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## CHAPTER VII.-FIELD CROPS AND VEGETABLES

Introduction.—This chapter presents statistics for field crops and vegetables enumerated in the 1954 Census of Agriculture, together with comparable data from prior Censuses.

In making comparisons of data for 1954 with those for prior Censuses, it is necessary to consider three significant differences. In 1954 for the first time, the Census was taken in the fall of the year. For some items, the crop year had not ended by the time of enumeration. Thus, farm operators may have been required to estimate the quantity harvested before the harvest had been completed and the quantity sold before the actual sale had been made. Second, the value of the sales for most crops was obtained by making estimates rather than obtaining from farm operators the value of the crops sold. For a complete discussion of this change in procedure see "Value of Farm Products' in Chapter IX. Third, in 1954, regionalization of inquiries on the Agriculture Questionnaire differed from that for prior Censuses. This may have resulted in differences in comparability of data for 1954 and prior Censuses because of changes in wording or interpretation of inquiries by farm operators and Census enumerators. Footnotes indicate lack of comparability between Censuses. Details as to the make-up of each regional questionnaire may be obtained in two places, namely, (a) as shown on the Composite Questionnaire in the Appendix of this volume or (b) in more detail and in better format from the regional questionnaires reproduced in Volume I.

Certain data presented in this chapter are estimates made on the basis of tabulations for a sample of approximately 20 percent of the farms. In such instances, headnotes on each table clearly indicate that the data are estimates based on a sample of farms. In a few instances, a table contains both figures which were obtained by tabulating data for all farms and those which represent an estimate of data based on a sample of the farms. In such tables, the data based on a sample of farms are in italics so that the reader may easily identify the two sources of data. (For a complete discussion of the sampling procedure and the reliability of estimates based upon data for a sample of farms, see the Introduction to this volume).

The data for each crop usually include the number of farms on which the crop was harvested, the acreage harvested, the quantity harvested, the quantity sold—if enumerated, and the value both of production and of sales. No data on quantity harvested are given for vegetables for sale. Units of measure are so varied for vegetables that it is difficult or impossible to enumerate vegetable production satisfactorily. For that reason, no attempt has been made to gather production statistics for vegetable crops. Acreage data are not available for home gardens. For sweetpotatoes and Irish potatoes, the acreage harvested did not include that for small plots used to produce potatoes primarily for home consumption.

For several crops, including corn, sorghums, soybeans, cowpeas, and peanuts, data were obtained for the acreage and usually for the quantity harvested for several of the most important uses. For soybeans, cowpeas, and other similar annual legume crops, the acreage includes areas not harvested but plowed under for green manure.

Some information, such as frequency of data (an array of the farms reporting according to the acres harvested, the amount of production, or the amount sold), are estimates based on tabulations of the data for a sample of approximately 20 percent of the farms.

Presentation of statistics.—In general, the tables of this chapter present the data for a specific crop. The order of arrangement is

generally that of the order in which the crops appeared on the Agriculture Questionnaire. For the more important crops, that is, those that are widely grown—some of which are subject to government control programs—both current and historic data have been presented in the tables. The table containing current data shows farms reporting, acreage, quantity harvested, and value for the Censuses of 1954 and 1950. The table containing current data is followed by a table which shows farms reporting, acreage, and quantity harvested for several Censuses. Because of space limitations no crop data, for States, are shown for years prior to 1899. Those who are interested in historic State data for years before 1899 are referred to reports for prior Censuses.

Data for each of the less important crops are presented in only one table that gives figures for 1954 as well as prior Censuses. For these minor crops, no attempt was made to provide State data for a specific number of Censuses. The tables contain the data for as many years as space permits.

Established methods of Census data presentation have been followed. Generally, States have been arranged according to geographic divisions. The tables contain totals for geographic divisions, together with totals for the North, the South, and the West. For crops that are not widely grown, the States have been arranged alphabetically and not by geographic divisions.

For some crops, separate data have not been obtained for all States for each Census. In such cases, the totals are presented for the specified States for which data are available. Usually, these totals are approximate totals for the United States or for regions.

The headnotes, footnotes, etc., on the tables indicate for the various Censuses any significant lack of comparability resulting from a change in questionnaire wording, instructions to the enumerators, or in definitions or procedures used for collecting and compiling the data.

This chapter presents only State, division, geographic region, and United States totals for field crops and vegetables. County totals and economic area totals are contained in other reports for the 1954 Census of Agriculture. (See "Other published data," subhead of this text.)

Other published data.—Information similar to that contained in this chapter is given in Chapter VIII for berries and other small fruits, tree fruits, nuts, and grapes. Chapter VIII also contains tables showing data on production and value of horticultural specialties and forest products.

Irrigation.—Data on the acreage and quantity of crops harvested on irrigated land were obtained for only the 17 Western States, Florida, Arkansas, and Louisiana. These data are given in Tables 136, 137, and 138. For these 20 States, these data include 91 percent of the acres of all crops harvested on irrigated land. The data for crops on irrigated farms do not include the acreage and quantity harvested on farms where only a part of the crop was irrigated. Figures for the acreage harvested and quantity harvested for crops where only a part of the crop was irrigated have been included with the nonirrigated farms in Tables 136, 137, and 138.

Chapter IX, "Value of Farm Products," contains a summary of data for the value of production and the value of sales for field crops, vegetables, fruits and nuts, horticultural products, forest products, and livestock and livestock products.

Definitions and explanations.—(For definitions that have general application, for a description of procedures, and for a statement of the completeness of the Census, see the Introduction to this volume.)

The definitions that are given here are limited to those deemed necessary for the proper understanding of data for field crops and vegetables.

Farms reporting.—Farms reporting represent a count of the farms harvesting a given crop as indicated by the table heading. If a crop was planted, but no part was harvested, the farm on which it was planted usually would not be included in the count of farms reporting. When the Agriculture Questionnaire contained separate inquiries for more than one type or variety of a crop, it was not feasible to obtain a count of farms reporting the crop. For example, in the case of spring wheat, the questionnaire in North Dakota called for durum and other spring wheat as separate items. A count of farms reporting spring wheat was not obtained in North Dakota. The farm counts for these two types of spring wheat cannot be added to obtain a total of farms reporting spring wheat as duplication would result from some farms harvesting both types of wheat. A similar situation applies to some other crops such as tobacco, cherries, grapes, plums and prunes, and oranges.

Generally, the "farms reporting" figure is a count of the farms which reported either or both acreage and quantity harvested for a given crop. In the case of vegetables, the number of farms reporting a given crop represents a count of the farms reporting acres harvested for sale. The total number of farms reporting vegetables for sale includes farms reporting sales of vegetable crops harvested in the open (not under glass). For Irish potatoes and sweetpotatoes, the count of farms reporting includes those farms that reported quantity harvested and no acreage. In the tables showing a distribution of farms reporting by number of acres harvested, the farms reporting a small quantity harvested without the acres harvested are included in the group under 0.5 acre. For crops hogged or grazed, the farms reporting count represents those farms reporting an acreage harvested in this manner.

Acreage.—The acreage, both for a specific crop and for all crops, represents, generally, the acreage harvested, not the commercial acreage nor the acreage planted. For vegetables and small fruits and berries, the acreage reported represents the acreage harvested for sale and excludes small plots used for production for use on the farm. The acres reported for all purposes for soybeans, cowpeas, and velvetbeans included the acreage of these crops plowed under for green manure or soil improvement. A part of the acreage of corn, sorghum, peanuts, soybeans, and cowpeas was hogged or grazed off. Hogging or grazing was considered to be a method of harvesting.

Drought conditions existed in 1954 in parts of the Great Plains and the South. In the drought area, yields for many crops were low and, in some cases, the farm operators and Census enumerators may have reported as harvested the entire acreage in the crop, even though only part of the acreage on the farm was actually harvested. It was not always possible to identify and correct such reports during the office processing and, therefore, in the drought area, the acreage harvested may be overstated.

Because of drought and other conditions, crops often are not harvested for the purpose contemplated at the time they were planted. For example, in the drought area, much corn which normally would have been harvested for grain was harvested for forage. Because of the feed shortage the whole plant was often fed green as an emergency feed. A small grain crop which would not warrant cutting or combining might have been grazed; such acreage would not appear with the statistics for that particular grain, but rather under "Root and grain crops hogged or grazed other than corn, sorghums, and soybeans." However, if any crop was a total loss—the crop was not harvested in any manner—the acreage would not appear in the data for the crop. If the land planted to a crop that failed completely was not successfully replanted to another crop harvested in the same calendar year, the acreage would not be included with cropland harvested but under cropland not harvested and not pastured.

