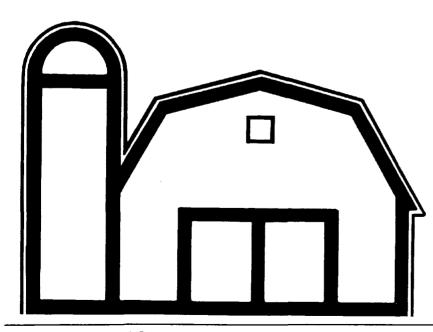
1987Census of Agriculture

AC87-S-2

Volume 2 SUBJECT SERIES

Part 2

Coverage Evaluation



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1987

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Coverage Evaluation

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CONTENTS

		Page
	oductionneral Explanation	
FIC	GURES	
1. 2. 3. 4. 5.	Map—Regions and Census Divisions of the United States	. XX . XX . XXI . XXI
TA	BLES	
1. 2. 3. 4. 5.	Estimated Census Farm Coverage Error for Selected Operation Characteristics: 1987	. 3 . 5 . 6
AP	PENDIXES	
A. B. C.	1987 June Enumerative Survey Items Used in the Coverage Evaluation Program	. B-1
— Put	blication Program Inside back	cover

INTRODUCTION

	raye
PURPOSE	٧
CENSUS AUTHORITY	٧
FARM DEFINITION	٧
ABBREVIATIONS AND SYMBOLS	٧

PURPOSE

The Bureau of the Census measures the accuracy and completeness of farm counts and selected data items for each census of agriculture through an independent coverage evaluation program. The program seeks to identify situations that lead to coverage error and to reveal data deficiencies and problems associated with census processes.

CENSUS AUTHORITY

The census of agriculture is required by law under Title 13, United States Code, sections 142(a) and 191. Beginning in 1982, the census has been taken in years ending in 2 and 7.

FARM DEFINITION

Minimum criteria defining a farm for census purposes were first established in 1850. Since 1850, the farm definition has been changed nine times. In 1974, the current farm definition was established as any place from which \$1,000 or more of agricultural products were produced and sold or normally would have been sold during the census year. A place not having sufficient sales to qualify as a farm may qualify on potential sales based on the inventory and production of crops or livestock.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used throughout the tables:

- Represents zero.
- (D) Withheld to avoid disclosing data for individual farms.
- (NA) Not available.
- Withheld because estimate did not meet pub-(S) lication standards on the basis of either the response rate (associated relative standard error) or a consistency review.
- Not applicable. (X)
- Less than half the unit shown. (Z)

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GENERAL EXPLANATION

	rage
1987 CENSUS OF AGRICULTURE	VII
STUDIES	VIII
THE 1987 PROGRAM	ΙX
SURVEY DESIGN	IX
ESTIMATION	ΧI
RESULTS	XII
PRECISION OF THE ESTIMATES	ΧV
TABLES:	
A. COVERAGE ERROR MODEL	ΧI
B. PERCENT ESTIMATED CENSUS FARM COVERAGE	
ERROR FOR SELECTED OPERATION CHARACTERIS-	
TICS: 1987	XIII
C. ESTIMATED OVERCOUNTED FARMS: 1987	XIV
D. PERCENT ESTIMATED UNDERCOUNTED FARMS FOR	
SELECTED AGRICULTURAL ITEMS: 1987	χV

1987 CENSUS OF AGRICULTURE

History

The 1987 Census of Agriculture is the 23d taken by the U.S. Department of Commerce, Bureau of the Census. The first agriculture census was taken in 1840 as part of the sixth decennial census of population. From 1840 to 1950, an agriculture census was taken as part of the decennial census. A separate mid-decade census of agriculture was conducted in 1925, 1935, and 1945. From 1954 to 1974, a census of agriculture was taken for the years ending in 4 and 9. In 1976, Congress authorized the census of agriculture to be taken for 1978 and 1982 to adjust the data reference year so that it coincided with the economic censuses covering manufacturing, mining, construction, retail trade, wholesale trade, service industries, and selected transportation activities. This adjustment in timing established the agriculture census on a 5-year cycle collecting data for years ending in 2 and 7.

Mail List

All agriculture censuses beginning with the 1969 census, primarily have used mailout/mailback data collection. The mail list for the 1987 census was comprised of individuals, businesses, and organizations that could be readily identified as being associated with agriculture. The list was assembled from the records of the 1982 census. administrative records of the Internal Revenue Service (IRS), and the statistical records of the U.S. Department of Agriculture (USDA). In addition, lists of large or specialized operations, such as nurseries and greenhouses, specialty crop farms, poultry farms, fish farms, livestock farms, and cattle feedlot operations, were obtained from State and Federal agencies, trade associations, and similar organizations. Lists of companies having one or more establishments (or locations) producing agricultural products were obtained from the 1982 census and updated using the information from the Standard Statistical Establishment List maintained by the Census Bureau. Exhaustive record linkage and mathematical modeling yielded a final mail list of 4.1 million names and addresses that had a substantial probability of being a farm operation.

Report Forms

In 1987, three different report forms were used-a two-page, a four-page, and a six-page form to minimize the reporting burden, particularly for small farms and places less likely to be farms. The six-page sample form and the four-page nonsample form are the same, with the exception of sections 23 through 28 which have been added to the sample form to obtain supplemental information from a sample of farms. The information collected in these sections will give the Bureau of the Census a good basis for making estimates of these data for other farms included in the census. The two-page form does not have as many questions or as much detail as the four-page and six-page forms. The four-page form has 11 regional versions and the six-page form has 13 regional versions. Both forms have different crops prelisted. Volume 1, appendix D contains copies of both the two-page and six-page forms.

The six-page form was mailed to 1,104,000 addressees on the mail list, including all those expected to have large (based on expected sales or acreage) or unique operations (farms operated by multiestablishment companies or nonprofit organizations), all those in Alaska and Hawaii, and a sample of other addressees. The two-page form was mailed to 906,000 addressees. These were expected to be small farms or less likely to be farms. The four-page form was mailed to the remaining 2,079,000 addressees. Further discussion of the criteria used to determine which form was mailed to an addressee is provided in the Census Sample Design section of volume 1, appendix C.

Initial Mailing

The report forms were mailed in mid-December 1987 to approximately 4.1 million individuals, businesses, and organizations on the mail list. The mail packages included a report form, a cover letter with a description of the purposes and uses of the census on the reverse side, an information sheet containing instructions for completing the form, and a postage-paid return envelope. Additional special instructions were included with report forms sent to

grazing associations; feedlot operations; institutional organizations; Indian reservations; firms with multiple farm or ranch operations; and producers of poultry under contract, bees and honey, fish, laboratory animals, and nursery and greenhouse crops.

To provide additional help to farmers in completing their reports, copies of an Agriculture Census Guide booklet were sent to vocational agriculture instructors, USDA county offices of the Agriculture Stabilization and Conservation Service, and the Cooperative Extension Service. The Guide contained descriptions and definitions of 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.

Followup Procedures

A thank you/reminder card was mailed to addressees on the mail list in mid-January 1988. Five followup letters, three of which were accompanied by a report form, were sent to nonrespondents at 4-week intervals starting in mid-February and continuing until early June 1988.

Telephone calls were made to all large farms who had not responded well into the data collection period. In addition, telephone calls were made to a sample of other nonrespondents in counties that had a response rate of less than 75 percent. 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 Census Estimation section of volume 1, appendix C.

Data Processing

Selected report forms were reviewed prior to keying the data. These included reports with attached correspondence and reports with remarks or no data on the front page. The data from 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. Substantial computer-generated changes to the data were clerically 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 substantial changes between 1982 and 1987. Sizeable historical differences were resolved or verified by telephone, if necessary. Respondents who reported sales or acreage above specified levels on non-sample forms were sent correspondence requesting the additional sample data. Prior to publication, tabulated totals were reviewed by statisticians to identify inconsistencies and potential coverage problems. Comparisons were made with previous census data, estimates published by the USDA, and other available data.

STUDIES

Methodology

A number of factors affects census coverage. They include the complexity of farm organizational arrangements, continuing changes in operational status, inadequacies of source lists, and difficulty in communicating census definitions and concepts. Extensive efforts are made each census to obtain a complete and accurate count of all farm operations meeting the census farm definition. Evaluations of questionnaire design, mail list construction, and data collection and processing procedures are conducted to improve coverage and accuracy of census data.

A coverage evaluation program for a census is an important means of measuring census completeness. Data from the coverage evaluation program have provided independent measures of the number and characteristics of farms not on the mail list, farms incorrectly classified as nonfarms, and overcounted farms. The program also helps in identifying problem areas for future improvements in developing the census mail list, in collecting and processing the data, and in developing report form items.

