reporting.

**Residence of farm operator.**—Information was obtained in 1945 as to whether the operator of the farm resided on the farm he was operating. The question read "Does the operator live on this farm? \_\_\_\_\_ (Yes or No)." Replies of "yes" were retained when it was evident that the operator considered himself as living on the farm operated even though there were no occupied dwellings on the farm on January 1, 1945. Thus, an operator living on an adjoining tract of land locally considered as part of the same farm, or an operator living on the farm a portion of the year but away from the farm on January 1, may be included in the figures for resident operators.

**Work off farm.**—Many farm operators obtain additional income from personal services performed off their farms. In some cases the operator supplements his farm income with odd or spare-time jobs or business;

in many other cases his farming activities are only secondary, his off-farm job being his principal source of income. The inquiry carried on the 1945 Farm and Ranch Schedule ascertained the number of days the operator worked off his farm in 1944 for pay or profit. Instructions were given to the enumerators that this question was intended to obtain a record of all time spent off the farm in 1944 for pay, income, or profit. Work of the operator in connection with a filling station, store, garage, tourist camp, or other nonfarm business conducted at the farm was considered as work off the farm. The figures on number of farm operators reporting work off their farms represent the minimum number of farm operators working off their farms in 1944. Because the number of operators working no days off their farm was not obtained, there is no accurate measure of completeness of the reports for farm operators reporting work off the farm. In 1940, when reports were secured for farm operators working no days off the farm, slightly less than 8 percent of the farm operators in the United States did not report as to whether or not they worked off their farms.

**Farms reporting.**—The term "farms reporting," as used in the tables, indicates the number of farms for which the specified items shown in the particular table were reported. If there were 1,922 farms in a county and only 1,465 of these had chickens on hand over 4 months old, January 1, 1945, the number of farms reporting chickens for that year would be 1,465.

**Land area.**—The approximate land areas reported for the States and for the counties for 1945 and 1940 resulted from a complete remeasurement of the United States, its individual States, and their counties, and, therefore, may be at variance with the figures shown for earlier censuses.

**Land in farms.**—The acreage designated as "all land in farms" includes considerable areas of land not actually under cultivation and some land not even used for pasture or grazing, but all such land must have been under the control of the operator and considered a part of his farm. However, large areas of timberland or other nonagricultural land held by an operator of a farm as a separate business, and not used for pasture or grazing, or for any other farm purpose, were to be excluded. Land neither owned nor leased but from which crops, including wild hay, were harvested was to be reported as part of the farm. When cattle, sheep, or other livestock were grazed or pastured on land neither owned nor leased by the operator, such land was not to be included as a part of the farm. Operations limited to livestock grazing on open range and reported as having no land owned or leased were given "0" acres and were included with farms of under 3 acres. In most of the States the increases in land in farms represent land used for grazing. In the Western States this increase does not necessarily represent more land used



for agricultural purposes. It is more likely that a large part of it represents leased land which was formerly open range.

The 1945 Census also includes in farm acreage more Indian grazing lands than prior censuses because of changes in the method of enumerating agricultural activities on Indian reservations. In 1945, if land in an Indian reservation was used by the Indians on a co-operative basis, the entire acreage in the reservation was reported as a single farm. In such cases, much grazing land, not included in farms in previous censuses, was included as land in farms in 1945.

In 1945, data were obtained for eight classes of land based upon the use made of the land in 1944, as follows:

**1. Cropland harvested.**—The land from which cultivated crops were harvested; land from which hay (including wild hay) was cut; and land in small fruits, orchards, vineyards, nurseries, and greenhouses. When two or more crops were harvested in 1944 from the same acreage, such acreage was included only once in the acreage for cropland harvested. However, the acreage and the quantity of each individual crop were reported separately as crops harvested. Thus, in some counties the total of the acreage of crops may greatly exceed the acreage designated as cropland harvested.

**2. Crop failure.**—The land from which no crop was harvested in 1944 because of destruction by wind, hail, drought, floods, insects, disease, or from any cause, or from failure to harvest because of low prices or lack of labor. If a crop was harvested, even though the yield was very low, the land from which the crop was actually harvested was included in the acreage for cropland harvested, not crop failure. The acreage designated as crop failure does not represent the entire acreage of crops which failed, but only that acreage of land in crops that failed and which was not successfully replanted to a crop that was harvested in 1944. Correspondence with individual operators indicates that enumerators sometimes included under crop failure land which had not been planted to crops in 1944 because of floods, shortage of labor, or for other reasons.

**3. Cropland idle or fallow.**—Cropland which was lying idle or which was in cultivated summer fallow; or land on which crops were planted for soil improvement or the prevention of erosion, and which was not pastured, or from which no crop of any kind was harvested in 1944.