The acreage of land from which crops were harvested is not always the same as the total acres of all crops harvested, as more than one crop may have been harvested from the same land during that crop year. Each farm operator was asked, "From how many acres of land were crops harvested this year?" The land for this question has been termed "cropland harvested." If two different crops were harvested from the same land during the year, the same land would be counted for both crops and the total acres of the two crops would be double the acreage of cropland harvested. In areas where more than one crop is harvested from the same land during the year, the total acres of all crops harvested may exceed the acreage of cropland harvested.

For most field crops, Census enumerators and farm operators were asked to report only whole acres and to omit fractions of acres. However, there were exceptions to this procedure in the case of vegetables harvested for sale, Irish potatoes, sweetpotatoes, tobacco, and sweet sorghums or cane harvested for sirup. For these crops, the instructions and the Agriculture Questionnaire indicated that tenths of acres were to be reported; also, the acreage of land in orchards, groves, and vineyards, and of horticultural specialties, was enumerated in tenths of acres.

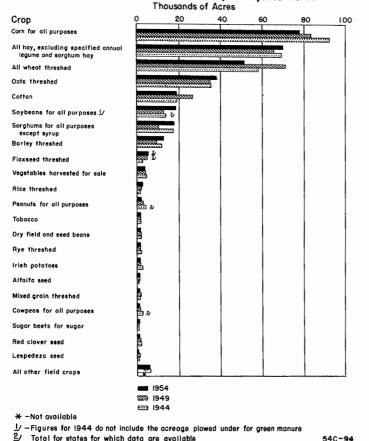
Quantity harvested.—Quantity harvested represents the quantity harvested during the crop year. For small fruits and berries, only the quantity sold was to be obtained.

The quantity harvested represents the total production, including the amount used on farms or ranches, the amount sold, and the amount belonging to or delivered for the landlords. The unit of measure, in which the quantity harvested was to be reported, varied for some crops. The Agriculture Questionnaire for a State or a group of adjacent States provided for the reporting of the quantity harvested in the unit of measure most commonly used in the State or group of States. When the unit of measure was not the same for all States, the quantity harvested has been converted to a standard unit of measure. In such instances, the unit of measure most widely associated with the crop has been used and conversion was made on the basis of standard weights and measures, as published by the United States Department of Agriculture.

Values.—A more complete discussion of value will be found in Chapter IX, "Value of Farm Products." Two types of data are presented. The value of production represents the value obtained by multiplying the quantity harvested by an estimated price per unit. Value of sales for the major field crops represents the value obtained by multiplying the quantity sold by an estimated price per unit. The average unit prices used in computing the value of production and the value of sales were the same for each State. average unit prices used in computing both value of production and value of sales were obtained cooperatively by the Agricultural Marketing Service of the United States Department of Agriculture and the Bureau of the Census. They were secured primarily from reports obtained by mail by the Agricultural Marketing Service from farmers and dealers in farm products. In 1954, these average unit prices were computed only at the State level and the same price was used throughout the State regardless of within-State variation. The quantity sold for the major crops was obtained by asking the farm operator the quantity sold or to be sold. For many of the minor crops, particularly seeds, medicinal crops, and herbs, the quantity sold was estimated, since the Agriculture Questionnaire did not call for quantity sold.

Corn.—The 1954 Agriculture Questionnaire provided for the reporting of corn according to use. The questionnaire provided for reporting the total acreage of corn harvested for all purposes with a classification of this acreage into (a) corn for grain, (b) corn for silage, and (c) corn hogged or grazed or cut for green or dry fodder. The inquiries were uniform for all States except Arizona, California, and Florida. In Arizona and California, the questionnaire provided for reporting of corn for all purposes and corn for grain; and in Florida, for the reporting of corn for all purposes, for grain, and a total for silage and corn hogged or grazed or cut for fodder. As a result, the acreage of corn harvested for silage and the production of silage are not available for 1954 for Arizona, California, and Florida. Except for minor variations in the wording of the question, and for a

### ACRES OF SPECIFIED FIELD CROPS AND VEGETABLES HARVESTED, FOR THE UNITED STATES: 1954, 1949, AND 1944

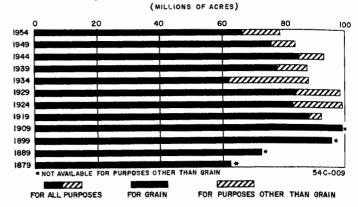


difference in the units of measure, the 1954 inquiry on corn was identical with that used in 1950 and the results should be directly comparable.

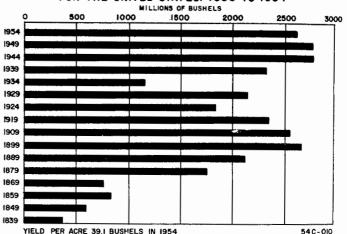
In areas where farmers frequently used units of measure other than bushels, such as baskets and barrels, the Agriculture Questionnaire provided an alternate choice of one or more units of measure for reporting the quantity harvested. For example, the questionnaire in Michigan, Minnesota, Wisconsin, all of the New England States, the Middle Atlantic States, Delaware, Maryland, and West Virginia provided for reporting the quantity harvested in units of bushels or baskets. In North Carolina and Virginia, the questionnaire provided for reporting in units of bushels, baskets, or barrels. When the quantity harvested was reported in units of measure other than bushels, the quantity was converted, during the office processing of each questionnaire, into bushels (70 pounds of ear corn or 56 pounds of shelled corn). Factors used for this conversion were: Two baskets equal one bushel, and one barrel equals five bushels. In southern Michigan and southern Minnesota, and to some extent in other areas, it appeared that the quantity harvested reported in baskets often represented bushels, and, in such cases, one basket was considered to be equivalent to one bushel.

The value of corn sold for 1954 represents only the value of corn sold for grain. For 1949, the value of corn sold includes not only the value of corn sold for grain but also the value of corn products such as silage and fodder that were sold. The omission of the value of silage and fodder sold does not significantly affect the comparability of data for 1954 and 1949. The value of corn silage and fodder sold is very small except in a few Western States; even in these States, the value of corn silage and fodder sold comprises only a relatively small part of the sale of all corn products. Also, the value of corn sold for 1954 was calculated by multiplying the bushels sold by an estimated State average price per bushel. For 1949, farm operators and Census enumerators were asked to report the value of all corn products sold from each farm.

#### CORN FOR ALL PURPOSES AND CORN HARVESTED FOR GRAIN-ACREAGE FOR ALL PURPOSES, 1924 TO 1954; AND ACREAGE FOR GRAIN, 1879 TO 1954; FOR THE UNITED STATES



#### CORN HARVESTED FOR GRAIN-PRODUCTION FOR THE UNITED STATES: 1839 TO 1954



Drought and high temperatures severely affected the use and production of corn in 1954 in the southwestern part of the Corn Belt and in many Southern States. Considerable acreages of corn were not harvested in those areas, and considerable acreages normally harvested for grain were harvested for silage or fodder. The total acreage of corn harvested for all purposes, at 78,122,557 acres in 1954, was 6 percent below the acreage harvested in 1949 and is the lowest acreage of corn reported since the Census of 1920. However, favorable weather conditions in most parts of the important cornproducing States, the use of fertilizer and hybrid seed, and the improvement in tillage resulted in an average yield per acre of 39.1 bushels in 1954, the highest ever reported in a Census. The 7 million acres of corn cut for silage was the largest ever reported for a Census.

Sorghums.—The Agriculture Questionnaire used in 15 of the more important producing States—Missouri, Kansas, Nebraska, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Texas, New Mexico, Oklahoma, Colorado, Arizona, and California-contained inquiries calling for the acreage of sorghums for all purposes except sirup, and the acres and quantity of sorghums harvested for grain or seed. For all of these States, except Arizona and California, there was a further inquiry relating to sorghums hogged or grazed or cut for dry forage or hay. The Agriculture Questionnaire contained an inquiry calling for the acres of sorghum for all purposes in six States-North Dakota, South Dakota, North Carolina, Virginia, Georgia, and South Carolina. In the remaining 27 States, sorghum was reported in the space on the questionnaire provided for reporting other crops. In these States, sorghums for grain or seed and sorghums for silage were tabulated and the data are presented in this chapter. Sorghums hogged or grazed or cut for hay or forage in these 27 States were tabulated separately but were included elsewhere. Therefore, the acreage of sorghums in the 27 States, where a separate inquiry was

not on the questionnaire, relates only to the crop harvested for grain or cut for silage.