Coverage evaluation programs are designed to measure errors in the census mail list and in farm classification. Mail list error includes a measurement of "farms not on the mail list" and a measurement of "farms duplicated." The first error contributes to census undercount; the second error contributes to census overcount. Classification error includes a measurement of "farms classified as nonfarms" and of "nonfarms classified as farms." Both types of classification errors are referred to as misclassified in tables where undercount or overcount are broken out by component.

The difference between the census count and the true size of the population is defined as net coverage error. The census count may be greater than the true size (an overcount), but usually the error is such that the census count is less than the true size (an undercount). The list error of "farms not on the mail list" dominates other errors for small farms. This component varies considerably by geographic area.

Application of Past Studies to the Census

Since 1945, coverage evaluation studies have been conducted for each census of agriculture. These studies have identified sources of coverage errors. Procedural modifications resulting from these coverage evaluation findings have been introduced into subsequent censuses. Several examples follow.

The 1945 coverage evaluation study showed that operations with sales of less than \$2,500 were a large proportion of the undercounted farms. This was attributed to the instruction interviewers were given to enumerate all places conforming to the farm definition. In 1950, census interviewers were instructed to enumerate all places with specified agricultural activities and the farm definition was applied during the data editing process.

The 1950 evaluation study identified that nonresident farm operators contributed a large proportion of the undercounted farms. Two new techniques were introduced in 1954 to reduce this type of undercount—(1) enumerators in selected counties drew the boundaries of each farm and each nonfarm tract on a township sketch, and (2) a listing book was used to record the location and identification of every residence and every agricultural operation in each enumeration district.

Coverage evaluation studies for the 1969 and 1974 censuses indicated that the source lists acquired for mail data collection did not have complete coverage of small farms with sales of agricultural products of less than \$2,500. in 1969 and 1974, 33 percent (±2.1)1 and 27 percent (±2.0), respectively, of all small farms were undercounted at the U.S. level. The 1978 census mail data collection was supplemented by an area sample for the United States, regional, and State estimates. This dual system estimation reduced the undercount of small farms to about 7 percent (±0.5) at the U.S. level. Although this methodology was successful in significantly reducing undercount of small farms, budget constraints have prevented subsequent use of area samples as part of the census estimates.

THE 1987 PROGRAM

The coverage evaluation program for the 1987 Census of Agriculture was designed to provide estimates of the components of census coverage at the United States, regional, and State levels. After the 1982 Census of Agriculture and the subsequent coverage evaluation study. data users expressed interest in obtaining State level estimates of farms not on the mail list rather than only United States and regional estimates as produced in 1982. An increase in sample size above the 1982 level was required to provide such State level estimates. Rather than constructing a single purpose area frame, selecting a sample, and conducting a field enumeration survey, the Agriculture Division of the Census Bureau entered into an agreement with the Department of Agriculture, National Agricultural Statistics Service (NASS) to use the 1987 June Enumerative Survey as part of the 1987 Census of Agriculture Coverage Evaluation program. In the agreement, the Census Bureau provided specific requirements for the survey so that the resulting data would be appropriate for use in the census coverage evaluation program. These requirements included specification of additional items for the data collection, an increase in agricultural screening in residential areas, and a 20 percent increase in the sample size in agricultural urban areas.

The objectives of the 1987 program were to:

- provide State estimates of the number of farms not on the mail list.
- provide more reliable national and regional estimates of the number of operations incorrectly classified and the number of duplicate farms than in previous studies.
- provide national, regional, and divisional estimates of selected agricultural characteristics of undercounted farms.

The 1987 June Enumerative Survey (JES) and the 1987 Classification Error Survey (CES) were used to meet the above objectives. The JES was used to provide State level estimates of the number of farms not on the mail list during the 1987 census. For most States, preliminary State level estimates of these farms and their operation and operator characteristics were published in appendix C, table G of Volume 1, Geographic Area Series, 1987 Census of Agriculture and are republished in this report. Divisional level estimates of agricultural production for these farms are published in this report. The CES was used to measure classification error and mail list duplication error. This independent sample was selected from the census mail list, designed to provide regional estimates of classification error with a coefficient of variation of 15 percent. Regional and U.S. level estimates for classification error are published separately, and in addition to the not on the mail list estimates, in this report.

SURVEY DESIGN

Not on the Mail List

The June Enumerative Survey is an annual area sample survey conducted by NASS to measure planted acreage of crops and numbers of livestock. For each State, NASS develops an area frame consisting of land parcels of predetermined size based on easily identifiable boundaries. The size of a sampling unit depends upon a multitude of related factors such as estimation method, data collection costs, data variability among sampling units, population density, concentration of cropland, and the availability of identifiable boundaries for the sampling units.

The basic stratification used by NASS divides all land of a State into about six to eight land use strata such as intensive cultivation, urban areas, and range land. Cultivated land is divided into several strata based on the degree of cultivation throughout the State. Primary sample units (PSU's) are land parcels selected within each land use stratum. Each randomly selected PSU is further divided into several ultimate sample units or segments. The size of the PSU's vary, but on the average, each PSU contains about six to eight segments. Each segment contains on the average three farm operations, one of which includes a resident operator. The JES is a two stage stratified probability area sample of U.S. farm operations. In the first stage, PSU's were selected with probability proportional to

¹Represents 1.65 standard errors above and below estimate. Intervals published in past Coverage Evaluation reports represent 2 standard errors above and below the estimate. See Precision of the Estimates for further discussion of confidence intervals.

the number of segments within each PSU of the substratum. In the second stage, a segment was selected with equal probability from each selected PSU.

Each distinct farm operation within a segment is defined as a tract. Land areas within segments that contain one or more occupied dwellings are designated as residential tracts. These residential tracts are more predominant in the agricultural urban strata (strata that include the perimeter of cities and small towns where residences merge into agricultural areas) but do occur in other strata. Such tracts are of particular interest for measuring farms not on the mail list, as they often include small acreage farms or farm operators not residing at the site of their farm operation. These types of operations are characteristic of those missing from previous censuses because they frequently are not found on census mail list source records.

The Census Bureau requested more intensive screening procedures than NASS generally used in the residential tracts to improve the survey coverage of farms less likely to be on the census mail list. Enumerators were required to compile a listing of all houses in each segment, to sample households according to a given procedure, to ask questions that screen for agricultural activities of the household members, and to inquire whether the resident knew of any neighbors with agricultural activity. The objective of the subsampling procedure was to provide a systematic method for obtaining information about all tract residents. Listing and prescreening were conducted in the fall of 1986 for all residential tracts with 11 or more households in the 1986 JES sample and, in May of 1987, for all smaller residential tracts and other types of tracts in the sample.

To increase the reliability of the estimates of farms not on the mail list, NASS retained in the sample 20 percent of the agricultural urban segments from 1986 that had been scheduled to be rotated out of the sample in 1987. This procedure provided a 20 percent overall increase in the number of agricultural urban segments across all States, as well as an increase in the residential tracts in the sample. In several States, additional minor increases were made in the number of agricultural urban segments to meet census sample size requirements.

The initial files received from the JES data collection consisted of names, addresses, and agricultural data on all sample area segment residents that had any indication of agricultural activity. Appendix A lists the data items on the file received from NASS. An initial match of this data file to the census mail list development file identified all JES area sample records with a special code for census processing. All JES sample records not on the mail list were included in the census data collection.

During the coverage processing, potential match records were clerically reviewed using both census and JES data. In particular, number and type of crops, livestock, total value of products sold, and land usage were used to determine the farm status of area sample cases that did not respond to the census and to resolve cases where the JES and census farm status differed. Coverage classification codes were assigned to each record during census processing to specify the farm status—farm (in-scope) or nonfarm (out-of-scope)—and relationship to the census mail list-match (on the mail list) or nonmatch (not on the mail list). Both the match and nonmatch farm records constituted the sample for deriving estimates of farms not on the mail list.

The data were keyed, edited, and reviewed for accuracy and consistency prior to tabulation. A final data file was created for estimation. This file was used independently to produce the State and divisional estimates in tables 5 and 6 of this report and with the CES data file to produce the regional and U.S. estimates in all other report tables.

Measurement of Incorrectly Classified Farms

The Classification Error Survey used a specially designed questionnaire entitled "Evaluation of the 1987 Census of Agriculture." The purpose of the report form was to collect agriculture data to measure the accuracy of the census farm counts. A series of screening questions were initially asked to determine if any person in the household had or was associated with any agriculture operations in 1987. The evaluation form contained questions about alternate farm names and addresses used for the operation; farm size, crops, and livestock; and various operator characteristics. See appendix B for a copy of the report form.