**4. Cropland used only for pasture.**—Cropland used only for pasture in 1944 that was plowed within the last 7 years. The figures for this item for the Censuses of 1940, 1935, 1930, and 1925 include land pastured which could have been plowed and used for crops without additional clearing, draining, or irrigating. This land may not have been plowed within the 7 years prior to the census date. In the States west of the Mississippi, large areas of land which had never been plowed were reported in the Censuses of 1940, 1935, 1930, and 1925 as plowable pasture. Therefore, the figures presented for cropland used only for pasture, especially for the States west of the Mississippi, for the 1940 and prior censuses are not comparable with the figures for 1945.

**5. Woodland pastured.**—Woodland used for pasture or grazing in 1944. If returns for various census years indicated that there was some question as to whether land should be classed as woodland or as other land, such land was retained as reported by the enumerator. Thus, some of the changes, from one census to the next, in the acreage of woodland pastured and other land pastured may merely represent differences in interpretation of the definition of woodland by the census enumerators.

**6. Other land pastured.**—Land, other than cropland and woodland, used only for pasture or grazing in 1944.

**7. Woodland not pastured.**—All farm wood lots or timber tracts, natural or planted, and cut-over land with young growth,

which has or will have value as wood or timber. Chaparral and woody shrubs were to be reported as other land used only as pasture or as all other land in farms.

**8. All other land.**—This classification includes all wasteland, house yards, barnyards, feed lots, lanes, roads, ditches, etc.

**Enumeration of farms with land located in more than one county.**—Land in an individual farm occasionally is located in two or more counties. In such cases, the entire farm was to be enumerated in the county in which the farm headquarters was located. As a result of this procedure, the acreage shown for "all land in farms" in some counties may be greater, and in other counties smaller, than the area actually in farms. Reference to cross-line acreage is made in the tables by footnote only when the area shown for the farms of a county is in excess of the county area.

**Farms and farm acreage classified by size of farm.**—The revised grouping of farms and farm land by size (total acreage in the farm) as used in the Census of 1935 was repeated for 1945.

The "under 3 acres" group includes a count of farms for livestock operators who neither owned nor leased any land but grazed their animals on open or public range.

**Farm values.**—The enumerators were instructed to obtain from each farm operator the total value of the farm (land and buildings) owned by the operator and, also, the value of that part of the farm rented from others. The value to be reported was the market value. For part-owner operators, the value of the owned and rented portions, as well as the total value, of the farm is shown in county table V.

Finally, the operator was asked to place an over-all value on the farm implements and machinery used in operating the farm. This was to represent the present market value and was to include not only the farm implements but also the tools, tractors, motortrucks, wagons, harnesses, dairy equipment, gins, threshing machines, combines, and all other farm machinery. However, the values of automobiles, commercial mills and factories, and, also, permanently installed irrigation and drainage equipment were to be omitted. In previous censuses, the value of automobiles was to be included in the value of implements and machinery. In making comparisons with the figures for 1940 and earlier censuses, it should be noted that the value of all automobiles on farms is not included in the 1945 figures.

The difference in the number of farms reporting value of implements and machinery and the total number of farms indicates that this item may be incompletely reported, as it is not likely that the number of farms not having implements and machinery is as great as this difference indicates.

**Motortrucks, tractors, and automobiles.**—On each farm, an inventory was made for the number of motortrucks, automobiles, and tractors used in the operation

of the farm. The enumerators were instructed to enumerate all automobiles on the farm, including those owned by hired help living on the farm.

**Roads.**—The enumerator was instructed to indicate the distance from the farm to the nearest all-weather road. If the main farm entrance was on an all-weather road, the enumerator was asked to report "0" miles; if not, to give the distance along the highway to the nearest road that was passable at all times and all seasons. Since some enumerators reported the distance from the farm dwelling or farm buildings to the nearest all-weather road, rather than the distance from the main farm entrance, the reports of "0" up to and including 0.2 mile were tabulated as a group. The comparative figures for the Censuses of 1940, 1930, and 1925 for farms reporting 0.0 to 0.2 mile to nearest all-weather road represent: for 1940, farms reported as on hard-surfaced, gravel, shell, shale, etc., roads; for 1930, farms reported as on concrete, brick, asphalt, macadam, gravel, and sand-clay roads; and for 1925, farms reported as on concrete, brick, macadam, and gravel roads. It should be noted that much of the difference between the figures for 1945 and those for earlier years may be attributed to the difference in the wording of the inquiry on roads.

**Facilities.**—The number of farms having various facilities was obtained by the inquiry "Does farm dwelling have—Running water? Electricity? Radio? Telephone?" The number of farms with dwellings, either occupied or unoccupied, with reports of "yes" to these inquiries is shown by counties. In using these county figures, it should be kept in mind that they represent a minimum number of farms having these facilities as reports for these items were occasionally omitted. State table 1 will indicate the possible overall extent of such incompleteness, as it includes figures on the number of farms with dwellings for which reports of "yes" or "no" were not secured.