The unit of measure used in reporting the production of sorghum grain or seed was bushels in all States, except Arizona and California. In these two States, production was enumerated in 100-lb. bags. To obtain a United States total, the reported bags for these two States were converted to bushels by using the standard bushel weight for sorghum.

Silage and forage production were both enumerated in tons. Production of silage was reported on a green-weight basis and forage on a dry-weight basis. The acres of sorghum for hay or forage in the 13 States, for which a separate inquiry appeared on the Agriculture Questionnaire, included also the acres of sorghum hogged or grazed. No information was obtained by the enumerator regarding the production of the acreage hogged or grazed. Therefore, the figures for the quantity of sorghums harvested for hay or forage do not include the total production for the acres shown for sorghums harvested for hay or forage and hogged or grazed.

The acreage of sorghum for all purposes in 1954, 17.6 million acres, was the largest ever reported for any Census and represents a 74 percent increase over that for 1949. The 1954 acreage of sorghum harvested for grain, 11.2 million acres, was also the highest for any Census year. Texas was the leading grain sorghum-producing State in 1954 with one-half of the United States acreage. The figures on value of sales of sorghums relate only to sorghums harvested for grain in 1954, and were obtained by multiplying the quantity sold by a State average price. The value of sales for 1949 includes the value of sorghum forage and sorghum silage sold, as well as the value of grain sold. The value of sales in 1949 was obtained from each farm operator.

Small grains.—The Agriculture Questionnaire for 1954 contained several questions regarding the acreage and quantity of small grains harvested. There were separate inquiries for the most important small grains in each State.

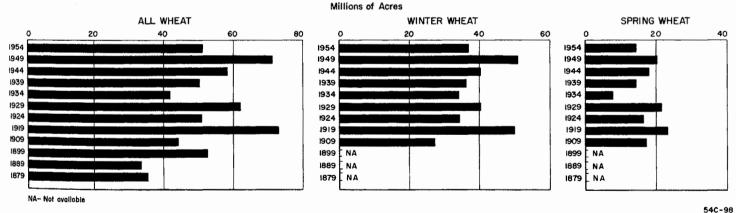
Small grains for which a separate inquiry did not appear on the questionnaire were to be reported under "Other grain" in 42 States. Since the number of small grain crops for which a separate inquiry appeared on the Agriculture Questionnaire varied from State to State, the kinds of small grains included in "Other grain" were not the same for all States.

Table 56 of this chapter shows farms reporting, acreage, and quantity harvested for both 1954 and 1949 for "Other grain" and lists the specific crops included under "Other grain." Two versions of the questionnaire were used in Missouri and Texas and the kinds of small grains included in "Other grain" were not uniform for the entire State.

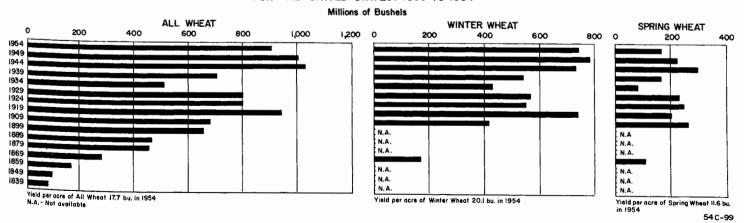
Wheat.—The inquiries on wheat called for the acres harvested, bushels harvested, and bushels sold. Separate inquiries were provided for each type of wheat in States where the production of more than one type of wheat was important. For those States where spring wheat was unimportant, the inquiry was limited to "all wheat." In those States where spring wheat was an important crop, separate inquiries were provided for winter wheat and for spring wheat. In North Dakota and South Dakota only, separate inquiries provided for the reporting of three types of wheat: (a) winter wheat, (b) durum or macaroni wheat, and (c) other spring wheat. Spring wheat harvested in the States where a separate inquiry for spring wheat did not appear on the questionnaire was enumerated under "all wheat," and durum or macaroni wheat, in States other than North Dakota and South Dakota, was enumerated under spring wheat.

A count of the number of farms reporting any wheat was not made in 1954 for those States where separate inquiries were carried for different types of wheat. A total for the farms reporting wheat at the United States, region, division, or State level may be approximated

## WHEAT THRESHED - ACREAGE OF ALL WHEAT, WITH SUPPLEMENTAL DATA FOR WINTER WHEAT AND SPRING WHEAT; FOR THE UNITED STATES: 1879 TO 1954



WHEAT THRESHED - PRODUCTION OF ALL WHEAT, WITH SUPPLEMENTAL DATA FOR WINTER WHEAT AND SPRING WHEAT; FOR THE UNITED STATES: 1839 TO 1954



by adding the number of farms reporting the several types. However, this total would contain a minor but undetermined amount of duplication because when two or more types of wheat were harvested on the same farm, the farm would have been counted as a farm reporting for each type of wheat harvested. The questionnaire did not contain a separate inquiry for wheat in 13 States-the six New England States, Alabama, Arkansas, Florida, Louisiana, Mississippi, 30 counties in Southeast Missouri, and 123 counties in East Texas. In these States, wheat was tabulated as "Other grain." The amount of wheat harvested in these States and counties is small and the omission of data for these States usually does not significantly affect State, region, or geographic division totals. However, the omission of data in 30 counties in Southeast Missouri, and 123 counties in East Texas does slightly affect the comparability of data for these two States. In 1949, the 30 counties in Southeast Missouri had 10.9 percent of the total wheat acreage for the State and the 123 counties of East Texas had 3.9 percent of the total wheat acreage for that

Mixtures of wheat and other small grains were not to be reported as wheat but as mixed grain for the 1954 and 1950 Censuses. No attempt was made to allocate grains harvested as mixtures in order to obtain separate totals for wheat and for other grains. For the 1945, 1940, and 1935 Censuses, enumerators were instructed to report one-half the acreage of wheat and flax, harvested as mixtures, under wheat and the other half under flax.

The harvested acreage of all wheat, as reported for the 1954 Census, was 51.4 million acres. This is a reduction of 28 percent from the 71.2 million acres reported for 1949. The reduction in acreage resulted not only from acreage allotments but also abandonment because of severe drought in Texas, Oklahoma, Kansas, Nebraska, New Mexico, and Colorado. Yield per harvested acre, 17.7 bushels in 1954, equalled the previous high, that for 1944.

Data on the quantity of wheat sold was obtained for each farm in both the 1954 and the 1950 Censuses. The value of sales for the 1954 crop was computed by multiplying bushels sold by an estimated State average price. A comparable value of wheat sold for 1949 is not available since the value of sales for all small grains was obtained as a total for each farm.

Oats.—The questionnaire for the 1954 Census of Agriculture provided (except in Washington, Oregon, and 123 counties in East Texas) only one inquiry for oats. This inquiry called for the reporting of acres harvested, bushels harvested, and bushels sold. In Washington and Oregon, a second inquiry called for the amount of oats cleaned out of vetch and peas. In these two States, a considerable acreage of oats and peas, or oats and vetch, are grown together and harvested at the same time. Enumerators were instructed not to consider these combinations as mixed grain. The acreage of oats and peas grown together was listed under the acreage for peas and the acreage of oats and vetch was listed under the acreage for vetch.

The quantity of oats harvested was reported separately and has been added into the production of oats grown alone in both Washington and Oregon. In Washington, 45 farms reported 11,911 bushels harvested and 4,922 bushels sold for oats cleaned out of vetch and peas; and in Oregon, 1,053 farms reported 617,760 bushels harvested and 398,807 bushels sold.

In 1954, for 123 counties in East Texas, the acreage, production, and sales of oats were included with "Other grain." The quantity of oats harvested in these 123 counties does not represent a significant part of the quantity harvested in the United States, in the South, or in the geographic division. However, the quantity of oats harvested in these 123 counties does represent a significant part of the crop in Texas and this fact needs to be considered when making comparisons of the figures for Texas for 1954 with those for other years. In 1949, the acreage of oats for these 123 counties constituted 35.6 percent of the total for the State.

