

APPENDIX A.

General Explanation

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TAKING THE CENSUS

Method of Enumeration

All censuses beginning with the 1969 census have been conducted primarily by mail. The 1978 census was the only census to include a mailout/mailback enumeration supplemented by the direct interview of all households in a sample of area segments. This combination of the mailout/mailback enumeration plus the area sample was used in 1978 to improve completeness of coverage for U.S., regional, and State level agriculture census statistics. Due to budget reductions, the area sample was eliminated in 1982.

In censuses prior to the 1969 census, enumerators were assigned to specific areas and called on all farm operators within each area. Beginning with the 1950 census, copies of the report form were mailed prior to the enumeration date to each boxholder served by post offices in predominantly rural areas and farmers were asked to complete the forms and have them ready for the enumerator to pick up.

The mailout/mailback enumeration procedure was not used in taking the agriculture census in Puerto Rico, Guam, and the Virgin Islands. A discussion of the direct enumeration methods used there appears in the reports for these outlying areas. A description of the special direct enumeration of citrus caretakers is included in the **Definitions and Explanations** section.

Mail List

The mail list for the 1982 census was comprised of all individuals, businesses, and organizations that could be readily identified as being associated with agriculture. The list was assembled from the records of the 1978 census and administrative records of various government agencies, primarily the Internal Revenue Service and the U.S. Department of Agriculture (USDA).

Lists of large or specialized operations, such as nurseries, specialty crop farms, broiler growers, fish farms, livestock farms, and cattle feedlot operations, were obtained from State and Federal agencies, trade associations, and similar organizations. Lists of multiestablishment companies having one or more establishments (or locations) producing agricultural products were obtained from the 1978 census and updated using

information from the Standard Statistical Establishment List maintained by the Census Bureau.

A preliminary census mail list was assembled using names and addresses from the 1978 census and administrative source lists available in September 1981. Those records which were less likely to be farms were included in the 1982 Farm and Ranch Identification Survey. Approximately 3 million farm and ranch forms were mailed in March 1982 to names which appeared on only one source list or selected combinations of lists which had yielded a low percentage of farm operators in the 1978 census. As a result of this survey, nonfarm names and addresses were deleted from the census mail list, new tenant and successor operations were added, and the names, addresses, and size information were updated for the identified active farm operators.

The final census mail list was developed using results of the 1982 Farm and Ranch Identification Survey, names and addresses from the unduplicated preliminary list that were retained without precensus verification, and new or updated source lists acquired after the preliminary unduplication. The preliminary and final census mail lists were both constructed by merging and unduplicating the names and addresses from the various source lists on the basis of Employer Identification numbers, Social Security numbers, and names and addresses. To facilitate processing, each name on the administrative source lists was assigned a geographic code indicating the State and county location of the operation and a size code indicating an estimated value of sales. Most duplicates were identified and resolved prior to mailing. Other duplicate names were either reported by respondents or located during office processing.

Report Forms

In 1982, 12 regional report form versions were used. These forms were tailored primarily in sections 2 through 8 to list crops commonly produced in one or more States, and in section 15 to list livestock specialties produced. These modifications were made to enhance reporting of crop and livestock data and to reduce respondent burden.

Two report form versions were used to minimize the reporting burden, particularly for small farms. Approximately 75 percent of all farms received the 4-page nonsample form covering major items such as land use, crops, livestock and poultry, market value of agricultural products sold, and operator characteristics. The 5-page sample form was mailed to all large and specialized farms (based on expected sales, acres, or standard industrial classification), all farms in Alaska and Hawaii, and approximately 17 percent of all other farms. The sample form contained all the items asked on the nonsample form plus the sample items (sections 22 through 28).

The sample form and the information sheet appear in appendix C. The **Statistical Adjustments** section of this appendix includes a discussion of the criteria used to determine whether the sample or nonsample form was to be mailed to addressees.

Initial Mailing

The report forms were mailed in late December 1982 to the approximately 3,653,000 individuals, businesses, and organizations on the mail list. The information sheet containing instructions for completing the form and a brochure explaining the uses of the census data were included with each report form. Additional special instructions were included with report forms sent to grazing associations; feedlot operations; institutional organizations; and producers of poultry under contract, bees and honey, fish, laboratory animals, worms, and nursery and greenhouse products.

In an effort to provide additional help to farmers in completing their reports, copies of an Agriculture Census Guide booklet were sent to county agricultural agencies, institutions, or businesses to whom farmers might turn for help. Included were vocational agriculture instructors, and USDA county offices—Agricultural Stabilization and Conservation Service, Farmers Home Administration, Soil Conservation Service, and Cooperative Extension Service. This guide contained descriptions and definitions for various items in more detail than the instructions included with each report form. Representatives of the above agencies graciously consented to assist farmers in completing their report forms if requested.

Followup Procedures

The data collection effort included a reminder card and five followup letters, two of which were accompanied by a report form. Followup reminders were sent to nonrespondents on a flow basis at 3- to 4-week intervals starting in late February and continuing until late June 1983. In early April 1983, an additional followup letter was sent to nonrespondents in low response counties in 14 States.

Telephone calls were made to nonrespondents who were expected to have large operations (those with expected sales of \$100,000 or more) or who were located in low response counties. A nonresponse adjustment procedure was used to represent the final nonrespondent farms in the census results. A description of this procedure is included in the **Statistical Adjustments** section.

DATA PROCESSING

Selected report forms were reviewed prior to keying the data onto magnetic tape. These included reports with attached correspondence, and reports with remarks or no positive data on the front page. All new successors reported by former operators were researched to see if they had already been included in the census mailing. Report forms were mailed to successor addresses not located on the mail file. This processing improved the coverage of the census.

The data for each report form were subjected to a detailed item-by-item computer edit. The edit performed comprehensive checks for consistency and reasonableness, corrected erroneous or inconsistent data, supplied missing data based on similar farms within the same county, and assigned farm classification codes necessary for tabulating the data. Significant computer-generated changes to the data were reviewed and verified.

In the computer edit, farms with sales, acreage, or commodities exceeding specified levels were tested for historical comparability. Key items, such as acreage and sales, were compared for significant changes between 1978 and 1982. Sizeable

historical differences were resolved or verified, by telephone if necessary.

Respondents who reported sales or acreage above specified levels on nonsample forms were sent correspondence requesting the additional sample data. Report forms with reported sales of \$1,000,000 or more or 30,000 acres or more, and other selected problem reports were reviewed by statisticians in the Agriculture Division. Problems that could not be resolved by reference to other information on the report were resolved by contacting the respondents by telephone or correspondence.

Prior to publication, tabulated totals were reviewed by statisticians to identify any inconsistencies and potential coverage problems. Comparisons were made with previous census data, estimates published by the USDA and other available check data. Selected report forms were reviewed and problem entries were either verified as being correct or the data were corrected.

MAJOR DATA CHANGES

The content of the 1982 census report form is similar to that of the 1978 form. To limit respondent burden, the 1978 and 1982 forms included only data items needed at the county level, either on a complete or sample basis. The 1978 census data items which were eliminated from the 1982 form include:

- Land held under foreign ownership
- Gallons purchased of gasoline; diesel fuel; LP gas, butane and propane; and fuel oil
- Animal health costs for livestock and poultry

The following new data items were added to the 1982 report form:

- Interest expense for the farm business
- Source of irrigation water
- Year in which the operator began to operate the farm

More extensive data on Commodity Credit Corporation (CCC) loans were collected in 1982.

DEFINITIONS AND EXPLANATIONS

The following definitions and explanations provide a more detailed description of the terms used in this publication than are available in the tables or on the report form. For an exact wording of the questions on the 1982 census report forms and the information sheet which accompanied these forms, see appendix C.

Most definitions of terms are the same as those used in earlier censuses. The more important exceptions are also noted here.

Farms or farms reporting—The term “farms” or “farms reporting” in the presentation of data denotes the number of farms reporting the item. For example, if there are 3,710 farms in a State and 842 of them had 28,594 cattle and calves, the data for those farms reporting cattle and calves would appear as:

Cattle and calves	farms. 842
	number. 28,594

Land in farms—The acreage designated in the tables as “land in farms” consists primarily of agricultural land used for crops, pasture, or grazing. It also includes woodland and wasteland not

actually under cultivation or used for pasture or grazing, provided it was part of the farm operator's total operation. Large acreages of woodland or wasteland held for nonagricultural purposes were deleted from individual reports during the processing operations.

Land in farms is an operating unit concept and includes land owned and operated as well as land rented from others. Land used rent free was to be reported as land rented from others. All grazing land, except land used under government permits on a per-head basis, was included as "land in farms" provided it was part of a farm or ranch. Grazing land operated by grazing associations was to be reported by the person chiefly responsible for conducting the business of the association. All land in Indian reservations used for growing crops or grazing livestock was to be included as land in farms. Land in reservations not reported by individual Indians or 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 area—The approximate land area of counties and States shown for 1982 represents the total land area as determined by records and calculations updated as of January 1, 1983. The county land areas were remeasured in 1980. The previous county measurements were done in 1940. Any differences between the land area in 1982 and 1978 are due to these new measurements, annexations, and other changes affecting county boundaries.

Land in two or more counties—With few exceptions, the land in each farm was tabulated as being in the operator's principal county. The principal county was defined as the one where the largest value of agricultural products was raised or produced. It was usually the county containing all or the largest proportion of the land in the farm or viewed by the respondent as his/her principal county. For a limited number of Midwest and Western States, this procedure has resulted in the allocation of more land in farms to a county than the total land area of the county. To minimize this distortion, separate reports were required for large farms identified from the 1978 census as having more than one farm unit. Other reports received showing land in more than one county were separated into two or more reports if the data would significantly affect the county totals.

Value of land and buildings—Respondents were asked to report their estimate of the current market value of land and buildings owned, rented or leased from others, and rented or leased to others. Market value refers to the respondent's estimate of what the land and buildings would sell for under current market conditions. If the value of land and buildings was not reported, it was estimated using the average value of land and buildings from a similar farm in the same geographic area.

Harvested cropland—This category includes land from which crops were harvested or hay was cut, and land in orchards, citrus groves, vineyards, nurseries, and greenhouses. Land from which two or more crops were harvested was counted only once, even though there was more than one use of the land.

Cropland used only for pasture or grazing—This category includes land used only for pasture or grazing that could have been used for crops without additional improvement, and all

land planted in crops that were grazed before the crops reached maturity. Also included was all cropland used for rotation pasture and land in government diversion programs that were pastured. However, cropland that was pastured after crops were harvested was not to be included.

Other cropland—This category includes cropland used only for soil improvement crops, land on which all crops failed, cultivated summer fallow, idle cropland, and land planted in crops that were to be harvested after the census year.

Total woodland—This category includes natural or planted woodlots or timber tracts, cutover and deforested land with young growth which has or will have value for wood products, and land planted for Christmas tree production. Land covered by sagebrush or mesquite was to be reported as other pastureland and rangeland or other land.

Woodland pastured—This category includes all woodland used for pasture or grazing during the census year. Woodland or forest land pastured under a per-head grazing permit was not counted as land in farms and therefore was not included in woodland pastured.

Other land—This category includes land in house lots, barn lots, ponds, roads, wasteland, etc. In 1974, for farms with sales of less than \$2,500, this category included pastureland and rangeland other than cropland and woodland pastured in addition to land in house lots, barn lots, ponds, roads, and wasteland.

Land set aside in federal farm programs—This land includes land diverted or set aside under the provisions of the Federal Commodity Acreage Reduction Program. These data are for the acres of cropland taken out of production by growers of wheat, cotton, rice, corn, sorghum, barley, and oats, and devoted to conservation uses. No information was obtained as to which crops would have been grown on the acres set aside.

Irrigated land—This category includes all land watered by any artificial or controlled means, such as sprinklers, furrows or ditches, and spreader dikes. Included are supplemental, partial, and preplant irrigation. Each acre was to be counted only once regardless of the number of times it was irrigated or harvested.

Operator—The term "operator" designates a person who operates a farm, either doing the work or making day-to-day decisions about such things as planting, harvesting, feeding, marketing, etc. The operator may be the owner, a member of the owner's household, a salaried manager, a tenant, a renter, or a sharecropper. If a person rents land to others or has land worked on shares by others, he/she is considered the operator only of the land which is retained for his/her own operation. For partnerships, only one partner is counted as an operator. If there is no clear-cut partner in charge, then the senior or oldest active partner is considered the operator. For census purposes, the number of operators is the same as the number of farms. In some cases, the operator was not the individual named on the address label of the report form, but another family member, a partner, or a hired manager who was actually in charge of the farm operations.

Operator characteristics—Data on characteristics such as residence, race, Spanish origin, age, sex, principal occupation, and off-farm work were collected from all operators in 1982. If

operator characteristics of race, age, sex, and principal occupation were not reported, they were derived based on information reported by farms with similar acreage size, tenure, and sales size. No imputations were made for nonresponse to place of residence, Spanish origin, off-farm work, or year began operation. For the 1982 and 1978 censuses, operators of Spanish origin were tabulated by reported race. Prior censuses included Spanish origin as "White" whenever separate data for the White race were shown.

Selected farm production expenses—Since only selected production expenses incurred in 1982 were requested, the expense data cannot be used in combination with gross sales to calculate net cash farm income. The **1979 Farm Finance Survey** provided estimates on net cash farm income.

In 1982, as in other recent censuses, operators producing crops, livestock, or poultry under contract frequently failed to report certain expenditure data. They often were unable or unwilling to estimate the cost of production inputs furnished by the contractors. As a consequence, the rate of imputation of expenditure data for these operations is considerably higher than it is for noncontract producers.

Commercial fertilizer—The expense for commercial fertilizer is the amount spent on fertilizer during 1982, excluding the cost of application. Some fertilizer purchased in 1982 may not have been applied during the year. If the fertilizer was applied by someone other than the operator, respondents were requested to report the cost of application as an expense for customwork, machine hire, and rental of machinery and equipment.

Other agricultural chemicals—These expenses include the cost of all insecticides, herbicides, fungicides, and other pesticides, excluding costs of application. Data exclude commercial fertilizer purchased. The cost of lime is included in the 1978 data, but excluded from 1982.

Customwork, machine hire, and rental of machinery and equipment—These expenses include costs incurred for having customwork done on the place and for renting machines to perform agricultural operations. The cost of cotton ginning is excluded. The cost of labor involved in the customwork service is included in the customwork expense. The cost of labor for operating rented or hired machinery is included as a hired farm and ranch labor expense.

Interest expense—Only the interest expense for the farm business was to be reported. Although instructions requested that interest on the owner/operator's dwelling be excluded when separate records were available, it is probable that an undetermined amount of such nonfarm business interest was also reported.

Energy and petroleum products—Respondents were asked to report only those expenses pertaining to the operation of the farm business.

Storage capacity—This category applies to those farms reporting expenditures for the specific kind of fuel. The storage capacity was to be reported even if not used during the census year.

Farms with storage capacity reported as "no"—This category includes farm operators with expenditures for a specific kind of fuel who also checked the "none" box for storage capacity. See appendix C, section 26, **Expenditures for Energy**.

Market value of agricultural products sold—This category represents the gross market value before taxes and production expenses of all agricultural products sold or removed from the place in 1982 regardless of who received the payment. It includes sales by the operator as well as the value of any shares received by partners, landlords, contractors, or others associated with the operation. In addition, it includes the loan value received in 1982 for placing commodities in the CCC loan program. This ensures comparability with prior census years for market value of agricultural products sold.