Comparative figures for 1940 are included only for those facilities covered in the 1940 Census of Agriculture. Although additional facilities were covered in the census of housing, the 1940 figures are not shown in State and county tables because of lack of comparability. However, comparisons can be made with the 1940 figures for the census of housing for rural-farm dwellings if allowance is made for certain differences. The 1945 figures refer to the number of farms equipped with the various facilities, while the figures for the 1940 Census of Housing refer to the number of rural-farm dwellings having these facilities. Therefore, allowance must be made for the fact that in most States the number of rural-farm dwellings is a little larger than the number of farms. Allowance must also be made for the difference in the concept of "farm" as used in the censuses of housing and population and the census of agriculture (see discussion under Farm dwellings and

Farm population) and for the fact that the census of agriculture includes figures for urban as well as for rural farms.

**Farm dwellings.**—The inquiry on dwellings on farms January 1, 1945, called for the number of occupied and the number of unoccupied dwellings separately. Dwellings rented to persons not connected with the farming operations, tourist camps, and institutional buildings were not to be considered as part of the farm and, therefore, were to be excluded.

**Farm population.**—Farm population was defined for the 1945 Census of Agriculture as the population living in dwelling units on farms, excluding persons in dwelling units rented to other than farm operators. In addition to the households of resident farm operators, the farm population, as defined for this census, includes the households of resident landlords and those of farm laborers, relatives of farm operators, and others occupying dwelling units on farms without paying specific rent for their use. It is believed, however, that some of the enumerators did not include all of the persons in the latter types of households. For this reason, State table 1 gives the population enumerated on farms with two or more occupied dwellings, as well as the total farm population.

Data on farm population have been collected quinquennially in the censuses of population and agriculture since 1920. Data for these earlier censuses also are shown in State table 1, although they are not strictly comparable with the figures for 1945. There are three principal reasons for lack of comparability:

1. In the censuses before 1945, persons living on farms in dwellings that were rented to other than farm operators were not specifically excluded by definition from the farm population. Thus, many families were included who had no connection with the operation of farms.
2. In the population censuses of 1940, 1930, and 1920, the data on farm population were obtained by a different method from that used in the censuses of agriculture in 1945, 1935, and 1925. It is believed that the difference in method of enumeration had an important effect upon the numbers of households reported as living on farms, and also upon the numbers of persons enumerated in those households. Furthermore, differences in numbers of farms enumerated in the various censuses of agriculture had an important effect on the relative size of the farm population enumerated. See discussion under definition of "a farm" relative to variations from one census to another caused by farms marginal as to definition.
3. The censuses of 1920, 1925, 1935, and 1945 were taken in January, a month when the farm population is seasonally low, whereas the censuses of 1930 and 1940 were taken in April.

**Farm labor.**—The farm labor inquiry sought to secure separate data for the number of persons 14 years old and over working on the farm the equivalent of 2 or more days during the week ending January 6, 1945, for (a) farm operators, (b) unpaid members of the operator's family, and (c) hired laborers. The enumerators were instructed to report the number of persons working at farm work, including farm chores. Inmates of

institutions and persons working at housework and contract construction work were not to be reported.

There was in 1945, as in the previous censuses, difficulty in securing accurate data on farm labor. In some cases, enumerators did not secure answers to the farm labor inquiries, and in other cases they included persons engaged in housework, children under 14 years old, the maximum number of persons employed during the year, or the operator with the other family workers in addition to reporting him separately. Although such errors were usually during the editing process, adequate corrections in the number and type of farm labor were difficult to make.

Another inquiry on farm labor called for the total cash paid in 1944 for farm labor (wage, contract, and piece-work labor). Expenditures for machine hire and for any labor included in the cost of such machine hire, and expenditures for household and contract construction work were not to be included. The expenditures for farm labor represent the amount paid in cash. For certain types of labor, cash wages are often supplemented with the furnishing of board, housing, products of the farm for the use of the laborer's family, feed, pasturage for animals, etc.

For country-estate areas, it should be noted that the wages reported for such farms quite often exceeded the sale of agricultural products. In citrus areas where it is a common practice to charge a fixed amount per acre for the care of groves, this charge was quite often reported in lieu of wages.

**Farm mortgages.**—Data on farm mortgage debt will be covered in a special report, and are not included in this report.

**Crops.**—The 1945 Farm and Ranch Schedule was prepared in such manner that every crop grown on a farm could be enumerated. The crop inquiries were varied in different regions of the country so that separate specific questions could be carried for all crops widely grown in each major area. If a separate inquiry was not carried for a particular crop, that crop could be reported under one of several "all other crops" questions on the schedule. By using a different schedule for each region it was also possible to use the unit of measure that was most prevalent in that area for reporting production.

The acreage, or area, given in the tables for the several crops represents the acreage harvested in the crop year 1944 except that the acreage given for land in fruit orchards, vineyards, and planted nut trees represents the land in bearing and nonbearing trees and vines, on the census date. It should be pointed out that the acreage harvested is often much less than the acreage planted; also, that a crop intended for harvest in one manner might be harvested in an entirely different manner; for example, soybeans may have been planted for the beans but may have been actually cut for hay.