The CES used an independent regionally stratified systematic random sample from the final census mail list. Specified operations were excluded from sample selection-all operations in Alaska and Hawaii, all operations with expected sales of \$500,000 or more, and all multiunit or abnormal operations (Indian reservations, research farms, experimental farms, institutional farms). These operations were considered inappropriate for a study of classification error due to their uniqueness or the use of more intensive census processing procedures for the operation. No classification error estimates were made for this portion of the census farm universe. With these exclusions, the universe for the CES consisted of 4,017,213 mail list records.

An initial sample of 18,500 names and addresses was selected from the CES universe. The sampling rate varied by census geographic region: 1 in 71 in the Northeast, 1 in 500 in the Midwest, 1 in 176 in the South, and 1 in 227 in the West. At designated cut-off dates, the census report form check-in status was obtained for all sample addresses using a unique CES evaluation code set in the census data base at the time of sample selection. Two waves of census respondents were selected for mailing the survey questionnaire according to date of response with mailouts in March and July, respectively. A total of 15,331 sample survey cases were mailed in the two waves. The mail data collection procedure for each group required a postcard followup 2 weeks after initial mailout, a form followup 4 weeks after initial mailout, and a telephone followup 6 weeks after initial mailout for nonrespondents only.

A separate technical review of CES sample questionnaires was conducted to classify operations as either farms or nonfarms. A determination of "true" farm status was made by comparing the CES and census farm status and data. Coverage classification codes were assigned after the survey and census reconciliation to identify farm operations and to define the relationship (match or non-match) between the census farm status and the CES farm status. Approximately 5.8 percent (889) of the sample cases were not classifiable and 0.7 percent (100) cases were survey nonrespondents. These cases were accounted for in the sample weighting. A final data file was created for estimation processing. It was used in conjunction with the final JES data file to produce the regional and U.S. estimates in the text tables and tables 1 through 4 of this report.

ESTIMATION

The "true" universe total (T) of all farms in the United States can be represented as the census published farm count (C) minus the number of overcounted farms (OV) plus the number of undercounted farms (U); i.e.

$$T = C - OV + U \tag{1}$$

The undercount (U) can be split into a component consisting of farms on the census mail list that were incorrectly classified as nonfarms (MCF) and a component consisting of farms not on the census mail list (NML); i.e.

$$T = C - OV + MCF + NML$$
 (2)

Unbiased weighted sample estimates of OV and MCF, incorporating the nonclassifiable and nonresponding survey cases, are obtained from the CES. These estimates are used to obtain the census farm count adjusted for classification error (C') where,

$$C' = C - OV + MCF \tag{3}$$

Then the "true" universe total of farms (T) can be represented by:

$$T = C' + NML \tag{4}$$

The estimator T is an application of the Petersen Coverage Error Model (Wolter, JASA, 1986). The model uses an independent survey (here, the JES) in conjunction with the census to provide an estimate of the "true" universe total of farms (T). For a variety of reasons, both the census and survey enumerations miss farm operations. The Petersen Coverage Error Model consolidates the estimates from two enumerations to estimate the true total. The model assumes that: (a) both the census, which is observable, and the universe of the JES, which is not observable, attempt to enumerate accurately the complete universe of farms, and farms reported on either list are true farms; (b) the event of being included by the census is independent of being included in the survey; (c) the probability of being missed by either the census or the

survey is the same for all farms within a given size category; and (d) every farm in the complete universe of farms has, independently of every other farm, the same chance of being listed in the census and, independently of listing in the census, the same chance of being listed in JES. Each farm in the universe can be placed into one of the cells in table A.

Table A. Coverage Error Model

Census list farms	In survey universe	Not in survey universe	Total
On mail list	N ₁₁	N ₁₂	N ₁₊
Not on mail list	N ₂₁	N ₂₂	
Total	N ₊₁		

where,

N₁₁ = the number of farms on the census mail list and in the JES sample resulting from the match of the JES area sample farms to farm records in the census.

N₁₂ = the number of farms on the census mail list but not in the JES sample,

N₂₁ = the number of farms in the JES sample but not on the census mail list resulting from the match of the JES area sample farms to farm records in the census.

 N_{22} = the number of farms not on the census mail list and not in the JES sample,

 N_{1+} = the number of farms on the census mail list adjusted for classification error; note that N_{1+} = C',

 N_{+1} = the number of farms in the JES sample.

The universe weighted estimator of N_{12} is:

$$\hat{N}_{12} = N_{1+} - \hat{N}_{11} \tag{5}$$

where,

 \hat{N}_{11} = the JES sample estimate of number of farms on the census mail list with characteristic x.

The universe weighted estimator of N_{22} is:

$$\hat{N}_{22} = (\hat{N}_{21}) (\hat{N}_{12}) / \hat{N}_{11}$$
 (6)

where,

 \hat{N}_{21} = the JES sample estimate of number of farms not on the census mail list with characteristic x.

The maximum likelihood estimate of total farm count provided by the model is:

$$T = [(\hat{N}_{11} + \hat{N}_{12}) (\hat{N}_{11} + \hat{N}_{21})] / (\hat{N}_{11})$$

= $N_{1+} + (N_{1+}) (\hat{N}_{21}/\hat{N}_{11})$ (7)

Then, total (T_x) for some characteristic x of farm operations can be estimated by:

$$\hat{T}_{x} = \hat{C}'_{x} + (\hat{S}_{x}) (N_{1+} / \hat{N}_{11})
= \hat{C}'_{x} + (\hat{S}_{x} / \hat{N}_{21}) (\hat{N}_{21}) (N_{1+} / \hat{N}_{11})
= \hat{C}'_{x} + (\hat{S}_{x} / \hat{N}_{21}) (\hat{N}_{21} + \hat{N}_{22})
= \hat{C}'_{x} + N\widehat{M}L_{x}$$
(9)

where,

 \hat{C}'_x = the total value for farms in the census with the characteristic x adjusted for classification error; i.e. $\hat{C}'_x = C_x - \hat{OV}_x + \hat{MCF}_x$

 N_{1+}/\hat{N}_{11} = ratio of number of census farms to the JES sample estimate of number of farms on the census mail list with characteristic x.

Ŝ_x = the unbiased JES sample open segment estimate for farms not on the census mail list with characteristic x.

Thus, the estimate for some characteristic x of farms not on the mail list is:

$$\widehat{NML}_{r} = \widehat{S}_{r} + (\widehat{S}_{r}/\widehat{N}_{21})(\widehat{N}_{22})$$
 (10)

Note that for farm count, $\hat{S}_x = \hat{N}_{21}$ and $N\widehat{M}L_x = \hat{S}_x + \hat{N}_{22}$.

For a given characteristic x, both the estimated census farm count and the associated census value were adjusted for farm classification error. The components of $\widehat{\mathbf{C}}'$ and Ĉ', were computed at the regional level separately for farms with sales of less than \$2,500 and for farms with sales of \$2,500 or more and summed to produce estimated totals. The ratio of the census farm count to the JES estimate of census farm count, (N_{1+}/N_{11}) , was similarly computed separately for these two sales groups at the State, divisional, or regional publication level; each sales break ratio was then multiplied by the JES estimate of farms in JES but not on the census mail list (\hat{S}_x) for that sales break and summed to estimate NMLx at that geographic level. Thus, the sum of the estimates of C', and NML_x is the estimate of the "true" universe total for the characteristic (Tx). U.S. estimates were obtained by summing the regional estimates.

For a given characteristic x, the JES sample open segment estimate of JES farms not on the census mail list was computed by:

$$\hat{S}_{x} = \sum_{i=1}^{2} \sum_{j=1}^{n_{i}} e_{j} \left(\sum_{k=1}^{m_{j}} S_{ijk} \right)$$
 (11)

- = sales group (< \$2,500 and greater than or equal to \$2,500),
- j = segment within group,
- k = farm within segment,
- n_i = number of sample segments in ith group,
- e_j = expansion factor or inverse of the probability of selection for the jth segment,
- $m_i = number of farms in j^{th} segment,$
- s_{ijk} = value of farm k in jth segment, ith sales group with characteristic x.

As previously mentioned, State level estimates of counts and selected characteristics of farms not on the mail list were published in the State census volumes. As estimates of classification error were not available at the State level, the estimated farm counts used in the volume 1, State reports were not adjusted for classification error. The bias resulting from not adjusting for classification error at the State level was considered to have less impact on mean square error than the increase in variance incurred by deriving a State level estimate including classification error.