The value of agricultural products sold represents total sales of all crops, including nursery products sold, and livestock, poultry, and their products sold. It does not include income from farm-related sources such as customwork or agricultural services, or income from nonfarm sources. Sales of forest products were not included in 1978 or 1982; but were included in 1974.

The value of crops sold in 1982 does not necessarily represent the sales from crops harvested in 1982. Data may include sales from crops produced in earlier years and exclude some crops produced in 1982, but held in storage and not sold. For commodities, such as sugar beets and wool, sold through a co-op which made payments in several installments, respondents were requested to report only the total value received in 1982.

The value of agricultural products sold was collected from all operators. If the operator failed to report, estimates were made based on the amount of crops harvested or the number of livestock or poultry sold. Extensive estimation was required for operators growing crops or livestock under contract.

Caution should be used when comparing sales in 1982 with sales reported in earlier censuses due to the fluctuations in per-unit prices between census years.

Income from machine work, customwork, and other agricultural services—This category consists of gross income received during 1982 by farm operators for providing services for others such as planting, plowing, spraying, harvesting, etc. Income from machine work and other agricultural services is generally included in the agriculture census if it is supplemental to the farming operation. However, it is excluded if it constitutes a separate establishment or is conducted from another location. The agricultural services part of a farming operation was generally considered a separate establishment when income from agricultural services was \$10,000 or more and greater than the value of agricultural products sold. Due to legislative restrictions, data for establishments primarily engaged in agricultural services were not collected in 1982.

Agricultural chemicals used, including fertilizer and lime—For each type of agricultural chemical, the acres treated were to be reported only once. If multipurpose chemicals were used, the acres treated for each purpose were to be reported.

Fish and other aquacultural products—The raising of fish and other aquacultural products in captivity is included in the agriculture census. Production in salt water is considered not to be in captivity and is excluded from the census. The value of fish and other aquacultural products sold and laboratory animals

sold is included in the category "other livestock and livestock products."

Bees and honey—Bee and honey production was enumerated and tabulated in the county in which the home farm was located even though hives are often moved from farm to farm over a wide geographic area. The completeness and accuracy of these data are affected by the fact that some bee operations may not have been on the mail list and some operators on the mail list may not have considered beekeeping to be an agricultural operation, and therefore did not report.

Citrus enumeration—In the 1982 census, reports for selected citrus caretakers in Arizona, Florida, and Texas were obtained by direct enumeration. A citrus caretaker is an organization or person caring for or managing citrus groves for others. This special enumeration has been used in recent censuses because of the difficulty in identifying and enumerating absentee grove owners who often do not know the information that is needed to adequately complete the census report. Each citrus caretaker was enumerated as a farm operator and requested to complete one report form for all groves cared for and to furnish a list of grove owners' names, addresses, and acres of citrus. The names on the lists were matched to completed grove owners' report forms to eliminate duplication. The caretaker was also requested to inform the grove owner that he had already reported for the citrus under his care and that the grove owner was not to report the citrus again. In the 1982 census, 8 caretakers in Arizona reported 210 grove owners having 13,000 acres of citrus; the 99 caretakers in Florida reported 5,900 grove owners having 250,000 acres of citrus; and 21 caretakers in Texas reported 1,500 grove owners having 30,000 acres of citrus.

Crop year or season covered—Acres and quantity harvested are for the calendar year 1982 except for citrus fruits, avocados, olives; vegetables in Florida; sugarcane in Florida and Texas; and pineapples and coffee in Hawaii.

Citrus fruits—The data for Florida relate to the quantity harvested in the September 1981 through July 1982 harvest season, except limes that were harvested in the April 1982 through March 1983 harvest season. The data for Texas relate to the quantity harvested in the September 1981 through May 1982 harvest season. The data for States, other than Florida and Texas, relate to the quantity harvested in the 1981-82 harvest season.

Avocados—The data for California relate to the quantity harvested in the November 1981 through November 1982 harvest season and for Florida the April 1982 through March 1983 harvest season.

Olives—The data for California relate to the quantity harvested in the September 1981 through March 1982 harvest season.

Vegetables—The data for Florida relate to the crop harvested in the September 1981 through August 1982 harvest season.

Sugarcane for sugar—The data for Florida relate to the cuttings from November 1981 through April 1982, and for Texas the cuttings from October 1981 through April 1982.

Pineapples—The data for Hawaii relate to the quantity harvested in the year ending May 31, 1982.

Coffee—The data for Hawaii relate to the 1981-82 crop.

Acres and quantity harvested—Crops were reported in whole acres, except for the following crops which were reported in 10ths of acres: Irish potatoes, sweetpotatoes, tobacco, fruit and nut crops including land in orchards, berries, vegetables, and nursery and greenhouse products; and in Hawaii, taro, ginger root, and lotus root. Totals for crops reported in 10ths of acres were rounded to whole acres at the aggregate level during the tabulation process.

If two or more crops were harvested from the same land during the year, the acres would be counted for each crop. Therefore, the total acres of all crops harvested generally exceeds the acres of cropland harvested. The exception to this procedure is hay crops. When more than one cutting of hay was taken from the same acres, the acres are counted only once but the quantity harvested includes all cuttings. However, hay cut for both dry hay and green crop or silage would be reported for each applicable crop. For interplanted crops or "skip-row" crops, acres were to be reported according to the portion of the field occupied by each crop.

If a crop was planted but not harvested, the acres were not to be reported as harvested. These acres were to be reported in the "land use" section under the appropriate cropland items—cropland used only for pasture or grazing, cropland used for cover crops, cropland on which all crops failed, or cropland idle.

Corn and sorghum hogged or grazed were to be reported as "cropland harvested" and not as "cropland used only for pasture or grazing." Crop residue left in fields and later hogged or grazed was not to be reported as cropland pasture.

Quantity harvested was not obtained for crops such as vegetables; nursery and greenhouse products; corn cut for dry fodder, hogged or grazed; and sorghum, hogged or grazed.

Acres of land in bearing and nonbearing fruit orchards, citrus or other groves, vineyards, and nut trees were to be reported as harvested cropland regardless of whether the crop was harvested or failed. However, abandoned orchards were to be reported as cropland idle, not as harvested cropland and the individual abandoned orchard crop acres were not to be reported.

Land in orchards—This category includes land in bearing and nonbearing fruit trees, citrus or other groves, vineyards, and nut trees of all ages, including land on which all fruit crops failed. Respondents were instructed not to report abandoned plantings and plantings of less than 20 total fruit, citrus, or nut trees, or grapevines.

Crop units of measure—The regional report forms allowed the operator to report the quantity of field crops harvested in a unit of measure commonly used in the region. When the operator reported in a unit of measure different than the unit of measure published, the quantity harvested was converted to the published unit of measure.

Grapes could be reported in dry weight or fresh weight; plums and prunes in fresh weight or prunes in dry weight; and in Hawaii, coffee in pounds parchment or pounds cherry, and macadamia nuts in pounds husked, unshelled or pounds shelled. For other fruit and nut crops and citrus, the operator was given a choice of units of measure of pounds, tons, or boxes. The quantity harvested for these crops are published in pounds.

Write-in crops—To reduce the length of the report form, only the major crops for the region were prelisted. For other crops, the respondent was requested to look at a list of crops in each section and write in the crop name and its code. For crops that had no individual code listed on the report form, the respondent was to write in the crop name and code the crop into the appropriate "all other" category for that section. Write-in crops coded as "all other" were reviewed and assigned a specific code when possible. Crops not assigned a specific code were left in the appropriate "all other" category.

In some cases, the reviewers were unable to determine the specific crop reported by the respondent because of incomplete or generalized crop names. To ensure proper coding, most of these respondents were telephoned. Reports for those not telephoned were changed on the basis of other reports for the area.

Misreported or miscoded crops—In a few instances, tabulated data may be inaccurate because respondents misunderstood or misinterpreted questions on the report form. Data may have been reported on the wrong line or in the wrong section, or the wrong crop code may have been placed beside the name of a write-in crop. Some of these errors as well as some keying errors may not have been identified during processing and therefore were not corrected. Reports with significant acres of unusual crops for the area were examined to minimize the possibility that they were in error.

Changes in crop wording—Changes were made to the wording of selected crop items on the 1982 census forms. These items are listed with the wording used in 1978. The 1982 and 1978 data are comparable for all items, except improved pecans and wild and seedling pecans which were combined.

Dry edible beans, excluding dry limas—The 1978 wording was "dry field and seed beans."

Dry edible peas—The 1978 wording was "dry field and seed peas". Dry edible peas exclude Austrian winter peas, wrinkled seed peas, and southern peas or cowpeas.

Green cowpeas and green southern peas; cowpeas and southern peas for dry peas—The wording for these items was changed for 1982 to include the term "southern peas," a more common term for cowpeas.

Honey tangerines—The 1978 wording was "murcotts."

Other tangerines—The 1978 wording was "tangerines and mandarins."

Pecans—The 1978 categories "improved pecans" and "wild and seedling pecans" have been combined into "pecans" for 1982.

"See text" References

Items in the tables which carry the note "See text" are explained or defined in this section.

Data are based on a sample of farms—For 1982 and 1978, selected data were collected from only a sample of farms. These data are subject to sampling error. For 1982, the 5-page sample form was mailed to all large and specialized farms (based on expected

sales, acres, or standard industrial classification), all farms in Alaska and Hawaii, and approximately 17 percent of all other farms. Sample sections 22 through 28 of the 1982 census forms include inquiries on commercial fertilizer and lime, chemicals, interest expense, machinery and equipment, expenditures for energy and petroleum products, selected production expenses, and value of land and buildings. Estimates of the reliability of county totals for selected items are shown in table E.

Principal source of irrigation water—The acres irrigated by principal source were derived based on reported percentages of water obtained by source. See appendix C for an example of section 11, **Land Irrigated**. When irrigation water was obtained from two or more sources, the acres irrigated were included only once under the source from which the largest percentage of water was obtained.

1974 data apply only to individual or family operations (sole proprietorships) and partnerships—For 1974, farm operator characteristics were not collected from corporations, cooperatives, prison farms, grazing associations, and Indian reservations. For 1982 and 1978, characteristics and occupation of the senior partner or person in charge were collected from all farms.

Farms operated by Black and other races—This category includes Blacks, American Indians, Asian and Pacific Islanders, and all other racial groups other than White.

All other races—This category is primarily limited to persons native to or of ancestry from Mexico, the Caribbean, and Central and South America.

Farms reporting no interest expense—This category includes only reports without dollars reported and the "no" box checked for the yes/no screening question in section 24. See appendix C for an example of section 24, **Interest Expense**.

Total sales—This item represents the gross market value of all agricultural products sold before taxes and expenses in the census year including livestock, poultry, and their products; and crops, including nursery products, and hay. Respondents were asked to include landlords' and contractors' shares. As in prior census years, the value of commodities placed in CCC loans are included as sold. Sales of forest products were not included in 1978 or 1982. The 1974 data included sales of forest products from those places qualifying as farms through other agricultural production.

Farms with sales of less than \$2,500—In 1982 and 1978, this category included all farms, except abnormal farms, with actual sales of less than \$2,500. In 1974, farms with sales of less than \$2,500 but having the production potential for sales of \$2,500 and over are included in the category "\$2,500 to \$4,999."

Farms with sales of less than \$1,000—This category includes all farms, except abnormal farms, with actual sales of less than \$1,000 but having the production potential for sales of \$1,000 or more.

Abnormal farms—This category includes institutional farms, experimental and research farms, and Indian reservations. Institutional farms include those operated by hospitals, peni-

tentiaries, churches, schools, grazing associations, government agencies, etc. In prior censuses, a number of nongovernmental units such as church farms and FFA camps were classified as abnormal farms. In 1982, such nongovernmental units were classified as abnormal farms only when 50 percent or more of their products produced and intended for human consumption were utilized by the organization.

Value of agricultural products sold directly to individuals for human consumption—This category represents the value of agricultural products produced and sold directly to individuals for human consumption from roadside stands, farmers' markets, pick-your-own sites, etc. It excludes nonedible products such as nursery products, cut flowers, wool, etc. Sales of agricultural products by vertically integrated operations through their own processing and marketing operations were excluded.

Other livestock and livestock products—This category includes all livestock and livestock products not listed separately.

Value of livestock and poultry on farms—Data for the value of livestock and poultry on farms were obtained by multiplying the inventory of each major age and sex group by State average prices. The State average prices for cattle, hogs, sheep, angora goats, hens and pullets of laying age, and turkeys were obtained primarily from data published by the Statistical Reporting Service, USDA. Prices applied to other livestock and poultry were census-derived averages based primarily on reported value of sales in the census.

Poultry hatched—This category includes all poultry hatched during the year and placed or sold. Incubator egg capacity on December 31, 1982, is tabulated under the column heading Inventory and the number of poultry hatched is under the heading Sales.

Worms—Worm inventory consists of the number of standard worm beds in production. A standard worm bed is considered to be 24 cubic feet. Sales of worms are shown in pounds. Sales of worm castings are included in other livestock products sold.

Hay-alfalfa, other tame, small grain, wild, grass silage, green chop, etc.—Data shown for hay represent all hay crops, including grass silage, haylage, and hay crops cut and fed green (green chop). In production data, dry tons represent dry tonnage for the various hay categories and dry weight equivalents for grass silage and hay cut and fed green. The conversion used was 3 tons of green weight to 1 ton of dry weight.

Tame hay other than alfalfa, small grain, and wild hay—Data shown represent dry tons of hay harvested from clover, lespedeza, timothy, Bermuda grass, Sudan grass, and other types of legume and tame grasses.

Grass silage, haylage, and green chop hay—The 1978 categories "grass silage and haylage" and "hay crops cut and fed green (green chop)" have been combined into "grass silage, haylage, and green chop hay" in 1982.

Grapes—Farm operators were given the option of reporting the quantity of grapes harvested in dry weight or fresh weight. For publication purposes, all quantities of grapes harvested

have been converted to pounds fresh weight. The conversion used was 4.3 pounds fresh weight to 1 pound dry weight.

Plums and prunes—Farm operators were given the option of reporting the quantity of plums and prunes harvested in dry weight or fresh weight. For publication purposes, all quantities of plums and prunes harvested have been converted to pounds fresh weight. The conversion used was 3 pounds fresh weight to 1 pound dry weight.

Almonds—In 1982, the quantity of almonds harvested was reported in pounds of meats. For 1978, the quantity harvested was reported in the shell.

Other fruits and nuts—Data shown for other fruits and nuts relate to any fruits and nuts not having a specific code on the 1982 report form.

Land used for vegetables—Data are for the total land used for vegetable crops. The acres are reported only once, even though two or more harvests of a vegetable or more than one vegetable were harvested from the same acres.

Vegetables harvested for sale—The acres of vegetables harvested is the summation of the acres of individual vegetables harvested. All of the individual vegetable items may not be shown.

Nursery and greenhouse products grown for sale—These data are a summation of the individual items reported. All of the individual items may not be shown.

Other grains—These data are for the total market value of other grains sold including dry edible beans, dry lima beans, buckwheat, cowpeas and southern peas for dry peas, emmer and spelt, flaxseed, mixed grains, lentils, mustard seed, dry edible peas, popcorn, proso millet, rice, rye for grain, safflower, sunflower seed, triticale, and wild rice.