The production for the various crops represents the quantity harvested during the 1944 crop year with the exception of citrus fruit production which was to be reported for the crop harvested in the 1943-1944 season from the bloom of 1943.

**Units of measure.**—The unit of measure for reporting production of some crops has varied from one census year to the next. It has been pointed out that the schedule for 1945 made it possible to secure the production of certain crops in units of measure most commonly used, varying according to the region. In censuses prior to 1940, production of a crop was quite generally, though not universally, reported in a standard unit for all areas with the result that the quantity harvested was given for some areas in terms of units of measure not commonly used in those areas.

Types of containers and their cubic content have varied over the years with production and marketing practices. This has been especially true of units of measure for vegetables and fruits. It has been found impossible to obtain the production of vegetables in terms of standard containers; hence, the use of value of sales has been resorted to as the measure of production.

In the tables, the current production of the several crops is shown in the unit of measure used on the schedule; for example, production of apples is shown in bushels for all States, except Arizona and California where it is given in tons or fractions thereof. In the State tables the historical data are given for most of the crops in the unit used on the 1945 schedule for that area. This often required that the figures for earlier years be converted into different units from those reported and published for those years. Conversions have been made by using the weights in current use.

**Value of specified crops harvested.**—These values for the 1945 Census, shown in State table 2 and county table II, were obtained by multiplying the quantity harvested for each county by county-unit prices. Therefore, these figures include the value of crops used for seed or fed to livestock on the farm where produced, as well as the value of crops sold or traded. Similar procedures were used in calculating the value for crops harvested for the Census of 1940. In all cases, the county-unit prices were obtained cooperatively by the Department of Agriculture and the Bureau of the Census. For four items, values were enumerated because of the difficulty of finding a common production unit for purpose of enumeration. These four items are: vegetables for sale, vegetables for farm household use, horticultural specialties sold, and forest products sold.

**Value of crops sold.**—These values for groups of crops, which are shown for comparative purposes in State table 2 and county table II, are also included in

the value-of-product tables, State table 4 and county table IV. They are enumerated values of crops *sold or traded*. Hence, they do not include the value of crops used for seed or fed to livestock on the farm where produced. In some counties, these figures include sales of locally important crops not shown in the tables. For such counties, the value of crops sold may properly exceed the calculated value of specified crops harvested. For a discussion of the different value-of-products questions, see pages XIV-XVI.

**Annual legumes.**—The inquiries for the individual annual legumes were designed to obtain the acreage of each crop grown alone and the acreage grown with other crops. Because of different planting practices, the interplanted acreage cannot always be satisfactorily reduced to an equivalent solid acreage to obtain a total acreage for any particular legume. However, there is some evidence that some enumerators included the equivalent solid acreage for the acreage of legumes interplanted as "acres grown alone." This method of reporting interplanted acreage was probably more frequently used in 1945 than in previous censuses; hence, the acreage of annual legumes grown alone may be overstated and the acreage grown with other crops understated for the 1945 Census. That part of the acreage of soybeans and cowpeas cut for hay was to be reported not only under the separate inquiries for legumes, but also under "soybeans and cowpeas harvested for hay."

If soybeans, cowpeas, and peanuts were grown extensively in an area, a separate inquiry was carried for each on the regionalized farm schedule.

For some of the annual legumes, such as cowpeas, picking of the seed is often incidental to the main use made of the crop. Some picking of seed is also made from interplanted acreages. Likewise, some annual legume hay is cut from the acreage grown with other crops.

**Hay crops.**—The total production of all cuttings was reported, but the acres of land from which these cuttings were made were counted only once. "Small grains cut for hay" includes hay from wheat, oats, barley, rye etc., but not oats cut when ripe or nearly ripe (milk stage) for feeding unthreshed. A considerable number of enumerators reported oats actually cut for hay as oats cut when ripe or nearly ripe (milk stage) for feeding unthreshed. Since some enumerators reported oats cut for hay as oats cut when ripe or nearly ripe for feeding unthreshed, the figures for the 1945 Census for small grains (including oats cut for hay) cut for hay and oats cut when ripe or nearly ripe for feeding unthreshed are not comparable with corresponding figures for previous censuses in many counties. "Other tame hay" covers sweetclover, old meadows, millet, Sudan grass, Johnson grass, orchard grass, redtop, crested wheatgrass, velvetbeans, and vetches cut for hay, but excludes sorghums cut for hay. "Wild

hay" includes marsh, prairie, or range grasses, but not volunteer grasses following cultivated crops.

**All other field crops.**—The acreage of all field crops harvested and not listed elsewhere on the Farm and Ranch Schedule was reported as a unit under question 141 (see facsimile of Farm and Ranch Schedule in the appendix). The crops included as all other field crops varied from region to region. Since a common unit of physical measure could not be used for all other field crops, the dollar value of production was required. No data are being published on the acreage or value of all other field crops.

