Appendix A

DEFINITIONS AND EXPLANATIONS

Descriptive summary and references—The definitions and explanations that follow relate only to those items that are considered to be inadequately described in the tables where they appear. Most of the definitions consist of a resumé of the questionnaire wording, supplemented by excerpts from instructions given to enumerators. For exact wording of the questions and of the instructions included on the questionnaire, see the facsimile of the 1964 agriculture questionnaire in appendix B.

An analysis of the questions asked in the 1964 census, and of the data obtained, will be given in Volume II, General Report, Statistics by Subjects, United States Census of Agriculture, 1964. The general report presents statistics for States by subject matter.

Land area—The approximate total land area of States and counties as reported for 1964 represents the land area as determined by records and calculations made for 1960. Differences between the land area for 1964 and 1959 reflect political changes in boundaries or actual changes in land area caused by changes in the number or size of reservoirs, lakes, streams, etc. For Alaska, the areas for election districts represent the gross area of land and water.

Land in farms---Except for managed farms, the land to be included in each farm was determined from the answers to questions about the number of acres owned, the number of acres rented from others or worked on shares for others, and the number of acres rented to others or worked on shares by others. The acres owned and the acres rented from others or worked on shares for others were first added together and then the acres rented to others or worked on shares by others were subtracted. The result represented the number of acres in the farm. The number of acres in a managed farm was the difference between the total land managed and land owned and that part of the managed and owned land that was rented to others or worked on shares by others.

The acreage designated in the tables as "land in farms" consists primarily of "agricultural" land—that is, land used for crops and pasture or grazing. It also includes considerable areas of land not actually under cultivation nor used for pasture or grazing. For example, the entire acreage of woodland and wasteland owned or rented by farm operators is included as land in farms, unless it was being held for nonagricultural purposes.

Except for open range and grazing land used under government permit, all grazing land was to be included as land in farms provided the place of which it was a part, was a farm. Grazing land operated by grazing associations was to be reported in the name of the person chiefly responsible for conducting the business of the association. Land used rent free was to be reported as land rented from others. All land in Indian reservations used for growing crops or grazing livestock was to be included. Land in Indian reservations that was not reported by individual Indians and that was not rented to non-Indians was to be reported in the name of the cooperative group that used the land. In some instances, an entire Indian reservation was reported as one farm.

Land owned—All land that the operator and/or his wife held under title, purchase contract, homestead law, or as heir or trustee of an undivided estate at the time of enumeration is considered as owned.

Land rented from others—This item includes not only land that the operator rented or leased from others but also land he worked on shares for others and land he occupied rent free. Grazing land used under government permit is not included.

Land rented to others—This item includes all land rented or leased to others, except land leased to the government under the Soil Bank, and all land worked by others on shares or on a rent-free basis. For the most part, the land rented to others represents agricultural land, but it also includes land rented for residential or other purposes. The tenant is considered as the operator of land leased, rented, or worked on shares even though his landlord may supervise his operations. The landlord is considered as operator of only that portion of the land not assigned to tenants.

Land managed—This item includes all tracts of land managed for one or more employers by a person hired on a salary basis. A hired manager was considered to be the operator of the land he managed since he was responsible for the agricultural operations on that land and frequently supervised others in performing those operations.

Land in two or more counties—An individual farm was always enumerated in only one county, even in cases where the land was located in two or more counties. If the farm operator lived on the farm, the farm was enumerated in the county where he lived. If he did not live on the farm, the figures for the farm were tabulated for the county where the farm headquarters was located. In cases where there was any question as to the location of the headquarters, figures for the farm were tabulated for the county where most of the land was located.

Land in farms according to use—Land in farms has been distributed according to the way in which it was used in 1964. The land uses described in the following paragraphs are mutually exclusive; that is, each acre of land is included only once even though it may have had more than one use during the year.

Cropland harvested-This category refers to all land from which any crops were harvested in 1964, whether for home use or for sale. It includes land from which hay (including wild hay) was cut, and land in berries and other small fruits, orchards, vinevards, nurseries, and greenhouses. Matured crops hogged off or grazed were considered to have been "crops harvested" and were reported here. Land from which two or more crops were harvested in 1964 was to be counted only once in the land-use classification. Land used for other purposes either before or after the crops were harvested was to be reported as cropland harvested, without regard to the other uses.

The enumerator was instructed to check the figure for cropland harvested for each farm by adding the acreages of the individual crops and subtracting the acreages from which two or more crops were harvested.

Cropland used only for pasture—This landuse classification includes rotation pasture and all other land used only for pasture or grazing that the operator considered could have been used for crops without additional improvement. Enumerators were instructed to include land planted to crops that were hogged off, pastured, or grazed before maturity but to exclude land pastured before or after hay or other crops were harvested from it. Permanent open pasture may have been reported either for this item or for "other pasture" depending on whether or not the operator considered it as cropland.

Cropland not harvested and not pastured— This classification represents a total of four subclasses for the 17 Western States and three subclasses for other States.

Cultivated summer fallow—This subclass of land is shown only for the 17 Western States. It refers to cropland that was plowed and cultivated but left unseeded for the 1964 harvest in order to control weeds and conserve moisture.

Soil improvement grasses and legumes— This includes land used only for cover crops to control erosion or to be plowed under for improving the soil. This subclass includes a large part of the acreage of cropland taken out of production under provisions of the 1964 Feed Grain Program.

Crop failure—This subclass includes all cropland on which all crops failed in 1964; and, also, all acreage in crops not harvested because of low prices or labor shortages.

Cropland idle—This subclass includes cropland idle one or more years and also land in crops not harvested in 1964, but intended for harvest in 1965 or later, such as land in young strawberries, new sugarcane plantings, land in pineapples for harvest in 1965, and land used for pineapples but between cycles of pineapple crops.

Woodland pastured—This classification includes all woodland where livestock were pastured or grazed in 1964. The instruction on the questionnaire was—"Include as woodland all wood lots and timber tracts; cutover and deforested land which has value for wood products and has not been improved for pasture."

Woodland not pastured—This classification refers to all woodland not used for pasture or grazing, including land in operated farms that was placed in the Soil Bank and planted to trees.

Other pasture—This classification refers to all land other than woodland and cropland

that was used only for pasture or grazing. It includes noncrop, open or brush pasture, and cutover or deforested land that has been improved and used for pasture.

Improved pasture—This subclass refers to that portion of "other pasture" on which one or more of the following practices had been used: Liming, fertilizing, seeding, irrigating, draining, or the clearing or control of weed or brush growth.

In the 17 Western States and Alaska, other pasture excluding improved pasture was further classified as predominantly grass or predominantly brush or browse. Other pasture predominantly grass comprises rangeland with cover predominantly in grass, and includes land that may be called meadow or prairie or may have a cover of bunchgrass, shortgrass, buffalograss, bluestem, bluegrass, switchgrass, or sand lovegrass. Other pasture predominantly brush or browse comprises land with cover predominantly brush or browse. Such land contains desert shrubs, sagebrush, mesquite, greasewood, juniper pinon, saltbrush, cactus, etc.

Other land—This classification refers to all land not included in the preceding land-use classifications, such as house lots, barn lots, lanes, roads, ditches, land area of ponds, and wasteland.

Value of land and buildings—The values of land and buildings are presented usually in terms of average per farm or average per acre. The values of land and buildings reported for the census were to represent market value i.e., the price for which the land and buildings would sell at the time of the census.

The value of land and buildings was not reported for all farms for which the value was required. The value of land and buildings for farms for which the value was not completely reported was estimated during office processing by using the average value per acre of land and buildings for farms of approximately the same size in the same area.

The average value per farm and per acre shown for the 1959 census may not be fully comparable with the averages for the 1964 census because estimates were not made for the value of land and buildings for the farms for which the value was not reported in 1959. (Line 14, county table 1, shows the proportion of farms for which the value of land and buildings was reported for the 1959 census.) Generally, the value of land and buildings was less completely reported for the larger-than-average farms in 1959, and consequently the 1959 averages may be too high. The averages given for the State total for 1959 have been adjusted to include estimates for 1959 on approximately the same basis as the estimates for 1964.

Farm operator—The term "farm operator" is used to designate a person who operates a farm, either doing the work himself or directly supervising the work. He may be the owner, a member of the owner's household, a hired manager, or a tenant, renter, or sharecropper. If he rents land to others or has land worked on shares by others, he is considered as operator only of the land which he retains for his own operation. In the case of a partnership, only one partner is counted as an operator. The number of farm operators is the same as the number of farms.

Farms or operators reporting—Figures for farms represent the number of farms, or farm operators, for which the specified item was reported. For example, if there were 1,922 farms in a county and only 1,465 had chickens 4 months old and over on hand at the time of enumeration, the figure for farms for the item "Chickens 4 months old and over" would be 1,465. The term "farms" used for the 1964 census to designate the count of the number of farms reporting or having the item has the same meaning as "farms reporting" used for the 1959 and prior censuses.

Residence of operator—Farm operators were classified by residence according to whether or not they lived on the farms they were operating. Some of those who did not live on the farms they operated themselves lived on farms operated by others. In cases where all the land was rented from others or worked on shares for others, the operator was considered to live on the farm operated provided the dwelling he occupied was included in the rental agreement. The dwelling, in such cases, was not necessarily on the land being operated. Similarly, a farm operator who did not live on the land being cultivated or grazed but who had some agricultural operations (other than a home garden) at his dwelling was considered as living on the farm operated.

Off-farm work—Off-farm work was defined to include work on someone else's farm for pay as well as all types of nonfarm jobs, businesses, and professions, whether the work was done on the farm premises or elsewhere. Exchange work was not included.

Equipment and facilities—Farm operators were asked to report equipment and facilities that were on the farm at the time of enumeration, regardless of ownership. They were to include items that were in operating order and were used during 1963 or 1964.

Automobiles included all automobiles kept on the farm whether owned by the farm operator, members of his family, his partner, hired workers, or others living on the place.

A grain combine with a corn picking attachment (head) was counted as a grain combine and also as a cornpicker.

A field forage harvester with a cylinder or flywheel head and also with a flail attachment was to be counted as a cylinder or flywheel type forage harvester and also as a flail type forage harvester.

IRRIGATION

Definition of irrigated land—Irrigated land is defined as land watered for agricultural purposes by artificial means. These means included subirrigation as well as systems whereby water was applied to the ground surface, either directly or by sprinklers. Land flooded for rice cultivation was considered as irrigated. Land flooded during high-water periods was to be included as irrigated only if water was directed to agricultural use by dams, canals, or other works.

Enumeration of irrigated land—The question on land irrigated was asked in all States. The total acreage reported as irrigated includes not only irrigated cropland but also any other land that was irrigated in 1964.

Irrigated farms—All farms reporting any land irrigated in 1964 are counted as irrigated farms.

Land in irrigated farms—Data for land in irrigated farms according to use relate to the entire acreage in these farms, including land that was not irrigated

Land irrigated—Data for land irrigated relate only to that part of the land in irrigated farms

that was watered by artificial means at any time in 1964.

Irrigated cropland harvested—The data for irrigated cropland harvested relate to all irrigated ed land from which crops were harvested in 1964, regardless of the method of irrigation. An instruction on the questionnaire reminded enumerators and respondents to include irrigated land from which hay was cut, irrigated land in both bearing and nonbearing fruit and nut crops, and irrigated land from which volunteer crops were harvested. Each irrigated acre was to be reported only once, regardless of how many crops were harvested from it.

Irrigated pasture or grazing land—This acreage may include one or more kinds of pasture or grazing land, irrigated one or more times in 1964.

Farms irrigated by number of acres irrigated— All farms on which any land was irrigated in 1964 are classified according to the number of acres irrigated in county table 2. This classification is based on total land irrigated. Therefore, it includes not only the irrigated land from which crops were harvested but also all other irrigated land, regardless of use.

Crops harvested from irrigated land—Data for the principal crops harvested from irrigated land appear in county table 14. The characteristics of the data in county table 14 differ for Eastern and Western States. Western States include 14 States (Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Hawaii, Alaska, and Louisiana). The Eastern States include the 36 remaining States.

For the Eastern States, the crops for which data are presented in county table 14 are divided into two groups as follows: (1) Two selected crops harvested from irrigated land, for which data for both acreage harvested and quantity harvested are presented. Generally, these are the two most important irrigated crops in each State. (2) Other crops harvested from irrigated land. For these crops only the acreage of each crop harvested from irrigated land is given.