Value of crop production—This item represents the estimated value of all crops harvested during the 1982 crop year. Data for the value of crops harvested were obtained by multiplying the average estimated value per unit by the reported acres or quantity harvested. Generally, harvested units of production (pounds, bushels, bales, etc.) were multiplied by State estimates of prices per unit. If only acres harvested were reported, State estimates for value of production per acre were used. The State average production price and production value per acre used in these calculations were obtained in most part from publications of the Statistical Reporting Service, USDA. When USDA estimates were not available, Bureau of the Census statisticians made estimates using available sources such as data from adjacent States, respondent report forms, county extension agents, and other persons knowledgeable about specific crops.

FARMS CLASSIFIED BY SPECIFIED CHARACTERISTICS

State tables 44 through 50 present detailed 1982 data for all farms classified by specified characteristics—tenure of operator, type of organization, age and principal occupation of operator, size of farm (acres), value of agricultural products sold, and standard industrial classification. Other tables include data classified by value of sales groups, or other characteristics of the farm or the operator.

Farms by value of agricultural products sold or value of sales—In 1982, all farms except abnormal farms were tabulated by size based on reported sales. Thus, the category “farms with sales of \$2,500 to \$4,999” included only farms with actual sales of \$2,500 to \$4,999. Abnormal farms were not tabulated based on actual or potential sales. The category “farms with sales of less than \$1,000” included all farms, except abnormal farms, with actual sales of less than \$1,000 but having the production potential for sales of \$1,000 or more.

The sales size categories have been changed to be consistent with the standard business size categories issued by the Office of Management and Budget in 1982. Sales size categories “\$100,000 to \$249,999” and “\$250,000 to \$499,999” are used in this report; whereas, sales size categories “\$100,000 to \$199,999” and “\$200,000 to \$499,999” were used in prior censuses. In State table 11 and county table 3, the 1978 census data have been retabulated into the new sales size categories.

Farms by tenure of operator—The classifications of tenure used in the 1982 census were:

Full owners, who operate only land they own.

Part owners, who operate land they own and also land they rent from others.

Tenants, who operate only land they rent from others or work on shares for others.

Farms by type of organization—All farms were classified by type of organization in the 1982 census. The classifications used were:

Individual or family operation (sole proprietorship), excluding partnership and corporation.

Partnership operation, including family partnership.

Corporation, including family corporation.

Other, such as cooperative, estate or trust, institutional farm, etc.

Corporations were subclassified by two additional characteristics into:

- a. Family held
Other than family held
- b. More than 10 stockholders
10 or less stockholders

Farms by age and principal occupation of operator—Data on age and principal occupation were obtained from all operators in 1982. The principal occupation classifications used were:

Farming—The operator spent 50 percent or more of his/her worktime in 1982 in farming or ranching.

Other—The operator spent more than 50 percent of his/her worktime in 1982 in occupations other than farming or ranching.

Farms by size—All farms were classified into selected size groups according to the total land area in the farm. The land area of a farm is an operating unit concept and includes land owned and operated as well as land rented from others. Land rented to or assigned to a tenant was considered the tenant's farm and not the owner's.

Farms by standard industrial classification—In 1982, all agricultural production establishments (farms, ranches, nurseries, greenhouses, etc.) were classified by type of activity or activities using the standard industrial classification (SIC) system. These classifications, found in the 1972 SIC Manual¹, are used to promote uniformity and comparability in the presentation of statistical data collected by various agencies.

An establishment primarily engaged in crop production (major group 01) or livestock production (major group 02) is classified in the 4-digit industry and 3-digit industry group which accounts for 50 percent or more of the total value of sales of its agricultural products. If the total value of sales of agricultural products of an establishment is less than 50 percent from a single 4-digit industry, but 50 percent or more from the products of two or more 4-digit industries within the same 3-digit industry group, the establishment is classified in the miscellaneous industry of that industry group. Otherwise, it is classified as a general crop farm in industry 0191 or a general livestock farm in industry 0291.

Characteristics of all farms by selected SIC groupings are shown in State tables 15 and 50. The SIC groupings shown in State table 50, together with the associated products (value of sales representing 50 percent or more of the value of agricultural products sold during the year) on which the classification is based, are as follows:

Cash grains (011)—Wheat, rice, corn, soybeans, barley, buckwheat, cowpeas, dry field and seed beans and peas, emmer, field seeds, flaxseed, lentils, mustard seed, oats, popcorn, rye, safflower, sorghum, and other small grains.

Cotton (0131)—Cotton and cottonseed.

Tobacco (0132)—Tobacco.

Sugar crops, Irish potatoes, hay, peanuts, and other field crops (0133, 0134, 0139)—Sugarcane, sugar beets, Irish potatoes, alfalfa, broomcorn, clover, flax, hay, hops, mint, peanuts, sweetpotatoes, and timothy.

Vegetables and melons (016)—Vegetables and melons grown in the open.

Fruits and tree nuts (017)—Berries, grapes, tree nuts, citrus fruits, deciduous tree fruits, avocados, dates, figs, olives, pineapples, and tropical fruit.

Horticultural specialties (018)—Ornamental plants; nursery products, such as bulbs, florists' greens, flowers, shrubbery, flower and vegetable seeds and plants, and sod; mushrooms and vegetables grown under cover.

General farms, primarily crops (019)—Crops, including horticultural specialties, but less than 50 percent of sales from any single 3-digit industry group. Includes farms with no agricultural products sold reporting cropland harvested or cropland on which all crops failed.

Livestock, except dairy, poultry, and animal specialties (021)—Cattle, calves, hogs, sheep, goats, goat's milk, wool, and mohair.

¹Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.

Beef cattle, except feedlots (0212)—Production or feeding of beef cattle, except feedlots.

Dairy farms (024)—Production of cows' milk and other dairy products and raising of dairy heifer replacements.

Poultry and eggs (025)—Chickens, chicken eggs, turkeys, duck, geese, pheasants, pigeons, and quail.

Animal specialties (027)—Fur-bearing animals, rabbits, horses, ponies, bees, fish in captivity except fish hatcheries, worms, and laboratory animals.

General farms, primarily livestock (029)—Livestock and livestock products, including animal specialties, but less than 50 percent of sales from any single 3-digit industry group. Includes farms with no agricultural products sold reporting livestock or pasture.

STATISTICAL ADJUSTMENTS

The 1982 Census of Agriculture used two types of statistical adjustments—nonresponse and sample. These adjustments were necessary because, as noted previously, not all farms were surveyed for all items and some farms failed to respond to the numerous attempts to contact them.

Nonresponse

Farms for which no response was obtained from the mailout/mailback self-enumeration procedure were classified as "large" or "small" based on expected sales being above or below \$100,000. The small nonrespondents were classified even further using other mail list characteristics.

A short report form was then sent to a sample selected from the various classifications of small farms to obtain information needed to develop a State estimate of the number of nonrespondents that were in fact farms. If this second report form was not returned, then a telephone follow-up was attempted.

For all large farms, a telephone follow-up was conducted. Some operators could not be contacted or they refused to cooperate. In these cases, secondary sources such as ASCS county offices, extension agents, and previous census reports were utilized whenever possible to provide reports for tabulation.

State estimates of the percentage of nonrespondent farms were made for several strata. These estimates were then used to make estimates at the county level for each stratum. Respondent farms were then randomly selected within county stratum to represent the nonrespondent farms by having a nonresponse weight of two. All other respondent farms had a nonresponse weight of one.

The nonresponse adjustment procedure makes the assumption that the respondents and the nonrespondents have similar statistical properties. Also, the use of secondary sources for some large farms and the fact that a percentage of the sampled farms were not contacted by either mail or telephone is assumed not to affect the estimates for nonrespondents.

Table A partially measures the effect of nonresponse on selected major items at the State level. This estimate of the nonresponse rate measures only the effect of small whole farm nonresponse. The effect of the adjustment for nonresponse due to complete nonresponse among large farms and item

nonresponse among all farms is not included in table A. The percentages in table A indicate the potential for bias in published figures resulting from small farm nonresponse. However, large farm nonresponse does not necessarily indicate bias. Individual county nonresponse rates may differ substantially from the State value in table A.

Sample

Report forms containing additional sample inquiries (sections 22 through 28) were mailed to all farms in Alaska and Hawaii and to a sample of farms identified when the mail list was constructed. Other farms were selected into the sample with certainty because they were expected to be "large," to have a complex organizational structure, or to have special characteristics. The definition of large varied by State, from a low of 1,000 acres or \$100,000 sales to a high of 10,000 acres or \$500,000 sales. The median State level for the continental United States was 1,800 for acres and \$150,000 for sales. Large farms identified during processing also were included with certainty by sending the respondents a supplemental form containing only sample questions. In addition to large farms, all farms in counties containing less than 100 farms in 1978 and all farms in SIC groups with a small number of farms at the State level in 1978 were included in the sample with certainty. Farms in counties containing 100 to 199 farms in 1978 were sampled at a rate of 1 in 2. Farms in counties containing 200 or more farms in 1978 were sampled at a rate of 1 in 6.

The noncertainty samples were stratified into 128 strata formed by the 8 sales groups, 8 SIC groups, and 2 acre groups.

Sales	SIC	Acres
\$1 to \$999	011	0 to 69
\$1,000 to \$2,499	013	70 or more
\$2,500 to \$4,999	016, 018	
\$5,000 to \$9,999	017, 019	
\$10,000 to \$19,999	024, 021, except 0212	
\$20,000 to \$39,999	0212, 027	
\$40,000 to \$99,999	025	
\$100,000 or more	029	

This post-stratification was done to improve precision and to reduce the bias in all estimates by weighting the sample farms within stratum by the ratio of total farms to sample farms. If the calculated weight was greater than 12 in counties sampled at a rate of 1 in 6, or greater than 4 in counties sampled at a rate of 1 in 2, then the post-stratum was collapsed into another post-stratum. Collapsing of post-stratum also occurred if the stratum contained fewer than 10 sample farms.

Table A. **Percent of State Total Represented by Adjustment of Whole Farm Nonresponse: 1982**

Item	Percent of total
Farms number	9.5
Land in farms acres	7.5
Value of land and buildings \$1,000	6.3
Market value of agricultural products sold \$1,000	6.2
Harvested cropland acres	7.0
Corn for grain or seed acres	6.1
Wheat for grain acres	4.6
Inventory:	
Cattle and calves number	7.7
Hogs and pigs number	5.8
Hens and pullets of laying age number	1.6

Estimates were prepared for items in sections 22 through 28 of the report form by multiplying the data item for each farm in the sample by the sample weight assigned the farm. The weight for a certainty farm was 1. Sample weights for the final post-strata ranged from 1 to 24 because all exact weights (census total number of farms divided by the number of sample farms in the stratum) were converted to integers by a simple algorithm and then multiplied by 1 or 2 (the nonresponse weight).

NONSAMPLING ERRORS

Each census or survey is subject to error. In addition to sampling variability, errors arise from nonsample sources such as incorrect or incomplete reporting, processing, and the inability to obtain a report from each eligible reporting unit. For example, an operator may report the number of hogs and pigs sold but may not report the value of the sale. In other cases, the respondent indicated the presence of an item but not the quantity. The accuracy of a census count is determined by the joint effects of sampling and nonsampling errors. Thus, extensive efforts were made to keep errors introduced during clerical and electronic processing to a minimum level through the use of quality control, verification, and check measures on specific operations.

CENSUS COVERAGE

Although a complete and accurate count of farms, land in farms, and farm production is the aim of each nationwide census of agriculture, the complex structure of America's agriculture makes this difficult to achieve. Among the complexities are the many places to be included, the variety of arrangements under which farms are operated, the continuing changes in the relationship of operators to the farm operated, the expiration of leases and the initiation or renewal of leases, the problem of obtaining a complete list of agricultural operations, the difficulty of locating and identifying some types of farms, the operator's absence from the farm during the data collection period, and the operator's opinion that part or all of the operation does not qualify and should not be included in the census.

An evaluation of coverage has been conducted for each census of agriculture since 1945. Although the primary purpose of these evaluations is to identify problem areas and supply evidence as a basis for improvements, they also provide users of census data with estimates of the completeness of the census counts. The results of the coverage evaluation study were published for the 1978 census in Volume 5, Special Reports, part 3. An evaluation of coverage was conducted in 1982 to measure the extent of the undercount and overcount of farms in the census. A description of this evaluation will be in a separate **Coverage Evaluation** report. This report includes estimates of the net percentage of all farms, acres, and sales missed in the census.

Classification Problems

In 1978, the proportion of farms missed due to misclassification (1.8 percent) was higher for farms with small values of sales. The rate of misclassification was higher on (1) crop farms than livestock farms, (2) farms with a small number of acres than larger farms, or (3) tenant farms than full or part-owner farms. Full owners were misclassified more often than part owners. Farm operators over 55 years of age were misclassified more often than younger operators.

An evaluation study of classification errors was conducted in the 1982 Census of Agriculture and will be reported in **Coverage Evaluation**. A sample of mail list respondents was selected, and these addresses reenumerated to determine whether they were a farm or nonfarm. Two types of errors were identified; missed farms and overcounted farms. Missed farms were farm operations included on the mail list but classified in the census as nonfarms. Overcounted operations were non-farm operations classified in the census as farms.

Mail List Problems

A major problem with the use of a mail list is the failure to include all farms on the list. In 1978, approximately 10.8 percent of all farms were not included on the census mail list. There were several reasons for the farm operator's names not being included on the mail list—the operation may have been started after the mail list source was developed; the operation may not have been included on any source list used to construct the mail list; or the operation may have been removed from the list because of incorrectly identifying duplicates or falsely classifying it as a nonfarm prior to mailout.

A great many of the farms not included on the mail list were small in both acres and sales. The operator in many cases had a full time off-farm job and farmed part time. In 1978, the average size of farms and sales for all farms and farms not on mail list is given below.

	Average size	
	All farms	Farms not on mail list
Land (acres)	415	68
Sales (dollars)	\$43,618	\$4,709

RELIABILITY OF CENSUS ESTIMATES

The sources of possible sampling and nonsampling errors have been previously discussed. Some sources affected all the data; others affected only certain items or geographic levels. The results of these errors, bias and increased variability, are difficult to measure.

Census items were classified as either 100-percent or sample items. The 100-percent items were those asked of all farm operators. These included land in farms, harvested cropland, livestock inventory and sales, and crop acreages and quantities (sections 1 to 21 of the census report form). Variability in the 100-percent items is due to the variation associated with non-response imputation and response error. Estimation of this variation results in a standard error of an estimate originating in the selection of the sample of small nonrespondents at the State level. Sample items were items asked of approximately 1 in 4 farm operators and include value of land and building, value of farm machinery, energy expenses, and selected farm production expenses, such as hired farm labor and interest expense (sections 22 to 28 of the census report form). Variability in estimates of sample items is the effect of the sample selection and estimation procedure and all the factors affecting the variability of 100-percent items.

In the 1982 Census of Agriculture, the sample used is one of a large number of all possible samples of the same size that could have been selected using the same sample design. Esti-

mates derived from the different samples would differ from each other. The difference between a sample estimate and the average of all possible samples is called the sampling deviation. The standard or sampling error of a survey estimate is a measure of the variation among the estimates from all possible samples, and thus is a measure of the precision with which an estimate from a particular sample approximates the average result of all possible samples. The relative standard error of estimate (percent) is defined as the standard error of the estimate divided by the value being estimated.