**Vegetables harvested for sale.**—In all States separate reports were required for the acreage of four important vegetables harvested for sale—i.e., fresh beans, cabbage, tomatoes, and green peas. In certain States reports were secured for celery, sweet corn, and lettuce. The acreage of vegetables for sale, other than those specified, were reported as a total as "all other vegetables and melons." Vegetables sold to canneries, as well as vegetables for fresh market, were to be reported as vegetables harvested for sale. Irish potatoes and sweetpotatoes were not reported as vegetables but as field crops.

**Horticultural specialties.**—Horticultural specialties included (1) crops grown under glass (flowers, plants, and vegetables) and propagated mushrooms, (2) nursery products (trees, shrubs, vines, ornamentals, etc.), and (3) flower and vegetable seeds, bulbs, and flowers and plants grown in the open. The inquiry on horticultural specialties called for the value of horticultural specialties sold or traded in 1944.

**Small fruits.**—The figures given for the individual small fruits represent the acreage and production of tame or cultivated varieties with the one exception, that wild blueberries were considered a harvested crop if the land from which they were harvested was used primarily for their production. The enumerators were instructed to omit the nonbearing acreage of small fruits.

**Tree fruits, nuts, and grapes.**—The inquiries on tree fruits, nuts, and grapes called for the number of trees or vines of all ages and the production. Except for citrus fruits, the production was for the crop year 1944. For citrus fruits, the production was for the crop harvested in the 1943-1944 season from the bloom of 1943.

**Land in orchards, vineyards, and planted nut trees.**—Enumerators were instructed to report the acreage of all land in bearing and nonbearing fruit orchards, vineyards, and planted nut trees. On many farms, there are a few fruit or planted nut trees or grapevines which are not a part of a well-defined orchard or vineyard. In many such cases, reports were secured for the number of trees or vines with or without production,

but no acreage was reported. Unless there were sufficient trees to equal the number of trees usually planted on two acres, the acreage was not supplied during the editing process. For this reason, the number of farms reporting specific fruits may exceed the number of farms reporting the acreage in orchards, vineyards, and planted nut trees.

**Specified classes of livestock on farms.**—The 1945 Farm and Ranch Schedule provided for an inventory as of January 1, 1945, of the following classes of livestock: all horses, all mules, all cattle, cows and heifers 2 years old and over, all hogs, sows and gilts kept for spring farrowing, all goats, all sheep, ewes and ewe lambs kept for breeding ewes, and all chickens over 4 months old.

The inquiries in the 1945 Farm and Ranch Schedule for livestock and livestock products were uniform for all States.

The livestock inventory for the 1945 Census of Agriculture, as also for the 1935, 1925, and 1920 Censuses, was to be reported as of January 1. This is the date most widely used for the inventory or numbers of livestock on hand. The various Acts of Congress authorizing a census of agriculture necessitated the fixing of certain livestock census dates other than January 1. Thus, in 1940 and 1930, the census was taken as of April 1. All livestock operations, regardless of whether the count of inventory numbers was made as of January or April, were to be reported for the preceding calendar year.

Periodically, numbers of certain species of livestock move through complete cycles in which they swing from a high point to a low point, then to another high and low, with considerable regularity. Census dates arbitrarily fixed may not occur at the same point in these cycles. Hence, figures for one census may not be directly comparable with those for another census taken at a different point in the cycle for a particular class of livestock.

Because of the differences in dates of enumeration and changes in age classifications, figures given for the number of animals for the various censuses are not always directly comparable. State table 3 presents a detailed statement of the age classifications for the various classes of livestock for the several censuses.

Livestock were to be enumerated on the farm or ranch where located on January 1, regardless of ownership, according to general instructions to enumerators. However, sheep on range presented, as usual, a special problem which was best solved by a modification of this general rule. In 1945, sheep in the Western States were enumerated at the headquarters (in most cases, the winter headquarters) of the ranch or sheep owner, regardless of where the sheep were located on January 1.

In the 1945 Census, ewes and ewe lambs reported were to be limited, according to the schedule, to those

"kept for breeding ewes" and are not, therefore, strictly comparable by class definition with ewes classified according to age only in previous censuses.

**Cows milked and dairy products.**—The inquiry on the number of cows milked was included for the first time in the census of 1925 and has been included in each census of agriculture since that date. "Cows milked" includes only those cows and heifers actually reported as having been milked any time during 1944. The inquiry following the one calling for the number of cows milked, asked for the total number of gallons of milk produced in 1944. Several inquiries were made concerning the utilization of milk produced in 1944. These inquiries called for the gallons of milk sold as whole milk, pounds of butterfat sold as whole cream, and pounds of butter sold.

**Poultry and poultry products.**—Chickens on farms on January 1 were reported, according to instructions and by definition of the item, only if over 4 months of age. Broilers under 4 months of age were to be excluded from this January 1 count. The count of chickens on hand January 1, therefore, gave an approximation of the laying and breeding chickens on hand.