For the Western States, data are presented in county table 14 for two groups of crops as follows. (1) Crops for which the entire acreage was irrigated. When the entire acreage of a crop harvested on the farm was harvested from irrigated land, the acreage and the quantity harvested were tabulated and the totals are given for all such farms under the grouping "Crops for which the entire acreage was irrigated." (2) Crops for which part of the acreage was irrigated. When part of the acreage of a crop harvested on the farm was on irrigated land and part of the acreage was on dry land, no attempt was made during the enumeration to obtain quantity harvested separately for the irrigated acreage and the dry land acreage. Accordingly, for crops for which only a part of the acreage harvested was irrigated, only data on the acreage harvested from irrigated land are available. Figures on the number of farms and the acres harvested from irrigated land for these crops are presented in county table 14 under the grouping "Crops for which part of the acreage was irrigated." The total acreage for each crop harvested from irrigated land may be obtained by adding the acreage shown for the crop under the two groupings in county table 14.

Data are presented in county table 14 only for the most important crops harvested from irrigated land.

CROPS

Crops harvested—The 1964 agriculture questionnaire was similar to the questionnaire used in several previous censuses in that it provided for the collection of detailed data for all crops harvested on each individual farm. The variation in the crops listed on the questionnaires used in different States made possible the separate reporting of all important crops grown in a given State. All versions of the questionnaire contain several "All other crops" questions where crops not specifically listed in separate questions were to be reported.

Acreage of crops harvested—In most instances, the acreage reported for individual crops represented the area harvested during 1964. The area harvested is often less than the area planted. For fruit orchards and groves, vineyards, and planted nut trees, the acreage reported represents the total area in both bearing and nonbearing trees and vines as of the date of enumeration—usually a date in November or December 1964.

Quantity of crops harvested—Except for sugarcane for sugar, pineapples, citrus fruits, olives, and avocados, data relate to the crop year 1964. (In most cases the harvest was completed during the calendar year 1964.) The quantity harvested represents the following: For sugarcane for sugar, the 1964 crop (part of which was harvested in 1965); for pineapples in Hawaii, the crop for the year ending May 31, 1964; for citrus fruits, the crop from the bloom of 1963 during the 1963-1964 marketing season; for olives, the crop from the 1963 bloom, during the period September 1963 to February 28, 1964; and for avocados, the crop from the 1963, to February 28, 1964, in Florida, and October 1, 1963, to September 30, 1964, in California.

Unit of measure—The unit of measure in which quantities were to be reported has varied for some crops, not only from State to State, but also from census to census. The aim has been to permit reporting in the units of measure currently in use. In the State and county tables, the quantities harvested for each crop are expressed in the unit of measure given on the 1964 agriculture questionnaire. To provide readily comparable information, data published for earlier censuses in different units of measure have been converted to the units used for 1964.

Hay crops—Data for the total acres of land from which hay was cut exclude the acreage in sorghum, soybean, cowpea, and beanut hays. These crops were reported in separate questions in the States where they are important.

The questionnaire contained an instruction that if two or more cuttings were made from the same land, the total production from all cuttings was to be reported but the acres cut were to be counted only once. In cases where both hay and grass silage were cut from the same land, the total acreage was to be reported for both crops.

The tonnage of hay, including alfalfa hay for dehydrating, is given on a dry-weight basis. However, the production of grass silage is given in terms of green weight.

Irish potatoes and sweetpotatoes—For Irish potatoes and sweetpotatoes (including yams), the total quantity harvested was to be reported for each crop in all cases, whether harvested for home use or for sale, or whether used for livestock feed. The acreage harvested was to be reported for each crop only in cases where the quantity amounted to 10 hundredweight or 20 or more bushels (or the approximate equivalent in terms of hundredweight or barrels, as explained on different versions of the questionnaire).

In State table 10, the distribution of farms for 1964 by acres of Irish potatoes and sweetpotatoes harvested, the group of farms with less than 10 hundredweight (or 20 bushels) harvested included farms with 10 hundredweight (or 20 bushels) harvested.

Berries and other small fruits—The question for berries and other small fruits related specifically to the acreages and quantities harvested for sale. Only tame or cultivated berries were to be reported, except for the New England States where wild blueberries were also to be reported. Enumerators were instructed always to report the total quantity of each kind of berry harvested for sale but to report the area harvested only when it amounted to onetenth acre or more. Nonbearing areas, and areas and quantities harvested for home use were to be excluded.

Tree fruits, nuts, and grapes—For 1964, as in 1959, fruit trees, nut trees, and grapevines were not enumerated for farms having a combined total of less than 20 at the time of enumeration. Both bearing and nonbearing trees and vines were to be included but not any that had been abandoned.

For both 1964 and 1959, the area in fruit orchards, groves, vineyards, and planted nut trees was enumerated when there were 20 or more fruit trees, nut trees, and grapevines.

In 1964, California and Hawaii were the only States for which the acreage in each individual fruit and nut crop was obtained. In all States, the number of bearing and nonbearing trees or vines on the farm at the time of enumeration and the quantity harvested in 1964 were to be reported separately for each fruit and nut crop. (Exceptions in the harvest period for citrus fruits, avocados, and olives are described on page A5.) The unit of measure in which quantities were to be reported varied from State to State.

Nursery and greenhouse products—The questions about nursery and greenhouse products related only to products grown on the place for sale. Crops bought for resale without additional cultivation were to be excluded. The area used for growing and the value of sales were to be reported separately for each of three groups, as follows:

(1) Nursery products (trees, shrubs, vines, and ornamentals). The acres reported represent the acreage in nursery products at the end of 1964.

(2) Cut flowers, potted plants, florist greens, and bedding plants. For these items, the area grown in the open was to be reported separately from the area grown under glass or other protection.

(3) Vegetables grown under glass, flower seeds, vegetable seeds, vegetable plants, bulbs, and mushrooms. For these items, the area grown in the open was to be reported separately from the area grown under glass or under other protection.

The value for these products represents the value at the place where grown and does not include retail value when the products were sold at a retail establishment or location off the place where the products were grown. The data obtained for 1964 are comparable with those for 1959.

Forest products—The forest products data obtained in the census of agriculture relate only to the products cut on farms. Commercial logging, timber operations, and forest products grown or cut on nonfarm places are excluded. Therefore, the data in this report do not represent the total forestry output or income for a county or State. Data relating to pulpwood, Christmas trees, gum for naval stores, maple trees, and maple sirup were obtained in States where such products are important commercially.

Value of crops harvested—The total value of crops harvested represents the estimated value of all crops harvested during the crop year 1964. It includes the value of quantities consumed on farms as food, feed, seed, etc., as well as quantities sold. Farmers were not asked to report value of crops harvested; the values were calculated during the office processing. For individual crops, the quantity harvested was multiplied by the average price at which the crop was sold in the State. State average prices were furnished to the Bureau of the Census by the Statistical Reporting Service of the U.S. Department of Agriculture. These average prices are based on reports received from a sample of farmers and dealers. Quantities harvested were not obtained for vegetables nor for nursery and greenhouse products. Therefore, for these crops, the value of sales, as obtained from farm operators, were used in the calculation of total value of crops harvested.

Value of crops sold-The questionnaire asked for the value of sales of crops to be reported only for total vegetables, nursery and greenhouse products, and certain forest products. For all other crops, the value of sales was calculated during processing operations by multiplying the State average prices by either the quantity sold or the quantity harvested. Reports of quantity sold were obtained during the enumeration only for some of the major field crops. Quantity harvested was used in the calculation of value of crops sold for such crops as cotton, tobacco, etc., that are customarily grown for sale. The procedures used for the various crops are described on pages A7 and A8. They are similar to the procedures followed for 1959.

LIVESTOCK AND POULTRY

Inventories—Data for livestock and poultry on farms relate to the number on hand at the time of enumeration. All livestock and poultry, including those being kept or fed under contract, were to be enumerated on the farm or ranch where they were, regardless of who owned them. Livestock in transit from one grazing area to another or grazing in national forests, grazing districts, open range, or on land used under permit were to be reported as being on the place where the person who had control over them had his headquarters.

Milk cows, cows milked, and butter—Data on the number of milk cows and cows milked relate to the day preceding the enumeration. Data for butter churned were obtained for only 14 States and relate to the calendar week preceding the enumeration. The data for cows milked yesterday and butter churned are not given in this volume. These figures were obtained primarily to serve the needs of the U.S. Department of Agriculture in making monthly and annual estimates of milk production. These figures can be made available at a small cost. Litters farrowed—Census data were obtained for the number of litters farrowed between December 1, 1963, and June 1, 1964, and from June 1 to December 1, 1964.

Goats and mohair—Questions on goats, kids, and mohair appeared on the questionnaire for the following five States: Missouri, New Mexico, Oklahoma, Oregon, and Texas.

Value of livestock on farms—To obtain the value of livestock on farms, the number of each class of livestock or poultry on hand was multiplied by the State average price for 1964 as furnished by the Statistical Reporting Service of the U.S. Department of Agriculture.

VALUES

Value of farm products sold—Data for the value of farm products sold in 1964 were obtained by enumeration for some products and by estimation for others. The questionnaire used for the 1964 census provided for farm operators to report value of sales for the following products:

Vegetables Nursery and greenhouse products Standing timber Miscellaneous forest products (poles, piling, bark, bolts, mine timbers, etc.) Cattle Calves Hogs and pigs Sheep and lambs Horses, mules, colts, and ponies Goats and kids Started pullets Ducks and turkeys Geese Turkey eggs Duck eggs Miscellaneous poultry such as guineas, etc. Mink, chinchillas Bees Honey

For all other agricultural products, the value of sales was estimated during the office processing. The State average prices used for calculating the value of farm products sold were furnished to the Bureau by the Statistical Reporting Service of the U.S. Department of Agriculture. One of the three following procedures was used.

(1) For the products for which data on quantities sold were obtained during enumeration, the State average prices were multiplied by the totals of the quantities reported as sold or the quantities reported as produced for sale. The following products were covered by this procedure:

| Corn for grain Corn for silage Sorghums for grain, seed, silage, sirup, and dry forage All small grains Hay crops All berries and small fruits | Pulpwood Fence posts Sawlogs and veneer logs Christmas trees Chickens including broilers and other meat type chickens |
|--|--|
| | |
| Firewood and fuel- wood | Milk Cream |

(2) For most of the agricultural products which are customarily raised for sale, the entire quantity produced was considered to be sold. The State average prices were, accordingly, multiplied by the total of production. The following products were covered by this procedure:

| Cotton | Tobacco |
|---------------------|----------------------|
| Popcorn | Wool |
| Sugar beets for | Mohair |
| sugar | Christmas trees |
| Broomcorn | Gum for naval stores |
| Safflower | Maple sap |
| Sugarcane for sugar | |

(3) For all other crops, the State average prices were multiplied by the quantities sold as estimated on the basis of crop-disposition data furnished by the Statistical Reporting Service, or data reported in questions for "other crops" on the questionnaire, or data obtained from earlier censuses.

For all tree fruits, nuts, and grapes, the entire quantity produced was considered as sold, except for some fruits, in States where a portion of the crop was not harvested or was subjected to excess cullage as indicated by data obtained from the Statistical Reporting Service of the U.S. Department of Agriculture.

Data for the sales of farm products represent total sales for the entire farm, regardless of who shared the receipts. For tenant-operated farms, the landlord's share of agricultural products was considered as sold provided the products were moved off the tenant farm. All crops, livestock, and poultry raised under a contract arrangement were considered as sold from the farm where they were raised. For institutional farms, all agricultural products produced on land operated by the institution and consumed by the inmates were to be reported as sold.

All sales data relate to one year's farm operations. Crop sales are for crops harvested during the crop year whether the crops were actually sold immediately after harvest or placed in storage for later sale. Sales of livestock, livestock products, poultry, and poultry products relate to the calendar year, regardless of when the livestock or products were raised or produced. All wool and mohair reported as shorn or clipped was considered as sold.

Enumerators were instructed to record gross values of quantities sold, with no deductions for feed, seed, fertilizer, water, labor, or marketing costs. For some products, however, net values may have been reported. The total value of farm products sold for 1964 includes income which the farm operator and members of his family received from hunting, fishing, boarders, lodgers, and other recreational services.

The data for the value of farm products sold for the 1959 Census of Agriculture are not fully comparable with those for 1964. The comparability of the data for the two censuses were affected by the following:

(1) The values of milk, cream, and butterfat were obtained from the farm operator for 1959, but were calculated by using average prices received by farmers at the delivery point for each milk marketing area in 1964. The values reported by farmers for milk and cream for 1959 usually represented the amount received by the farmer after hauling and other marketing costs had been deducted.

(2) Data on the quantity of milk and cream sold, and the number and value of cattle and calves sold, hogs and pigs sold, sheep and lambs sold, and goats and kids sold, represent totals for all farms for 1964, but are estimates for all farms based upon reports for a sample of farms for 1959. Since the data for 1959 are subject to sampling errors, the difference between totals for 1964 and 1959 may not always indicate change accurately, especially if the number of farms reporting the item is small.