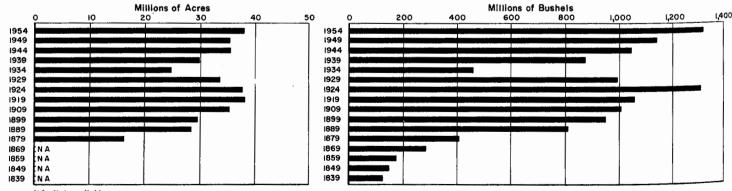
Two inquiries on oats had been on the Agriculture Questionnaire for the 1925 Census through the 1950 Census. One inquiry asked for the acreage and production of oats threshed or combined, while the other asked for the acreage of oats cut when ripe or nearly ripe for feeding unthreshed. This second inquiry, oats cut when ripe or nearly ripe for feeding unthreshed, was not included in the 1954 Census, as instructions called for the reporting of oats cut when ripe or nearly ripe under small grains cut for hay. A comparison of the figures for small grains cut for hay for 1954 and for 1949 indicates a considerable increase in the acreage for this item. A part of this increase, in some areas, was the result of dry weather and the shortage of other types of hay. However, a considerable portion of the increase is the result of the inclusion of oats cut when ripe or nearly ripe in small grains cut for hay. In order to facilitate comparisons between the two Censuses, Table 89 shows the acreage of oats cut for feeding unthreshed and the acreage of small grains cut for hay for 1949. The totals are added to facilitate a comparison with the acreage of small grains cut for hay for 1954.

The reported acreage of oats harvested, 37.9 million acres, is the largest since 1919. The increase to a large extent, represented a diversion of acres from crops such as wheat, corn, and cotton. The production, 1,314 million bushels, is also the largest reported for any Census.

The quantity of oats sold was obtained for each farm in both the 1954 and the 1950 Censuses. The value of oats sold was computed for 1954 by multiplying the quantity sold by State average prices. A comparable value of oats sold is not available for 1949 since the value of oats sold was included in the value of all small grains sold.

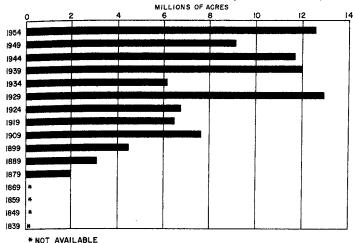
Barley.—A separate inquiry on barley appeared on the Agriculture Questionnaire for 37 States in 1954. Barley did not appear as a separate item on the questionnaire for the six New England States, Florida, Alabama, Mississippi, Arkansas, Louisiana, 30 counties of Southeast Missouri, and 123 counties in East Texas. In all of these

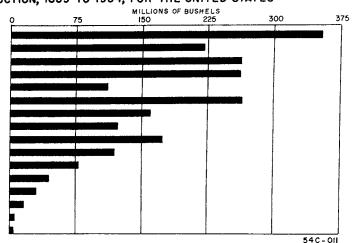
### OATS THRESHED - ACRES, 1879 TO 1954; AND PRODUCTION, 1839 TO 1954: FOR THE UNITED STATES



NA-Not available Oats threshed: Yield 34.7 bu. in 1954







YIELD PER ACRE 28.2 BUSHELS IN 1954

areas where there was not a separate inquiry, barley was included with "Other grain." Barley production is small in the areas where barley has been included in "Other grain," and the totals for the United States, regions, and geographic divisions usually are not significantly affected by the omission of data on barley in these areas. However, totals for Missouri and Texas are significantly affected by the inclusion of data for barley with "Other grain" in selected counties in these two States. For 1949, the 30 counties in Southeast Missouri had 33.1 percent of the total barley acreage for the State. The 123 East Texas counties had 14.1 percent of the barley acreage for the State in 1949.

The unit of measure on the Agriculture Questionnaire for reporting the quantity harvested was bushels for all States except Arizona and California, where it was 100-lb. bags. The 100-lb. bags were converted to bushels on the basis of 48 lb. per bushel. The harvested acreage of barley for 1954, nearly 12.6 million acres, was considerably greater than that for 1949 and is the largest for any Census year since 1929. Data on barley sold were obtained in the same manner as for the other small grains.

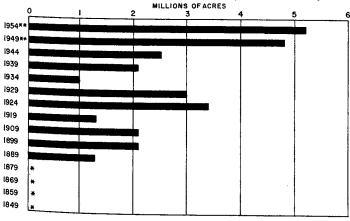
Rye.—The inquiry on rye was similar to that for other small grains. A separate inquiry on rye appeared on the questionnaire for 23 States. Rye was tabulated as "Other grain" in 25 States and 30 counties in Southeast Missouri, where a separate question was not on the questionnaire. Rye is used as a cover crop for green manure, for pasture, and for hay. The separate inquiry for rye called for rye harvested for grain. Enumerators were instructed to report rye hogged or grazed off after reaching maturity under root or grain crops hogged or grazed. Rye used as a hay crop was to be reported

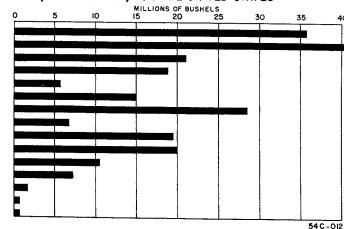
under "Small grains cut for hay." Rye used for pasture and rye used as a cover or green manure crop were not to be reported as crops harvested. If no other crop was harvested on the land, such acreage was included as "cropland used only for pasture" or "cropland used only for crops not harvested and not pastured." If a rye crop was turned under for soil improvement and the land was planted to another crop, that acreage was included as "cover crops turned under and the land planted to another crop" under Conservation Practices. (See Section V of the Composite Questionnaire in the Appendix.) Mixtures of rye and other grains were to be reported as mixed grains.

Buckwheat.—A separate inquiry on buckwheat appeared on the questionnaire for nine States. In all other States, buckwheat was tabulated as "Other grain." Data in the summary tables for buckwheat relate only to those States where a separate inquiry appeared on the Agriculture Questionnaire.

Flaxseed.—The 1954 questionnaire contained a separate inquiry on flaxseed for eight States: Michigan, Minnesota, Wisconsin, North Dakota, South Dakota, Texas (eastern part of the State only), Arizona, and California. In Texas, a separate question was carried only in the 123 counties of East Texas. Flaxseed was tabulated as "Other grain" in the States where a separate inquiry was not on the questionnaire. Data are shown for only those States for which the Agriculture Questionnaire contained a separate inquiry. Mixtures of flax and other grains were to be reported under "Mixed grains." This procedure is the same as was followed for the 1950 Census. However, in the Censuses of 1945, 1940, and 1935, the enumerators were instructed to report one-half the acreage of flax and





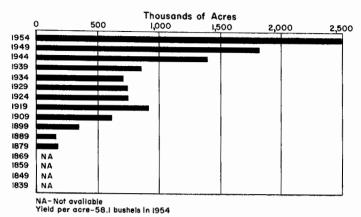


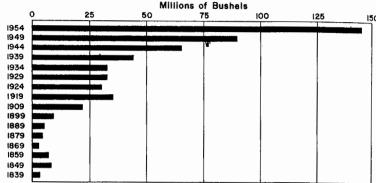
\*NOT AVAILABLE

YIELD PER ACRE 6.9 BUSHELS IN 1954

<sup>\*\*</sup> DATA AVAILABLE ONLY FOR PRINCIPAL STATES

### RICE THRESHED-ACRES, 1879 TO 1954; AND PRODUCTION, 1839 TO 1954: FOR THE UNITED STATES





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wheat, harvested as mixtures, under flax and one-half under wheat.

Grains grown together and threshed as a mixture.—A separate inquiry on mixed grains was carried on the questionnaire for 31 of the 48 States. This item was defined as grains grown together and threshed as a mixture. In Texas, the data relate only to the 131 counties in West Texas. In the 123 counties in East Texas and in 17 States, mixed grains were tabulated as "Other grain." In 1954, mixtures of oats and peas or oats and vetch in Oregon and Washington were not to be included under mixed grains, and the quantity harvested for peas, vetch, and oats was to be reported separately. Instructions on the 1945, 1940, and 1935 Census Questionnaires stated that flax and wheat mixtures were to be allocated to the individual crops and not to be reported as mixed grains. Instructions on the 1930 Census Questionnaire did not specifically exclude mixtures of flax and wheat, but instructions given to enumerators stated that such mixtures were not to be included as mixed grains. For 1920, the Census Questionnaire specified mixed crops not separated in harvesting.