As calculated for this report, the standard error of the estimate (percent) partially measures the effect of certain non-sampling errors but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples, between the estimate and the desired value. The accuracy of a survey result depends on both the sampling and nonsampling errors measured by the relative standard error of the estimate (percent) and the bias and other types of non-sampling error not measured.

If all possible samples were selected, each of those surveyed under essentially the same conditions, and an estimate and its estimated standard error were calculated from each sample then:

- a. Approximately 67 percent of the intervals from one standard error below the estimate to one standard error above the estimate would include the average value of all possible samples.
- b. Approximately 95 percent of the intervals from two standard errors below the estimate to two standard errors above the estimate would include the average value of all possible samples.

To illustrate the computations involved in the above confidence statements as related to average value of land and building estimates, assume that an estimate of a average value of land and buildings published for a particular county is \$276,741 and the relative standard error of the estimate (percent) for this estimate, as given in table D, is 2.8 percent, or 0.028. Multiplying \$276,741 by 0.028 yields \$7,749. Therefore, a 67-percent confidence interval is \$268,992 to \$284,490 (i.e.,

\$276,741 plus or minus \$7,749). If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately 2 out of 3 (67 percent) of these intervals would contain the figure obtained from a complete enumeration. Similarly, a 95-percent confidence interval is \$261,243 to \$292,239 (i.e., \$276,741 plus or minus $2 \times \$7,749$).

Tables B and C present the reliability of the estimates of the number of farms reporting a 100-percent or sample item at the county level. Both tables contain relative standard errors of estimate (percent) which were weighted over all counties in the State to arrive at an estimated value. In county table 12, for example, in column 2 the number of farms reporting hog and pig inventory is 35. From table B, an approximate relative standard error of estimate (percent) for the number of farms reporting hogs and pigs would be 0.8.

Table D presents State estimates of major items for all farms and for all farms with sales of \$10,000 or more and measures of their reliability. The estimate and the relative standard error of the estimate (percent) is given for selected 100-percent and sample items. The relative standard error of the estimate (percent) measures the variation associated with the small whole farm nonresponse adjustment. It does not measure census variability associated with complete nonresponse among large farms, partial or item nonresponse among all farms, response error or content error. The relative standard error of estimate (percent) for sample items measures both nonsampling and sampling error. It measures the variation associated with selecting a sample to estimate sample items as well as variability associated with adjustment for small farm nonresponse. The reliability of county estimates may vary substantially from each other and will usually be larger than the State estimate.

Table E presents the estimate of reliability at the county level for four major 100-percent items and six sample items. The relative standard error of the estimate (percent) for the same item differs among counties in a State. Reasons for this are: (1) differences among counties in the total number of farms, (2) the number of large farms included with certainty, (3) the size classifications of farms sampled, (4) the amount of non-response, (5) the general agricultural characteristics, and (6) the specific characteristic being measured.

Table B. Estimates of Reliability of Number of Farms in a County Reporting a 100-Percent Item: 1982

Farms	Estimated relative standard error of estimate (percent)
Number of farms reporting:	
25	0.8
50	0.8
75	0.7
100	0.7
150	0.7
200	0.7
300	0.7
500	0.7
750	0.7
1,000	0.7
1,500	0.7
2,000	0.7

Note: 100-percent items are items included in sections 1 to 21 of the report form (appendix C).

Table C. Estimates of Reliability of Number of Farms in a County Reporting a Sample Item: 1982

Farms	Estimated relative standard error of estimate (percent)
Number of farms reporting:	
25	61.3
50	35.3
75	25.6
100	20.3
150	14.7
200	11.7
300	8.5
500	5.6
750	4.1
1,000	3.3
1,500	2.4
2,000	1.9

Note: Sample items are items included in sections 22 to 28 of the report form (appendix C).

Table D. Estimates of Reliability of State Totals for Selected Items: 1982

[For meaning of abbreviations and symbols, see introductory text]

Item	All farms		Farms with sales of \$10,000 or more	
	Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)
Farms.....number.....	82 199	.1	57 049	.1
Land in farms.....acres.....	17 234 127	.1	15 132 720	.1
Value of land and buildings ¹ , average per farm.....dollars.....	232 606	.4	297 070	.4
Total cropland.....farms.....	78 060	.1	55 575	.1
.....acres.....	11 769 183	.1	10 785 973	.1
Harvested cropland.....farms.....	75 734	.1	55 002	.1
.....acres.....	10 062 154	.1	9 411 818	.1
Irrigated land.....farms.....	1 695	.1	1 399	.1
.....acres.....	259 270	-	257 287	-
Market value of agricultural products sold.....farms.....	82 199	.1	57 049	.1
.....\$1,000.....	4 854 582	.1	4 758 053	.1
Crops, including nursery and greenhouse products.....farms.....	41 093	.1	27 708	.1
.....\$1,000.....	943 422	.1	899 467	.1
Livestock, poultry, and their products.....farms.....	67 484	.1	51 950	.1
.....\$1,000.....	3 911 160	.1	3 858 586	.1
Poultry and poultry products.....farms.....	4 684	.1	2 836	.1
.....\$1,000.....	139 972	-	139 022	-
Livestock and poultry inventory:				
Cattle and calves.....farms.....	62 836	.1	48 999	.1
.....number.....	4 458 683	.1	4 213 590	.1
Hogs and pigs.....farms.....	11 940	.1	9 111	.1
.....number.....	1 479 028	.1	1 421 940	.1
Hens and pullets of laying age.....farms.....	7 302	.1	4 175	.1
.....number.....	4 347 340	.1	4 210 017	.1
Livestock and poultry sales:				
Cattle and calves.....farms.....	61 246	.1	49 286	.1
.....number.....	1 806 185	.1	1 712 795	.1
Hogs and pigs.....farms.....	12 059	.1	9 389	.1
.....number.....	2 658 032	.1	2 561 589	.1
Broilers and other meat-type chickens.....farms.....	897	.2	449	.1
.....number.....	8 803 544	.1	8 744 743	.1
Crops:				
Corn for grain or seed.....farms.....	52 645	.1	43 786	.1
.....acres.....	3 257 104	.1	3 125 291	.1
.....bushels.....	332 327 822	.1	321 775 955	.1
Wheat for grain.....farms.....	4 276	.1	3 578	.1
.....acres.....	122 029	.1	112 340	.1
.....bushels.....	5 505 837	.1	5 151 809	.1
Sorghum for grain or seed.....farms.....	12	-	9	-
.....acres.....	(D)	-	187	-
.....bushels.....	11 099	-	7 086	-
Soybeans for beans.....farms.....	5 667	.1	4 476	.1
.....acres.....	332 235	.1	306 426	.1
.....bushels.....	10 619 901	.1	10 045 675	.1
Hay--alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text).....farms.....	64 770	.1	49 422	.1
.....acres.....	4 491 368	.1	4 125 529	.1
Vegetables harvested for sale (see text).....farms.....	4 262	.1	3 246	.1
.....acres.....	280 326	.1	267 266	.1
Land in orchards.....farms.....	1 172	.2	446	.2
.....acres.....	15 052	.3	10 700	.2
Selected farm production expenses ¹ :				
Livestock and poultry purchased.....farms.....	30 958	1.1	22 425	1.2
.....\$1,000.....	261 923	1.5	250 449	1.6
Feed for livestock and poultry.....farms.....	62 210	.5	48 225	.5
.....\$1,000.....	667 669	.6	652 985	.6
Seeds, bulbs, plants, and trees.....farms.....	66 683	.4	52 803	.4
.....\$1,000.....	117 535	.5	112 631	.5
Commercial fertilizer.....farms.....	60 964	.5	48 729	.5
.....\$1,000.....	262 517	.6	254 594	.6
Other agricultural chemicals.....farms.....	52 981	.6	44 070	.6
.....\$1,000.....	90 030	.7	87 148	.7
Hired farm labor.....farms.....	38 398	.8	33 326	.8
.....\$1,000.....	279 154	.7	273 821	.7
Energy and petroleum products.....farms.....	81 948	.2	56 994	.3
.....\$1,000.....	382 519	.4	362 864	.4
Interest expense.....farms.....	48 252	.7	40 202	.7
.....\$1,000.....	531 636	.7	512 297	.7
Estimated market value of all machinery and equipment on place ¹farms.....	82 139	.2	57 027	.3
.....\$1,000.....	4 410 681	.5	4 046 032	.6

¹Data are based on a sample of farms.

Table E. Estimates of Reliability for County Totals for Selected Items: 1982

[For meaning of abbreviations and symbols, see introductory text]

Geographic area	Farms		Land in farms		Average value of land and buildings per farm ¹		Harvested cropland		Market value of agricultural products sold	
	Total (number)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)	Value (dollars)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)
Adams	435	1.3	119 215	.9	254 984	4.8	65 407	1.1	28 315	1.4
Ashland	298	1.5	69 251	1.0	111 819	11.2	22 551	1.3	6 196	1.7
Barron	1 852	.8	385 555	.5	175 699	2.6	207 202	.6	133 793	.4
Bayfield	441	1.4	110 434	.8	119 635	6.2	42 444	1.1	11 146	1.1
Brown	1 355	.7	228 643	.5	249 330	4.8	181 779	.5	86 336	.5
Buffalo	1 105	.8	365 259	.5	228 559	4.6	155 340	.5	74 133	.7
Burnett	512	1.3	104 523	.9	117 553	13.2	43 772	1.0	13 481	1.1
Calumet	1 050	.8	170 376	.5	254 842	4.5	135 498	.5	69 137	.5
Chippewa	1 766	.8	421 815	.5	191 702	3.4	216 215	.5	98 138	.5
Clark	2 442	.8	469 076	.5	181 334	3.5	255 950	.6	129 745	.5
Columbia	1 637	.8	355 120	.4	293 663	2.4	240 659	.4	108 892	.7
Crawford	1 140	1.1	277 939	.9	180 008	7.5	107 901	.8	45 160	.8
Dane	3 130	.6	601 614	.4	299 502	1.6	432 314	.4	266 752	.3
Dodge	2 353	.6	431 558	.4	278 414	2.2	330 270	.3	174 295	.4
Door	1 032	.8	155 318	.6	167 904	4.8	97 884	.6	35 696	.6
Douglas	364	1.5	85 242	.9	105 835	6.7	26 850	1.2	7 925	3.6
Dunn	1 673	.8	412 235	.6	209 412	2.6	234 311	.6	97 451	.5
Eau Claire	1 088	.9	214 323	.7	171 470	3.7	115 384	.8	47 889	.7
Florence	104	2.5	23 976	2.3	159 548	7.9	8 170	3.2	2 850	3.8
Fond du Lac	1 922	.6	367 782	.3	285 222	2.2	287 440	.4	132 520	.4
Forest	133	2.4	29 589	1.6	105 707	6.9	8 417	1.9	2 677	2.0
Grant	2 560	.7	654 642	.4	291 829	2.2	350 347	.4	187 024	.4
Green	1 517	.9	338 889	.6	294 981	2.6	232 096	.6	118 223	.6
Green Lake	705	1.1	164 188	.6	333 479	5.1	112 754	.7	46 085	.7
Iowa	1 435	.9	406 294	.6	295 858	3.2	212 834	.8	109 836	1.2
Iron	65	3.7	14 160	3.1	104 985	.6	4 285	4.1	1 522	3.3
Jackson	897	1.1	247 136	.9	210 735	4.1	110 111	.8	52 157	.8
Jefferson	1 602	.8	269 791	.4	243 498	2.5	192 767	.4	109 898	.4
Juneau	825	1.2	196 754	.7	217 115	3.7	101 595	.7	41 430	1.0
Kenosha	554	1.3	100 738	.8	363 823	3.2	81 144	.8	36 752	1.1
Kewaunee	1 124	.8	182 056	.4	202 241	3.0	135 728	.4	67 874	.5
La Crosse	860	.9	202 483	.6	218 098	3.6	89 994	.6	46 337	.6
Lafayette	1 411	.8	386 147	.5	380 109	1.8	252 965	.4	126 815	.5
Langlade	573	1.3	145 643	.7	194 508	4.9	67 466	.7	37 362	.8
Lincoln	579	1.3	123 566	.7	154 275	5.4	47 856	.9	23 594	.8
Manitowoc	1 660	.6	283 315	.3	227 780	2.4	214 132	.4	105 552	.4
Marathon	3 245	.6	605 780	.4	170 791	2.7	312 917	.4	173 296	.4
Marquette	844	1.2	181 825	.8	147 576	3.8	86 373	.9	31 962	.8
Marquette	549	1.3	150 775	.8	213 213	6.6	79 295	.8	28 605	.8
Menominee	6	5.2	350	3.4	56 000	3.0	(D)	1.7	81	1.8
Milwaukee	167	2.3	13 991	2.8	197 766	5.2	(D)	3.0	7 967	1.3
Monroe	1 774	.8	368 293	.6	191 945	4.5	166 561	.6	83 350	.6
Oconto	1 235	.9	244 472	.5	197 371	4.8	146 398	.5	61 495	.5
Oneida	117	2.0	41 112	.8	279 838	2.7	10 109	.8	7 205	.4
Outagamie	1 700	.7	294 023	.4	327 865	2.0	226 238	.4	117 654	.5
Ozaukee	527	1.1	89 331	.8	272 315	4.0	70 637	.8	30 778	1.1
Pepin	469	1.3	119 393	.9	217 011	5.0	64 435	1.1	24 480	1.1
Pierce	1 425	.9	298 538	.6	204 952	2.9	179 445	.6	68 782	.6
Polk	1 721	.9	338 881	.5	162 724	3.2	173 464	.6	72 755	.6
Portage	1 119	.9	283 731	.5	242 294	4.3	158 078	.5	82 622	.4
Price	558	1.0	132 893	.6	118 984	5.0	35 380	.8	15 870	.7
Racine	814	1.0	136 852	.6	327 053	3.9	109 005	.5	57 193	.4
Richland	1 234	.9	299 560	.7	200 446	3.7	127 154	.8	59 517	.7
Rock	1 680	.8	362 206	.4	399 610	2.4	287 396	.4	122 776	.3
Rusk	813	1.2	188 240	.7	136 304	5.7	68 850	.8	30 563	.9
St. Croix	1 741	.8	352 472	.5	218 866	2.7	221 508	.5	93 663	.6
Sauk	1 635	.7	388 255	.4	257 075	3.0	214 470	.4	104 384	.5
Sawyer	200	1.9	48 787	2.1	140 502	10.2	18 755	2.6	8 246	2.0
Shawano	1 761	.7	333 705	.4	193 604	2.7	194 669	.4	103 091	1.1
Sheboygan	1 349	.7	217 888	.5	242 878	3.0	171 734	.4	79 238	.5
Taylor	1 138	1.0	258 243	.6	163 193	4.6	109 510	.6	55 752	.6
Trempealeau	1 606	.8	384 196	.5	186 362	4.9	196 534	.6	94 508	.7
Vernon	2 414	.7	416 215	.5	168 011	3.4	187 228	.5	90 471	.5
Vilas	48	3.4	7 499	3.0	221 125	.2	1 878	3.5	2 825	1.9
Walworth	1 060	1.0	249 479	1.0	438 461	2.4	197 285	1.0	88 730	.9
Washburn	390	1.5	107 034	1.0	160 723	14.9	36 243	1.4	13 233	1.2
Washington	1 103	.7	163 788	.5	259 484	4.9	121 771	.5	53 951	.6
Waukesha	974	1.0	149 259	.7	323 661	4.0	111 436	.7	51 191	.5
Waupaca	1 488	.7	274 368	.4	194 198	2.7	167 046	.5	75 989	.5
Wausara	783	1.1	185 788	.7	242 678	4.1	112 739	.7	54 847	.6
Winnebago	1 060	.9	191 012	.5	247 681	2.7	145 102	.5	58 716	.6
Wood	1 253	.9	242 248	.5	170 839	2.9	119 217	.6	65 808	.5

See footnotes at end of table.