Chickens raised in 1944 included broilers and fryers, but excluded chicks hatched for sale as baby chicks as well as started chicks sold for further raising.

**Value of specified classes of livestock on farms.**—These values for the 1945 Census, shown in State table 3 and county table III, were secured by multiplying the inventory number of each class of livestock for a county by a county-unit price. Similar procedures were used in calculating the inventory values of livestock for the Censuses of 1940, 1935, 1930, and 1925. For the 1920 Census, the inventory value of livestock was enumerated. In all cases, the county-unit prices were obtained cooperatively by the Department of Agriculture and the Bureau of the Census.

**Value of livestock and livestock products sold.**—These values, which are shown for comparative purposes in State table 3 and county table III, are also included in the value-of-products tables, State table 4 and county table IV. They are enumerated values of livestock and livestock products *sold or traded* during the calendar year. For a discussion of the different value-of-products questions, see pages XIV-XVI.

**Farm slaughter and sales of livestock.**—The inquiry on farm slaughter called for the number of animals butchered for use on the particular farm as well as those for sale as dressed meat from that farm. Animals butchered off the farm on a custom basis, or otherwise, for use on the farm were to be reported by the operator of the farm for which the animals were butchered.

Animals sold alive were reported for the farm from which sold whether produced on that farm or purchased from others. However, enumerators were instructed not

to report animals purchased and then resold immediately.

**Value of farm products sold or used by farm households.**—The enumerated values are presented in this bulletin as "Value of farm products sold or used by farm households." These values were obtained by the enumerators from farm operators. The 1945 Farm and Ranch Schedule contained nine questions relating to the value of farm products sold, traded, or used by farm households. (See facsimile of schedule shown in the appendix.) The total value of farm products sold or used by farm households is a total of the individual reports of farm operators for the nine value-of-products questions on the schedule. The total value of farm products, or the value of farm products sold plus the value of farm products used by farm households, gives an approximate measure of gross farm income. The value-of-products questions were uniform for all States. It will be noted that the arrangement of these nine questions was such that each question appeared immediately following the reports on the items to which the value questions related—i.e., the inquiry on the value of the field crops followed immediately after the inquiries on the acreage and production of field crops.

The value questions relating to livestock and livestock products, horticultural products, and forest products apply to the calendar year 1944; whereas, the value questions for fruit and nut crops, vegetables harvested for sale, all other crops (field crops), and farm products used by farm household are for the crop year immediately preceding the census.

Since the individual farm is the unit of enumeration, the value-of-products figures necessarily include duplications because of interfarm sales. For example, feed crops produced on Farm A may be sold to Farm B; in this case, their value will be reflected in the gross livestock income for Farm B. Similarly, a Texas ranch may show sales of feeder cattle, and the same cattle may be fattened and sold from an Illinois farm.

The value-of-products figures do not include income from nonagricultural sources, such as work off the farm by the farm operator or members of his family.

Enumerators were instructed not to include in the value of farm products sold any government payments, such as soil conservation and dairy feed or dairy production payments.

**Fruits and nuts sold.**—In general, the figures reported for this question cover the value of all fruits and nuts harvested in 1944 that had been or were to be sold at the time of the census enumeration. However, the information on citrus fruit applies to the 1943-1944 season, that is, to the crop harvested from the bloom of 1943. The value figures on fruit cover all tree fruits, nuts, and grapes, as well as small fruits. Sales of wild fruits and nuts are excluded with two exceptions: wild blueberries were to be reported on

the census schedule where the land was used primarily for their production; and wild or seedling pecans were also reported whether grown in orchards, farmyards, pastures, or elsewhere on the farm or ranch. The enumerator was instructed that, for all the value-of-products questions, gross receipts or values were desired without deductions for expenses of any kind. However, in the case of fruit, there was a noticeable tendency in many commercial fruit areas for growers to report their net receipts instead of the gross value of all fruit sold or traded. This was particularly true in sections where certain marketing costs were commonly deducted from the payments to the grower for fruit sold. Another factor which may have contributed to the tendency to report net receipts for fruit crops was the absence of any questions on the schedule regarding expenditures for such items as spray materials, orchard cultivation, irrigation water, packages, and other production and marketing costs.

**Vegetables sold.**—The values reported for this item represent the total value of vegetable crops harvested in 1944 for sale. Irish potatoes and sweetpotatoes were not included under vegetables, but were included under field crops.

**Horticultural specialties sold.**—The values reported for this item include the value of sales for crops grown under glass and propagated mushrooms; nursery products; and flower and vegetable seeds, bulbs, and flowers and plants grown in the open.