RESULTS

The estimated net farm coverage error was 7.2 percent (± 0.5) for the U.S. resulting in an estimated census coverage of 92.8 percent. Approximately 13.2 percent (± 0.5) of estimated total farms were undercounted and approximately 6.0 percent (± 0.5) were overcounted. The net farm coverage error rate was 15.0 percent (± 0.4) in 1969, 10.7 percent (± 0.3) in 1974, 3.4 percent (± 0.4) in 1978, and 9.1 percent (± 2.6) in 1982 as shown in figure 2. The low net farm coverage error in 1978 resulted primarily from the inclusion of the area sample in the census.

Farm counts and values are tabulated by estimated farms, census published farms, undercounted (misclassified and not on the mail list) farms, and overcounted farms. U.S. estimates are presented in tables B. C. and D. U.S. and regional estimates in tables 1 through 4; divisional and State estimates in table 5; and divisional estimates in table 6. Table B presents selected U.S. values on estimated farms, estimated undercounted farms, and estimated overcounted farms as a percent of table 1; U.S. estimated farm totals by sales group, standard industrial classification, size in acres, and operator characteristics. Table C presents count of overcount misclassified and duplicate farms in the four census regions. The base for this percent is census published farms plus estimated undercounted farms minus estimated overcounted farms. Table D presents the U.S. percent estimated undercount for agricultural commodity items provided in table 2. The base for this percent is the total of census published and estimated undercounted farms.

Table B. Percent Estimated Census Farm Coverage Error for Selected Operation Characteristics: 1987

	Estim farr		Estin underc farr			nated ounted ns ⁴	Estimated net farm coverage error ⁵		
Characteristics	Total (number)	Relative standard error of estimate (percent)	Percent ³	Standard error of percent	Percent ³	Standard error of percent	Percent ³	Standard error of percent	
Total	2 243 648	.4	13.2	.3	6.0	.3	7.2	.3	
Farms by value of sales: Less than \$2,500	662 600	.8	32.3	.8	6.0	.5	26.3	2.0	
	1 581 048	.4	5.2	.2	6.0	.3	8	-	
	559 943	.6	9.8	.4	5.6	.5	4.2	.4	
Less than \$10,000	1 222 543	.5	22.0	.5	5.8	.3	16.2	1.0	
\$10,000 or more	1 021 105	.4	2.8	.2	6.3	.4	-3.6	.3	
Farm by standard industrial classification: Crops (01) Livestock (02)	921 373	.6	9.8	.3	7.9	.5	1.8	.1	
	1 322 274	.5	15.6	.4	4.7	.3	10.9	.7	
Farms by size: 1 to 49 acres 50 to 179 acres 180 to 499 acres 500 acres or more	752 362 672 674 467 925 350 689	.8 .6 .6	27.9 10.0 3.4 1.1	.7 .4 .2	6.5 5.8 5.6 6.2	.5 .4 .5	21.4 4.2 -2.2 -5.1	1.6 .4 .3 .9	
Farms by tenure of operator; Full owners Part owners Tenants	1 369 595	.5	17.3	.4	7.5	.4	9.8	.5	
	623 020	.5	5.8	.3	3.4	.4	2.4	.3	
	251 034	1.0	9.6	.7	4.6	.7	5.0	.9	
Farms by age of operator: Under 35 years 35 to 54 years 55 years and over	302 485	1.0	14.4	.7	6.2	.8	8.1	1.1	
	959 733	.5	14.9	.4	4.9	.4	10.0	.8	
	981 430	.5	11.2	.3	7.1	.4	4.2	.3	
Farms by principal occupation of operator: Farming	1 136 704 1 106 945	.4 .6	5.9 20.8	.2 .5	5.7 6.3	.4 .4	.1 14.4	- o,	

¹Census published farms plus estimated undercounted farms minus estimated overcounted farms.

For farms with value of agricultural products sold of \$2,500 or more, the net farm coverage error was -0.8 percent,² an overcount. Of the \$2,500 or more sales group, 5.2 percent (± 0.3) were undercounted and 6.0 percent (± 0.5) were overcounted. The net farm coverage error for this group was 6.5 percent (± 0.7) in 1969, 6.8 percent (± 0.5) in 1974, 3.6 percent (± 0.3) in 1978, and 0.5 percent³ in 1982. This group has a low net farm coverage error because larger farms are more likely to be included in census source lists and were subjected to more intensive processing procedures to ensure that they were included.

An estimated 73.7 percent (\pm 1.2) of farms with value of agricultural products sold of less than \$2,500 were in the census. Of these farms, 32.3 percent (\pm 1.3) were undercounted and 6.0 percent (\pm 0.8) were overcounted. The

gross undercounted rate for this group was 33.3 percent (± 2.1) in 1969, 27.3 percent (± 2.0) in 1974, 7.1 percent (± 2.5) in 1978, and 28.6 percent (± 5.5) in 1982.

From tables B and 1, the estimated number of undercounted farms was 296,933 (\pm 9,309) or 13.2 percent (\pm 0.5). About 4 of 5 undercounted farms were not on the mail list. The remainder were farms incorrectly classified as nonfarms (misclassified). While about 27.9 percent of the undercounted farms had value of agricultural products sold of \$2,500 or more, only about 9.5 percent of the undercounted farms were larger farms with sales of \$10,000 or more. Of the undercounted farms, 70.7 percent had 49 acres or less, 22.6 percent had from 50 to 179 acres, 5.4 percent had from 180 to 499 acres, and 1.3 percent had 500 acres or more. Of these farms, 79.8 percent were operated by full owners, 12.1 percent by part owners, and 8.1 percent by tenants. About 2 of 3 undercounted farms were livestock farms and 1 of 3 were crop farms.

²Includes misclassified farms (farms classified as nonfarms) and farms not on mail list.

³Base for percent is estimated farms (column 1).

⁴Includes nonfarms classified as farms and multiple enumerations of 1 farm operation.

⁵Difference of estimated undercounted farms and estimated overcounted farms.

²Standard error for estimate is essentially zero.

³Relative standard error was over 100 percent and not published.

Table C. Estimated Overcounted Farms: 1987

	Estimate	ed total	Miscla	ssified	Duplicate		
Geographic area	Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)	
United States	135 600	4.2	72 310	5.8	63 290	6.3	
Northeast Midwest South West	6 030 57 776 50 344 21 450	9.4 8.2 5.1 9.0	2 430 29 516 31 784 8 580	14.9 11.5 6.4 14.4	3 600 28 260 18 560 12 870	12.3 11.8 8.4 11.7	

The estimated number of overcounted farms was 135,600 $(\pm 9,397)$ or 6.0 percent (± 0.5) . About 1 out of 2 overcounted cases were nonfarms incorrectly classified as farms (misclassified). The remainder were farms with more than one census report (reports duplicated for a single farm or multiple reports for parts of a single farm). Table C presents the estimated overcounted farms included in the census by misclassified and duplicate for the United States and its regions. The distribution of the two components varies considerably by region. Of the overcounted farms, 36.1 percent had 49 acres or less, 28.7 percent had from 50 to 179 acres, 19.2 percent had from 180 to 499 acres, and 16.0 percent had 500 acres or more. Of these farms, 76.0 percent were operated by full owners, 15.5 percent by part owners, and 8.5 percent by tenants. About 2 of 5 overcounted farms were livestock farms and 3 of 5 were crop farms.

Census coverage differed by the census regions as provided in figure 1. The undercount coverage components were lower in the Midwest Region than in the other three census regions as illustrated in figure 3. Overall coverage was substantially more complete for the Midwest Region for all sizes of farms as illustrated in figure 4 using value of sales as the measures of size. This is due primarily to the higher proportion of larger farms in the Midwest Region which are more likely to be included on the source lists for the census.

Table D and tables 2 through 4 present estimated totals and relative standard errors of selected agricultural commodity items (tables D and 2), of acreage (table 3), and market value of agricultural products (table 4) for undercounted farms. Figure 5 provides estimated percent undercounted farms, land in farms, and value of sales for the four census regions. The estimated total (or base for the percents) is the sum of the census published and estimated undercounted farms. Figure 6 provides the composition of undercounted farms by sales, commodity, acreage, ownership of the operation and by age range, principal occupation, and sex of the operator.

The percent estimates for most agricultural commodity data items in table D are much less than the 12.5 percent (± 0.4) estimate of undercounted farms. This can be seen dramatically in figure 5. Thus, it is advisable to consider coverage component estimates relative to the census

agricultural data as well as to the farm count. Estimates of the total number of undercounted farms or the proportion of undercounted farms alone are not a complete indication of the quality of the census data. The undercount estimates for agricultural data items do not represent total error for these characteristics, probably understating it. Comparable estimates for overcounted farms could not be derived from the coverage evaluation sample nor were estimates for incorrect item reporting on these farms measured. The estimates for the data items in these tables from undercounted farms are likely to contribute a larger proportion of total coverage error than from overreporting of these items for farms included in the census.