Rice.—A separate inquiry on rice, providing information on acres harvested, quantity harvested, and quantity sold, appeared on the questionnaire for six States: Alabama, Mississippi, Arkansas, Louisiana, Arizona, and California, and for 123 counties in East Texas, and 30 counties in Southeast Missouri. The unit of measure for reporting rice production varied: In several States, bushels was the unit of measure; in Arizona and California, the unit was 100-lb. bags; and in Louisiana and East Texas, it was 162-lb. bbl. The bags and barrels were converted to bushels, using standard weights and measures.

Figures on rice sold were obtained by the same methods as for other small grains; that is, the quantity sold—bushels, barrels, or bags—was enumerated and the value was computed by multiplying the quantity sold by State average prices. Small acreages of rice are produced in areas outside the six States and the counties in East Texas and Southeastern Missouri. In these other areas, rice was reported and included with "Other grain." The totals for rice represent only the totals for those States where a separate inquiry appeared on the Agriculture Questionnaire. However, the total represents practically all rice produced in the United States.

Rice requires irrigation. It is grown under several kinds of rental arrangement. In Louisiana and Texas, in the most important rice-producing counties, a list of rice growers was obtained from irrigation companies. These lists were checked with Agriculture Questionnaires in the field in order to insure a complete and accurate enumeration.

The 1954 total rice acreage, nearly 2.5 million acres, was about 37 percent above that for 1949 and was the largest acreage of rice ever enumerated in a Census. Production, slightly over 145 million bushels, and the average yield per acre, 58 bushels, were also the largest reported for any Census. Four States: Arkansas, Louisiana, Texas, and California have most of the rice acreage and production. In 1954, Arkansas ranked first both in acreage and production.

Other grain.—The Agriculture Questionnaires contained separate inquiries for the most important small grain crops in each area. Small grains, for which the Agriculture Questionnaire did not contain a separate inquiry, were tabulated as "Other grain." Table 56 in this chapter lists, for 1954 and 1949, the acreage, production, and sales of other grain and specifies which grains were included in the classification. A separate inquiry was carried on the questionnaire in 1954 for all but six States: North Dakota, South Dakota, Florida, Louisiana, California, and Arizona. Other grains in these six States were reported under "Other crops" but were tabulated as other grain.

"Other grain" included more grain crops in the 30 counties of Southeast Missouri and the 123 counties in East Texas than "Other grain" for the remaining counties in these two States. In Southeast Missouri, "Other grain" included all small grains other than oats and rice, while for the other counties of Missouri, "Other grain" included all small grains except wheat, oats, barley, and rye. For the 123 counties of East Texas, "Other grain" included all grains except flaxseed and rice. For the remaining counties in Texas, "Other grain" included all small grains except mixed grains, wheat, oats, and barley.

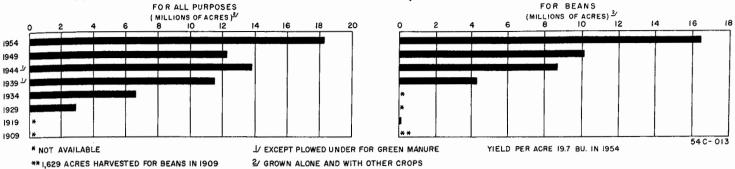
The unit of measure used for reporting "Other grain" was bushels. The quantity of "Other grain" sold was obtained for each farm and the value of sales was computed by multiplying bushels sold by an estimated State average price per bushel.

Annual legumes.—In general, separate inquiries for the annual legumes appeared on the 1954 questionnaire for those States where each crop was important. In the case of soybeans, cowpeas, and peanuts, the inquiries called for the various uses of the crops. The first inquiry provided for the total acreage for all purposes followed by other inquiries as to the acreage for each of the more important uses. For other annual legume crops, the separate inquiries provided for reporting each crop for a specific use. For velvetbeans, the inquiries related to velvetbeans for all purposes.

Soybeans.—A separate inquiry for soybeans appeared on the questionnaire for all States except six New England States, Florida, ten of the Western States, and 123 counties of East Texas. In the States where a separate inquiry did not appear on the questionnaire, the acreage of soybeans hogged or grazed was included with other crops hogged and grazed, and hence is not included in the total for soybeans. Also, in these States, the acres of soybeans plowed under for green manure are not available as the acreage of soybeans for such purposes would not have been reported as a harvested crop.

The separate inquiry on the questionnaire for soybeans called for the acreage of soybeans for all purposes, soybeans for beans, soybeans for hay, soybeans hogged or grazed or cut for silage, and soybeans plowed under for green manure. In addition, for 10 Southern States and 30 counties of Southeastern Missouri, the acreage grown alone and acreage grown with other crops was to be reported. In most areas, the acreage grown with other crops is interplanted for a cover crop or for later hogging off or grazing. There are, however, some





important producing areas where soybeans are grown in alternate rows and are planted for harvest as beans. The quantity harvested represents the total harvested on the acres grown alone and grown with other crops. The average yield per acre for beans shown in Table 58 was based on the total acreage for beans (acres grown alone plus acres grown with other crops).

The unit of measure for reporting the quantity harvested for soybeans for beans was bushels, and for soybeans for hay, tons. The quantity sold for soybeans for beans and soybeans for hay was not enumerated but was estimated on the basis of crop disposition data published by the Agricultural Marketing Service of the United States Department of Agriculture. The estimated quantity sold for both beans and hay was multiplied by the average price per unit to secure the value of sales. In addition, an average value per acre for soybeans hogged or grazed was computed for each State. The average value per acre used for estimating the value of soybeans hogged or grazed grown with other crops was one-half the value for soybeans hogged or grazed grown alone. No value was computed for soybeans plowed under for green manure.

In 1954, the total acres of soybeans grown for all purposes, 18.2 million acres, was about 50 percent above the acreage reported for 1949 and the highest ever reported for any Census. Also, the proportion of the crop harvested for beans was also the highest ever reported for a Census.

Cowpeas.—Separate inquiries for cowpeas appeared on the questionnaire in 14 Southern and Southwestern States and 30 counties of Southeastern Missouri where cowpeas is an important crop.

The inquiries for cowpeas on the 1954 Questionnaire were similar to those for soybeans, except that the acreage for all purposes excluded that acreage harvested for fresh market, canning, or freezing. Cowpeas harvested for fresh market, canning, or freezing were to be reported as a vegetable harvested for sale. Because of their wide-spread use for interplanting as a cover crop, the questionnaires for all 15 States except Texas, New Mexico, and Oklahoma provided for

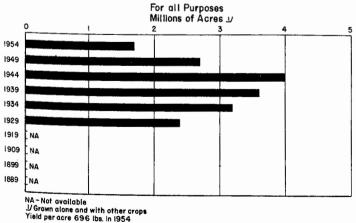
reporting both the acreage grown alone and grown with other crops. As in the case of soybeans, the quantity harvested was reported as a total and represented the amount harvested from the combined acreage.

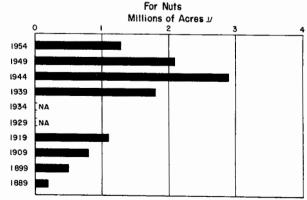
Peanuts.—Separate inquiries on peanuts appeared on the questionnaire for the 12 important producing States, and for 30 counties of Southeastern Missouri. The inquiries called for information on peanuts grown for all purposes, and the acreage and quantity harvested for nuts and the acreage and tons of vines or tops saved for hay. The acreage from which vines or tops are saved for hay is often the same as that from which nuts are harvested. No inquiry was made regarding the acreage hogged or grazed, or the acreage plowed under.

The difference between the total acreage for all purposes and the acreage from which nuts were picked or threshed provides an approximation of the acreage used solely for hogging or grazing. Drought in some of the important peanut-producing areas reduced yields in 1954 so that it was not profitable to harvest the crop either for nuts or for hay. Therefore, a larger than normal proportion of the acreage for all purposes was harvested for purposes other than for nuts in 1954. The quantity of peanut vines and tops saved for hay has been understated for each Census because of the difficulty in getting complete reports for vines or tops saved for hay when the peanuts have been harvested primarily for nuts.