**All other crops (field crops) sold.**—This question covers the value of the sales of field crops such as corn, sorghums, small grains, annual legumes, hay, clover and grass seeds, and miscellaneous crops, including Irish potatoes and sweetpotatoes, cotton (lint), tobacco, sugarcane, sugar beets, hops, etc. In addition, the enumerator was instructed to include the value of sales of byproducts such as cottonseed, beet pulp and tops, pea vines, etc., although no provision was made for reporting the production of such byproducts on the schedule. On some schedules the value of sales of cottonseed apparently was not included in the value of field crops sold or traded. The enumerator was also instructed that where the farm operator was a tenant, the landlord's share should be included in reporting the value of sales, not only for this item, but also for all other value-of-products questions. Income from grazing livestock on a per-head basis was also included under this question.

**Dairy products sold.**—This question called for the value of all dairy products sold or traded in 1944, including sales of cheese, buttermilk, and skimmed milk, as well as sales of milk, butterfat, and butter. The value of dairy products purchased for resale was to be excluded, both from this value question and from the preceding items on quantities of whole milk, cream, and butter sold.



**Poultry and poultry products sold.**—Sales of ducks, geese, guineas, pigeons, baby chicks, and poults were included, as well as sales of eggs, broilers, fryers, other chickens, and turkeys.

**Livestock and livestock products sold (other than dairy and poultry).**—This value question included the sales of horses, mules, cattle and calves, hogs and pigs, sheep and lambs, meat (except poultry), goats, goat milk, wool, mohair, fur animals in captivity and pelts, bees, and honey.

**Forest products sold.**—The values reported for this question include sales of firewood, fuel wood, standing timber, sawlogs, veneer logs, pulpwood, mine props, bark, charcoal, fence posts, railroad ties, poles and piling, turpentine, resin, maple sirup and sugar, etc.

**Farm products used by farm households.**—This question called for the value of products of the farm in 1944 that were, had been, or were to be used by all households on the farm. The following items were to be included in this question if consumed on the farm where produced: meat, milk, cream, butter, poultry, eggs, honey, vegetables, fruit, firewood, fuel wood, and Irish and sweet potatoes. Farm products of institutional farms which were used by inmates of the institution were considered as sold, and the value was included under the other eight value-of-products questions. The same procedure was followed with respect to products of Community Victory gardens.

**Comparability of 1940 and 1930 Census figures on value of farm products sold or used by farm households.**—In general, the value of farm products information from the 1945 Census is comparable with that from the 1940 and 1930 Censuses. Available comparative figures will be found in State table 4. The 1940 Farm and Ranch Schedule carried 10 value-of-products questions, separate inquiries being used for value of livestock sold and value of sales of livestock products (other than dairy and poultry). The 1930 Farm and Ranch Schedule had 5 questions on value of farm products. A single question was used for the value of sales of all crops. Separate questions were used for value of livestock sold and for value of all livestock products sold (including dairy and poultry). In addition, the 1930 questionnaire carried an inquiry on gross receipts from lodgers, boarders, and campers. The 1930 Census value-of-products figures shown in State table 4 do not include the income reported from this source.

**1945 classification by type of farm.**—In the 1945 Census, all farms have been classified mechanically by type of farm, based on the principal source of income in 1944. The procedure was as follows:

After eliminating "farms with no products" and "unclassified" farms, which could not be classified by type on the basis of the value of products, the remaining farms were sorted into two groups: (1) farms producing products primarily for sale, and (2) farms

producing products primarily for own household use. If the value of farm products used by farm households exceeded the total value of all farm products sold, the farm was classified as a "farm producing products primarily for own household use." On the other hand, if the value of all farm products sold equaled or exceeded the value of farm products used by farm households, then the farm was classified as a "farm producing products primarily for sale." "Farms producing products primarily for sale" were further classified into the following nine major types, on the basis of source of income: fruit-and-nut farms, vegetable farms, horticultural-specialty farms, all-other-crop (field crop) farms, dairy farms, poultry farms, livestock farms, forest-product farms, and general farms. If the value of products sold from one source of income was more than 50 percent of the total value of all farm products sold, then the farm was classified as the type corresponding to that source of income. Farms for which the value of products from any one of the eight sources of income did not exceed 50 percent of the total value of all farm products sold were classified as "general" farms.

**Farms with no farm products sold or used.**—These are farms for which there was a correct report of no farm products sold or used by farm households. Such farms include: (a) new farms being operated for the first time in 1945, and (b) farms having a complete crop failure in 1944 with no livestock or livestock products sold and no value for farm products used by farm households. For example, in certain areas, such as the New England States, some farms reported hay as the only product, with no sales and no livestock on hand at the time of enumeration. Such farms are included in the category of "farms with no farm products sold or used."

**Unclassified farms.**—Where information on the farm production and value of farm products sold or used was incomplete or not reported, the farm was designated as "unclassified."

**Comparative 1940 Census figures on type of farm.**—The 1945 and 1940 Census classifications of farms by type are not comparable. In the 1940 Census, farms were classified by type on the basis of major source of income. To illustrate, if the entry for value of dairy products sold was the largest entry under the 10 value-of-products questions, the farm was classified as a dairy farm. If a farm had two or more sources of income for which the value entries were the same, and these were the largest value entries, the farm was classified according to the item predominating as to major source in that locality. While this method of classification was simple and objective, the results were not entirely satisfactory. For example, farms for which the value of products used by the farm households was only slightly larger than the value of the largest sales item were classified as subsistence or

family-living farms. But many of these "family living" farms had diversified operations so that the total value of farm products sold was greatly in excess of the value of products for farm household use. Logically, such farms belonged in a "general farm" category.