Table D presents the U.S. estimates of percent undercount for the selected crop and livestock items that are presented in more detail at the regional level in table 2. From table 2, the estimated number of farms not on the mail list was 242,853 (\pm 7,613), the estimated number of farms incorrectly classified as nonfarms (misclassified) was 54,080 (\pm 5,354) for an estimated total of 296,933 (\pm 9,309) undercounted farms. These 296,933 farms have 1.9 percent (\pm 0.2) of the total census and undercounted farm acreage. The estimated undercounted acres were approximately 18.4 million (\pm 1,938,000) with the average size undercounted farm having about 62 acres (\pm 6.8) compared to 462 acres (\pm 0.2) for the average census farm.

Table 3 presents estimates of the land in farms by sales group for estimated undercounted farms. It was estimated that 98.1 percent² of the land in farms in the United States was in the census. Undercounted farms accounted for 1.1 percent (± 0.2) of the estimated total acres of farms with sales of \$2,500 or more, and 12.5 percent (± 1.1) of farms with sales of less than \$2,500. Table 4 presents the estimates for the value of agricultural products sold by sales group. It was estimated that 98.8 percent² of the value of agricultural products sold in the United States was in the census. Undercounted farms accounted for 1.1 percent (± 0.2) of estimated farms whose market value of sales were \$2,500 or more, and 24.2 percent (± 3.5) of estimated farms whose sales were less than \$2,500.

²See footnote 2 on p. XIII.

Table D. Percent Estimated Undercounted Farms for Selected Agricultural Items: 1987

Item	Census published and undercounted farms ¹ (number)	Census published farms (number)	Estimated undercounted farms ² (number)	Percent estimated undercount ³
Farmsnumber	2 379 248	2 082 315	296 933	12.5
Land in farmsacres	980 072 515	961 722 372	18 350 143	1.9
	411.9	462.0	61.8	(X)
Market value of agricultural products sold \$1,000 Corn for grain farms	137 077 713	135 420 801	1 656 912	1.2
	652 550	627 602	24 948	3.8
acres Sorghum for grainfarms _	59 264 383 91 772 9 992 629	58 701 505 89 642	562 878 2 130	.9 2.3
Wheat for grainacresacresacresacresacres	358 222 53 713 718	9 760 574 352 231 53 224 055	232 055 5 991 489 663	2.3 1.7 .9
Soybeans for beans	451 625 55 787 803	441 899 55 291 205	9 726 496 598	2.2
Hayfarms_	1 069 759	994 253	75 506	7.1
number	59 330 280	57 943 823	1 386 457	2.3
Tobaccofarms	145 565	136 682	8 883	6.1
number_	6 544 916	6 333 104	211 812	3.2
Cattle and calves inventoryfarms	1 323 567	1 175 173	148 394	11.2
number_	97 472 804	95 626 821	1 845 983	
Hogs and pigs inventoryfarmsnumber	279 372 53 382 391	242 981 52 222 983	36 391 1 159 408	13.0
Hens and pullets of laying age inventoryfarms_ number_	192 106	141 622	50 484	26.3
	321 972 049	315 507 008	6 465 041	2.0

¹Differs from estimated farms given in tables B and 1 because overcounted farms are not subtracted from total.

Tables 5 and 6 present estimates of farms not on the mail list. Table 5 presents the estimates of farms not on the mail list by census divisions (as shown in figure 1) and state for the number of farms by sales groups, market value of agricultural products sold, standard industrial classification, and selected operator characteristics. Table 6 presents division estimates of selected agricultural commodities for farms not on the mail list.

PRECISION OF THE ESTIMATES

As previously mentioned the estimates in this report are derived from the 1988 June Enumerative Survey and the Classification Error Survey samples. Thus, there are two possible types of errors—sampling and nonsampling. Sampling errors occur because observations are made only on a sample, not on the entire population. The JES and CES sample selection and estimation procedures contributed to the sampling errors. Nonsampling errors encompass all other types of errors associated with estimates from survey data collections that are not related to sample design. These are discussed further in the section on nonsampling errors. The "accuracy" of a survey result is determined by the joint effect of sampling and nonsampling errors.

Sampling Error

Variability in the estimates was due to JES and CES sample selection procedures, sample estimation procedures, and census nonresponse estimation procedures. For JES, sampling errors for number and characteristics of farms not on the mail list were estimated assuming a random sample with replacement. A Taylor series approximation was used for the ratio estimates. For CES, sampling errors for MCF and OV were estimated assuming a random sample without replacement. The variance of the total "true" farm count and "true" value of characteristics was calculated as the sum of the variance for each error component, derived independently from JES and CES. Zero covariances were assumed for deriving the error component variances and the total variances.

The post stratification based on the sales breaks were used for computing NML variance estimates at the State and divisional levels and MCF and OV variance estimates at the regional level. The NML regional variance estimates are the sum of the corresponding divisional variance estimates. The U.S. variance estimates for all error components are the sum of their respective regional variance estimates. The formulae for the variance estimators are given in Wright (1989).

The samples for the JES and CES were, respectively, each one of a large number of possible samples of the same size that could have been selected using the same sample design. Estimates derived from different samples would differ from each other. The difference between a sample estimate and the average of all possible sample estimates is called the sampling deviation. The standard error or sampling error of a survey estimate is a measure of

²Includes misclassified farms (farms classified as nonfarms) and farms not on mail list.

³Base for percent is total for census published and undercounted farms (column 1).

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.

Estimates of sampling variability are expressed as relative standard errors or standard errors in the tables. The estimated relative standard error (percent) of a statistic is derived by dividing the estimated standard error for the statistic by the statistic and multiplying by 100. When the statistic is a percent, the estimated standard error of the percent is the published measure of variability. These estimates only measure the sampling errors associated with the survey. If all possible samples were selected, each of the samples surveyed under essentially the same conditions, and an estimate and its standard error 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 90 percent of the intervals from 1.65 standard errors below the estimate to 1.65 standard errors above the estimate would include the average value of all possible samples.

The computations necessary to define the above confidence statements are illustrated in the following example. The estimated total number of farms in the United States in table 1 is 2,243,648 with an estimated standard error of 8,975 and an estimated relative standard error of approximately 0.4 percent (i.e., 8,975 divided by 2,243,648 times 100). The chances are about 2 out of 3 (67 percent) that complete coverage using the same methods would yield between 2,234,673 and 2,252,623 farms. Similarly, a 90 percent confidence interval is 2,228,839 to 2,258,457 (i.e. plus or minus 14,809). As calculated, the standard error does not measure the effect of nonsampling errors.

Estimates of the standard error of derived statistics may be of interest to the user. Formulas and examples illustrating their application are provided below for the net coverage error (undercount minus overcount) and for any ratios of estimated components of coverage error to estimated census totals for a given characteristic. The estimated totals and corresponding relative standard errors for the components of coverage error used in these formulas are provided in table 1.

The standard error of the estimated net coverage error (E) for any characteristic in table 1 may be estimated by using the formula:

$$\widehat{\sigma}(\widehat{E}) = \sqrt{\widehat{U}^2 \widehat{V}_1^2 + \widehat{OV}^2 \widehat{V}_2^2}, \tag{12}$$

where \hat{E} is the estimated net coverage error, \hat{U} is the estimated undercount, \hat{OV} is the estimated overcount, and \hat{V}_1 and \hat{V}_2 are the estimated relative standard errors of \hat{U} and \hat{OV} , respectively.

Example 1—To compute the standard error of the net coverage error for the total number of farms in the Northeast Region, apply the formula as follows:

$$\hat{U} = 28,994$$

$$\hat{OV} = 6,030$$

$$\hat{V}_{1} = .049$$

$$\hat{V}_{2} = .094$$

$$\hat{E} = \hat{U} - \hat{OV} = 22,964$$

$$\hat{\sigma}(\hat{E}) = \sqrt{(28,994)^{2}(.049)^{2} + (6,030)^{2}(.094)^{2}}$$

$$= 1.528.9$$

The estimated relative percent standard error of $\hat{\mathbf{E}}$ is equal to:

$$\hat{V}$$
 $(\hat{E}) = \frac{\hat{\sigma}(\hat{E})}{\hat{E}}$ (100)
 $= \frac{1528.9}{22,964}$ (100)
 $= .0666$ (100)
 $= 6.7$ percent

The standard error for the ratio (R) of any estimated coverage component (X) such as undercount, the overcount, or the net coverage error for farms to the estimated total farms at the regional level can be approximated by the formula:

$$\hat{\sigma} (\hat{R}) = \sqrt{\hat{T}^{-2} \hat{\sigma}^{2} (\hat{X}) (1 - 2\hat{R} + \hat{R}^{2})}, \qquad (13)$$

where $\hat{\sigma}^2$ (\hat{X}) is the variance of the estimated coverage error component (\hat{X}), \hat{T} is the coverage estimated farm total, and R is the ratio of \hat{X} to \hat{T} . The values for \hat{X} and \hat{T} are given in table 1. The standard error of these ratios at the U.S. level is given in table A for most of the data items in table 1. To calculate the standard error of these ratios at the regional level use formula (13).