(3) The value of farm products sold includes the sales of gum for naval stores, mink, other fur-bearing animals, goat milk, bees and honey, and income from hunting, fishing, and other recreational services, for the 1964 but not for the 1959 census.

(4) The checking for the completeness of the reporting of the quantity sold for corn, sorghums, small grains, and hays was performed for individual farms by a computer for 1964 and by clerks for the 1959 census. The checking procedures for 1964 were more elaborate and were more uniformly performed than for 1959 and as a result, reporting of sales of feed grains and hay may have been somewhat more complete for most counties and States in 1964 than in 1959.

The total value of farm products sold does not represent the total income of farm operators and members of their families. It does not include government payments received by farm operators for participation in wheat, feed grains, and other government programs. It does not include income the farm operator and members of his family received from sources other than the farm operated. As indicated by the data in county table 6, farm operators and members of their families receive considerable income from sources other than the farm operated. Data in State table 17 indicate for the various economic classes of farms the number of farms on which the farm operator and members of his family received income from sources other than the farm operated.

Contracts for producing farm products-Each farm operator was asked if he had a contract or agreement with a dealer, processor, or a cooperative to produce any farm products in 1964. In the case of milk or dairy products, an agreement providing only for the marketing of milk or dairy products was not to be reported as a contract. Likewise, a rental contract with a farm landlord, contracts for the purchase of feed, fertilizer and farm supplies, government contracts regarding soil conservation and other programs, contracts for the handling of farm products, and contracts providing bargaining regarding price were not to be reported as contracts for producing farm products. State table 16 contains data for the number of farms reporting contracts for the production or value of farm products, together with data on the guantity and value of the farm products sold, selected farm products sold, and all farm products sold from farms reporting contracts. The quantity of each farm product produced under contract and sold was not obtained. The guantities and values given in State table 16 represent the total of the quantities sold or the value of the total quantity sold. All of the quantity sold may not have been produced under contract.

Some farm products produced under contract are also produced by dealers, processors, and cooperatives, operating farms on their own account. Farms operated by dealers, processors, and cooperatives have not been counted as farms with contracts.

Recreation income—Recreation income includes gross cash receipts obtained from fees, permits, rentals or privileges of hunting, fishing, swimming, boating, camping, picnicking, horseback riding, skiing, and hiking, plus gross receipts from boarding and lodging of vacationers and others, plus rental of cabins and lodges located on the farm or ranch.

LAND-USE PRACTICES

Cropland used for grain or row crops farmed on the contour—This item relates to land on which grain or row crops were planted in level rows around the slope of a hill.

Land in stripcropping systems for soil-erosion control—Stripcropping was defined as the practice of alternating close-sown crops with strips or bands of row crops or of alternating either close-sown or row crops with bands of cultivated fallow land. The published data refer to the total acreage of all fields and tracts on which stripcropping was practiced in 1964.

FERTILIZER AND LIME

Fertilizer used-Data were obtained for the total acreage in the farms fertilized any time during 1964. If land was fertilized more than once, the acreage was counted only once. The acres fertilized and the tons of fertilizer applied to those acres were obtained separately for selected crops. The selected crops varied by State so that it was possible to obtain detailed data for the crops most commonly fertilized in each State. In cases where the same land was used for more than one crop, the acres fertilized were to be reported separately for each crop. If the same crop was fertilized more than once, however, the acres in that crop were to be reported only once. In all cases, the total quantity of fertilizer used in 1964 was to be reported, including quantities used on land occupied by crops planted in 1963 or by crops to be harvested in 1965.

Reports for quantity of fertilizer and fertilizing materials used were required for both dry and liquid materials. The terms "dry" and "liquid" referred to the form in which the fertilizers and fertilizing materials were purchased and not to the way in which they were applied. Thus, dry fertilizers were those purchased in dry or solid form, as powders, dusts, granules, pellets, etc.; liquid fertilizers were those purchased in fluid form, as solutions or as liquefied gases.

The number of farms reporting acres fertilized may differ slightly from the number of farms reporting quantities of fertilizers applied because counts were not made of farms having less than one-tenth of a ton of fertilizer applied.

Lime—The data for lime relate to the total acreage limed in 1964 and the total tonnage of lime and liming materials used on those acres for purposes of conditioning the soil. Instructions on the questionnaire stated that ground limestone, hydrated and burnt lime, marl, and oyster shells were to be included but that lime used for spraying or sanitation purposes was to be omitted.

EXPENDITURES

Specified farm expenditures—Data were obtained for several of the most important items of farm expenditures. The expenditure for each item represents the total for the farm including expenditures made by the farm operator, the landlord, as well as by other persons providing the item under the terms of a contract or agreement.

Feed—The report on feed purchased for livestock and poultry was to include expenditures for grain, hay, millfeeds, salt, condiments, concentrates, antibiotics, and mineral supplements. The estimated cost of items furnished by a landlord, contractor, or other owner for feeding poultry and livestock kept on the farm was also to be included. Payments made by a tenant to his landlord for feed grown on the tenant farm were to be excluded.

Feed expenditures were obtained separately for (a) feed grain (corn, oats, barley, grain sorghum, rye, wheat, etc.); (b) commercially mixed feeds, millfeeds, and feed supplements; and (c) hay and other roughage. Livestock and poultry—The cost of baby chicks and turkey poults was to be included in the expenditures made for the purchase of livestock and poultry. Farm operators were asked to include the cost or estimated purchase price of poultry and livestock provided by others and cared for by the operator under a contract feeding arrangement. The cost of livestock purchased for resale within 30 days was not to be included. A short-term transaction of that nature was considered to be a dealer operation, not an agricultural one.

Expenditures were obtained separately for (a) cattle, calves, hogs, pigs, sheep, etc.; and (b) poultry (baby chicks, started pullets, poults, etc.).

Machine hire-Expenditures for machine hire relate to custom machine work, such as tractor hire, threshing, grain or seed combining, silo filling, baling, cotton picking, corn picking, plowing, vegetable harvesting, fruit picking, spraying, and dusting. The total also includes expenditures for work performed under contract by a labor contractor, etc. Any amount spent for the labor included in the cost of machine hire was to be considered as part of the total expenditure. The cost of freight or trucking and exchange work without pay were to be omitted. The total for 1964 does not include the cost for cotton ginning while the total for the 1959 census includes expenditures for cotton ginning.

Hired labor—Expenditures for hired labor were to include total cash payments made to family members and to others for farm labor. Payments to persons supplied by a contractor or a cooperative organization and paid directly to the employees were to be included. Payments made to contractors, processors, packers, and cooperative associations for work performed by hired workers of these contractors, etc., was not included as an expenditure for hired labor, but for machine hire or contract work. Payments made to members of the farm operator's family were to be included if paid in cash. The total was to include payments made for Social Security and taxes. Payment for the following types of work were to be excluded: Housework; contract construction work; custom machine work: and repair, installation, or construction work done by persons specifically employed for such work.

Gasoline and other petroleum fuel and oil—Expenditures for gasoline and other petroleum fuel and oil were to relate only to the products used in the farm business. Enumerators were instructed to exclude the cost of petroleum products used for the family automobile when operated for other than farm business purposes and of products used in the farmhouse for heating, cooking, and lighting. The cost of gasoline, etc., used for performing customwork on other farms was to be excluded.

Expenditures were obtained separately for (a) gasoline, (b) diesel fuel, (c) LP gas (butane and propane), and (d) other petroleum fuel and oil (kerosene, piped gas, natural gas, lubricating oil, grease, fuel oil, and other tractor oil).

Fertilizer-The expenditure was to represent the total expenditures for all fertilizer and fertilizer materials bought in 1964, without regard to when used. Payments made under the Agricultural Conservation Program were not to be deducted. The expenditures were not to include cost of manure, gypsum or land plaster, sulphur, nor the cost of applying fertilizer. For a considerable number of farms, small expenditures (under \$100) for fertilizer were accepted without requiring a report of quantity of fertilizer used or acres fertilized. Consequently, the number of farms reporting expenditure for fertilizer will usually exceed the number of farms reporting acres fertilized or quantity of fertilizer applied.

Seeds, bulbs, plants, and trees—Expenditures were to represent the total amount spent for seeds, bulbs, plants, and trees to be used on the farm operated. The value of seed grown on the farm was to be excluded. For nurseries and greenhouses, the cost of products purchased for immediate resale was also to be excluded.

Regular hired workers—Regular hired workers comprise workers paid cash wages, who worked 150 days or more on the reporting farm in 1964. These regular workers may or may not have been employed on the reporting farm at the time of the census enumeration. The count of regular hired workers for 1959 was restricted to hired workers who worked 150 days or more on the farm in 1959 and who worked on the reporting farm any time during the calendar week preceding the census enumeration.

HOURS WORKED

Hours of work on farm—Hours of farm work (or chores) on the farm of the farm operator was obtained for each person 10 years old and over, living in the household of the farm operator. The hours of work may have been either for pay or not for pay. The count of the number of farm operators with "None" for hours worked on the farm, given in State tables 17 through 22, includes farm operators not reporting the number of hours of farm work as well as those reporting "None."

CHARACTERISTICS OF PERSONS IN FARM OPERATOR'S HOUSEHOLD

Persons living in the farm operator's household and their characteristics-Persons in farm operator's household include all persons who usually live in the farm operator's household at the time of the census (November-December 1964). Persons in the farm operator's household include the relatives of the farm operator; nonrelatives such as hired laborers, lodgers, etc.; and also partners of the farm operator and members of the partner's family living in the same house as the farm operator or in another house. Persons in the household were included in the census for every farm operator, regardless of where the farm operator lived. The farm operator may not have lived on the farm but in a city or elsewhere.

Income of all persons in farm operator's household from sources other than farm operated— Information was secured for each person in the farm operator's household regarding the amount of income received in 1964 from each of four groups of income sources as follows:

(1) Wages and salaries—The amount of income received from wages, salaries, commissions, and tips from all jobs (farm and nonfarm) was to be reported. The totals were to include piece-rate payments, cash bonuses, Armed Forces pay, and National Guard pay. Cash wages paid by the farm operator to members of his family or to hired workers living in his household and employed as hired workers on his farm were to be included. The amount of income was to represent the total money received or earned before taxes and other deductions were made. (2) Nonfarm business or profession—The net amount of income was to be reported, i.e., the net income after deducting business expenses.

(3) Social Security, pensions, veteran, and welfare payments—Income to be reported from this source included U.S. Social Security payments, pension payments or survivor's benefits received from U.S. Bureau of Old Age and Survivor's Insurance, retirement and disability payments, annuities received from the Veteran's Administration, pensions or retirement benefits received from Federal, State, county or local governments, retirement benefits from the Railroad Retirement Board, unemployment insurance payments, compensation for injuries incurred at work, money received from welfare and relief agencies, and military allotments for dependents.

(4) Rent from farm and nonfarm property, interest, dividends, etc.-This source was to include net income from farm land, buildings, machinery, equipment, stores, etc. rented to others. The total was to include not only cash rent, but also the value of sales of the share of farm products received as rent. In obtaining net income, such expenses as taxes, insurance, repairs, depreciation, and interest on mortgages and loans on property rented to others were to be deducted from gross receipts. This source was to include Soil Bank payments, feed grain program payments, receipts from oil leases, net income from customwork, income from estates and trusts, income from insurance policies or annuities, and alimony and funds received from persons not living in the farm operator's household.

Differences in totals for some items—The totals given in one table for an item may differ slightly from the total given for the same item in another table because of the rounding of fractions for the several groups of farms, counties, etc.

CLASSIFICATION OF FARMS

This report presents detailed data for farms classified by size of farm, age of farm operator, tenure of farm operator, economic class of farm, and type of farm. In addition, the report contains a number of counts of farms according to various characteristics as well as frequency distribution of farms classified by size of each of the principal farm enterprises. Farms by size—Farms were classified by size according to the total land area established for each farm. The same classification was used for all States. According to definition, a farm is essentially an operating unit, not an ownership tract. All land operated by one person or partnership represents one farm. In the case of a landlord who has assigned land to other tenants, the land assigned to each tenant is considered a separate farm even though the landlord may operate the entire landholding as one unit in respect to supervision, equipment, rotation practice, purchase of supplies, or sale of products.

Farms by color of operator—Farms were classified by color of operator into two groups, "white" and "nonwhite." "Nonwhite" includes primarily Negro and Indian operators but also some of other racial origin. Detailed data for nonwhite farm operators appear in State table 18a for the Southern States and Hawaii. Comparable data for 1959 may be obtained from State table 21b of volume I of the reports for the 1959 Census of Agriculture.