The quantity of peanuts sold was estimated on the basis of crop disposition data as reported by the Agricultural Marketing Service of the United States Department of Agriculture. The value of the nut and hay crops was calculated by multiplying State average prices by the quantity of nuts harvested and the quantity of tops or vines saved for hay. To obtain the value of the total peanut crop, an estimate was made for the value of the acreage not harvested for nuts. This value was secured by computing a State average price per acre for nuts and hay, then multiplying the difference between acres harvested for all purposes and acres harvested for nuts by one-half of this average value per acre. In the case of acres grown with other

### PEANUTS-ACRES FOR ALL PURPOSES AND FOR NUTS, FOR THE UNITED STATES: 1889 TO 1954





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crops, only one-half the value per acre was used. For 1949, the value of production for peanuts included the value for nuts and the value for hay. The value of the acreage hogged or grazed was not computed or included in this total.

The value of peanuts hogged or grazed represents 1 or 2 percent of the value of all field crops harvested in such important peanut-producing States as Georgia. Thus, this change in the method for calculating the value of peanut production slightly affects comparisons in the value of the peanut crop and the value of production of field crops in a few States.

Velvetbeans.--A separate inquiry on velvetbeans was on the questionnaire for only five States: Georgia, South Carolina, Florida, Alabama, and Mississippi. The inquiry called for the acreage for all purposes grown alone and grown with other crops, and the bushels of velvetbeans harvested.

Other annual legumes.—Separate inquiries for other annual legumes, such as dry field and seed beans, dry field and seed peas, and dry lima beans appeared on the questionnaire in the States where the production of such crops was important. The inquiry on dry field and seed beans indicated the varieties that were to be included. Dry limas were to be included with dry field and seed beans, except for California and Arizona, where the questionnaire contained a separate inquiry for dry lima beans. The inquiry for dry field and seed peas excluded Austrian winter peas and wild winter peas and specified the varieties which were to be included. Austrian winter peas and wild winter peas were reported separately, and data for these crops are shown under other seed crops.

Hay crops.—Separate inquiries covering one or more kinds of hay appeared on the questionnaire in each of the 48 States. The acreage harvested, tons harvested, and tons sold were to be reported. Specific inquiries for each important kind of hav appeared on the questionnaire for each State. For every State except Florida, the questionnaire had an inquiry in the form of a catch-all question for "Other hay." All kinds of hay, except sorghum, soybean, cowpea, and peanut, for which a separate inquiry did not appear on the questionnaire, were to be reported under "Other hay."

In most States, separate inquiries appeared on the questionnaire for alfalfa and alfalfa mixtures; clover, timothy, and mixtures of clover and grasses; oats, wheat, barley, rye, or other small grains; and any other hay. Separate inquiries for lespedeza hay, wild hay, and grass silage did not appear on the questionnaires for all States. (The Composite Questionnaire in the Appendix indicates the kinds of hay for which separate inquiries appeared on the questionnaire for the various States.)

The data for all hay does not include the acreage, production, or value of sorghum hay, soybean hay, cowpea hay, or peanut hay. These kinds of hays are reported separately and listed under such crops. The quantity of hay harvested was to be reported on a dryweight basis. Grass silage was enumerated on a green-weight basis. If two or more cuttings were made from the same acreage, the acres were to be reported only once, but the total production was to be reported from all cuttings.

Grass silage was defined as silage made from grasses, alfalfa, clover. or small grains, including silage made from pasture acreage. It did not include silage made from corn or sorghums. A separate inquiry regarding grass silage appeared on the questionnaires for 25 States. In the other 23 States, grass silage was reported in the space provided on the questionnaire for reporting other crops. Data were tabulated and are presented for these States also. A considerable proportion of the grass silage was probably cut from the same acreage from which one or more cuttings of hay was also made. In such cases, the acreage of land from which grass silage and a hay crop were cut was counted twice, once under grass silage and again under the hay crop.

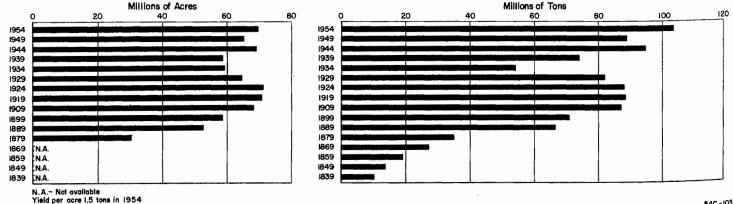
The wording for the inquiries concerning alfalfa and clover hav was different for 1954 from that for prior Censuses. For 1954, the inquiry was, "Alfalfa and alfalfa mixtures for hay and for dehydrating." For 1950, the inquiry on alfalfa read, "Alfalfa for hay or for dehydrating." For Censuses prior to 1950, the inquiry was similar to that for 1950 except that dehydrating was not mentioned. For 1954, the inquiry regarding clover read, "Clover, timothy, and mixtures of clover and grasses for hay." The inquiry regarding clover for 1950 and other earlier Censuses specified, "Clover or timothy alone or mixed for hay." Instructions on the questionnaire for the 1950 and previous Censuses stated that mixed hay was to be reported under the kind of hay that made up the largest part of the mixture. It is very likely that some of the change in the acreage of alfalfa cut for hay from 1949 to 1954 resulted from the change in the inquiries rather than from an actual change. The data in the following table indicate the change in the relative importance of various kinds of hay from 1939 to 1954.

	Percent of land from which hay was cut represented by the acreage of—					ıt 	
Year	Al- falfa hay	Clover and timo- thy hay	Lespe- deza hay	Small grain hay	Wild hay	Other tame hay	Hay or grass silage
1954 1949 1944 1939	37.2 25.0 21.6 21.8	24.2 28.3 32.7 29.4	4.7 10.6 8.6 8.0	6.7 4.6 2.2 6.3	17.8 21.8 22.4 20.3	7.7 9.7 12.5 14.2	1.7 0.5 (NA) 0.1

NA Not available.

Alfalfa hay for 1954 and 1949 includes the acreage and production of alfalfa used for dehydrating. Sweetclover hay was not to be reported under clover and timothy but under "Other hay." In Oregon and Washington, the questionnaire carried an inquiry on vetch or peas, alone or mixed with oats or other grain cut for hay. This

ALL HAY, EXCLUDING SPECIFIED ANNUAL LEGUME AND SORGHUM HAY- ACRES, 1879 TO 1954; AND PRODUCTION, 1839 TO 1954: FOR THE UNITED STATES



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vetch-pea-oat hay has been included in "Other hay" in Table 92. The farms reporting acreage, production, and quantity sold for this kind of hay are shown below:

Vetch or peas, alone or mixed with oats or other grains, cut for hav: 1954

	Farms reporting	Acres	Production (tons)	Quantity sold (tons)
Oregon	3,918	48,737	85,927	10,122
Washington	610	6,634	10,962	1,180

Table 82 of this chapter contains data on the total acreage of land from which hay was cut. The acreage of sorghum, soybean, cowpea, and peanut hays are not included in this total. In 1954, the figures for total land from which hay was cut were obtained by adding the acreage of the various hay crops including grass silage. The same procedure was followed in all prior Censuses except 1950. For 1950, the acreage of land from which hay was cut was obtained from each farm operator. Table 82 also shows the total quantity of hay cut. This total includes the production of grass silage converted to a dryweight basis by multiplying tons of silage by 0.30.

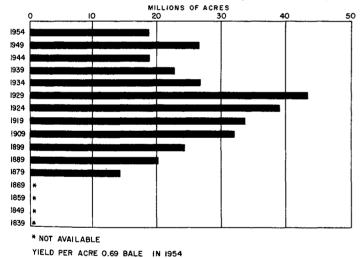
The value of production for hays was obtained by multiplying the State average price by the tons harvested for each of the several kinds of hay. The value of all hay also includes the value of grass silage. The tons of hay sold were obtained for each kind of hay for each farm. Value of sales was computed in 1954 by multiplying the State average price per ton by the tons sold for each kind of hay. The value of sales for all hay in 1954 does not include any allowance for the value of grass silage sold, since it was considered that all grass

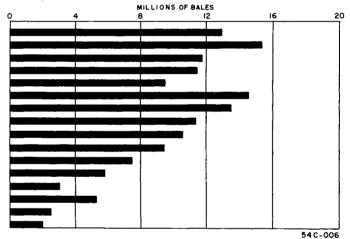
silage was used on the farm where harvested. The tons sold and value of sales for each kind of hay are not available for 1949 as only the total tons of all kinds of hay sold were obtained for 1949.