Example 2—To compute the standard error of the ratio of the estimated net coverage error for farms to the estimated total farms in the Northeast Region, apply the formula as follows:

$$\hat{U}$$
 = 28,994
 \hat{OV} = 6,030
 \hat{E} = \hat{U} - \hat{OV} = 22,964

$$\hat{T}$$
 = 146,446
 \hat{R} = \hat{E}/\hat{T} = .157
 $\hat{\sigma}$ (\hat{E}) = 1528.9 (from Example 1)
 $\hat{\sigma}$ (\hat{R}) = (146,446)⁻² (1528.9)² [1-2(.157) + (.157)²]
= .010

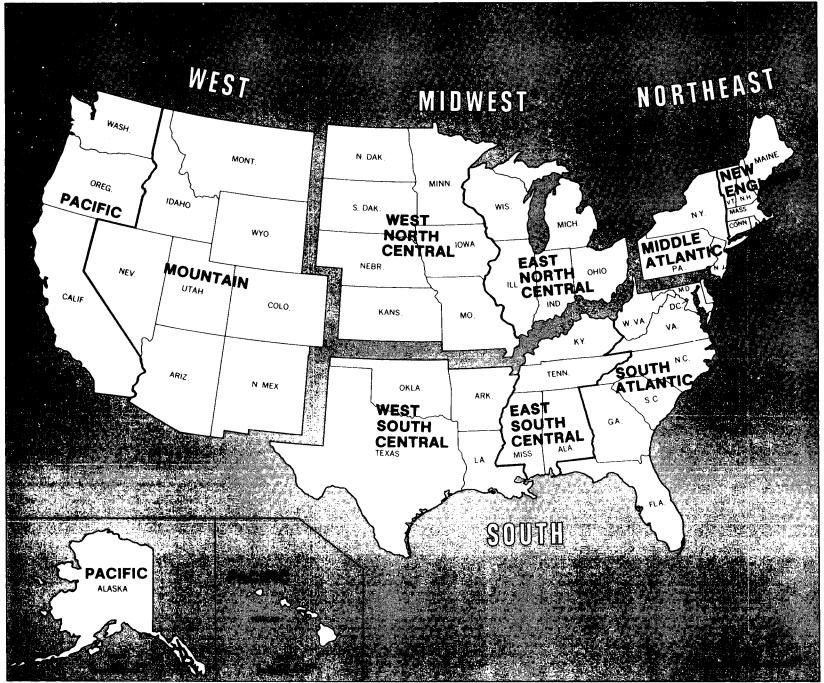
Nonsampling Error

Nonsampling errors for the coverage estimate can be attributed to such sources as incorrectness of the model used for the estimation, flaws in the questionnaire design, incompleteness of the enumerations, inaccuracies in the census and JES survey list matching procedures, and incorrect or inaccurate data reporting and processing procedures for JES, CES, and the census. Extensive efforts were made to minimize nonsampling errors in the surveys for this study through the use of quality control and other verification measures.

Failure to classify 2.5 percent (619) of the total JES sample cases represents a potential source of nonsampling error in the coverage evaluation study. These unclassified cases resulted from households that did not supply all or some of the required data either in the JES enumeration or on the census report form and could not be contacted after extensive followup procedures. Approximately 8.9 percent (488) of the nonmatched cases and 0.7 percent (131) of the matched cases were not classified. These unclassified cases were removed from the sample estimation procedures. No separate adjustment was made to the coverage estimates for these cases, thus resulting in a potential bias in the estimates of farms not on the mail list, Further examination of these cases (as well as the nonclassifiable and nonresponding survey cases in the CES which were accounted for in the sample estimation) is planned for 1992 to develop alternative processing or estimation procedures.

i.			

REGIONS AND CENSUS DIVISIONS OF THE UNITED STATES



U.S. DEPARTMENT OF COMMERCE Bureau of the Census

* The Midwest Region was designated as the North Central Region until June 1984.

Figure 2. Estimated Net Census Farm Coverage Error: 1969 to 1987

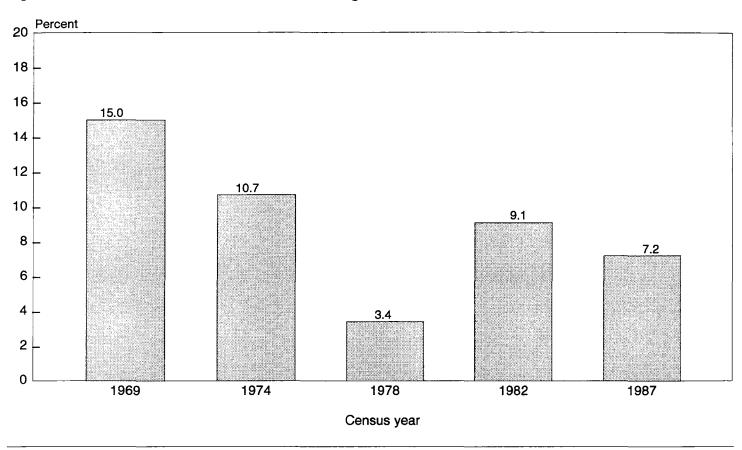


Figure 3. Estimated Census Farm Coverage Error: 1987

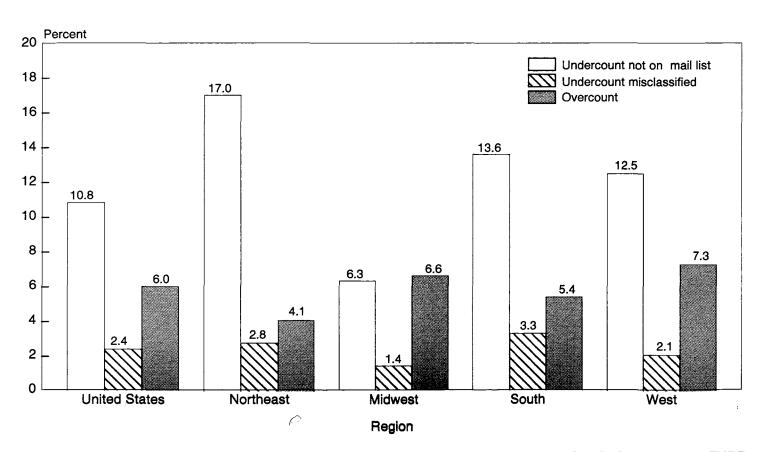


Figure 4. Estimated Net Census Farm Coverage Error by Value of Sales: 1987

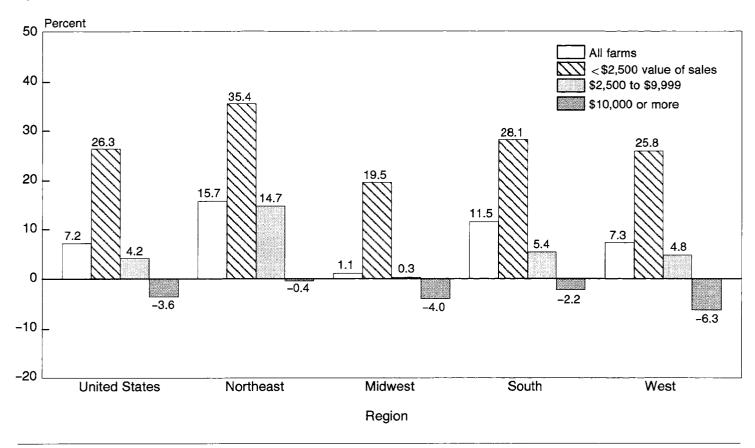


Figure 5. Estimated Undercounted Farms—Farm Count, Land in Farms, and Value of Sales: 1987