Enumerators were instructed to report the race on the basis of their own observation whenever possible rather than by asking the respondent.

Farms by tenure of operator—The classification of farms by tenure of operator was based on data reported for land owned, land rented from others or worked on shares for others, land managed for others, and land rented to others or worked on shares by others. The same basis of classification was used in 1964 as in 1959.

For 1964, each questionnaire was coded during the office processing to indicate whether it represented a farm operated by a full owner, part owner, manager, or tenant.

The various classifications of tenure, as used for the 1964 census, are defined below:

- a. Full owners operate only land they own.
- b. Part owners operate land they own and also land rented from others.
- c. Managers operate land for others and are paid a wage or salary for their services. Persons acting merely as caretakers or hired as laborers are not classified as managers. If a farm operator managed land for others and also operated land on his own account, the

land operated on his own account and the land manged for others was considered as one farm. If he managed land for two or more employers, all the managed land was considered to be one farm. Data for managers are omitted from some tables presenting statistics by tenure of farm operator.

d. Tenants rent from others or work on shares for others all the land they operate. They are further classified, as described below, on the basis of rental arrangements in regard to the payment of cash rent, sharing of crops, and sharing of livestock or livestock products.

(1) Cash tenants pay cash rent, either on a per-acre basis or for the farm as a whole.

(2) Share-cash tenants pay part of the rent in cash and part in a share of the crops and/or of the livestock and livestock products.

(3) Crop-share tenants pay a share of the crops but not of the livestock or livestock products.

(4) Livestock-share tenants pay a share of the livestock or livestock products. They may or may not also pay a share of the crops.

(5) Other and unspecified tenants are those who did not qualify for inclusion in any of the foregoing subclassifications. They may have had the use of land rent-free or in return for a fixed quantity of products, payment of taxes, maintenance of buildings, etc. Unspecified tenants are those for whom the rental arrangement was not reported.

The definition of each subclass of tenant was essentially the same for earlier censuses. The information for classifying tenants by subclass was obtained for only a sample of farms and as a result the total of the estimates for the number by subclass may differ slightly from the number of all tenants.

Detailed data regarding the characteristics of farms by tenure of operator appear in State table 18. Comparable data for 1959 appear in State table 21 of volume I of the 1959 Census of Agriculture.

Farms by age of operator---Detailed data are presented by age of the farm operator in State

table 19. Comparable detailed data are not available for the 1959 census.

FARMS BY ECONOMIC CLASS

Farms were grouped into two major categories, commercial farms and other farms, mainly on the basis of total value of products sold. In general, all farms with a value of sales amounting to \$2,500 or more were classified as commercial. Farms with a value of sales of \$50 to \$2,499 were classified as commercial if the farm operator was under 65 years of age and he did not work off the farm 100 or more days during the year. The remaining farms with a value of sales of \$50 to \$2,499 were included in one of the three groups of "other farms."

Commercial farms were divided into six economic classes on the basis of the total value of all farm products sold, as follows:

Class of farm

| Į – | \$40,000 | or | more |
|-----|------------|-------|----------|
| 11 | \$20,000 | to | \$39,999 |
| | \$10,000 | | |
| IV | \$ 5,000 | to | \$ 9,999 |
| ٧ | \$ 2,500 | to | \$ 4,999 |
| ۷I | \$50 to \$ | \$2,4 | 199 |

 * Provided the farm operator was under 65 years of age and he did not work off the farm 100 or more days.

Other farms were divided into three economic classes as follows:

- a. **Part-time**—Farms with a value of sales of farm products of \$50 to \$2,499 were classified as "part-time" if the operator was under 65 years of age and he worked off the farm 100 or more days.
- b. Part-retirement—Farms with a value of sales of farm products of \$50 to \$2,499 were classified as "part-retirement" if the farm operator was 65 years old or over. Many of these are farms on which the income from nonfarm sources was greater than the value of sales of agricultural products.
- c. Abnormal—All institutional farms and Indian reservations were classified as "abnormal," regardless of the value of sales. Institutional farms include those operated by hospitals, penitentiaries, schools, grazing associations, government agencies, etc.

The classification of farms by economic class of farm for 1964 was made on the same basis as for 1959 for farms with the sale of farm products of \$2,500 or more. Changes for 1964 in the criteria increased, as compared with 1959, the number of farms classified as class VI and decreased the number of farms classified as part-time farms. In 1959, farms with a value of farm products sold of \$250 to \$2,499 were classified as part-time farms when the farm operator worked off the farm 100 days or more or when the farm operator stated that the income he and members of his family received from sources other than the farm operated exceeded the value of farm products sold. Information was not available regarding the relationship of income of the farm operator and members of his family from sources other than the farm operated to the total value of farm products sold for 1964, and this criterion was not used in 1964. Estimates are given in State table 17 for the number of 1964 farms for which the income of the farm operator and members of his family from sources other than the farm operated, exceeded the value of farm products sold. These estimates will indicate the approximate number of 1964 class VI farms that would have been classified as part-time farms if the 1964 criterion had been the same as that for 1959.

The grouping of farms by economic class into commercial and other farms represents an arbitrary separation of census farms into two groups. Since data are given in State table 17 for each of the eight economic classes of farms, it is possible for the user to make other groupings by combining classes of farms if he so desires. Data in county table 5 give counts for 15 groups of farms classified on the basis of the total value of farm products sold. State table 17 also provides detailed frequency distribution data regarding sources and amounts of income from sources other than the farm operated and characteristics of farm operators, members of farm operator's families, as well as other characteristics of the farm producing unit and its component major enterprises.

Detailed comparative data for the 1959 census for farms classified by economic class may be obtained from State table 17 of volume I of the report for the 1959 census.

Large-scale farms—Farms with a value of farm products sold of \$100,000 or more have been designated arbitrarily as large-scale farms. Data

for these farms are presented in State table 23.

FARMS BY TYPE

Farms by type—The type of farm represents a description of the major source of income from farm sales. To be classified as a particular type, a farm had to have sales of a particular product or group of products amounting in value to 50 percent or more of the total value of all farm product sold during the year.

The types of farms, together with the products on which type classification is based, are as follows:

| Cash-grain | (Products with sales value representing 50% or more of total value of all farm products sold) Corn, sorghums, small grains, soybeans for beans, cowpeas for peas, dry field and seed beans and peas. |
|---------------|---|
| Tobacco | • |
| Cotton | |
| | Peanuts, potatoes (Irish and sweet), sugarcane for sugar or sirup, sweet sor- ghums for sirup, broom- corn, popcorn, sugar beets, mint, hops, sugar beet seed, and pineapples. |
| Vegetable | Vegetables. |
| Fruit and nut | Berries, other small fruits, tree fruits, grapes, nuts, and coffee. |
| | Chickens, chicken eggs, turkeys, and other poultry products. |
| Dairy | Milk and cream. The cri- terion of 50 percent of total sales was modified in the case of dairy farms. A farm having value of sales of dairy products amounting to less than 50 percent of the total value of farm products sold was classified as a dairy farm, if— |
| | (a) Milk and cream sold accounted for more than |

30 percent of the total value of products sold, and----

(b) Milk cows represented 50 percent or more of total cows, and—

(c) The value of milk and cream sold plus the value of cattle and calves sold amounted to 50 percent or more of the total value of all farm products sold.

Livestock other

than dairy and

- poultry _____Cattle, calves, hogs, sheep, goats, wool, and mohair except for farms in the 17 Western States, Louisiana, Florida, Hawaii, and Alaska that qualified as livestock ranches.
- Livestock ranches ___Farms in the 17 Western States, Louisiana, Florida, Hawaii, and Alaska were classified as livestock ranches if the sales of livestock, wool, and mohair represented 50 percent or more of the total value of farm products sold and if pastureland or grazing land amounted to 100 or more acres and was 10 or more times the acreage of cropland harvested.
- General _____Field seed crops, hay, grass, and silage. A farm was also classified as general if it had cash income from three or more sources and did not meet the criteria for any other type.
- Miscellaneous _____Nursery and greenhouse products, forest products, mules, horses, colts, ponies, fur-bearing animals, bees, honey, goat milk, and farms with no value of farm products sold. Also all institutional farms and Indian reservations.

The type of farm classification for the 1959 census was essentially the same except for miscellaneous farms as that used for 1964. Detailed comparative data for farms classified by type of farm for 1959 may be obtained from State table 18 of volume I of the reports for the 1959 Census of Agriculture.

DATA BASED UPON REPORTS FOR A SAMPLE OF FARMS

Data for guestions 307 to 355 (sections 9, 10, 11, 12, and 13) of the agriculture questionnaire (see facsimile of questionnaire in the appendix C) were required to be collected for (1) all farms having 1,000 acres or more in the place, (2) all farms with a value of farm products sold of \$100,000 or more, but with less than 1,000 acres in the place, and (3) a sample of one-fifth of the remaining farms. The procedures for enumeration provided for enumerators to obtain the information for questions 307 to 355 for farms in (3) and also for all farms with 1,000 acres or more in the place. The information for questions 307 to 355 for farms with a value of farm products sold of \$100,000 or more, but with less than 1,000 acres in the place, was obtained by crew leaders or by mail or telephone inquiry to the farm operator at the time of office processing.

The selection of the one-fifth of the farms for which information for questions 305 through 355 was to be collected was performed by census enumerators. When the enumerator determined that an agriculture questionnaire was required, he assigned the agriculture questionnaire a number. Questionnaires were assigned numbers in consecutive order, beginning with "1" for the first questionnaire in each enumerator's assignment. Enumerators were required to obtain answers for questions 307 to 355 for every questionnaire for which the assigned number ended in "2" or "7."

The data published by counties and for the State for items to which questions 307 through 355 of the agriculture questionnaire relate are estimates for all farms and are based upon reports for farms in the sample described above, plus totals for farms with 1,000 acres or more in the place, plus totals for farms of less than 1,000 acres with a total value of farm products sold of \$100,000 or more. In order to improve the accuracy of the estimates for these items, ratio estimates were made by assigning weights to farms in the sample on the basis of the ratio of farms in the sample to all farms in the group from which the sample was selected. This procedure reduced the possible biases introduced by enumerators and made the number of farms estimated on the basis of the sample exactly equal to the actual number of farms in each county.

For the purpose of making ratio estimates, farms comprising the sample were grouped for each county into 75 relatively homogeneous strata. The strata comprised farms within one of the five size of farm groups (these five size of farm groups were: Under 50 acres, 50 to 99 acres, 100 to 219 acres, 220 to 499 acres, and 500 to 999 acres); within each of three tenure of farm operator groups (these tenure of farm operator groups were: (1) Full owners, (2) part owners and managers, and (3) tenants); within two type of farm groups (these two groups were crop and general farms and livestock and poultry farms); and within each of three economic class of farm groups (these three groups of economic classes were: (1) Classes I, II, III, (2) classes IV and V, and (3) class VI, part-time, and part-retirement).

Farms in the entire group from which the sample was selected (farms with less than 1,000 acres and farms with a value of farm products sold of less than \$100,000) were grouped into the same 75 strata and total counts of the number of farms for the entire group and for the farms in the sample were obtained for each stratum.

Farms in the sample in each of the 75 strata were assigned weights so that the total of the weights for all farms in the sample in the stratum would be equal to the total number of farms in the stratum.

When there were 30 or fewer total farms in a stratum or when the farms in the sample comprised less than one-nineteenth of the farms in the stratum, the stratum was combined with another stratum or other strata in prescribed order, until the number of farms in the combined strata totaled more than 30 and the number of farms in the sample comprised at . least one-nineteenth of the total farms in the combined strata.

Estimates were prepared for items related to question's 307 through 355 of the agriculture

questionnaire by multiplying the data for each item for each farm of the sample by the weight assigned the farm and adding to this the totals for farms with 1,000 or more acres in the farm plus totals for farms with a value of farm products sold of \$100,000 or more, but with less than 1,000 acres in the farm.

Estimated totals for data for items relating to questions 307 through 355 of the agriculture questionnaire are subject to sampling errors. Approximate measures of sampling errors for selected items may be obtained through the use of State tables 27 and 28. State table 28 contains a list of selected items and an indicated level of sampling reliability for county and State data and for various groups of farms for the State.

State table 27 shows percentage limits such that the chances are 68 out of 100 that the difference between an estimate based wholly or in part on a sample of farms and the figure that would have been obtained if the information had been collected and tabulated for all farms would be no more than the percentage specified. The chances are about 99 out of 100 that the difference would be less than 2 1/2times the percentage given in table 27. The percentage given in table 27 takes into account the fact that data for the items listed were collected for all farms with 1,000 acres or more in the farm and all farms with a value of farm products sold of \$100,000 or more, when the acres in the farm were less than 1,000. As explained in State table 27, the percentages given for level 1 should be used as a measure of sampling variability for the number of farms having an item.