Clover, alfalfa, grass, and other field seed crops.—A separate inquiry appeared on the questionnaire for the important field seed crops in each State. In addition, each questionnaire provided space for writing in a report for any other field seed crops. Space was also provided to list the kind or variety of seed as well as the acreage and production. Instructions stated that the production of seed was to be reported on a "clean seed" basis. The unit of measure used for reporting production varied among States, and this unit may be determined by reference to the Composite Questionnaire in the Appendix. Production was converted to a common unit for presentation in the tables of this chapter, using standard conversion factors.

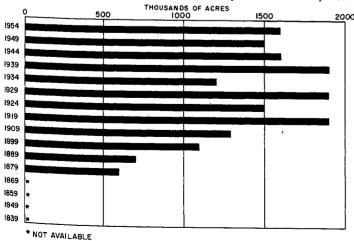
The harvesting of bluegrass seed over much of the important producing area, particularly in the Midwest, is a specialized operation, often carried out by itinerant crews who move from locality to locality. Bluegrass seed is usually purchased or contracted from landowners or farm operators on an acreage basis, and the person living on a farm may have little information as to the quantity of seed obtained. Because of this type of operation, it is difficult to obtain production data on bluegrass seed by asking for information from the farm operators. The data obtained in the Census were, therefore, relatively incomplete and represent only that portion of the crop harvested by the landowners or operators, or that portion of the crop where they had knowledge of the amount harvested. A check of the enumerated data and the yields involved indicated that

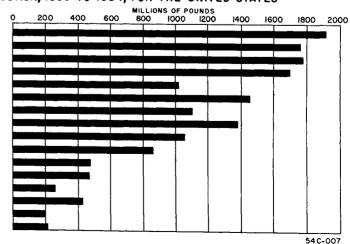
### COTTON HARVESTED - ACREAGE, 1879 TO 1954; AND PRODUCTION, 1839 TO 1954; FOR THE UNITED STATES





TOBACCO HARVESTED-ACREAGE, 1879 TO 1954; AND PRODUCTION, 1839 TO 1954; FOR THE UNITED STATES





YIELD PER ACRE 1,234 POUNDS IN 1954

the seed production reports for bluegrass were primarily on a greenseed basis, and the production data are so labeled except in the case of Kentucky where the production is given on the basis of cured seed. In California, Oregon, and Washington, the entire production reported for bluegrass consisted of Merion bluegrass, and the production is given on a clean-seed basis. No attempt has been made to convert the clean seed or the cured seed to a green-seed basis. The United States, region, and division totals represent totals of the several States on the basis of pounds of seed as reported.

Cotton.—A separate inquiry on cotton appeared on the regional questionnaire for all States where cotton is an important crop. In States such as Illinois, Kansas, and Nevada, cotton was reported by farm operators and enumerators writing in the information in the space on the questionnaire provided for reporting other crops. The questionnaire called for acreage harvested and production of lint cotton in running bales. The type of bales was not specified because of the universal use of a square-type bale. In the Censuses prior to 1950, the enumerator was instructed to convert round bales to equivalent square bales on the basis that two round bales were equal to one square bale.

The production of cottonseed has been enumerated only once (in 1930) in a nationwide Census. Cottonseed production for other Censuses has been computed on the basis of the production of lint cotton. In 1954, the total production (in tons) of cottonseed for each State was calculated by using the following formula:

Total net weight of lint cotton × percentage seed is of seed cotton

2,000 lb. × percentage lint is of seed cotton

The factors used in these calculations for each State are given in the following table:

FACTORS USED FOR CALCULATING COTTONSEED PRODUCTION, BY STATES: 1954

State	Average net weight per running bale (pounds)	Percent lint cotton is of seed cotton	Percent cottonseed ls of seed cotton
Alabama Arizona Arkansas California Florida	483.3 482.0 473.0	37.0 36.8 36.4 36.5 35.8	63.0 63.2 63.6 63.5 64.2
Georgia Illinois. Kentucky. Louisiana Maryland	478.1 469.8 489.2	36.5 36.9 37.1 36.8 37.1	63.5 63.1 62.9 63.2 62.9
Mississippi Missouri Nevada New Mexico North Carolina	467.5 473.0 485.7	36.5 35.3 36.5 37.4 36.0	63.5 64.7 63.5 32.6 64.0
Oklahoma South Carolina. Tennessee. Texas Virginia.	492.2	36.5 35.8 37.1 36.5 37.1	63.5 64.2 62.9 63.5 62.9

Sales of cotton were not enumerated since it was considered that the entire crop was sold. Therefore, value of production and value of sales are identical. The value of the cotton crop was computed by multiplying the enumerated bales times a State average price per bale. (The State average price included the value not only of the lint but also of the seed.)

The enumerated acreage of cotton for 1954, 18,858,145 acres, is the smallest for any Census year since 1879, and is about 29 percent below the acreage harvested in 1949. The number of bales produced, 12,921,376, is only 16 percent below the production of 1949. The average yield per acre was 0.69 bale, the highest ever recorded for a Census. This high average yield per acre was primarily the result of heavy fertilizer application, the diversion of the less productive acres to non-allotment crops, and the increase in cotton production on irrigated land.

Tobacco.—The 1954 Questionnaires for 26 States contained one or more separate inquiries on tobacco. The questionnaires asked for information on all types of tobacco for 16 States—and for 10 States, for production by type of tobacco. For example, in the six New England States, the inquiries for tobacco provided for reporting binder and wrapper types of tobacco separately. In North Carolina and Virginia, separate information was secured for flue-cured and for burley and other types. For Kentucky and Tennessee, the questionnaire asked for burley, dark-fired, and dark air-cured tobacco.

A separate count was not made for farms reporting tobacco in 1954 when there were separate inquiries on the questionnaire for more than one type. Where the questionnaire contained inquiries for two or more types, a count of the farms reporting each particular type of tobacco is available. The total of the farms reporting the several types would give an approximation of the number of farms reporting tobacco. However, such a total would represent some overstating of the number of farms reporting tobacco, since an individual farm may have produced more than one type of tobacco.

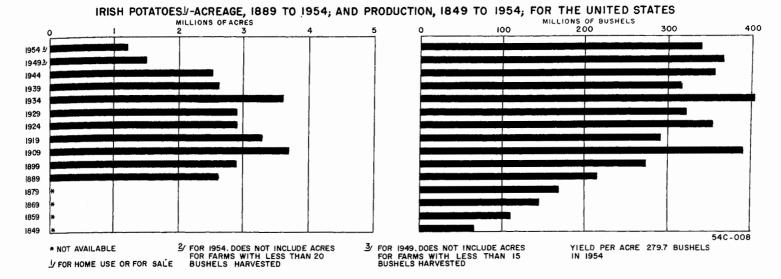
The total harvested acreage of tobacco for 1954, slightly under 1.6 million acres, was approximately the same as that reported for 1949. However, production, 1,921 million pounds, was nearly 9 percent above 1949 and was the largest reported for any Census. The quantity of tobacco sold was not enumerated because practically all tobacco harvested is sold. The value of sales and the value of production have been considered the same and have been computed by multiplying pounds harvested by State average prices per pound.

Irish potatoes.—A separate inquiry on Irish potatoes appeared on the questionnaires for all States. Information was asked on acres harvested and quantity harvested. The questionnaire provided for reporting acreage in tenths of acres. Instructions on the questionnaire and to the enumerator specified that it was not necessary to report the acreage harvested if less than 20 bushels (or 10 bags in those States where the production unit was 100-lb. bags) were harvested. This procedure was adopted to facilitate securing production reports for potatoes produced primarily for home use. If an acreage figure was reported on the questionnaire where the quantity harvested was less than the minimum specified, the acreage figure was not tabulated during the office processing. A similar procedure was followed in the 1950 Census except that the acreage was not obtained when the quantity harvested was less than 15 bushels (10 bags in specified States). Censuses prior to 1950 included the acreage for most of these small plots in the total acreage for Irish potatoes. Therefore, the data on acres of potatoes for 1954 and 1949 are not fully comparable with those for earlier Censuses. This is especially true in areas where the production was largely for home use.