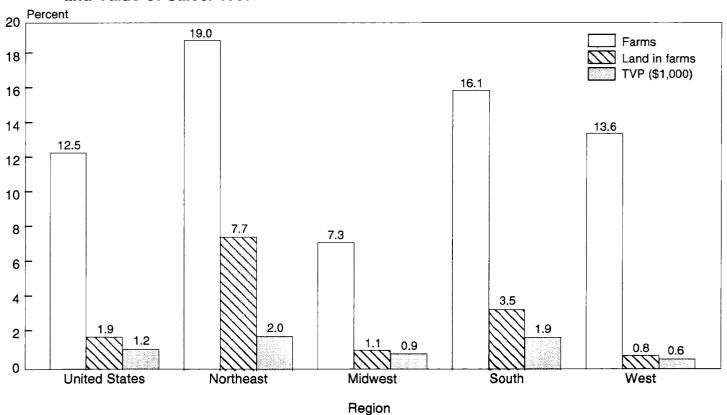
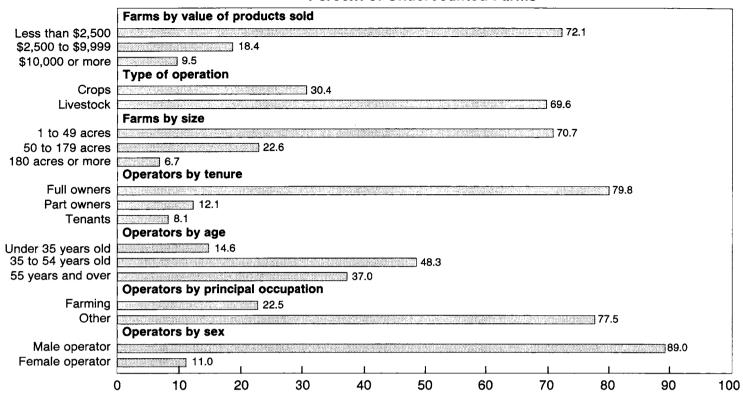


Figure 6. Composition of Nation's Estimated Undercounted and Census Farms: 1987

Percent of Undercounted Farms



Percent of Census Farms

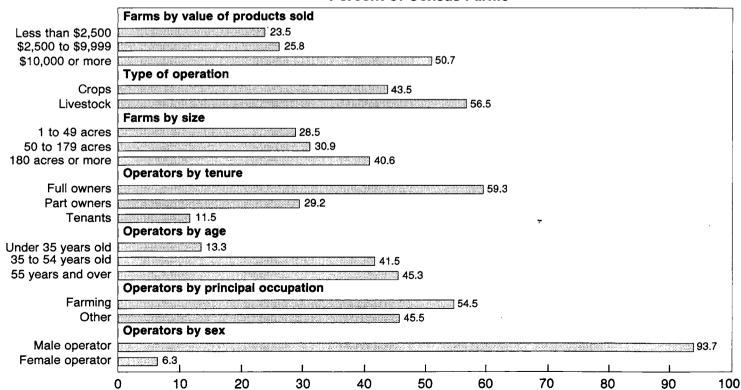


Table 1. Estimated Census Farm Coverage Error for Selected Operation Characteristics: 1987

[Detail may not add to total due to rounding]	Estimated	d farms ¹	Census p		Estimated undercounted farms					Estimated o		
Geographic area and item	Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)	Misclassified total (number)	Relative standard error of estimate (percent)	Not on mail list total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)
UNITED STATES												
Total	2 243 648	.4	2 082 315	.01	296 933	1.9	54 080	6.0	242 853	1.9	135 600	4.2
Farms by value of sales: Less than \$2,500 \$2,500 or nore \$2,500 to \$9,999	662 600	.8	488 652	.02	214 014	2.2	31 034	7.6	182 980	2.2	40 066	7.4
	1 581 048	.4	1 593 663	.01	82 919	3.4	23 046	9.5	59 873	2.9	95 534	5.2
	559 943	.6	536 306	.02	54 715	3.8	10 768	13.3	43 947	3.4	31 078	8.6
Less than \$10,000	1 222 543	.5	1 024 958	.01	268 729	2.0	41 802	6.6	226 927	2.0	71 144	5.6
\$10,000 or more		.4	1 057 357	.01	28 204	6.5	12 278	13.5	15 926	5.0	64 456	6.5
Farms by standard industrial classification: Crops (01) Livestock (02)	921 373	.6	904 490	.03	90 123	3.1	19 606	9.8	70 517	2.9	73 240	5.8
	1 322 274	.5	1 177 825	.03	206 809	2.2	34 474	7.5	172 335	2.2	62 360	6.3
Farms by size: 1 to 49 acres 50 to 179 acres 180 to 499 acres 500 acres or more	672 674 467 925	.8 .6 .6 .7	591 229 644 336 478 069 368 681	.05 .05 .06 .05	210 019 67 186 15 940 3 790	2.2 3.5 6.4 12.8	37 404 11 868 3 272 1 536	7.4 11.5 23.5 29.9	172 615 55 318 12 668 2 254	2.2 3.5 5.2 7.1	48 886 38 848 26 084 21 782	7.0 7.7 9.6 11.8
Farms by tenure of operator: Full owners Part owners Tenants	623 020	.5 .5 1.0	1 235 609 608 113 238 593	.02 .04 .08	237 024 35 859 24 051	2.0 5.3 7.5	41 056 6 224 6 800	6.7 18.8 18.6	195 968 29 635 17 251	2.0 5.0 7.5	103 038 20 952 11 610	4.8 11.4 15.8
Farms by age of operator: Under 35 years 35 to 54 years 55 years and over	959 733	1.0 .5 .5	277 949 863 820 940 546	.07 .04 .04	43 432 143 285 110 216	4.5 2.6 2.9	7 562 21 258 25 260	20.0 9.1 8.3	35 870 122 027 84 956	3.4 2.6 2.9	18 896 47 372 69 332	12.4 7.1 5.9
Farms by principal occupation of operator: FarmingOther	1 136 704	.4	1 135 115	.02	66 921	3.7	12 186	12.7	54 735	3.5	65 332	6.2
	1 106 945	.6	947 200	.03	230 013	2.1	41 894	6.8	188 119	2.1	70 268	5.8
Farms by residence of operator: On farm operated Not on farm operated Not reported	430 043	.4 .9 .8	1 484 763 440 806 156 746	.03 .06 .09	213 369 31 085 52 480	2.2 6.8 3.0	40 814 13 266 (²)	6.9 11.8 (²)	172 555 17 819 52 480	2.2 8.0 3.0	93 752 41 848 (²)	5.0 7.9 (²)
Farms by sex of operator: Maie Female		.4 1.8	1 951 408 130 907	.01 .11	264 207 32 726	1.9 6.0	46 690 7 390	6.3 17.3	217 517 25 336	1.9 5.8	120 646 14 954	4.5 12.1
NORTHEAST												
Total	146 446	1.0	123 482	.04	28 994	4.9	4 140	11.4	24 854	5.4	6 030	9.4
Farms by value of sales: Less than \$2,500 \$2,500 or more \$2,500 to \$9,999	51 407	2.1	33 229	.08	19 438	5.3	1 890	17.0	17 548	5.6	1 260	20.8
	95 039	1.0	90 253	.04	9 556	8.6	2 250	15.5	7 306	10.2	4 770	10.6
	34 329	2.3	29 279	.08	6 490	11.3	1 080	22.5	5 410	12.8	1 440	19.4
Less than \$10,000		1.6	62 508	.05	25 928	5.2	2 970	13.5	22 958	5.6	2 700	14.2
\$10,000 or more		.9	60 974	.04	3 066	11.8	1 170	21.6	1 896	13.6	3 330	12.7
Farms by standard industrial classification: Crops (01) Livestock (02)	60 823 85 624	1.8 1.1	50 629 72 853	.13 .12	13 344 15 651	7.6 5.4	2 250 1 890	15.5 17.0	11 094 13 761	8.6 5.7	3 150 2 880	13.1 13.7
Farms by size: 1 to 49 acres 50 to 179 acres 180 acres or more	53 157	2.2	36 797	.21	17 890	6.4	2 610	14.4	15 280	7.1	1 530	18.9
	54 499	1.2	47 608	.19	9 141	6.2	1 170	21.6	7 971	6.4	2 250	15.5
	38 791	1.1	39 077	.17	1 964	13.0	360	38.9	1 604	13.3	2 250	15.5
Farms by tenure of operator: Full owners Part owners Tenants	97 028	1.4	77 239	.09	24 109	5.4	3 600	12.3	20 509	6.0	4 320	11.2
	39 235	1.0	36 566	.17	3 659	8.3	180	55.1	3 479	8.2	990	23.5
	10 183	3.3	9 677	.42	1 226	21.5	360	38.9	866	25.7	720	27.5
Farms by age of operator: Under 35 years 35 to 54 years 55 years and over	18 422	2.1	15 474	.30	3 488	9.6	450	34.8	3 038	9.7	540	31.8
	67 712	1.5	55 012	.15	14 860	6.4	1 800	17.4	13 060	6.9	2 160	15.9
	60 312	1.5	52 996	.16	10 646	7.8	1 890	17.0	8 756	8.7	3 330	12.7
Farms by principal occupation of operator: Farming	74 850	1.0	70 450	.09	8 090	7.8	1 530	18.9	6 560	8.6	3 690	12.1
	71 597	1.7	53 032	.15	20 905	5.7	2 610	14.4	18 295	6.2	2 340	15.2
Farms by residence of operator: On farm operated Not on farm operated Not reported	121 868	1.2	102 363	.10	24 545	5.3	3 330	12.7	21 215	5.8	5 040	10.3
	14 247	2.4	13 856	.33	1 381	18.1	810	25.9	571	23.8	990	23.5
	10 332	3.3	7 263	.43	3 069	11.1	(2)	(²)	3 069	11.1	(²)	(²)
Farms by sex of operator: Male Female	134 267	1.1	114 188	.04	25 479	5.2	3 600	12.3	21 879	5.7	5 400	10.0
	12 179	3.2	9 294	.42	3 515	9.8	540	31.8	2 975	10.1	630	29.4

Table 1. Estimated Census Farm Coverage Error for Selected Operation Characteristics: 1987-Con.