The procedures for adjusting the sample and determining sampling reliability for estimates based on a sample for the 1959 census were somewhat different. A description of the 1959 procedures are found on pages XII and XIII of the introduction, and data on the reliability of estimates are given separately for each State in State tables 23 and 24 of volume I of the reports for the 1959 Census of Agriculture.

Differences in estimates based on reports for a sample of farms and totals for all farms—Data representing estimates based on a sample and given in the State tables for farms classified by economic class of farm, type of farm, size of farm, age of farm operator, and by color and

tenure of farm operator, for the characteristics of farm operators, equipment and facilities, use of fertilizer and lime, use of agricultural chemicals, land-use practices, persons living in farm-operator households, expenditures, and value of land and buildings for various groups of farms will not always be consistent with the data obtained by the tabulation of data collected for all farms. For example, the total number of farm operators given for the distribution of farm operators by year of school completed may not agree exactly with the total number of farms shown for the first line in the table. The percent of farms having an item or average per farm for items relating to the characteristics of farm operator, persons living in farm-operator households, farm machinery and equipment, use of fertilizer and lime, use of agricultural chemicals, land-use practices, expenditures, and value of land and buildings should be derived by dividing totals for the item by the number of farms given for total farms on line 13, third page of State table 17 (or on the corresponding line of State tables 18 to 23) rather than by the number of farms shown in the first line of each table.

Availability of data for areas other than counties and States—This report presents data only for counties and for the State. Data for many of the items for the 1964 Census of Agriculture have been tabulated for townships or groups of townships, or other similar minor civil divisions, or census county divisions.

To make these data available to users, it will be necessary for the data to be copied onto statistical tables and to delete data disclosing figures for individual farms or farm operations. The user will be required to pay for the cost of preparing statistical tables and deleting data disclosing figures for individual farms.

Providing funds and time are available, it is planned to tabulate statistics given in State tables 17 through 22, by State parts of agricultural subregions. To obtain these unpublished tables users will be required to pay the cost of review of the tables for disclosures of data for individual farms and for the cost of making copies. Information regarding the availability of unpublished data may be secured by writing the Agriculture Division, Bureau of the Census, Washington, D.C. 20233.

Appendix B

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| <u> </u> | | | | 12. ··· | | Sec | tion 2.— | OWNERSHIP | e en en | - | \rightarrow | Δ |
|----------------------------|---|-------------------------|---|------------------------|---|-------------------------------|------------------------|---------------------------------------|-----------------------------------|---------------------------|---|----------|
| BUREAU | MENT OF COMMERCE OF THE CENSUS ILLE, INDIANA, 47130 | | AGE AND FEES PAID ARTMENT OF COMMERCE | OWNED L | | uld like to a uildings you | | ut the ownership | of the | Acres | | _ |
| - | CIAL BUSINESS | | | 3. How ma | my acres do you o (if no i | wn? | , mark X i | the square for " | None None | l | | V1 |
| | | | | LAND REP | NTED OR LEASE | D FROM | OTHERS | (Include all la land rented of | nd and tracts of leased by you | | | |
| l l | | | | | and by your separate field | r partners, re ds, meadows | gardless , pasturel | of where located and, woodland, : | . Include any | Acres | | |
| OFFICIAL | | | | | ny acres do you r | ent from oti | hers? | | . None | | | V12 |
| U.S. GOVE | RNMENT | RURAL RO | UTE. | | de acres worked on e without paying an | ny rent.) | | | | | | |
| DOCUMEN | | STAR ROUT | | a. Wh | at is the name and | | | ond skip to questi h landlord and | on [ə].; | 1.000 | × . | |
| | | POST OFFIC | CÉ BOX HOLDER | the | number of acres r Name of | rented or w | orked on | shares for each | Acres | - and a | | |
| (DO NOT DESTR | OY) | LOCAL | | | landlord Mail address | | | | | | | _ |
| | | | | | (Post office and St Name of | tate) | | | Acres | - | | |
| | | | | | landlord Mail address | •••• | ••••• | | | | · · · · | _ |
| Dear Fellow Citize | n | | | | (Post office and S Name of | tate) | | | Acres | - | | |
| | Census is now engaged in the big | iob of taking a natio | onwide Census of Agriculture. | i - | landlord Mail address | | | ••••• | | | | _ |
| Your cooperation | will help in the economical and | | | | (Post office and St NAGED FOR O | | | | <u>}</u> | Acres | | _ |
| | duction in your county. is being distributed through the F | Post Office to all box | holders in tural areas. Please | | any acres do you | J | others as | a hired manage | r? None | | \ | ¥13 |
| | onnaire and fill it out at once if- | | | (Enter | the name and mail | address of e | mployer v | inder question 4 | | | | |
| (1) You opera | | | | LAND REN | ITED OR LEASED | | ar ar | d pastureland re | | Acres | · · · · <u>· · · · · · · · · · · · · · · </u> | |
| | ne this year you had any cattle, 4 o or grapevines, or | or more nogs, 50 or | more chickens, or 20 or more | [| leased to the | he Governme | ent under | the Soil Bank.) | | | | |
| ., , | ou harvested any crops such as co | rn, hay, wheat, vege | etables for sale, or nursery or | | ny acres do you re le land rented to oth | | | artners.) | None 🖵 | | | /14 |
| | e products. er will call at your place soon; he | will pick up your g | sestionnaire and will check it | a. 0f 1 | the acres rented to | | | and skip to questi | 2n [7]) | | | |
| to see that all the o | questions have been answered. | | | are | owned by you (o at is the name and | r your partn | ers)?. No | | | \$ | | ÷ |
| | n the questionnaire will help you i can be answered by checking "No | | | | the number of ac | | | | Acres | | أستجنبت | |
| | nd help you when he calls. | | | | Name of tenant | | | | ACTUD | | | |
| | ou enter on the questionnaire will Census takers are prohibired under | | | | Mail address (Post office and St | ate) | | | Acres | | | |
| | ormation you provide. The U.S. | | | | Name of tenant Mail address | | | | | 12200 | | |
| taxation or investig | zation. e questions on your questionnaire | are needed for a com | place census for your county | | (Post office and St | ate) | | | | in this place | | _ |
| We are asking you | to fill the questionnaire and have | e it ready for the cen | sus taker when he calls. By | | THIS PLACE | | | | Acres | in ma piece | | |
| | naire you will save time and will r | educe the cost of tak | ing the census. | | acres owned and btracting acres rei | nted to othe | irs, we ge | + | | | ····· | /15 |
| Thank you for you | r assistance and cooperation. | Sincerely y | 10115 | Thus is all the | (Question 3 plus of | | | - | | | | J |
| | | () | Coais, | | tions (except those in | | | | | | | |
| | | And | Cauma | LOCATION | OF LAND | | | | | | _ | |
| | | Pichard N | I. Scammon | 8. Is ony of | f this land (reported | d in question | | nd in another ca mark X and skip ! | | Yes [| □ v | /16 |
| | | Director | | | w many acres are | | nty? | | . Acres | | _ - | _ |
| | | Bureau of | the Census | b. Giv | e names of other | counties an | d acres ic | cated in each: | | | _ | _ |
| | | | * | (N | ame of county) | (Act | , | | f county) | (Acres) | | _ |
| Form 64-A1.30 (7-20-64) | NEW JERS | SEY | Budget Bureau No. 41-6433 Approval expires June 30, 1965 | Non we by | ould like to ask you | | | ESTED THIS Y | <i>li</i> | | v | 19 |
| CONFIDENTIAL_T | his inquiry is authorized by Act of Cor | ngress, United States C | ode, Title 13, Sections 5, 9, 142, | we mean th | e acres reported in q | uestion 7.) | If you re | nt land from othe | rs or work land on | shares for ot | hers. | |
| information furnishe | ring that the inquiries be answered ed be accorded confidential treatmen | | | | s as sold if it was ta | | | | | | | |
| taxation, investigation | n, or regulation. | <u> </u> | · · · · · · · · · · · · · · · · · · · | CORN | | | | | | | | |
| | U.S. DEPARTMENT OF | | | | y com harvested f rpose this year?. | | es 📋 | (1) How many acres | (2) How much was | (3) How much | | |
| | A1 CENSUS OF | TONNAIRE | 1964 IVRE | | lo," mark X and skip er these questions if " | | 3] .) | were or will be harvested? | or will be harvested? | vear's crop or will be | | |
| State | | County | | 10. Corn fo corn or | popcorn)? | lo not includ | le sweet | Acres * | | | v | /20 |
| Township | | ED No. | | | , | | | Acres | Bu. (56 lb. shelled) | Bu (56 lb. shel | led) | _ |
| | Section 1PERSON 1 | NOW IN CHARGE | | a. Cori (1 | n for grain? 70 lb. ear com = 1 b | u. shelled) | | Acres | Tons (green weight) | Tons (green wei | ght) | |
| | mber of the family or anyone else fills | this questionnaire for | the person in charge, | | n for sliage? n cut for green a | | | Acres | | | · | V21 |
| 1 | that all the information is given for th mot (Person in charge.) | e person in charge.) | | | husked or snapped) | | | Acres | | 22 J | v | /22 |
| | | | | d. Cor | n hogged or graze | | ·· · | | | n vanimanum 18 Maanum | | /23 |
| 2. What is your me | | e initial) · | (Last name) | | (The total o | f the acres fo | or questio | ns a, b, c, and d | nust equal the acre | s for questio | n 10.) (| Ç |
| | | | | 1 | | | | | | | F | * |
| (Route nu | mber or street address) | (Post office) | (State) | | | | | | | | | |