The unit of measure for reporting quantity harvested was either bushels or 100-lb. bags. For the summary tables in this chapter, all production has been converted to bushels, using 60 lb. per bushel as a basis of converting 100-lb. bags to bushels. In the most important potato-producing area of Maine, Aroostook County, potatoes are picked up from the harvest field in barrels, delivered to storage in barrels, and later taken out of storage and delivered to market in barrels. Thus, it was necessary for the farm operator or the Census enumerator to convert barrels into bushels. An investigation indicated that the conversion factor used by most enumerators and farm operators in the main potato-producing area was 3 bushels for each barrel. Field investigation in Aroostook County showed that this conversion was correct as the barrels contained approximately 180 pounds of potatoes.

The quantity of Irish potatoes sold was not enumerated. Quantities sold were estimated on the basis of disposition data published by the Agricultural Marketing Service of the United States Department of Agriculture and by making a per-farm allowance for home consumption for all farms reporting potatoes.

Table 127 of this chapter shows farms reporting, acres, and bushels produced for Irish potatoes by States, divisions, regions, and for the United States for farms classed according to the number of acres harvested. The table also shows the number of farms and the bushels of potatoes produced on the small plots where the acreage harvested was not enumerated.



The 1954 acreage of Irish potatoes harvested, 1.211 million acres, is the lowest for any Census. This figure does not include an acreage for potatoes harvested from plots where total production amounted to less than 20 bushels or less than 10 bags. Production, slightly over 340 million bushels, was about 7 percent below the harvest for 1949. The yield per acre of Irish potatoes, based on farms that reported both acreage and production, averaged 273 bushels per acre. This was the highest yield ever reported by any Census.

Sweetpotatoes.—There was a separate inquiry for sweet potatoes on the questionnaire for 25 States where they were an important crop. In the remaining States, they were reported in the space provided in the questionnaire for writing in information for other crops harvested. The question called for the acreage harvested and the production in bushels. The questionnaire provided for the reporting of acres in tenths of acres. If less than 20 bushels of sweetpotatoes were harvested, the acreage was not to be reported. The instructions to the enumerator provided that the reports for sweetpotatoes and yams should include those used as livestock feed.

The unit of measure for reporting quantity harvested was bushels in all States. The quantity of sweetpotatoes sold and the value of sweetpotatoes sold were computed using a procedure like that used for Irish potatoes.

Sugarcane and sorghum.—A separate inquiry on the acreage and production of sugarcane and sorghum for sirup appeared on the questionnaire for 10 States, and for 30 counties in Southeast Missouri. The question asked for the combined acreage of both sugarcane and sorghum harvested for sirup. The questionnaire provided for the reporting of the acreage in tenths of acres.

Two additional inquiries relating to sugarcane were carried in Louisiana. One referred to "Sugarcane cut for sugar or for sale to mills" and the other to "Sugarcane cut for seed." Although there was no separate inquiry for sugarcane harvested for sugar for other States, separate data were tabulated for Florida and are shown in Table 125.

Sugar beets for sugar.—An inquiry covering the acreage and production of sugar beets for sugar appeared on the questionnaire for 15 States. In all other States, sugar beets were reported in the space on the questionnaire for reporting other crops. Sugar beets harvested for seed were not included as sugar beets for sugar. Separate data for sugar beets harvested for seed appear in Table 125.

Popcorn.—A separate inquiry on popcorn was on the questionnaire for only six States—Illinois, Indiana, Iowa, Ohio, Kentucky, and Tennessee, and all counties in Missouri except the 30 Southeastern ones. For all other States, the information reported for popcorn was written in the space on the questionnaire provided for writing in information for other crops. The questionnaire provided for reporting whole acres and production in pounds of ears. The instructions to

enumerators required that the quantity harvested should be reported in pounds of ear corn. However, totals in this chapter are given in units of thousands of pounds of ear corn. In some areas, small quantities of popcorn were reported as harvested for use on the farm. On many farms, only a fraction of an acre of popcorn was harvested. The quantity of popcorn harvested on these farms has been totaled and included in the data. Because acres harvested were not secured when less than an acre, the yield per acre in the States where popcorn is produced principally for use on the farm may be too high.

Minor and miscellaneous crops.—The Agriculture Questionnaire provided two methods for reporting minor and miscellaneous crops. In the case of small grains and hay crops, the sections of the questionnaire containing inquiries regarding these crops usually contained a separate inquiry for "Other grain" or "Other hay."

For field seeds, for vegetables, and for miscellaneous crops for which a separate inquiry did not appear on the questionnaire, space was provided in the sections of the questionnaire containing inquiries for each of these groups of crops, for writing in the name of the crop and reporting the acres, quantity harvested (except for vegetables), and value. During the office processing, these miscellaneous crops were coded and the data were tabulated for each crop. This information is given in this chapter for the United States in Tables 2 and 3, and by States in other applicable tables. The data for each crop with a total of 50 acres or more harvested are presented in State Table 16 of Volume I.

Vegetables harvested for sale.—The Agriculture Questionnaire for all States contained a separate section for reporting vegetables harvested for sale. The first question in this section asked (a) if any vegetables were harvested for home use, and (b) if any vegetables were harvested for sale for fresh market or to canners, freezers, or other processors.

The acres harvested were to be reported separately for each vegetable crop. Separate inquiries were listed for the important vegetable crops in each State and space was provided on each questionnaire for writing in the names and acreages of other vegetables for which there was no separate inquiry. The questionnaire provided for reporting acreage in tenths of acres for the vegetable crops that were harvested for sale.

Questionnaire notes and specific instructions to enumerators and farmers provided that if two or more plantings of the same crop were made, either on the same land or on different land, the total acreage harvested from the several plantings was to be reported. Vegetables harvested from land from which other crops had been harvested were also to be reported.

The value of vegetables sold was obtained only as a total for all vegetables harvested for sale on the farm, and not for each vegetable crop harvested.

Table 137 of this chapter presents data for the 17 Western States, Arkansas, Florida, and Louisiana, for vegetables harvested from irrigated and nonirrigated land. The data for the acreage of vegetables harvested from irrigated and nonirrigated land are not strictly comparable with the total value for sales of vegetables harvested from irrigated and nonirrigated land. The value of sales for vegetables harvested from irrigated land includes only the value of vegetables sold for those farms where the entire acreage of vegetables harvested on the farm was irrigated: The acreage of the vegetables harvested on irrigated farms includes the acreage for all farms where all of the vegetables were irrigated, and the acreage for any vegetable that was entirely irrigated on a farm where other vegetable crops were only partly irrigated or not irrigated. The acreage for vegetables harvested on nonirrigated land was obtained by subtracting from acres of all vegetables, the acres of vegetables harvested on irrigated land. The value of the vegetables harvested from nonirrigated land was obtained by subtracting the value of vegetables harvested for sale on irrigated land from the total value of all vegetables harvested for sale.

Thus, the acreage of vegetables harvested for sale on irrigated land includes the acreage of vegetable crops where the entire acreage of

the individual crop was irrigated and where part but not all the vegetables were harvested for sale on irrigated land; whereas the value of vegetables harvested for sale on irrigated land does not include the value of such vegetable crops.

In 1949, the count of farms reporting vegetables harvested for sale did not include those farms that harvested green cowpeas only in the States of North Carolina, South Carolina, Georgia, Florida, Alabama, Louisiana, Mississippi, and Texas. Also, the value of vegetables sold for these same eight States does not include the value of green cowpeas harvested for fresh market, canning or freezing. The 1949 value of green cowpeas harvested for these eight States was included with other field crops.

The number of farms reporting vegetables harvested for sale in 1954 was 279,606, which is the smallest recorded in any Census. However, the total acreage of vegetables harvested for sale, 3,739,994 acres, and the value of vegetables sold, \$645,095,047, were slightly larger for 1954 than for 1949. Farms reporting vegetables harvested for home use in 1954 totaled 3,245,679. This is the smallest number of farms reporting vegetables harvested for home use in any Census and represents 67.9 percent of the total number of farms in 1954.

# ACREAGE OF SPECIFIED VEGETABLE CROPS HARVESTED FOR SALE, FOR THE UNITED STATES: 1954, 1949, AND 1944