Table E. Estimates of Reliability for County Totals for Selected Items: 1982—Con.

[For meaning of abbreviations and symbols, see introductory text]

Geographic area	Selected farm production expenses ¹								Estimated market value of all machinery and equipment ¹	
	Livestock and poultry purchased		Commercial fertilizer		Hired farm labor		Energy and petroleum products		Total (\$1,000)	Relative standard error of estimate (percent)
	Total (\$1,000)	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)	Total (\$1,000)	Relative standard error of estimate (percent)		
Adams	789	25.9	3 215	5.4	1 765	5.3	2 501	3.3	21 536	8.3
Ashland	57	23.8	130	11.0	253	28.1	617	6.6	8 611	8.5
Barron	3 567	9.6	5 530	3.9	6 249	4.8	8 627	2.3	92 310	3.9
Bayfield	287	13.1	179	9.7	814	12.1	1 049	7.0	13 451	6.8
Brown	4 787	16.4	4 432	6.2	5 237	5.3	6 892	3.8	84 752	4.4
Buffalo	5 241	20.9	3 333	5.4	3 283	5.0	6 009	3.8	68 323	4.7
Burnett	553	54.5	794	17.3	276	22.0	1 274	7.1	18 754	12.2
Calumet	1 729	9.2	2 602	5.0	4 198	4.7	5 381	3.1	76 210	4.9
Chippewa	3 081	14.4	4 975	4.0	5 502	5.9	8 572	2.4	96 110	3.5
Clark	4 392	11.9	5 693	4.6	6 825	6.2	10 085	2.6	112 733	3.5
Columbia	11 549	9.0	7 342	5.0	5 043	4.3	8 692	2.5	86 744	3.9
Crawford	2 753	30.4	1 390	5.0	2 432	7.7	3 999	3.7	44 535	6.3
Dane	16 730	8.6	14 118	2.2	14 497	3.4	16 699	1.6	169 817	3.1
Dodge	11 024	3.9	8 997	2.4	8 527	3.4	12 723	1.7	153 093	3.1
Door	716	17.9	1 585	6.0	3 403	9.2	3 255	4.7	51 544	9.0
Douglas	328	15.1	46	18.2	598	15.4	662	14.8	7 481	9.9
Dunn	4 557	9.9	6 179	4.3	5 928	6.0	7 889	2.6	90 704	3.7
Eau Claire	1 668	5.8	2 475	6.0	3 113	14.2	3 818	4.0	50 724	6.0
Florence	195	46.6	131	3.6	123	6.4	243	4.3	3 827	6.7
Fond du Lac	5 488	7.6	8 217	2.6	6 823	3.5	11 127	2.5	123 736	2.9
Forest	169	27.8	117	21.3	130	20.1	296	9.3	3 446	10.5
Grant	15 772	5.9	10 451	2.7	6 980	3.9	15 260	1.9	168 391	2.7
Green	6 233	6.5	5 348	3.3	5 713	5.3	9 473	2.5	103 913	4.9
Green Lake	3 236	12.9	3 521	5.6	1 897	7.3	3 991	4.5	42 474	4.9
Iowa	8 983	6.2	5 747	3.5	5 749	5.1	8 635	2.6	89 615	4.3
Iron	110	.1	62	.4	93	.2	148	.4	1 798	.5
Jackson	1 663	21.0	2 158	6.6	2 907	10.5	3 893	4.7	48 146	4.0
Jefferson	6 320	5.8	6 056	3.7	9 413	3.0	7 309	1.9	87 041	3.5
Juneau	1 701	28.5	2 648	10.1	2 982	9.2	4 040	6.5	39 637	7.1
Kenosha	1 609	7.9	2 956	3.1	2 976	8.1	2 870	3.0	30 346	3.7
Kewaunee	3 087	8.9	3 009	8.1	4 919	4.4	5 836	3.2	69 234	4.8
La Crosse	2 189	12.4	2 063	4.4	2 479	6.7	3 490	3.6	42 907	6.1
Lafayette	8 508	5.1	7 744	2.6	4 934	4.3	9 801	2.0	99 156	3.0
Langlade	1 333	19.5	1 900	2.9	3 701	5.5	2 706	4.8	31 238	4.9
Lincoln	1 914	36.3	923	5.9	1 354	10.0	1 804	6.7	23 362	8.1
Manitowoc	3 712	9.1	5 194	2.6	6 936	3.9	7 984	2.2	101 419	3.0
Marathon	5 340	7.8	6 947	3.6	10 287	4.4	12 911	2.4	163 723	2.7
Marinette	2 362	13.8	1 898	5.6	1 680	14.5	2 912	4.0	38 876	6.1
Marquette	1 598	13.3	2 217	5.7	2 063	6.1	2 712	3.4	28 245	8.7
Menominee	(D)	13.7	(D)	1.7	-	-	12	2.9	108	2.1
Milwaukee	56	25.3	206	8.6	1 380	2.3	1 018	2.8	5 086	5.0
Monroe	3 345	16.8	3 494	6.1	4 679	4.5	6 341	3.1	79 666	4.0
Oconto	2 927	21.9	4 474	6.9	3 574	7.0	5 629	5.4	73 602	5.3
Oneida	242	7.9	468	2.7	1 374	1.3	617	3.0	5 583	4.4
Outagamie	5 930	11.5	7 659	4.4	6 739	4.7	9 109	3.5	108 107	2.5
Ozaukee	990	20.1	2 087	5.5	2 417	10.8	2 587	2.9	35 074	7.5
Pepin	1 346	52.4	1 427	8.5	1 551	13.0	2 277	4.6	27 797	5.4
Pierce	4 489	7.9	3 822	3.8	3 461	6.7	6 042	2.6	67 824	3.5
Polk	4 528	16.5	3 543	4.4	3 800	6.7	5 776	3.8	68 704	3.7
Portage	8 772	4.9	6 429	3.9	6 690	2.2	5 893	2.7	65 566	4.7
Price	489	15.0	432	13.6	1 085	9.2	1 447	4.8	15 351	5.5
Racine	3 859	8.6	3 932	4.7	5 230	4.9	5 127	4.2	47 433	4.7
Richland	3 732	15.4	2 183	4.6	3 286	8.3	4 766	3.2	54 972	4.8
Rock	8 306	2.7	10 926	2.2	6 177	3.0	9 990	1.9	95 419	2.6
Rusk	925	21.0	842	11.9	1 518	18.6	2 515	6.3	28 235	7.5
St. Croix	5 005	6.1	5 403	4.2	4 948	6.2	7 079	2.5	88 011	3.9
Sauk	5 165	10.8	5 669	4.2	5 174	3.5	8 651	2.3	96 582	3.6
Sawyer	157	10.7	252	6.2	617	10.4	551	8.3	7 148	16.7
Shawano	6 584	7.4	4 541	3.5	5 561	5.8	7 618	2.1	100 406	3.7
Sheboygan	3 013	13.0	4 121	3.9	4 911	5.6	6 149	2.9	80 659	3.9
Taylor	3 261	17.6	1 734	7.8	2 884	7.5	4 691	5.1	56 873	6.0
Trempealeau	7 734	10.0	4 633	5.1	4 854	6.2	7 737	2.9	80 041	3.3
Vernon	5 705	10.9	3 097	3.9	4 432	6.6	7 318	3.1	89 682	4.0
Vilas	(D)	-	(D)	.2	448	-	182	.2	2 473	.1
Walworth	6 149	8.5	7 309	2.9	4 439	4.1	6 678	2.8	69 433	3.7
Washburn	784	26.5	602	10.8	802	13.7	1 291	6.8	12 570	8.6
Washington	1 662	9.5	2 802	5.3	3 444	5.3	4 629	1.9	60 002	3.3
Waukesha	1 932	7.6	3 453	5.4	4 028	3.9	3 873	2.7	43 224	5.0
Waupaca	3 303	14.1	4 077	3.9	5 041	4.9	6 222	3.1	79 806	3.9
Waushara	2 386	14.3	4 673	5.4	4 143	4.8	4 285	3.2	51 366	5.3
Winnebago	1 425	6.4	3 475	3.5	3 318	5.0	5 265	3.9	62 669	3.7
Wood	2 346	14.0	2 392	4.9	5 065	8.1	4 973	2.8	63 245	4.2

¹Data are based on a sample of farms.

APPENDIX B.

Effect of the Area Sample on Census Comparability

The 1982 and 1978 Censuses were conducted primarily by mail. Despite every effort to assemble a complete list, a small portion of the Nation's farms were not included on the census mail list. To improve the coverage of the 1978 Census, especially in counting the number of small farms, the mail-out/mail-back enumeration was supplemented by the direct enumeration of all households in a sample of areas in all States, except Alaska and Hawaii. Due to budget reductions, the direct enumeration sample was eliminated in the 1982 Census.

In late 1978, enumerators visited all households in approximately 6,400 segments in rural areas (areas with less than 2,500 population) and completed a census form for each agricultural operation. These forms were then matched to the census mail list. Data from those cases which were not matched to the mail list were used to estimate the number and characteristics of farms not on the mail list at the State, regional, and national levels. No county-level estimates were developed because the area sample size was insufficient for reliable estimates at that level.

The U.S., region, and State data for 1978 shown in the 1978 Census of Agriculture publications included data for farms represented on the mail list plus estimates from the area sample for farms not on the mail list. To provide comparable data for 1982 and 1978, estimates from the area sample have been subtracted from the 1978 data. Thus, all 1978 data presented in the 1982 Census of Agriculture publications include data only for farms on the 1978 mail list.

In 1978, the area sample farms accounted for 9 percent of all farms in the United States, but only 1 percent of the total value of agricultural products sold and 1 percent of the land in farms. The area sample farms represented 25 percent of all farms with sales of less than \$2,500. The contribution of the area sample farms to the total farm count varied widely by State, from a low of 2.0 percent in North Dakota to a high of 23.8 percent in New Hampshire.

The following table shows the 1982 results and adjusted 1978 data for farms on the mail list, as well as 1978 data which include estimates for farms not on the mail list.

Effect of 1978 Area Sample on Census Comparability: 1982 and 1978

[For meaning of abbreviations and symbols, see introductory text]

Item	Data published in 1982 Census of Agriculture		Data published in 1978 Census of Agriculture		Percent of 1978 total represented by area sample portion
	1982	1978 adjusted ¹	1978 total ²	Portion of total from 1978 area sample ³	
Farms.....number...	82 199	86 505	89 945	3 440	3.8
Land in farms.....acres...	17 234 127	17 838 982	18 106 245	267 263	1.5
Value of land and buildings ⁴ , average per farm.....dollars...	232 606	175 095	171 616	84 122	(X)
Total cropland.....farms...	78 060	83 666	86 706	3 040	3.5
Harvested cropland.....acres...	11 769 183	12 088 709	12 240 963	152 254	1.2
.....farms...	75 734	81 708	84 356	2 648	3.1
Irrigated land.....acres...	10 062 154	9 863 051	9 965 480	102 429	1.0
.....farms...	1 695	1 645	1 645	-	-
.....acres...	259 270	234 557	234 557	-	-
Farms by size:					
1 to 9 acres.....	4 254	3 117	3 508	391	11.1
10 to 49 acres.....	10 256	9 447	10 991	1 544	14.0
50 to 69 acres.....	3 688	3 853	4 173	320	7.7
70 to 99 acres.....	8 341	9 479	9 610	131	1.4
100 to 139 acres.....	9 659	11 158	11 589	431	3.7
140 to 179 acres.....	9 514	11 211	11 451	240	2.1
180 to 219 acres.....	7 892	8 908	9 068	160	1.8
220 to 259 acres.....	6 521	7 048	7 079	31	.4
260 to 499 acres.....	16 442	17 041	17 233	192	1.1
500 to 999 acres.....	4 682	4 437	4 437	-	-
1,000 to 1,999 acres.....	778	672	672	-	-
2,000 acres or more.....	172	134	134	-	-
Market value of agricultural products sold.....\$1,000...	4 854 582	3 444 600	3 467 821	23 221	.7
Crops, including nursery and greenhouse products.....\$1,000...	943 422	671 094	674 910	3 816	.6
Livestock, poultry, and their products.....\$1,000...	3 911 160	2 773 506	2 792 910	19 404	.7
Farms by value of sales:					
Less than \$2,500.....	10 768	11 653	13 620	1 967	14.4
\$2,500 to \$4,999.....	6 472	8 119	8 421	302	3.6
\$5,000 to \$9,999.....	7 884	9 901	10 272	371	3.6
\$10,000 to \$19,999.....	8 940	11 395	11 875	480	4.0
\$20,000 to \$39,999.....	11 304	16 248	16 488	240	1.5
\$40,000 to \$99,999.....	22 951	22 715	22 795	80	.4
\$100,000 to \$249,999 ⁵	11 808	5 606	5 606	-	-
\$250,000 to \$499,999 ⁵	1 581	605	605	-	-
\$500,000 or more.....	465	231	231	-	-
Abnormal farms.....	26	32	32	-	-

See footnotes at end of table.

Effect of 1978 Area Sample on Census Comparability: 1982 and 1978—Con.

[For meaning of abbreviations and symbols, see introductory text]

Item	Data published in 1982 Census of Agriculture		Data published in 1978 Census of Agriculture		Percent of 1978 total represented by area sample portion
	1982	1978 adjusted ¹	1978 total ²	Portion of total from 1978 area sample ³	
Farms by type of organization:					
Individual or family	70 842	76 016	79 436	3 420	4.3
Partnership	8 937	8 749	8 769	20	.2
Corporation	2 193	1 555	1 555	-	-
Other—cooperative, estate or trust, institutional, etc.	227	185	185	-	-
Tenure of operator:					
Full owners	48 529	53 689	55 867	2 178	3.9
Part owners	26 617	26 645	27 236	591	2.2
Tenants	7 053	6 171	6 842	671	9.8
Operators by principal occupation:					
Farming	57 939	59 222	60 004	782	1.3
Other than farming	24 260	27 283	29 941	2 658	8.9
Female operators:					
Farms	3 256	3 132	3 163	31	1.0
Land in farms	454 370	444 240	444 395	155	(Z)
Operators by race:					
White	82 035	86 298	89 738	3 440	3.8
Black and other races	164	207	207	-	-
Corn for grain or seed	farms.. 52 645	56 602	58 173	1 571	2.7
.....	acres.. 3 257 104	2 975 928	3 000 662	24 734	.8
Wheat for grain	farms.. 4 276	2 403	2 563	160	6.2
.....	acres.. 122 029	42 655	45 615	2 960	6.5
Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc. (see text)	farms.. 64 770	71 292	73 418	2 126	2.9
.....	acres.. 4 491 368	4 771 840	4 829 796	57 956	1.2
Vegetables harvested for sale	farms.. 4 262	5 188	5 330	142	2.7
.....	acres.. 280 326	319 090	320 344	1 253	.4
Land in orchards	farms.. 1 172	1 285	1 365	80	5.9
.....	acres.. 15 052	13 806	13 886	80	.6
Cattle and calves inventory	farms.. 62 836	64 192	66 544	2 352	3.5
.....	number.. 4 458 683	3 971 214	4 010 848	39 634	1.0
Hogs and pigs inventory	farms.. 11 940	15 713	16 573	860	5.2
.....	number.. 1 479 028	1 473 818	1 491 178	17 360	1.2
Chickens 3 months old or older inventory	farms.. 7 373	9 284	10 748	1 464	13.6
.....	number.. 4 926 499	4 499 970	4 556 208	56 238	1.2
Estimated market value of all machinery and equipment ⁴	\$1,000.. 4 410 681	3 475 058	3 511 869	36 811	1.0
Energy and petroleum products ⁴	\$1,000.. 382 519	208 074	210 361	2 287	1.1
Hired farm labor, workers working 150 days or more ⁴	farms.. 21 121	18 027	18 107	80	.4
.....	number.. 46 478	37 885	37 965	80	.2

¹Includes data only for farms on 1978 mail list—excludes area sample data.