| SOYBEANS | | | <u></u> | - | Ţ | VEGETABLES FOR SALE | | | | |
|---|---------------|--|--|----------|-----------|---|----------------------------|--------|-------------------------------|----------------------------------|
| [13] Were any soybeans harvested for any purpose this year? No | | (1) How many | (2) How much | - | 1 | 114. Were any vegetables, sweet corn, or melons harvested this ye | ar for | | | - (|
| (If No, mark X and skip to question [25]) | Yes | acres were | was harvested? | | | sale for fresh market, or to canners, freezers, or processors? (Do not include vegetables grown for home use or in greenhous | | . 1 | No 🗌 Yes 🗍 | |
| (Answer these questions if Yes ')- | | harvested? | | | | (If ''No,'' for question 114, mark X and skip to quest (Answer these questions if ''Yes.'') | ion [15 | 4].) | | |
| 14. Soybeans for beans? | | * | | V | 40 | Were any of the following vegetable crops | | ∽_[| (1) Acres harvested? | |
| 15. Soybeans for hay? | | * | Tons | | 41 | (If two or more plantings of the same vegetable crop were | No No | | (Report tenths of an acre) | |
| 16. Soybeans hogged or grazed, or cut far silage? | | * | | . v | 42 | made, either on the same land or on different land, report the total acres harvested of the several plantings.) | | | Acres Ten | ths |
| SMALL GRAINS THRESHED OR COMBINED |] | | | | | 115. Tomatoes? | | 니 | * / | /10 VO 1 |
| | How | 1) (2 many How | | _ | | 116. Sweet corn? | | i – t | | /10 102 |
| (Answer these questions if "Yes ") | aci | res wa ere harve | is this year sig | rop | | 117. Cucumbers and pickles? | | | | 10 103 |
| Were any of the following grain crops No | Yes harve | ested? | be sold? | | | 118. Snep beans (bush and pole types)? | | | | /10 104 |
| [25] Wheat for grain? | | 501 | hels Bushels | | 60 | 119. Watermelons? | | 님 | 1 | /10 VO: |
| 30. Oats for grain? | | | | v | /65 | 120. Cabbage? | | | | 10 100 |
| 33. Barley for grain? | | | | | /68 | 122. Contaioups and muskmelons? | | | | 10 VOE |
| 34. Rye for grain? | | | | v | /69 | 124. Sweet peppers including pimientos? 127. Hot peppers? | | | | /10 10 |
| 43. Other grains? | | | | | 79 | 128. Green peas? | | | | /10 V13 /10 V14 |
| Buckwheit? Mixed grains? (Underline kind) | | | | | | 129. Green lima beans? | | Ы | | /10 11 |
| HAY AND GRASS SILAGE CROPS | | | | | | 130. Squash? | | | | /10 V1 |
| (Answer these questions if 'Yes.'') Were any of the following hay or silage crops | | w many How | 2) (3) many How much | ot | | 132. Dry onions? | | | | /10 11 |
| harvested this year | ha | | were this year's c ested? was or wi | n | | 134. Asparagus? | | | | /10 120 |
| same field, count the acres only once but give total tons of all cuttings.) | No Yes | | be sold? | | | 135. Carrots? | - | | | /10 121 |
| 44. Alfalfa and alfalfa mixtures cut for hay and for dehydrating? | | | | | /80 | | | | | /10 122 |
| 46. Clover, timothy, and mixtures of | | | | | | 137. Beets (table)? | | | | /10 123 |
| clover and grasses cut for hay? 49. Oats, wheat, barley, rye, or other small | | | | | /82 | 138, Pumpkins? | | | * | /10 24 |
| grains cut for hay? (Include oats cut when ripe or nearly ripe | | | | V | /85 | 140. Spinach7 | | | * | /10 120 |
| for feeding unthreshed.) | | a the second | منغث ، مإمد في عنتك | 4 | | 141. Cauliflówer? | | | * | /10 27 |
| 51. Any other hay? (Include bromegrass, millet, old meadows, | | | | 3 | /87 | 142. Eggplant? | | | * | /10 28 |
| peas Sudan grass, June grass, sweetclover, wild grasses) | فنسنأ | Tons (gre | en weight) Tons (green weigh | 1) | | 145. Broccoll? | | | * | /10 //31 |
| 52. Grass silage made from grasses, alfalfa, clover, or small grains? | | | | | /88 | 146. Celery? | | | * | /10 1032 |
| (Include also hay crops cut and fed green, and ha | ylage.) | | | -1 | | 149. Escarole, endive, and chicory? | [] | | * | /10 135 |
| FIELD SEEDS | | | | >∣ | Б | 152. Other? (see list below) Blackeyes and Dandelion Parsley Give name | | | | |
| 53. Were any alfalfa seed, clover seed, or other field seeds harvested this year? | No 🗍 Y | (es 🗍 🗍 (| | 1 | B | other green greens Okra . cowpeas Green Radishes Comment | | | * | /10 |
| (If "No, mark X and skip to question (Answer these questions i | [80].) | acres v | vere or clean seed | r [| | Chinese cabbage onions Rhubarb Give name Collards Horseradish Rutabagas Mustard Turnips | | | * 1. | /10 |
| | · - | No Yes harve | | | | greens 153. What was the value of all vegetables sold this year? | | | | .00 998 |
| 55. Red clover seed? | | | res Pounda | | | (Include the landlord's share; do not include the value of Irish and BERRIES | i sweet | potato | xes.) | - |
| 79. Other field seeds? | | | | | | [154] Were any berries harvested | | | | <u>></u> D |
| Alfalfa? Give name | | * | | | | | low ma | | | |
| Give name | | * | | <u> </u> | | (Answer these quostions if "Yes.") | were ha (Repor of an | t tent | hs | ear |
| FIELD CROPS | | | | | | Were any of the following berry No Yes crops harvested this year | Acres | | lenths Quarts | |
| | | (1) | (2) | | | 155. Strawberries? | | ····· | /10 Quarts | V01 |
| (Answer these questions if "Yes ") | $\overline{}$ | How many ac or will be had | vested? was or | h | | 156. Raspberries? | | | /10 12-slat travs | V02 |
| Were any of the following crops harvested this year— | No Ye | | for) harvested | 2 | | 159. Blueberries (tame)? | | | /10 100-16. borrels | |
| [80] Irish potatoes for home use or for sale? | | Acres | Tenths Cwt. /10 | | 50 | 161. Cranberries? | | | /10 | VOS |
| (It less than 10 hundredweight were harvested, do not report acres.) | | 4 | - | | | 162. Other berries? | <u></u> | | Querts | |
| | | ٦. | Βυ. | | | dewbernes? | | | /10 Quarts | |
| 81. Sweetpotatoes for home use or for sale? (If less than 20 bushels were harvested, | · [] | _] <u>★</u> | /10 | Ň | /51 | | | ئ | /10 | |
| do not report acres) | | | | - | - | | | | | |
| 1 | | | | | | | | | | |
| | | | | | | | | | | |
| 1 | | | | | | | | | | |
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| | ~ | and the second and th |
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| measured in b | s of fruit harvested, if the quantity was ishels, baskets, or some other unit of ply the number of bushels or baskets | Section 4LAND USE AND IRRIGATION THIS YEAR, 1964 |
| [163] is there a total of 20 freit trees, by the net we and gropevines on this place? | ght per bushel or basket.) NoYes ion[214].) | 223. Arres in this place (copy acres from question 7) |
| (If "Yes," enswer questions 164 through 213. If was harvested, give the reason at battom of this to groves, vineyards, and planted nut trees? | page.) Acres Tenths rchards, + /10 | 224. How many acres of land were in fields and tracts from which crops were harvested (including hay cut) this year?. Nonc (Obtain this area by adding the acres in the fields or tracts from which one or more crops were harvested or hay was cut this year; acres in nonbearing and bearing planted fruit trees, and the set of th |
| (Answer these questions if "Yes.") Were any of the following kinds of fruit trees, nut trees, or grapevines on this No Yes place | Iow many trees How many trees (or vines) (or vines) are NOT of are of bearing age? bearing age? this year? Number Number Ub. | graphings; and access in pursperty and greenhouse products.) |
| 165. Apples? | Lb. Bu. | V21 b. From how many acres of land were two crops horvested this year? Acres v22 c. Subtract the acres for b from a and enter difference the entry should not differ from acres in Acres |
| 172. Grapes? | Bu. tb. | question 224 by more than 3 acres) Acres 225. How meny series of cropland were used only for pasture (or grazing) this year?. None 227. How meny series of cropland were used only for soll- Arres |
| 213. Other fruits and nuts? | Lb. | V133 Improvement grasses, cover crops, end legumes not harvested and not pastured this year? None V14 (Include cropland in grass or legume crops not harvested and not pastured or grazed, in the Soil Bank, feed grain, and wheat programs.) Anexas These totals 228. On how many acres did all crops fail this year? None bc V13 |
| NURSERY AND GREENHOUSE PRODUCTS, FLOW VEGETABLE SEEDS AND PLANTS, AND BULBS [214] Were ony nursery or greenhouse products, flow | | CDo not include land in fruits or nuts.) Acres the same V16 WOODLAND (Include as woodland all woodlots and timber tracts, cutover and deforested land which has value for wood |
| seeds or plants, flowers, or bulbs grown for sale ts (If "No," mark X and skip to question [219].) (Answer these questions if "Yes.") | Ha year? No Yes How much area was What will be used for growing in the value of | 230. How many acres of woodland were 231. How many acres of woodland were 231. How many acres of woodland were 231. How many acres of woodland were |
| 215. Nursery products (trees, shrubs, vines, ornamentals)? 216. Cut flowers, potted plants, florist greens, | No Yes 1964? sales for 1964? Acres Tenths | None |
| and bedding plants for sale | Acres Tenths ★ / 10 Square feet 00 | V02 (not cropland pasture and not woodland pasture)? None (iff "None," mork X and skip to question [233].) |
| protection, nower seess, regenous seess, vegetoble plants, bulls, and mushrooms a. Grown under glass or other protection? b. Grown in open? | Acres Tenths ★ /10 S00 | (Improved by Imming, fertilizing, seeding, irrigating, draining, and controlling weeds and brush.) |
| OTHER CROPS [219] Are there any other crops that were or will be have year on this place- Dry field and seed beans? Sorghums? | | Acres (Questions 224, 225, 227, 228, 229, 230, 231, 232, and 233) and enter total here |
| (II 'reg.'' Name of crop? Acres Quantity answer for each crop) | Quantity sold or to be sold? Unit of measure? Value of sales? Sold or to be sold? S 00 | 234. Of the total land in this place (reported in question 223), how many acres were irrigated this year? None Acres V50 (If "None," mark X and skip to question [241].) 235. Of the land used only for patture or grazing |
| | | him year (reported in glassion 227 and 222), how many acress were irrigated how many acress of irrigated land were crops horvested this year? None Acres (Be sure to include all irrigated land from which hay was cut, and |
| | | all irrigated land in both beating and nonbeating fruit and nut crops, and irrigated land from which any crops were harvested.) (If "None," mark X and skip to question [241].) 237. What part of the land from which crops were hervested (question 224) was irrigated this year? All Part VS1 (If "All," mark X and skip to question [241].) |
| | | (II ' Part," mark X and onswer questions 238, 239, and 240.) 238. a. How many acres of carn for grain were harvested from this gear? None Acres V61 b. How many bushels of corn for grain were harvested from this larligated land this year? |
| | | Acres None Acres /10 V71 (Report tenths of a rish potatoes were b. How many hundredweight of Irish potatoes were |
| | | harvested from this irrigated land this year?. Hundredweight |
| | | Censust code Name of crop urigated? Acres urngated? Census code Name of crop irrigated? Acres urngated? 1 1 1 1 - |