Table B, on page XVII, shows comparative State figures on farms, classified by type, for both the 1945 and 1940 Censuses. In the last two columns are figures from the 1940 Census on number of farms, classified by the 1940 Census "major source of income" procedure, described in the preceding paragraph. The figures in the second and fourth columns show the 1940 Census number of farms reclassified, using the 1945 Census procedure

described in the preceding section entitled "1945 Classification by Type of Farm." As explained in footnote 2 of table B, this reclassification is based, in part, on a comparatively small sample. The coefficients of variation shown in the fifth column may be interpreted as follows: The probabilities are about 2 in 3 that the percent error of the 1940 estimate will be less than the coefficient of variation and about 1 in 3 that it will exceed the coefficient of variation. The coefficients of variation apply alike to the estimated 1940 number of farms of each type and to the percentage that the number of each type is of the total farms in the State.



# CENSUS OF AGRICULTURE: 1945

XVII

TABLE A.—APPROXIMATE AVERAGE DATE OF ENUMERATION AND PERCENTAGE DISTRIBUTION OF  
ENUMERATION DISTRICTS BY DATES OF ENUMERATION: 1945

ITEM	Michigan	ITEM	Michigan
Approximate average date of enumeration.....	March 16-31	Percent of enumeration districts enumerated during—	
Percent of enumeration districts enumerated during—		May 1-15.....	2
January 1-15.....	1	May 16-31.....	5
January 16-31.....	14	June 1-15.....	7
February 1-15.....	21	June 16-30.....	4
February 16-28.....	11	July 1-15.....	3
March 1-15.....	11	July 16-31.....	5
March 16-31.....	4	August 1-15.....	5
April 1-15.....	4	August 16-31.....	1
April 16-30.....	2		

TABLE B.—NUMBER AND PERCENT DISTRIBUTION OF FARMS BY TYPE OF FARM: CENSUSES OF  
1945 AND 1940

[For basis of classification by type, see text]

TYPE OF FARM	1945 TYPE CLASSIFICATION					1940 TYPE CLASSIFICATION <sup>1</sup> (CENSUS OF 1940)	
	Number of farms		Percent distribution		Coefficient of variation of 1940 estimates <sup>2</sup> (percent)	Number of farms	Percent distribution
	Census of 1945	Census of 1940 <sup>2</sup>	Census of 1945	Census of 1940 <sup>2</sup>			
All farms.....	175,268	187,589	100.0	100.0	.....	187,589	100.0
Farms with no farm products sold or used <sup>3</sup> .....	3,898	3,527	2.2	1.9	.....	3,527	1.9
Farms, unclassified <sup>4</sup> .....	369	2,185	0.2	1.2	.....	2,185	1.2
All classified farms.....	171,001	181,877	97.6	97.0	.....	181,877	97.0
Farms producing products primarily for sale.....	140,167	146,990	80.0	78.4	1	129,745	69.2
Fruit-and-nut farms.....	7,128	6,794	4.1	3.6	4	7,658	4.1
Vegetable farms.....	4,575	4,047	2.6	2.2	3	4,541	2.4
Horticultural-specialty farms.....	731	744	0.4	0.4	(1)	889	0.5
All-other-crop farms.....	21,071	28,818	12.0	15.4	2	40,045	21.3
Dairy farms.....	44,831	33,786	25.6	18.0	2	47,136	25.1
Poultry farms.....	9,374	7,576	5.3	4.0	5	9,435	5.0
Livestock farms.....	15,016	14,617	8.6	7.8	4	19,417	10.4
Forest-products farms <sup>4</sup> .....	966	362	0.6	0.2	(1)	624	0.3
General farms.....	36,475	50,246	20.8	26.8	3	(*)	(*)
Farms producing products primarily for own household use.....	30,834	34,887	17.6	18.6	2	52,132	27.8

<sup>\*</sup> Not available.

<sup>1</sup> More than 15 percent.

<sup>2</sup> For comparable figures by counties, see 1940 Reports on Agriculture, vol. II, pt. 1, county table XIX, p. 404.

<sup>3</sup> County figures are not available. The 1940 Census figures (State) by type of farm are based on a 2-percent sample for farms with under \$10,000 total value of farm products, plus a tabulation of all farms with \$10,000 or more total value of farm products. These figures are, therefore, subject to sampling errors. The coefficients of variation provide information on the approximate magnitudes of these errors. See text.

<sup>4</sup> Classified by total value of farm products, but not classified by type. See State tables 4, 7, and 8.

<sup>5</sup> Not classified either by total value of farm products or by type. See State tables 4, 7, and 8.