²Includes mail list enumeration and area sample data.

³Data from farms not on mail list.

⁴Data are based on a sample of farms.

⁵Retabulated 1978 data for 1982 comparability.

APPENDIX C.

Report Form and Information Sheet

DUE BY FEBRUARY 15, 1983

O.M.B. APPROVAL NO. 0607-0408: EXPIRES 12/84

FORM 82-A0303 (2-12-82)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

1982 CENSUS OF AGRICULTURE

Please complete this form and RETURN TO

BUREAU OF THE CENSUS
1201 East Tenth Street
Jeffersonville, Indiana 47133

Note -- If your records are not available, reasonable estimates may be used. If you cannot file by February 15, a time extension request may be sent to the above address. Include your 12-character Census File Number (CFN) as shown in your address label in all correspondence to us.

If you received more than one report form, enter extra Census File Number(s) here and return extra copies with your completed report.

035	036	037	038
039	040	041	042

CENSUS USE ONLY

NOTICE -- Response to this inquiry is required by law (title 13, U.S. Code). By the same law YOUR REPORT TO THE CENSUS BUREAU IS CONFIDENTIAL. It may be seen only by sworn Census employees and may be used only for statistical purposes. Your report CANNOT be used for purposes of taxation, investigation, or regulation. The law also provides that copies retained in your files are immune from legal process.

In correspondence pertaining to this report, please refer to your Census File Number (CFN)

82-A0303

(Please correct errors in name, address, and ZIP code.)

SECTION 1 ACREAGE IN 1982

If the acres you operated in 1982 changed during the year, refer to the INFORMATION SHEET, Section 1.

Report land owned, rented, or used by you, your spouse, or by the partnership, corporation, or organization for which you are reporting. Include ALL LAND, REGARDLESS OF LOCATION OR USE -- cropland, pastureland, rangeland, woodland, idle land, house lots, etc.

	None	Number of acres
1. All land owned.....	<input type="checkbox"/>	043
2. All land rented or leased FROM OTHERS, including land worked by you on shares, used rent free, in exchange for services, payment of taxes, etc. Include leased Federal, State, and railroad land. (DO NOT include land used on a per-head basis under a grazing permit.) Also complete item 5 below.....	<input type="checkbox"/>	044
3. All land rented or leased TO OTHERS, including land worked on shares by others and land subleased. Also complete item 6 below.....	<input type="checkbox"/>	045
4. ACRES IN THIS PLACE -- ADD acres owned (item 1) and acres rented (item 2), then SUBTRACT acres rented TO OTHERS (item 3), and enter the result in this space.....		046

For this census report these are the "ACRES IN THIS PLACE."

If the entry is zero please refer to the INFORMATION SHEET, Section 1.

5. If you rented land FROM OTHERS (item 2) enter the following information for each landlord.

Name of landlord	Mailing address (Include ZIP code)	Number of acres

List additional landlords on a separate sheet of paper.

6. If you rented land TO OTHERS (item 3), enter the following information for each renter.

Name of renter	Mailing address (Include ZIP code)	Number of acres

List additional renters on a separate sheet of paper.

a. Of the land you rented or leased to others, how many acres did you own?..... ☐ 053 Acres

7. During 1982, did you have any Federal or state grazing permits on a per-head basis; such as Forest Service, Taylor Grazing, Indian Reservations, etc.?..... ☐ Yes ☐ No 054

8. How many acres were diverted (or set-aside) under Federal commodity acreage reduction programs in 1982?..... ☐ 055 Acres

9. LOCATION OF AGRICULTURAL ACTIVITY FOR THIS PLACE

	County name	State	Number of acres
a. In what county was the largest value of your agricultural products raised or produced?.....	Principal county →		056
b. If you also have agricultural operations in any other county(ies), enter the county name(s), etc.	Other counties {		057
			058
			059

INSTRUCTIONS -- Please report your crops in the appropriate section. Use section 7 to report ONLY those crops NOT listed in sections 2 through 6 and section 8. DO NOT INCLUDE crops grown on land rented to others.

SECTION 2 Were any of the FOLLOWING CROPS harvested from this place in 1982?

S2	None	Acres harvested	Quantity harvested	Acres irrigated
1. Corn (field) for grain or seed (Report quantity on a dry shelled-weight basis).....	<input type="checkbox"/>	067	068 Bu.	069
2. Corn (field) for silage or green chop.....	<input type="checkbox"/>	070	071 Tons, green	072
3. Wheat for grain (including durum).....	<input type="checkbox"/>	073	074 Bu.	075
4. Oats for grain.....	<input type="checkbox"/>	076	077 Bu.	078
5. Barley for grain.....	<input type="checkbox"/>	079	080 Bu.	081
6. Rye for grain.....	<input type="checkbox"/>	086	087 Bu.	088
7. Soybeans for beans.....	<input type="checkbox"/>	088	089 Bu.	090
8. Beans, dry edible.....	<input type="checkbox"/>	554	555 Cwt.	556
9. Sunflower seed.....	<input type="checkbox"/>	734	735 Lbs.	736
10. Flaxseed.....	<input type="checkbox"/>	605	606 Bu.	607
11. Sugar beets for sugar.....	<input type="checkbox"/>	719	720 Tons	721
12. Tobacco -- all types.....	<input type="checkbox"/>	094	095 Lbs.	096
13. Potatoes, Irish.....	<input type="checkbox"/>	097	098 Cwt.	099

SECTION 3 Was any DRY HAY, GRASS SILAGE, HAYLAGE, or GREEN CHOP cut or harvested from this place in 1982? Include sorghum-sudan crosses and hay cut from pastures.

S3

☐ YES -- Complete this section ☐ NO -- Go to section 4

If cuttings were made for both dry hay and grass silage, haylage, or green chop from the same fields, report the acreage in the appropriate items under DRY HAY and also under GRASS SILAGE, HAYLAGE, and GREEN CHOP.

	Acres harvested	Quantity harvested (Report either dry or green weight as indicated)	Acres irrigated
1. DRY HAY (If two or more cuttings of dry hay were made from the same acres, report acres only once, but report total tons from all cuttings.)			
a. Alfalfa and alfalfa mixtures for hay or dehydrating.....	103	104 Tons, dry	105
b. Small grain hay -- oats, wheat, barley, rye, etc.	106	107 Tons, dry	108
c. Other tame dry hay, clover, lespedeza, timothy, bromegrass, Sudan grass, millet, etc.	109	110 Tons, dry	111
d. Wild hay.....	112	113 Tons, dry	114
2. GRASS SILAGE, HAYLAGE, AND GREEN CHOP (hay crops cut and fed green) (If two or more cuttings were made from the same acres, report acres only once, but report total tons from all cuttings.)	115	116 Tons, green	117
3. HAY SOLD -- Did you sell any hay or grass silage in 1982? (Report value of hay sold in section 9, item 4).....	118		
	<input type="checkbox"/> Yes <input type="checkbox"/> No		

PENALTY FOR FAILURE TO REPORT

SECTION 4

Were any **VEGETABLES, SWEET CORN, MELONS, etc.**, harvested FOR SALE from this place in 1982? (Exclude those grown for home use.)

S4

1 ☐ YES — Complete this section

2 ☐ NO — Go to section 5

Acres

Whole acres

Tenths

Acres irrigated

Whole acres

Tenths

375

/10

376

/10

1. Land from which vegetables were harvested in 1982.....

2. From the list below, enter the crop name and code for each crop harvested in 1982.
If more than one vegetable crop was harvested from the same acres, report acres for each crop. Report crops grown under protection in section 5.

Crop name	Code	Acres harvested	Acres irrigated
Snap beans (bush and pole)	381	/10	382 /10
Peas, green	441	/10	442 /10
Sweet corn	461	/10	462 /10
		/10	/10
		/10	/10
		/10	/10

If more space is needed, use separate sheet of paper.

Crop name	Code	Crop name	Code	Crop name	Code
Asparagus	379	Cucumbers and pickles	411	Pumpkins	449
Beets	383	Eggplant	415	Radishes	451
Broccoli	385	Honeydew melons	423	Rhubarb	453
Cabbage, head	391	Lettuce and romaine	427	Spinach	457
Cantaloups and muskmelons	395	Lima beans, green	429	Squash	459
Carrots	397	Mustard greens	431	Tomatoes	463
Cauliflower	399	Onions, dry	433	Turnips	465
Celery	401	Onions, green	435	Turnip greens	467
Collards	407	Peppers, sweet	443	Watermelons	473
		Peppers, hot	445	Other vegetables — Specify	475

SECTION 5

Were any **NURSERY and GREENHOUSE PRODUCTS, MUSHROOMS, sod, bulbs, flowers, flower seeds, vegetable seeds and plants, vegetables under glass or other protection, GROWN FOR SALE** on this place in 1982?

S5

1 ☐ YES — Complete this section

2 ☐ NO — Go to section 6

1. Nursery and greenhouse products irrigated in 1982 ☐

2. From the list below, enter the product name and code for each product grown.

Product name	Code	Square feet under glass or other protection in 1982	Acres in the open in 1982		Sales in 1982	
			Whole acres	Tenths	Dollars	Cents

If more space is needed, use separate sheet of paper.

Product name	Code	Product name	Code
Bedding plants (include vegetable plants)	479	Mushrooms	494
Bulbs	482	Sod harvested	497
Cut flowers and cut florist greens	485	Vegetable and flower seeds	500
Nursery products — ornamentals, fruit and nut trees, and vines	488	Greenhouse vegetables	503
Foliage and flowering plants	491	Other — Specify	506

SECTION 6

Were any **STRAWBERRIES, CRANBERRIES, or OTHER BERRIES** harvested FOR SALE from this place in 1982? (Exclude those grown for home use.)

S6

1 ☐ YES — Complete this section

2 ☐ NO — Go to section 7

From the list below, enter crop name and code. Report quantity harvested in unit specified with crop name.

Crop name	Code	Acres harvested	Quantity harvested	Acres irrigated
Strawberries	536	/10	537 Lbs.	538 /10
		/10		/10
		/10		/10

If more space is needed, use separate sheet of paper.

Crop name	Code	Crop name	Code
Blackberries and dewberries (pounds)	509	Raspberries (pounds)	533
Blueberries, tame (pounds)	512	All other berries (pounds) — Specify	539
Cranberries (100-lb. barrels)	521		

SECTION 7

Were any **OTHER CROPS** harvested from this place in 1982 — small grains, field seeds, sorghums, mint, or other crops not previously reported? (Report fruit in section 8.)

S7

1 ☐ YES — Complete this section

2 ☐ NO — Go to section 8

For those crops not listed enter the crop name and code from the list below. Report quantity harvested in unit specified with crop name.

Crop name	Code	Acres harvested	Quantity harvested	Acres irrigated
Kentucky bluegrass seed	629		630 Lbs.	631
Red clover seed	671		672 Lbs.	673
Timothy seed	746		747 Lbs.	748
Mint for oil	644		645 Lbs. of oil	646
Sorghum for grain or seed (Exclude sorghum-sudan crosses)	082		083 Bu.	084
Sorghum for silage or green chop	085		086 Tons, green	087
			1	2
			1	2
			1	2

If more space is needed, use separate sheet of paper.

Crop name	Code	Crop name	Code
Alfalfa seed (pounds)	542	Dry edible peas (hundredweight)	659
Birdsfoot trefoil seed (pounds)	566	Popcorn (pounds, shelled)	662
Buckwheat (bushels)	575	Proso millet (bushels)	665
Corn cut for dry fodder, hogged or grazed (report acres only)	581	Rapeseed (pounds)	668
Emmer and spelt (bushels)	599	Ryegrass seed (pounds)	689
Herbs, including ginseng (pounds)	620	Sweetclover seed (pounds)	737
Mixed grains (bushels)	614	Triticale (bushels)	749
Mustard seed (pounds)	660	Wild rice (pounds)	764
		Other crops (pounds) — Specify	762

SECTION 8

Was there a combined total of 20 or more **FRUIT TREES, including GRAPEVINES and NUT TREES ON THIS PLACE** in 1982?

S8

1 ☐ YES — Complete this section

2 ☐ NO — Go to section 9

1. **TOTAL ACRES** in bearing and nonbearing fruit orchards, vineyards, and nut trees on this place. (Do not include abandoned acres.)

2. For those crops not listed below, enter the name and code from the list at the right for other fruit and nut trees on this place in 1982. Report the requested information for each crop even if not harvested because of low prices, damage from hail, frost, etc.

Crop name	Code	NUMBER OF TREES OR VINES OF —		Acres in trees and vines of all ages		Quantity harvested	Unit of measure Mark one				
		Nonbearing age	Bearing age	Whole acres	Tenths		Lbs.	Tons	Boxes	Lbs. per box	
Apples	123		124	125	/10	126	127	1	2	3	128
Cherries	147		148	149	/10	150	151	1	2	3	152
Grapes	177		178	179	/10	180	181	1	2	3	182
Peaches	225		226	227	/10	228	229	1	2	3	230
			1	2	/10	3	4	1	2	3	15
			1	2	/10	3	4	1	2	3	15
			1	2	/10	3	4	1	2	3	15

If more space is needed, use separate sheet of paper.

Crop name	Code
Apricots	129
Nectarines	201
Pears	231
Plums and prunes	243
Other fruit and nut trees — Specify	369

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C-2 APPENDIX C

1982 CENSUS OF AGRICULTURE

SECTION 9 GROSS VALUE OF CROPS SOLD from this place in 1982, BEFORE taxes and expenses (Refer to the INFORMATION SHEET, Section 9.)

Report your best estimate of the value for each of the following groups of crops sold from this place in 1982. Include the value of the landlord's and/or contractor's share, estimating if necessary. Exclude value of Government CCC loans.

	None	Dollars	Cents
1. Grains, soybeans and other beans sold in 1982		774	
a. Corn for grain.....		\$	
b. Wheat.....		\$	
c. Soybeans.....		776	
d. Sorghum for grain.....		777	
e. Oats.....		778	
f. Other — barley, rye, dry edible beans, sunflower seed, flaxseed, buckwheat, etc.		779	
2. Cotton and cottonseed.....		780	
3. Tobacco.....		781	
4. Hay, silage, field seeds, and grass seeds.....		782	
5. Vegetables, sweet corn, and melons — Do not include Irish potatoes and sweetpotatoes, report them in item 7 below.....		783	
6. Fruits, nuts, berries — apples, cherries, grapes, peaches, pears, plums, strawberries, blueberries, cranberries, etc.		784	
7. Other crops — potatoes, mint for oil, sugar beets, etc. (Exclude nursery and greenhouse products) —		785	
Specify		\$	

SECTION 10 LAND USE IN 1982

NOTE: If the same land had more than one use in 1982, REPORT THAT LAND ONLY ONCE — in the use first listed below that applies. For example, cropland harvested and also pastured is to be reported only as "Cropland harvested."