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| Section 5.—FOREST PRODUCTS THIS YEAR, 1964 | 2 | SHEEP AND LAMBS | ſ |
|---|----------------|---|-----|
| FOREST PRODUCTS Forest products are important on many farms. We wish to obtain answers to several questions regarding forest products for your place. | U | [266] Are there any ewes, rams, wethers, and lambs on this place? No 🗌 Yes 🗌 | • |
| [241] How much was or will be received in 1964 from | | 267. If "No," were there any on this place any time this year? | |
| on the stump sale of standing timber or trees? None sold \$ 000 | V21 | (If "No" for both questions 266 and 267, mark X and skip to question [277].) | |
| (Include standing timber sold for pulpwood, sawlogs, or other wood products.) 242. How much was or will be received in 1964 from the sale of | | 268. How many ewes, rams, wethers, and lambs are on this place? | 20 |
| poles and piling, bark, boits, and mine timbers? None sold\$00 | V22 | (If "None," mark X and skip to question [269].) | |
| (Do not include sale of standing timber, firewood, pulpwood, fenceposts, sawlogs, and Christmas trees.) | | Of this total, how many are— | _ |
| (Do not report below any products sold on the stump. Products (1) (2) sold on the stump should be included in guestion 241 (1) | 1 | a. Lambs under 1 year old? Number Number | |
| (Answer these questions if "Yes.") | | b. Ewes 1 year old or more? | -1 |
| Were any of the following forest products No Yes in 1964? in 1964? cut or sold this year | - | c. Rams and wethers 1 year old or more? Number | ◄ |
| 243. Firewood and fuelwood? | V23 | (The total for questions a, b, and c must equal the number for question 268.) [269] How many sheep and lambs were or will be sold this year? None Number sold | 2 |
| Cords | | a. How much was or will be received from | 1 |
| 244. Pulpwood? | ₩24 | the sale of sheep and iambs in 19647 | |
| 245. Fenceposts? | V25 | 270. How many lambs were shorn in 1964? None shorn | 122 |
| Board feet Board feet | | | |
| 246. Sawlogs and veneer logs? | ₩26 | 271. How many sheep were shorn in 1964? None shorn | |
| 247. Christmas trees? | V27 | HOGS AND PIGS | |
| Section 6RACE, AGE, RESIDENCE, OFF-FARM WORK, AND RECREATION INCOME | | [277] Are there any hogs and pigs on this place? | |
| In order to classify farms in your county, we need some information regarding you, and | 1 | 278. If "No," were there any on this place any time this year? | |
| whether you work off your farm. We wish to obtain your answers to several questions. | V50 | T I I I I I I I I I I I I I I I I I I I | |
| 249. What is your race? (Mark one.) White King (2) (3) What race? | | 279. How many hogs and pigs, including sows and boars, are on this place? | 40 |
| | 1 | Of this number, how many are- | |
| 250. How old were you (the person in charge) at your last birthday? Years | 1- | a. Hogs and pigs used or to be used for breeding? None 🔲 Number | - |
| 251. Do you live on any part of this place? | | b. All other hogs and pigs? None Number | - |
| 252. When did you begin to operate this place? | _ | (The total for questions a and b must equal the number for question 279.) | N |
| (Report month if you began to operate this place since January 1, 1963.) | 1 | 280. How many hogs and pigs have been sold this year? None Number | (41 |
| OFF-FARM WORK 253. How many days this year did you work off your farm? Include work at a nonfarm job, | | 281. How many hogs and pigs will be sold between now and December 317 | - |
| business, profession, or on someone else's farm. Include days you expect to work off your | | 282. How much was or will be received from | |
| farm between now and December 31, 1964. (Do not include exchange work.) (1) (2) (3) (4) (5) | - | the sale of hogs and pigs in 1964? | 7 |
| (Mark one)→ None 1 to 50 to 100 to 200 or more days 200 or | 1 | SOWS AND GILTS FARROWING | |
| | 4 | 283. How many litters were farrowed since June 1, this year or will be farrowed befare December 1? None of littersV | 42 |
| RECREATION INCOME | | 284. How many litters were farrowed between Number | |
| 254. Was any income earned this year, or will any income be earned | | December 1, last year and June 1, this year? None of litters | |
| from providing hunting, fishing, picnicking, camping, boarding and lodging, or other recreational service on this place? No Yes |] | CATTLE AND CALVES | |
| (If "No," mark X and skip to question [256].) 255. How much was or will be your gross income in 1964 from boarding and | 1 | [285] Are there any cattle and calves on this place? | |
| lodging, and recreational activities and facilities on this place?\$00 | | 286. If "No," were there any on this place any time this year? No Yes (If "No" for both questions 285 and 286, mark X and skip to question [304].) | |
| Section 7POULTRY AND LIVESTOCK NOW ON THIS PLACE AND | H | 287. How many cattle and calves are on this place? None Number | '50 |
| LIVESTOCK SALES THIS YEAR, 1964 | ┤╹╹ | (If 'Nane,'' mark X and skip to question [288].) Of this total, how many are | |
| Now we would like to ask you about the poultry and livestock on this place (By this place we mean the acres reported for question 7.) We want you to report all animals on this place including | | a. Cows? | - |
| those owned by you, by your landlord, or anyone else and also all poultry or livestock on this place being fed under a contract or on a custom basis. | ł | (Include heifers that have calved.) | _ |
| | | b. Heifers and heifer calves? None Number Number Number | |
| POULTRY | | c. Bulls, bull calves, steers, and steer calves? None Number | _ |
| [256] Are there any chickens, turkeys, or other poultry on this place? No Yes | | (The total for questions a, b, and c must equal the number for question 287.) | C |
| 257. If "No," were there any on this place any time this year? No Yes (If "No" for both guestions 256 and 257, mark X and skip to question [266].) | 1 | CALVES AND CATTLE SOLD | |
| 258. How many chickens (hens, pullets, roosters, etc.) 4 months old or more are now on this place? None Number | VOI | | /51 |
| a. Of this number, how many are | | 289. How many calves will be sold between now and December 31? | - |
| hens and pullets of laying age? None Number | 1 | 290. How much has been or will be received | _ |
| 259. How many dozens of chicken eggs were or will be sold this year? (include eggs sold or used for hatching purposes.) None Dozens | | from the sale of calves in 1964? None \$\$00 | |
| 260. How many brollers and other meat type chickens were or will be sold for slaughter this year? | _ V02 | 291. Of the calves sold or to be sold in 1964, how many were fattened on grain and concentrates and sold for slaughter? None Number | - |
| (Report all broilers sold or to be sold including those grown for others under contract.) | | 292. How many cattle, not counting calves, | 152 |
| 261. How many hens and roosters were or will be sold for slaughter this year? None Number | V03 | | 21 |
| | 1 | sold between new and December 31? | - |
| 262. How many turkeys and turkey fryers were raised this year? None Number (Include those raised from poults hatched, poults bought, and those raised for others under contract.) | _\ v 04 | 294. How much was or will be received from the sale of cattle in 1964? | - |
| 263. How many turkey hens now on hand are you keeping for breeding next year? . Nonc Number | | 295. Of the cattle sold or to be sold in 1964, how many were fattened on grain and concentrates and sold for slaughter? None Number | |
| 264. How many started pullets, ducks, geese, and Give | | | 7 |
| other poultry were or will be sold this year? None nameNumber (Do not include broilers or chickens sold for slaughter) | | | |
| 265. How much was or will be received in 1964 from the sale of started pullets, torkays, ducks, geese, and missellaneous poultry, and their eggs? None sold in Value, of sales \$0 (Do not include chicken eggs sold, chickens sold for slaughter, and broilers.) Sales \$0 | 119 | | |
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| Section 8COWS MILKED, MILK AND CREAM SOLD, OTHER | 1 | Section 10AGRICULTURAL CHEMICALS AND LAND-USE PRACTICES | 7 |
|--|--------------|--|----------|
| ANIMALS SOLD AND TO BE SOLD THIS YEAR, AND CONTRACTS, 1964 | 1 ♥ | FERTILIZER AND LIME We would like to ask you several questions regarding fertilizer, lime, sprays, and dusts used on this place during 1964. Please report all ap- | 1 |
| 296. How many cows and heifers were milked yesterday? None Number | V60 | plications of fertilizers, lime, sprays, and dusts paid for by your landlord | |
| 297. How many milk cows were an this place yesterday? |]_ | operator. | |
| (Include dry milk cows and milk heifers that have calved.) | Γ | 323. On how many acres were commercial fertilizer and fertilizing materials used in 1964? None Acres | V20 |
| MILK AND CREAM SOLD entire year 1964, including estimated sales during the remainder of the year. Where sales are divided with landlord, include his share in the | | How much was used- | - |
| total sales reported.) | 1 | (Answer these questions if "Yes.") On how many (2) (3) On how many Dry materials? Liquid materials? | 1 |
| 299. Was any milk or cream sold, or will any milk or cream be sold from this place this year? | | Was fertilizer used this year No Yes fertilizer used' (Include cock phosphate) (Include annyarous annyarous) on any of the No Yes fertilizer used' phosphate) ammonia) | 1 |
| (If "No," mark X and skip to question [304].) | 1 | following crops — Acres Tons Tenths Tons Tenths //10 //10 | s v21 |
| 300. How much whole milk was or will be sold to | V61 | a. Hay and cropland pasture? | v22 |
| plants and dealers in 1964? None or b. Gallons of milk.) | 1 | cropland)? | v23 |
| 301. How much whole milk was or will be sold directly | V62 | | V26 |
| to consumers, stores, and restaurants in 1964? None Quarts Pounds of | V64 | | v30 |
| 302. How much cream was or will be sold in 1964? None fat in cream (If unable to report pounds of fat directly, multiply | V65 | j. trish potatoes? | 1 |
| gallons of cream sold by 21/2 to get pounds of fat.) 303. Was the whole milk sold to plants and dealers (reported in question 300) | | | V39 |
| approved for fluid consumption? | V66 | [324] How many acres were limed in 1964? None Acres (If 'None,'' mark X and skip to question [326]) | 1.31 |
| OTHER ANIMALS SOLD | | 325. How much lime or liming material was used in 1964? Tons | 1- |
| [304] Were any fur-bearing animals, horses, mules, goats, goat milk, bees, honey, or other livestock products sold or will any be sold in 1964? No Yes | | oyster shells, etc. Omit lime used for sprays or sanitation.) | |
| if "Yes," give name of animal or product sold and number or Number or Value of | | SPRAYS, DUSTS, ETC. | |
| amount sold or to be sold Name amount sales \$00 | ,[| [326] How many acres of the following crops were treated in 1964 by spraying, dusting, or other methods to control insects and diseases? | |
| CONTRACTS | | (Count the acres only once if treated more than once.) a. Grain crops? (Corn, wheat, oats, rye, barley, etc.) None Acres | V40 |
| 306. Did you have in 1964 a contract or agreement with a dealer, processor, or a cooperative to produce any farm products? | V99 | | V41 |
| a. if "Yes," give names of farm products | | d. Vegetables grown for sale? (Do not include potatoes.) None Acres | V43 |
| covered by the contract or agreement | 1 | | V44 |
| These questions are to be filled by CENSUS ENUMERATOR. Are acres in question 7, 1,050 ar more to the construction of the const | | (Do not include berries and small fruits.) f. Seed crops and other crops? None Acres | V45 |
| Section 9EQUIPMENT AND FACILITIES NOW ON THIS PLACE | C | f. Seed crops and other crops? None Acres | VAS |
| Now we would like to ask you several questions about equipment and facilities on this place | 13 | 327. How many acros of the following crops or land were treated in 1964 by | Ì |
| Please include all equipment now on the place, owned by you, your landlord, or anyone else. Report only equipment and facilities that are in operating order and were used during 1963 or 1964. | | spraying, dusting, or other methods for the purpose of controlling weeds or brush? (Count the acres only once if treated more than once) | |
| EQUIPMENT | - | | V50 |
| How many of the following are on this place | 1 | · · · · · · · · · · · · · · · · · · · | V51 |
| 307. Automobiles? | V01 | d. Other crops? None Acres | V53 |
| 308. Motortrucks (include pickups)? None | V02 | other seed crops, berries, orchards, etc.) | |
| 309. Wheel tractors other than garden and motor tillers? None | V03 | e. Pastureland? | V54 |
| 310. Crawler tractors? | V05 | 328. How many of the following animals were treated externally in 1964 by | |
| 311. Garden tractors and motor tillers? None 312. Groin and bean combines: None | v05 | (Count the animals only once if treated more than once) Number | 1 |
| a. Pull type? | V07 | Number | V60 |
| b. Self-propelled? None 313. Pickup balers? None | ٦ | b. Hogs, sheep, and goats? None of head | V61 |
| 314. Hay conditioners? None | V09 | 329. How many acres of cropland used for grain or row | { |
| 315. Crop driers? None | V10 | crops this year were farmed on the contour? . None Acres | V70 |
| 316. Complekers including picker-shellers and compleking heads for combines? None | _ v11 | 330. How many acres of stripcropping systems for | V71 |
| 317. Field forage harvesters: a. Cylinder or flywheel type? None | V12 | 331. How many artificial ponds, pits, reservoirs, and earthen tanks are on this place? | V72 |
| b. Flail type? | V13 | (If "None," mark X and skip to question [332].) | } |
| FACILITIES | V14 | a. When filled to capacity, how many acres do these water areas cover? Acres/10 (Report tenths of an acre.) | F |
| Do you have on this place | 14 | [332] Did you have any land this year in the crop diversion program— |] |
| 318. Telephone? No Yes 319. Television set? No Yes | | a. For wheat? No 🗌 Yes 🗍 | V80 |
| 319. Television sett. No Fes 320. Home freezer? No Yes | 1- | b. For feed grains? (Corn, grain sorghums, and barley.) . No Yes | 1 |
| 321. Milking machine? | - | | |
| 322. Bulk milk tank? No Yes | | | |
| | - | | |
| | | | |
| | | | |
| | | | |

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| | | 4.9. <i>7.9</i> .8.9 | | Sect | tion 11.—PERSC | ЭNS | LIVIN | G IN H | OUSE OF | FARA | | | | | *** | | | \rightarrow | T |
|----------|---|--------------------------------------|---|-------------|---------------------|----------|---------------|-----------------|--------------------|----------|-------------------------|------------------|-------------|-----------|-------------------|--------------|----------------------|---------------|----------|
| 333. | We would like to ask you for a list of a | and several quest | ions regard | ling th | e persons now liv | ing i | n the ho | use In C | Column 5, ent | ter for | the highest grade of | of school com | pleted, a n | number a | is follows: | | 8.232 | - | |
| | in which you live First, we would | like to have the | name of e | each pe | erson now living | in t | he house | in For | no grade con | nplete | d or only kindergar | ten completed | d, enter 0. | For e | ementary scho | ol ente | r the numb | er of | |
| | which you live. | rson in charge fir | st and the | n orbe | r persons luving i | o the | hours | grad | e completed, | such a | as 1, 2, 3, 4, 5, 6, 7, | or 8; for high | n school, e | enter 9, | 10, 11, or 12 de | pendin | g on the hig | ghest | |
| | the place is operated by partners, enter | r the name of the | partner i | n Colu | mn I and write " | parte | ner" in C | ol- com | | | | | | | | | | | |
|] | | partner, the nam | e of each | person | living in the hou | 15e 11 | n which | the live: | stock and po | ultry, | care and repair of | equipment a | nd buildir | ngs, kee | ping farm reco | ords, a | nd planning | g and | 1 |
| ┣— | partner lives Name | Answer these | avertion | . Int | r | | | | | | | | | | | | | | I |
| | (List person in charge first. | | | is ter | ····· | Ú. | | | | ques | | | | | | | | | |
| | Include everyone who | Relationship | | | What was the | | | | | | | did this perso | on receive | orwill | he receive in 15 | 764 fro | m- | | 1 |
| 1 | usually lives in the house in which the farm operator | to person in | | Age | highest grade | | | wor | | | | Working | atown | Soc | ial Security | Ren | t for farm | and | |
| | lives. Do not include | charge? (Write wife, son, | | at | | | | place | in 1964– | | | | | | | | | | i i |
| | college students away at | daughter, | male and | | | | | At farm | | and | deductions, etc.? | | | | | | | | 1 |
| 1 | school, persons away in the Armed Forces, and persons | father, hired | F for | | instructions | | | | annfarm | | | | | | | | | | ł |
| | away in institutions.) | man, partner, etc) | remaie.) | 1 | above.) | | | | work? | 1 10 | | | | | | | | | 1 |
| | (1) | (2) | (3) | (4) | (5) | [] | (6) | (7) | (8) | Ì | (9) | |) | { | (11) | 1 | (12) | | i |
| VOI | 1. | Person in | | | | No | ne | | | | | None | | _ | | None | ; | | ł |
| | | charge | | + | <u> </u> | | J | | | $\{\Box$ | .00 | 🗋 s | .00 | 🗌 🕯 | .00 | $ \sqcup$ | \$ | 00 | VOI |
| V02 | 2 | 1 | | | | | 1 | | | | \$.00 | □ s | .00 | | | 1 m | ś | 00 | V02 |
| V03 | 3. | | | | | | , ר | | | | | — . | | | | | | | |
| V04 | | + | <u> </u> | | | | J | <u> </u> | + | ιu | s 00 | Ll s | .00 | | .00 | | \$ | 00 | ¥03 |
| 104 | 4. | | <u> </u> | | | |] | | | | \$00 | □ \$ | .00 | 🗌 🕯 | .00 | $ \Box $ | \$ | 00 | V04 |
| V05 | 5 | { | | Ì | 1 | | 1 | ļ | | | \$ 00 | | 00 | İп. | .00 | (m | e | 00 | V05 |
| V06 | 6. | | 1 | 1 | [| | , | | | 12 | | | | | | | | - 1 | Ì |
| H | | + | <u> </u> | <u> </u> | <u>}</u> | |] | | | $+\Box$ | \$00 | □ * | .00 | [] \$ | .00 | ļΠ | \$ | 00 | V06 |
| V07 | 7 | 1 | | | | |] | | | iΠ | s00 | ∏ s | .00 | | .00 | | \$ | 00 | V07 |
| V08 | 8 | | ł | | | 12 | - | { | | | • | | 00 | | | m | | | VAR |
| V09 | 9 | + | 1 | t – | t | |] | | | 1 🗆 | .00 | | .00 | | | | \$ | | |
| | · · · · · · · · · · · · · · · · · · · | | ļ | <u> </u> | ļ | $\{\Box$ |] | | | | \$00 | 🗌 s | .00 | 🗌 🕯 | .00 | | \$ | 00 | V09 |
| V10 | 10 | | | 1 | | |] | | | | s .00 | Ì □ s | 00 | I D s | | | \$ | 00 | VIO |
| <u>.</u> | Section 12 SELE | CTED BARA B | VPENDI | THE | | 1 | in . | | | 1 | | | | | | | | . 1888 | |
| | | | | | | | ୲→ | > Y 🛛 | Section | 13 | KENIAL AGREE | MENT, FAR | W VALU | E, ANL | FARM REA | L ESI | AIE DEBI | | 200 |
| EY | PENDITURES We would like to ask s | several questions a | about expo | inses fo | or this place. (By | this | <u>a</u> i | -1 - 1 | RENTAL AC | GREE | MENT | | | | | | | | 7 |
| Ē | place we mean the acre | s reported in que | stion 7.) | Wew | rish you to include | e any | ; | 1 1 | | | | | | | None | Acres _ | | | V20 |
| | | | | | | | | | (Include | e land | | | | | 1) | | | | |
| | | | | | | per | | | 349. Do you | ı∘pay | | | | | | No 🗌 | Yes | | |
| 33 | 6. How much was or will be spent for | | | ins | | | | | • | | | | | | | | | | - |
| | (Corn, oats, barley, grain sorghums, | | | | | | | | | | | | | | | | | 00 | _ |
| 33 | How much was or will be spent for cially mixed feeds, millfeeds, and | | | | None 🗍 💲 | | | | | | | | | s (such a | 15 14, 15, 12) 1. | | | | |
| | (Include not only mixed feeds, min- | | | | | | | | livesto | ick or | livestock products | (such as) | 4, 13, 15)? | | | No | Yes 🗌 | | - |
| | biotics, but also feeds such as scrate cottonseed meal, etc.) | ch feed, bran, soy | bean meal | • | | | | | | | | | | | | | | | |
| | a. How many tons of feed were a | or will be purcha | sed in 196 | 4? | Tons _ | | / | | of land | lord. | rent free, etc.)? | | | | | No [| Yes 🗌 | | - |
| 1 | | (Report ten | | | | | | | | 112 | Now we would like | to ask you so | ome quesi | tions ab | out the value | - | | | |
| 330 | How much was or will be spent to of hay and other roughage in 19- | | | | None 🗍 💲 | | | | | | of the farm land and | a buildings yo | u own, or | rent. | | | | | ł |
| 1 | | | | - | | | | | | | | and and the | | None | | | | ,e | 1 |
| 33 | How much was or will be spent calves, hogs, pigs, sheep, lambs, a | nd other livesto | ck in 196 | 4? | None S_ | | | 00 106 | DUIIGI | ngs s | en for- | | | Home | | | | | 1 |
| | (Include estimate of cost of livestock | e fed under contr | act.) | | _ | | | | a. L | | | | | | | s | | 00 | V21 |
| 330 | How much was or will be spent chicks, pullets, poults, and other poults. | | se of bal | у | None 🗌 🕯 | | , | 00 1007 | b. L | | | | 17 | | | | | 00 | 1222 |
| | (Include estimate of cost of baby chi | cks and poults ra | ised by yo | u | | | | | | (Cop | by acres from questi | ion 4.) | | 님 | | | | | |
| | under contract) | | internet Secial Security Secial | | | | | | | | | | | | | | | | |
| 339 | How much was or will be spent for of seeds, plants, buibs, and trees | | | | None 🗍 💲 | | | 00 VO8 | d. L | and a | ind buildings rente | d to others? | | | | s | | .00 | V31 |
| 1 | (Include expenses for seed for corn, | , wheat, soybeans | | | | | | | | (Cop | y acres from question | on 6,1 | | L | | | | | 1 |
| | Irish potatoes, sweetpotatoes, grasse | |) | | | | | | FARM REA | L ES | TATE DEBT | | | | | | | | Į – |
| 34 | How much was or will be spent fo of fertilizer and fertilizing materia | | | | None S | | | 00 vo 9 | 354. Are the | •re a | ny debts represent | ed by real er | state | | | | | | ł |
| | (Do not include cost of applying.) | | | | | | | | mortga | ages, | deeds of trust, lan | id purchase c | ontracts | | | | | | |
| 341 | I. How much was or will be spent fo | or the purchase | | | N | | | | | | | | | . | No 🗆 🗸 | es 🗂 | | | V40 |
| | of gasoline for the farm business | in 1964? | • | | None \$ | | | 010 00 | | | | | | | | •• L_ | 0 | | |
| 342 | . How much was or will be spent fo | | | | None 🗖 🔹 | | | | a. A | Fede | eral land bank, Fai | mers Home | Administr | ation, | | | | | |
| 1 | of Diesel fuel for the farm busines | | | | | | | | | | | | | | | No | | | |
| 34 | How much was or will be spent in butane, and propane for the form | | | 25, | None 5 | | | ₂₀ — | | | | | | | dings, | | | | Í |
| 344 | I. How much was or will be spent for | | | 15 , | | | | | a | ssocie | ation, a mortgage | or investment | t company | y, a pro- | | <u>ы</u> . Г | ריז _{יי} רי | r | - |
| | kerosene, fuel ail, motor all, and g | grease for the fa | rm busine | -55 | None 🗖 \$ | | | | | | | | | | | | | | |
| | in 1964? | | | | | | | | | | | | | | | s | | 00 | - |
| 34 | How much was or will be spent fa customwork, and contract work i | n 1964? | | | None S | | | 00 115 | (1 | Do no | ot,include debts secu | ired only by li | vestock, n | nachiner | y or crops. Do | | | | |
| | (Include expenses for the hire of far | m machinery and | d equipme | nt. | | | _ | | | | | | | | | | | | |
| 1 | and customwork such as grinding an bining, corn picking, silo filling, sp | nd mixing feed, p raving, dusting | and control | om- act | | | | | | | | | | | <u> </u> | | | | ĺ |
| | work such as fruit picking, berry p | oicking fruit hai | vesting, c | | | | | | 355. On wh | at da | te did you fill this o | questionnaire | ? | | (Month an | d daws | ···· | 1964 | V50 |
| 1 | performed by a contractor, crew lead | | | | | | | | | | 1. | | | | | | | | Cilier |
| 34 | b. How much was or will be paid in control of the second secon | ash for hired lat | or in 196 | 4? | None 🔤 💲 | | | 6 | South and the last | Section | on 14ENUMER | ATOR'S REC | .UKDTo | o be fil | ied by Censu | S ENU | merator | <u> au</u> | <u>.</u> |
| | or to be made for Social Security taxe | es Do not inclu | ide payme | nts | | | | | | 6 | Operator W | life or other me | mber of op | erator's | family | Land | ord | | |
| | for housework, customwork, or cont | tract work.) | | | | | | | in this report? | ~ | <u> </u> | | - | | | | | | |
| HIF | RED WORKERS | | | | | | | i F | | | iired laborer 🛄 Ne | ignbor [] (| | | | | | | |
| 347 | . How many hired workers worked | or will work | | | | | | | conned by | | | , Fnumerato | | | | | | | 1964 |
| 1 | 150 days or more at farmwork on | this place in 19 | 641 | | None 🔄 of | work | ers | - _ _ | Checked by | | | | | nonth and | day) | | | | |
| | (Include any members of your family | who receive pay | , | | | | | - | | | | . Crew leade | 51 | | | | | | |

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| PORM | - | | | _ | | <u></u> | | | | _ | | ING O | | -Bui-uvil. | · · · · · | | | | oval expires | | Ť |
|------------------|--------|--|-------------------------------------|---|--------------------------------|---|---|--|--------------------------------------|---|---|--|---|---|----------------------------|--|---|--------------|------------------------------|------------------------|---|
| -7-4 | | Part I.—UIST OF PLACES IN ED Instructions: 1. List the head of every household living in this ED. AND ALSO 2. List every person, not living in this ED, who has agri- cultural operations in this ED. | | Instru Yes'' for | any colu r all col Did t | TURAL (Columns umn, skip lumns 4 this perso of his hou time this | 4 to 6 to colu to 6, s | mn 7. kip to y mem- | Does t perso live i your EE | this on | Doe per have cult oper whe | s this son agri- vral stions re he es? | A1 number | | Column Column Column | s 10 to 13.— Filt as required. 14.— Will be filled by | D OF COMPLETION OF ENUMERATION Instructions: crew leader. re onswered all required questions and have filled a | in Al if req | uir a d. | | |
| | ł | | | | | | Any | crops | | | IŁ | res, " | | | | Collback | | | d over to leader | | |
| | number | Name | pe or me of hous far | es this enson mber f his sehold rate a m {or sch)? | 4 or ho 30 a chic | 1 or more cattle? 4 or more hogs? 30 or more chickens? 30 or more | | such as corn, hay? Any vege- tables or berries for sale? Nursery or greenhouse products? | | if "Yes," fill column 9 and get A1. if "No," fill | | ot get but p to nn 13 enter oil ress. | H "Yes," in column 7 or "No" in column 8, assign A1 number. | Ai left to be filled (or to be completed) Date due Telephone number | | Appointment made (Date and hour of appointment) | Ramarks (Mail address, notes, etc.) | Date | Crew leader's initials | Dote com- pleted | |
| | | (3) | (4) | | turkeys or ducks? (5) | | 20 or more fruit trees or grape- vines? (6) | | column 8. | | fill column 9 and get A1. (8) | | (9) | (10) | (11) | (12) | (13) | · | [14] | (15) | |
| Τ | 1 | | No | Yes | No | Y•• | No | ¥ | | Yes | No | Yes | | | | | | 1 | | 1.17 | 1 |
| | 2 | | | | | | | | ſ | | | | | | | | | | | | |
| | 3 | • • • • • • • | | | | | | | | | | | | | | | | <u> </u> | | | |
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| - | 5 | | No | Y•5 | No | <u>ү</u> ез | No | Yes | No | Yes | N₀ | Yes | | | | | | | | _ | _ |
| | 6 | | | | | | | | [| | | | | _ | | | | 1 | | | |
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| $\left \right $ | • | | No | Yes | No | Yes | No | Yes | No | Yes | N₀ | Yes | | | | | | | | | _ |
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| | + | | No | Yes T | No | Yes | No | Yes | No [| Yes | | Yes | | | | | | - | | | _ |
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Appendix C