S10

	None	Number of acres
1. CROPLAND		787
a. Cropland harvested — Include all land from which crops were harvested or hay was cut, and all land in orchards, citrus groves, vineyards, and nursery and greenhouse products		788
b. Cropland used only for pasture or grazing — Include rotation pasture and grazing land that could have been used for crops without additional improvements.....		789
c. Cropland used for cover crops, legumes, and soil-improvement grasses, but NOT harvested and NOT pastured.....		790
d. Cropland on which all crops failed (Exception: Do not report here land in orchards and vineyards on which the crop failed. Such acreage is to be reported in item 1a.).....		791
e. Cropland in cultivated summer fallow		793
f. Cropland idle		794
2. Woodland — Include all woodlots and timber tracts and cutover and deforested land with young timber growth. { a. Woodland pastured		795
b. Woodland not pastured		796
3. Other pastureland and rangeland — Include any pastureland other than cropland and woodland pasture		797
4. All other land — Land in house lots, ponds, roads, wasteland, etc. — Include any land not reported in items 1 through 3 above		798
5. TOTAL ACRES — Add the acres reported in items 1 through 4 (Should be the same as section 1, item 4, page 1.)		798

SECTION 11 Was any LAND in this place IRRIGATED at any time in 1982?

Irrigated land is all land watered by any artificial or controlled means — sprinklers, furrows or ditches, spreader dikes, etc. Include supplemental, partial, and preplant irrigation.

S11

1 ☐ YES — Complete this section
2 ☐ NO — Go to section 12

	None	Number of acres irrigated
1. How many acres of harvested land were irrigated?.....		680
Include land from which hay was cut and land in bearing and nonbearing fruit and nut crops reported in section 10, item 1a.		681
2. How many acres of pastureland, rangeland, and any other lands not included in item 1 above were irrigated?.....		682
3. What percent of the irrigation water used on this place in 1982 was obtained —		Percent
a. From a well or wells located on this farm or another farm?....		683 %
b. From an on-farm surface supply not controlled by a water supply organization (stream, drainage ditch, lake, pond, spring, or reservoir on or adjacent to this farm)?.....		684 %
c. From off-farm water suppliers (U.S. Reclamation projects; irrigation district; mutual, cooperative, or neighborhood ditches; or other irrigation organizations)?.....		%
d. TOTAL — Sum of a, b, and c should equal 100%		100%

SECTION 12 Did you or anyone else have any CATTLE or CALVES on this place in 1982?

S12

1 ☐ YES — Complete this section
2 ☐ NO — Go to section 13

• DECEMBER 31, 1982 INVENTORY

	None	INVENTORY
		Number on this place Dec. 31, 1982
1. CATTLE AND CALVES of all ages (Total of a, b, c, and d below)		803
a. BEEF COWS — Include beef heifers that had calved		804
b. MILK COWS kept for production of milk or cream for sale or home use — Include dry milk cows and milk heifers that had calved		805
c. HEIFERS AND HEIFER CALVES (Exclude heifers that had calved)		806
d. STEERS, STEER CALVES, BULLS, AND BULL CALVES		807

• CATTLE AND CALVES SOLD FROM THIS PLACE IN 1982

Include those fed on this place on a contract or custom basis. Also report as sold cattle moved from this place to a feedlot for further feeding.

	None	Number sold in 1982	Gross value of sales
			Dollars Cents
2. Calves weighing less than 500 pounds		808	809
3. Cattle, including calves weighing 500 pounds or more		810	811
a. Of the total cattle sold, how many were FATTENED on this place on GRAIN or CONCENTRATES for 30 days or more and SOLD for SLAUGHTER?.....		812	813

• DAIRY PRODUCTS SOLD FROM THIS PLACE IN 1982

	None	DAIRY PRODUCTS
		Gross value of sales
		Dollars Cents
4. Gross value of sales of DAIRY PRODUCTS from this place in 1982 — Include milk, cream, butter, etc.		814

SECTION 13 Did you or anyone else have any HOGS or PIGS on this place in 1982?

S13

1 ☐ YES — Complete this section
2 ☐ NO — Go to section 14

• DECEMBER 31, 1982 INVENTORY

	None	INVENTORY
		Number on this place Dec. 31, 1982
1. HOGS and PIGS of all ages (Total of a and b below)		815
a. HOGS and PIGS used or to be used for BREEDING		816
b. OTHER HOGS and PIGS		817

• LITTERS FARROWED

	None	Number of litters
2. LITTERS FARROWED on this place between —		818
a. December 1, 1981 and May 31, 1982		819
b. June 1, 1982 and November 30, 1982		

• HOGS AND PIGS SOLD

	None	Number sold in 1982	Gross value of sales
			Dollars Cents
3. HOGS and PIGS SOLD from this place in 1982		820	821
4. Of the hogs and pigs sold, how many were sold as FEEDER PIGS for further feeding?		822	823

SECTION 14 Did you or anyone else have any SHEEP or LAMBS on this place in 1982?

S14

1 ☐ YES — Complete this section
2 ☐ NO — Go to section 15

	None	INVENTORY	NUMBER SOLD
		Number on this place Dec. 31, 1982	in 1982
1. SHEEP and LAMBS of all ages		824	825
a. EWES 1 year old or older		826	
2. SHEEP and LAMBS SHORN		827	828
3. What was the gross value of sales of SHEEP, LAMBS, and WOOL from this place in 1982?		829	830

SECTION 15 Did you or anyone else have any HORSES, BEES, FISH, GOATS, OTHER LIVESTOCK, or ANIMAL SPECIALTIES in 1982?

S15 1 ☐ YES — Complete this section 2 ☐ NO — Go to section 16

	None	INVENTORY Number on this place Dec. 31, 1982	Total number sold in 1982	Gross value of sales	
				Dollars	Cents
1. Horses and ponies of all ages.....	<input type="checkbox"/>	830	831	832	
2. Colonies of bees.....	<input type="checkbox"/>	839	840	841	
3. Mink and their pelts.....	<input type="checkbox"/>	836	837	838	
4. Other livestock or animal specialties in captivity (Enter name and code from "List A" below.)					

Name _____ Code _____

List A

Name	Code	Name	Code	Name	Code
Angora goats.....	842	Mules, burros, and donkeys.....	853	Worms — Refer to information sheet.....	857
Milk goats.....	845	Rabbits and their pelts.....	851	All other livestock — Specify.....	860
Other goats.....	848	Chinchillas and their pelts.....	854		

5. Livestock or animal products (Enter name and code from "List B" below.)

Name	Code	Total quantity sold in 1982	Gross value of sales	
			Dollars	Cents
		2 OR Pounds		
		Gallons		

Name _____ Code _____

List B

Name	Code	Name	Code
Mohair sold.....	864	Honey sold.....	868
Goat milk sold.....	866	Other livestock products — Specify.....	870

6. Fish and other aquaculture products (Enter name and code from "List C" below.)

Name	Code	Water surface acres for aquaculture	Total quantity sold in 1982	Gross value of sales	
				Dollars	Cents
			1 Pounds		
			OR		
			Number		

Name _____ Code _____

List C

Name	Code	Name	Code	Name	Code
Catfish.....	872	Other fish — Specify.....	884	Other aquaculture products — Specify.....	888
Trout.....	876				

If more space is needed, use separate sheet of paper.

SECTION 16 Did you or anyone else have any POULTRY such as CHICKENS, TURKEYS, DUCKS, etc., on this place in 1982? (Include poultry grown for others on a contract basis.)

S16 1 ☐ YES — Complete this section 2 ☐ NO — Go to section 17

	None	INVENTORY Number on this place Dec. 31, 1982	Total number sold in 1982
1. HENS and PULLETS of laying age.....	<input type="checkbox"/>	892	893
2. Pullets for laying flock replacement			
a. PULLETS 3 months old or older not yet of laying age	<input type="checkbox"/>	894	895
b. PULLET CHICKS and PULLETS under 3 months old (Exclude commercial broilers).....	<input type="checkbox"/>	896	897
3. BROILERS, fryers, and other meat type chickens including capons and roasters.....	<input type="checkbox"/>	898	899
4. TURKEYS			
a. Turkeys for slaughter (Exclude breeders).....	<input type="checkbox"/>	900	901
b. Turkey HENS kept for breeding.....	<input type="checkbox"/>	902	903
5. OTHER POULTRY raised in captivity — ducks, geese, pigeons or squab, pheasants, quail, etc. (Enter poultry name and code from the list below.)			

Poultry name _____ Code _____

Poultry name _____ Code _____

Name	Code	Name	Code	Name	Code
Ducks.....	904	Pigeons or squab.....	908	Quail.....	912
Geese.....	906	Pheasants.....	910	All other poultry — Specify.....	914

6. POULTRY HATCHED on this place in 1982 and placed or sold — chickens, turkeys, ducks, etc. — Specify kind of poultry

7. Incubator egg capacity on December 31, 1982.....

8. What was the gross value of sales of poultry and poultry products (eggs, etc.) from this place in 1982?

	None	Gross value of sales	
		Dollars	Cents
	<input type="checkbox"/>	918	

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SECTION 17 S17

GOVERNMENT CCC LOANS

1. Amount received in 1982 from Government CCC loans for — (Include regular and reserve loans, even if redeemed or forfeited)

a. Corn, sorghum, barley, and oats.....

b. Wheat.....

c. Cotton.....

d. Soybeans, peanuts, rye, rice, tobacco, and honey.....

MACHINE WORK, CUSTOMWORK, and OTHER AGRICULTURAL SERVICES

2. Gross amount received from machine work, customwork, and other agricultural services PROVIDED FOR OTHERS in 1982 — planting, plowing, spraying, harvesting, etc.

Specify kind of work done.....

SECTION 18 During 1982 did you SELL any crops, livestock, or livestock products DIRECTLY to individuals FOR HUMAN CONSUMPTION — roadside stands, farmers markets, pick your own, etc.?

S18 1 ☐ YES — Complete this section 2 ☐ NO — Go to section 19

1. What was the gross value of these direct sales?

Specify products sold — vegetables, eggs, etc.

SECTION 19 TYPE OF ORGANIZATION

S19 Mark (X) the one item which best describes the type of organization for this place in 1982. Refer to the INFORMATION SHEET, Section 19.

• FAMILY or INDIVIDUAL operation — (Exclude partnership and corporation).....

• PARTNERSHIP operation — Include family partnerships.....

• INCORPORATED UNDER STATE LAW.....

• OTHER, such as estate or trust, prison farm, grazing association, Indian reservation, etc.

Specify.....

SECTION 20 CORPORATE STRUCTURE (for incorporated operations only)

S20 Refer to the INFORMATION SHEET, Section 20.

1. Is this a family-held corporation?

2. Are there more than 10 stockholders?

SECTION 21 CHARACTERISTICS AND OCCUPATION OF OPERATOR (Senior partner or person in charge) Refer to the INFORMATION SHEET, Section 21.

S21

1. RESIDENCE — Does the operator (senior partner or person in charge) live on this place?

2. PRINCIPAL OCCUPATION — At which occupation did the operator spend the majority (50 percent or more) of his/her work time in 1982? For partnerships consider all members of the partnership together.....

3. OFF FARM WORK — How many days did the operator (senior partner or person in charge) work at least 4 hours per day off this place in 1982? Include work at a nonfarm job, business, or on someone else's farm. (Exclude exchange farm work).....

4. In what year did the operator (or senior partner) begin to operate any part of this place?

5. AGE of operator (senior partner or person in charge)

6. RACE of operator (senior partner or person in charge)

7. SEX of operator (senior partner or person in charge)

8. SPANISH ORIGIN — Is the operator (senior partner or person in charge) of Spanish origin or descent (Mexican, Puerto Rican, Cuban, or other Spanish)?

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(Sections 22 through 28 were collected from approximately 20 percent of the farms, see text)

SECTION 22		Was any COMMERCIAL FERTILIZER, including ROCK PHOSPHATE, or LIME used on this place during 1982?	
S22	1 <input type="checkbox"/> YES — Complete this section 2 <input type="checkbox"/> NO — Go to section 23	None	Acres fertilized
1.	Acres of cropland fertilized in 1982, other than cropland used only for pastures reported in section 10, item 1b		932
2.	Acres of pastureland and rangeland fertilized in 1982 reported in section 10, items 1b and 3		933
3.	Expenditures for commercial fertilizer purchased — all forms, including rock phosphate and gypsum (exclude lime) Report cost of custom application in section 27, item 6.	None	Dollars Cents 988 \$
4.	LIME — tons of lime used and acres on which applied (Do not include land plaster or gypsum or lime for sanitation)	None	Tons of lime Acres limed 934 935

SECTION 23		Were any INSECTICIDES, HERBICIDES, FUNGICIDES, NEMATOCIDES, OTHER PESTICIDES, or OTHER CHEMICALS used on this place in 1982?	
S23	1 <input type="checkbox"/> YES — Complete this section 2 <input type="checkbox"/> NO — Go to section 24		
Include any materials provided by you, your landlords, or contractors. For each item listed, report acres only once. If multipurpose chemicals were used, report acreage treated for each purpose.			
1.	Sprays, dusts, granules, fumigants, etc., (fungicide, herbicide, insecticide, nematocide) to control —	None	Number of acres on which used
a.	Insects on crops, including hay		936
b.	Nematodes in crops		937
c.	Diseases in crops and orchards (blights, smuts, rusts, etc.)		938
d.	Weeds, grass, or brush in crops and pasture Include both pre-emergence and post emergence		939
2.	Chemicals for defoliation or for growth control of crops or thinning of fruit		940
3.	Agricultural chemicals purchased—insecticides, herbicides, fungicides, other pesticides, etc. Report cost of custom applications in section 27, item 6.	None	Dollars Cents 989 \$

SECTION 24		Was there any INTEREST EXPENSE for the farm business in 1982? Refer to the INFORMATION SHEET, Section 24.	
S24	1 <input type="checkbox"/> YES — Complete this section 2 <input type="checkbox"/> NO — Go to section 25		
1.	How much interest was paid on all debts for the farm business in 1982?		Dollars Cents 942 \$

SECTION 25		MACHINERY AND EQUIPMENT on this place on December 31, 1982 (Include only equipment used for agricultural operations in 1981 or 1982.)	
S25	• Value of ALL machinery and equipment on this place, December 31, 1982		
1.	What is the estimated market value of ALL machinery, equipment, and implements usually kept on this place and used for the farm or ranch business? Include cars, trucks, tractors, combines, plows, disks, harrows, dryers, pumps, motors, irrigation equipment, dairy equipment including milkers and bulk tanks, livestock feeders, grinding and mixing equipment, etc.	Estimated market value	
		Dollars Cents	
		943 \$	
•	SELECTED machinery and equipment on this place, December 31, 1982. (Report only if used in 1981 or 1982.)		
	None	Total number on this place on December 31, 1982	Of the total, HOW MANY were manufactured in the last 5 years (1978–1982)? (Number)
2.	Automobiles	944	945
3.	Motortrucks — Include pickups	946	947
4.	Wheel tractors other than garden tractors and motor tillers	948	949
5.	Grain and bean combines, self-propelled only	950	951
6.	Corn heads for combines	952	953
7.	Cotton pickers and strippers	956	957
8.	Mower conditioners	958	959
9.	Pickup balers — Include rectangle and round balers	960	961
10.	Field forage harvesters, shear bar or flywheel type	962	963

SECTION 26		EXPENDITURES FOR ENERGY and petroleum products for the farm business during 1982	
S26	Include expenditures paid by you and others for production of crops, livestock, and other agricultural products on this place in 1982.		
	None	Expenditures	Storage capacity on this place
		Dollars Cents	None Capacity in gallons
1.	Gasoline and gasohol for the farm business	966 \$	967 968
2.	Diesel fuel for the farm business	969 \$	970 971
3.	LP gas, butane, propane for the farm business (4.5 lbs. = 1 gallon)	972 \$	973 974
4.	Fuel oil and kerosene for the farm business	975 \$	976 977
5.	Natural gas for the farm business	978 \$	
6.	Motor oil and grease for the farm business	979 \$	
7.	Electricity for the farm business	980 \$	
8.	Other — coal, wood, coke, etc.	981 \$	

SECTION 27		SELECTED PRODUCTION EXPENSES paid by you and others for this place in 1982	
S27	Include your best estimates of expenses paid by you, your landlord, contractors, buyers, and others for production of crops, livestock, and other agricultural products in 1982. DO NOT INCLUDE expenses connected with performing customwork for others; operation of nonfarm activities, businesses, or services; or household expenses not related to the farm business.		
	None	Selected expenditures	
		Dollars Cents	
1.	Livestock and poultry purchased — cattle, calves, hogs, pigs, sheep, lambs, goats, horses, chicks, poult, started pullets, etc.	982 \$	
2.	Total feed purchased for livestock and poultry — grain, hay, silage, mixed feeds, concentrates, etc.	983 \$	
a.	Commercially mixed formula feeds purchased — complete, supplement, concentrates, premixes. (Exclude ingredients purchased separately, such as soybean meal, cottonseed meal, and urea)	Tons Tenths Dollars Cents 984 /10 \$	
3.	Seed cost — for corn, other grains, soybeans, tobacco, cotton, etc. — Include plants and trees purchased	987 \$	
4.	Hired farm or ranch labor (See Information Sheet)	990 \$	
a.	Of the hired workers, including paid family workers, how many — (1) Worked 150 days or more? (2) Worked less than 150 days?	None Number of workers 991 992	
5.	Contract labor — Include expenditures primarily for labor, such as harvesting of fruit, vegetables, berries, etc., performed on a contract basis by a contractor, crew leader, a cooperative, etc.	993 \$	
6.	Customwork, machine hire and rental of machinery and equipment — Include expenditures for use of equipment and for customwork such as grinding and mixing feed, plowing, combining, corn picking, drying, silo filling, spraying, dusting, fertilizing, etc. (Exclude cost of cotton ginning)	994 \$	

SECTION 28		ESTIMATED CURRENT MARKET VALUE OF LAND and BUILDINGS	
S28	Please give your best ESTIMATE of the CURRENT MARKET VALUE of land and buildings for the acres reported in section 1, items 1, 2, and 3, page 1.		
	None	Estimated market value of land and buildings	
		Dollars Cents	
1.	All land owned	996 \$	
2.	All land rented or leased FROM OTHERS	997 \$	
3.	All land rented or leased TO OTHERS	998 \$	

SECTION 29		PERSON COMPLETING THIS REPORT — Please print	
Name	999	Date	
Telephone	Area code	Number	

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► **Section 8 — Fruits and Nuts** — In counting the combined total of 20 or more trees and vines, include those for home use as well as those maintained for sale of the production. Acres in trees or vines that have been abandoned should not be included; these acres should be included in section 10, item f. "Cropland idle."

If crops other than fruit and nut trees and vines were interplanted with trees or vines, report the total acres for BOTH the orchard and the interplanted crops harvested.

► **Section 9 — GROSS VALUE OF CROPS SOLD**

Report the value of all crops sold from "this place" in 1982, regardless of the year they were harvested or who owned the land. Be sure to give gross values (before deducting expenses and taxes). Include payments received in 1982 from cooperatives or marketing organizations for crops produced on this place regardless of the year in which the crops were harvested.

Include the landlord's or contractor's share of crops removed from this place in 1982 in the value of crops sold. If the sale price or market value is not known, give your best estimate of the crops' market value when removed from "this place."

Include in the value of crops sold from "this place" any cost of harvesting, tilling, fertilizer, chemicals, etc., furnished under a contract arrangement. Also include as sales your estimate of the value of any crops removed from this place in trade for services, such as hay cut in exchange for fence repair, clearing, or other services.

DO NOT INCLUDE:

- a. Amount of government CCC loans received in 1982 in this section. Report government CCC loans in section 17.
- b. Crops or crop products purchased from others and later resold.

► **Section 10 — LAND USE**

The purpose of this section is to classify the "Acres in This Place" you reported in section 1, item 4, by principal use in 1982. Do NOT include any acres you rented TO others (reported in section 1, item 3).

Land Used for More Than One Purpose — If part of your land was used for more than one purpose in 1982, report that land on the line for the use first listed, and NOT on the line for the second use. For example, if you plowed under a cover crop, and planted and harvested a grain crop, report the land in item 1a, "Cropland harvested," but NOT as "Cropland used for cover crop, legumes, . . . etc." (item 1c).

Double Cropping — When more than one crop was harvested from the same land in 1982, report that land only ONCE as "Cropland harvested," item 1a of this section.

Interplanted Crops — If you interplanted crops, such as cotton in an orchard, report the total land used for both crops only ONCE, as "Cropland harvested," item 1a.

Skip Row Planted Crops — Report the acres that represent the total non-planted or skipped rows as "Cropland idle," item 1f. The acres that represent the planted rows should be reported as "Cropland harvested," item 1a.

► **Sections 12 through 16 — LIVESTOCK, POULTRY, AND ANIMAL SPECIALTIES**

Animals and Poultry to Include in the Report — Report all animals, poultry, and animal specialties on "this place" (section 1, item 4) on December 31, 1982. Include all owned by you and any kept by you for others. Include animals on unfenced lands, National Forest land, district land, cooperative grazing association land, or rangeland administered by the Bureau of Land Management on a per-head or lease basis. Animals in transit on December 31, 1982, or animals on short-term pasture (such as wheat pasture or crop residue) on a per-head or lease basis should be reported by the person who had control of the animals.

Animals and Poultry to Exclude from the Report — Do not report any animals or poultry kept on land rented to others or kept under a share arrangement on land rented to others. Do not include animals quartered in feedlots which are not a part of "this place." Animals kept on a place not operated by you are to be included on the report for that place.

Animals Bought and Sold — DO NOT REPORT ANY ANIMALS BOUGHT AND THEN RESOLD WITHIN 30 DAYS. Such purchases and sales are considered "dealer" transactions, and are not included in this census.

Number Sold — Report all animals and poultry sold or removed from this place if the animals were located on the place 30 days or more and were sold or removed from this place in 1982, without regard to ownership or who shared in the receipts. Include animals sold for a landlord or given to a landlord or others in trade or in payment for goods or services. Do NOT report number sold for any livestock or poultry kept on another place.

Animals Moved to Another Place — For animals moved from this place to another place, such as for further feeding, report animals as "sold" and give your best estimate of their market value when they left "this place."

Fat Cattle Sold — Cattle fattened on grain or concentrates for 30 days or more and sold for slaughter are reported in section 12.

DO NOT INCLUDE WITH FATTENED CATTLE SOLD:

- a. Cattle and calves sold for further feeding
- b. Dairy cows fed only the usual dairy ration before being sold
- c. Veal calves, or any calves weighing less than 500 pounds

Value of Sales — Report the total gross value of animals and poultry sold or removed from this place in 1982 without deducting production or marketing expenses (cost of feed, cost of livestock purchase, cost of hauling and selling, etc.). If the sale price or market value is not known, give your best estimate of their market value when they left "this place." Do NOT report the value of sales of any livestock and poultry owned by you but kept and sold from a place you did not operate.

Contract and Custom Feeding Operations — Livestock or poultry kept by you on "this place" on a contract or custom basis should be included on this report REGARDLESS OF OWNERSHIP. Report as "INVENTORY" numbers of animals or poultry on the place on December 31, 1982. Report as "SOLD" animals and poultry which were kept on a contract or custom basis and were removed or sold from the place in 1982. If the sale price or market value is not known, give your best estimate of the market value of the animals or poultry when they left this place.

► **Section 15 — HORSES, PONIES, BEES, FISH, GOATS, ANIMAL SPECIALTIES, OTHER LIVESTOCK**

Items 1 through 4 — Report the inventory number of animals, bee colonies, or animal specialties on the place on December 31, 1982. Indicate number sold and the gross value of sales for the number sold in 1982. In item 4, specify the name and code from List A of any livestock or animal specialties on "this place" which are not covered in items 1 through 3, or 6 (fish and aquaculture products), or sections 12 through 14, or 16.

If "inventory" or "Sold" is in units other than "Number" (such as pounds, packages, etc.), indicate the unit.

If you own colonies or hives of BEES — report all bee and honey operations conducted by you regardless of where the hives were kept most of the year. (Report hives in item 2 and honey, beeswax, or pollen in item 5).

MINK PELTS, RABBIT PELTS, and CHINCHILLA PELTS should be included in number sold and value of sales, but NOT in inventory. WORMS raised for sale should be reported in beds (24 cubic feet per bed) in item 4, "Inventory" and in pounds in item 4, "Number sold."

Item 5 — Sales of Animal Specialty Products — If any semen, manure, honey, beeswax, or other animal products were sold from this place in 1982, specify the products, the code from list B, the quantity sold, and the gross value of sales in 1982. If sold in units other than pounds or gallons, please indicate unit.

Item 6 — Fish and Aquaculture Products — Report water surface acres (estimate, if necessary) used for raising fish or other aquaculture products FOR SALE.

► **Section 16 — POULTRY**

Roosters and turkey toms used or to be used for BREEDING should be specified and reported in item 5, code 914 (All other poultry).

Item 8 — Gross Value of Sales — Include an estimated value of poultry and poultry products moved from this place by contractors and others.

► **Section 17 — AMOUNT RECEIVED FROM GOVERNMENT CCC LOANS AND AGRICULTURAL SERVICES**

Item 1 — Report the amount received under the regular or reserve program for commodities placed under CCC loan during 1982. Include amount received even if commodity was redeemed or forfeited prior to December 31, 1982. Do not include CCC loans received to build crop storage facilities, or amount received for storage payments in the reserve program.

► **Section 19 — TYPE OF ORGANIZATION**

Use the following definitions to help you determine the type of organization for your operation:

Individual or Family Operation — Defined as a farm or business organization controlled and operated by an individual. Includes family operations that are not incorporated and not operated under a partnership agreement.

Partnership Operation — Defined as two or more persons who have agreed on the amount of their contribution (capital and effort) and the distribution of profits. Co-ownership of land by husband and wife or joint filing of income tax forms by husband and wife DOES NOT constitute a partnership, unless a specific agreement to share contributions, decisionmaking, profits, and liabilities exists. Production under contract or under a share rental agreement DOES NOT constitute a partnership.

Incorporated Under State Law — A corporation is defined as a legal entity or artificial person created under the laws of a state to carry on a business. This definition does not include cooperatives. Also complete section 20.

Other — Such as cooperative (defined as an incorporated or unincorporated enterprise or association created and formed jointly by the members), estate or trust (defined as a fund of money or property administered for the benefit of another individual or organization), prison farm, grazing association, Indian Reservation, institution run by a governmental or religious entity, etc.

► **Section 20 — CORPORATE STRUCTURE**

This section is to be answered by corporations only. Answer both items. A family-held corporation has more than 50 percent of its stock owned by persons related by blood or marriage.

► **Section 21 — OPERATOR CHARACTERISTICS AND OCCUPATION**

This section applies to the characteristics and occupation of the individual owner, operator, senior partner, or person in charge for the type of organization reported in section 19 of the form.

For Individual or Family Operation — Complete this section for the operator.

For Partnership Operations — Answer all items except 2 for the "Senior Partner." The "Senior Partner" is the individual who is mainly responsible for the agricultural operations on this place, not necessarily the person senior in age. If each partner shares equally in the day-to-day management decisions, consider the oldest as the "Senior Partner." For item 2 (Principal Occupation) consider all members of the partnership together. Please include as "farming" worktime at all types of agricultural enterprises, including work at greenhouses, nurseries, mushroom production, ranching, feedlots, broiler feeding, etc.

For Corporations and Other Operations (Cooperatives, Estates, etc.) — Complete section 21 for the person in charge, such as a hired manager, business manager, or other person primarily responsible for the on-site, day-to-day operation of the farm or ranch business.

Item 4 — Year Began Operation — Report the first year the operator or senior partner began to operate any part of this place on a continuous basis. If the operator returned to a place previously operated, report the year operations were resumed.

► **Section 22 — COMMERCIAL FERTILIZER AND LIME**

Report acres on which commercial fertilizer (items 1 and 2) or lime (item 4) was applied during 1982. If any acreage was fertilized or limed more than once, report acres ONLY ONCE in each item. Report expense for commercial fertilizer purchased, excluding lime, in item 3.

► **Section 24 — INTEREST EXPENSE**

Report all interest expenses paid in 1982 for the farm business.

INCLUDE interest or finance charges on:

- a. Mortgage loans for land and buildings in "this place"
- b. Machinery, tractors, trucks, and other equipment
- c. Fertilizer, feed, seed, etc.
- d. Livestock, poultry, breeding stock
- e. Funds borrowed to replenish or provide working capital
- f. Interest paid on CCC loans

DO NOT INCLUDE:

- a. Interest on debts associated with activities not related to the production of crops or livestock on "this place," such as land or buildings rented to others, packing sheds, or feed mills providing services to others
- b. Interest on owner/operator dwelling where amount is separated from interest on other land and buildings in this place.

► **Section 25 — MACHINERY AND EQUIPMENT**

The estimated market value in item 1 refers to ALL machinery and equipment kept primarily on this place and used for the farm business. The value should be an estimate of what the machinery and equipment would sell for in its present condition, not the replacement or depreciated value.

► **Section 27 — SELECTED PRODUCTION EXPENSES**

Include expenses paid by you and by anyone else for the production of crops, poultry, livestock, and other agricultural products on this place. Also include expenses incurred even if payment was not made in 1982. Please give estimates if you do not know the exact figures. For livestock or poultry grown under contract or fed on a custom basis on "this place," report their value (estimate, if necessary) in item 1 (Livestock and poultry purchased), at the time they came on this place. Also, include in item 2, the value and amount of feed purchased by you or someone else for use on this place. Do not include expenses related to nonfarm activities (trading and speculation, livestock, or dealer activities).

Hired Labor — Include in expenses for hired labor gross wages or salaries, commissions, paid bonuses, and leave pay before deductions. Social Security taxes, health, life, or employment insurance and any other benefits paid by you should be included. Be sure any salary paid to a hired manager is part of your total figure.

Contract Labor — Applies to expenditures primarily for labor in harvesting of crops, shearing sheep, etc. Exclude money paid to contractors for capital improvements such as putting up fences, repair or maintenance of buildings or machinery, land clearing, etc. Include the expense of items considered primarily machine work in customwork, item 6.