	Estimated	i farms¹	Census p		Estimated undercounted farms				Estimated overcounted farms			
Geographic area and item	Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)	Misclassified total (number)	Relative standard error of estimate (percent)	Not on mail list total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)
MIDWEST												
Total	871 608	.6	861 982	.01	67 402	3.8	12 560	17.7	54 842	2.3	57 776	8.2
Farms by value of sales: Less than \$2,500 \$2,500 or more \$2,500 to \$9,999	156 489	1.9	125 967	.04	43 710	4.3	5 652	26.5	38 058	2.9	13 188	17.3
	715 120	.6	736 015	.01	23 693	7.3	6 908	23.9	16 785	2.9	44 588	9.3
	180 529	1.3	180 072	.03	11 761	8.9	2 512	39.7	9 249	3.6	11 304	18.7
Less than \$10,000	337 018	1.1	306 039	.02	55 471	3.9	8 164	22.0	47 307	2.5	24 492	12.7
\$10,000 or more	534 590	.7	555 943	.02	11 931	11.4	4 396	30.0	7 535	4.6	33 284	10.8
Farms by standard industrial classification:	426 522	.9	430 260	.04	27 034	5.6	4 396	30.0	22 638	3.2	30 772	11.3
Crops (01)	445 086	.9	431 722	.05	40 368	5.1	8 164	22.0	32 204	3.0	27 004	12.0
Farms by size: 1 to 49 acres 50 to 179 acres 180 acres or more	201 142	1.8	171 206	.10	48 776	4.8	10 676	19.2	38 100	2.9	18 840	14.5
	250 660	1.0	252 767	.08	12 337	6.8	(S)	(S)	(S)	(S)	14 444	1
	419 806	.7	438 009	.06	6 289	5.0	(S)	(S)	(S)	(S)	24 492	12
Farms by tenure of operator: Full owners Part owners Tenants	459 745	1.0	447 410	.04	52 527	4.0	8 164	22.0	44 363	2.4	40 192	9.8
	290 593	.8	294 014	.06	7 255	13.4	1 884	45.9	5 371	8.4	10 676	19.2
	121 270	1.6	120 558	.12	7 620	13.7	2 512	39.7	5 108	5.8	6 908	23.9
Farms by age of operator: Under 35 years 35 to 54 years 55 years and over	153 188	1.7	147 479	.10	17 013	8.8	5 024	28.1	11 989	4.3	11 304	18.7
	365 572	.8	352 640	.06	31 144	4.9	3 768	32.4	27 376	3.3	18 212	14.7
	352 848	1.0	361 863	.06	19 245	7.0	3 768	32.4	15 477	3.7	28 260	11.8
Farms by principal occupation of operator: FarmingOther	532 875	.7	545 723	.03	16 668	7.3	3 140	35.5	13 528	3.7	29 516	11.5
	338 733	1.2	316 259	.06	50 734	4.4	9 420	20.5	41 314	2.7	28 260	11.8
Farms by residence of operator: On farm operated Not on farm operated Not reported	657 155	.7	645 045	.04	49 790	4.5	10 048	19.8	39 742	2.5	37 680	10.2
	146 267	2.1	160 097	.10	6 266	16.7	2 512	39.7	3 754	8.6	20 096	14.0
	68 186	.9	56 840	.16	11 346	5.1	(²)	(²)	11 346	5.1	(²)	(²)
Farms by sex of operator: Male Female	832 990	.6	826 221	.01	60 149	3.8	10 048	19.8	50 101	2.3	53 380	8.5
	38 618	4.4	35 761	.21	7 253	15.0	2 512	39.7	4 741	9.2	4 396	30.0
SOUTH							:					
Total	931 014	.5	823 851	.01	157 507	2.7	31 088	6.5	126 419	2.9	50 344	5.1
Farms by value of sales: Less than \$2,500 \$2,500 or more \$2,500 to \$9,999	351 454	1.2	252 837	.03	118 801	3.1	19 488	8.2	99 313	3.4	20 184	8.1
	579 559	.5	571 014	.02	38 705	4.5	11 600	10.7	27 105	4.6	30 160	6.6
	282 281	.7	267 161	.02	29 736	4.9	6 032	14.8	23 704	4.8	14 616	9.5
Less than \$10,000	633 736	.7	519 998	.02	148 538	2.8	25 520	7.2	123 018	3.0	34 800	6.1
\$10,000 or more	297 278	.6	303 853	.02	8 969	10.7	5 568	15.4	3 401	12.4	15 544	9.2
Farms by standard industrial classification: Crops (01) Livestock (02)	307 827 623 185	.9 .6	295 326 528 525	.05 .04	38 949 118 556	5.0 3.0	10 672 20 416	11.1 8.0	28 277 98 140	5.4 3.2	26 448 23 896	7.0 7.4
Farms by size: 1 to 49 acres	348 998	1.1	259 626	.08	108 164	3.2	19 256	8.3	88 908	3.4	18 792	8.4
	313 717	.8	292 030	.08	39 551	5.1	8 584	12.4	30 967	5.6	17 864	8.6
	268 299	.6	272 195	.07	9 792	8.1	3 248	20.2	6 544	6.8	13 688	9.8
Farms by tenure of operator: Full owners Part owners Tenants	619 412	.7	535 279	.03	126 357	2.9	25 288	7.2	101 069	3.1	42 224	5.6
	226 416	.7	211 683	.07	20 301	7.0	3 016	21.0	17 285	7.4	5 568	15.4
	85 186	1.6	76 889	.15	10 849	11.6	2 784	21.8	8 065	13.7	2 552	22.8
Farms by age of operator: Under 35 years 35 to 54 years 55 years and over	98 323	1.3	86 233	.13	17 426	5.6	2 088	25.2	15 338	5.4	5 336	15.8
	394 796	.8	336 495	.06	75 005	3.9	13 688	9.8	61 317	4.2	16 704	8.9
	437 894	.7	401 123	.06	65 075	3.9	15 312	9.3	49 763	4.2	28 304	6.8
Farms by principal occupation of operator: FarmingOther	382 377	.6	370 561	.05	31 072	5.5	5 800	15.1	25 272	5.8	19 256	8.3
	548 637	.8	453 290	.05	126 435	2.9	25 288	7.2	101 147	3.2	31 088	6.5
Farms by residence of operator: On farm operated Not on farm operated Not reported	614 204	.7	540 775	.04	107 301	3.2	23 432	7.5	83 869	3.5	33 872	6.2
	209 589	1.1	206 872	.09	19 189	8.7	7 656	13.1	11 533	11.6	16 472	8.9
	107 221	1.1	76 204	.14	31 017	3.9	(²)	(2)	31 017	3.9	(²)	(²)
Farms by sex of operator: Male Female	859 178	.5	761 703	.01	141 323	2.8	27 608	6.9	113 715	3.0	43 848	5.4
	71 836	2.3	62 148	.16	16 184	8.6	3 480	19.5	12 704	9.5	6 496	14.3

Table 1. Estimated Census Farm Coverage Error for Selected Operation Characteristics: 1987-Con.

	Estimated	farms¹	Census p			E	stimated under	counted farr	ms		Estimated of far	overcounted ms
Geographic area and item	Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)	Misclassified total (number)	Relative standard error of estimate (percent)	Not on mail list total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)
WEST												
Total	294 580	1.0	273 000	.02	43 030	5.2	6 292	16.8	36 738	5.3	21 450	9.0
Farms by value of sales: Less than \$2,500	103 250 191 330 62 804	2.1 1.0 1.8	76 619 196 381 59 794	.04 .02 .05	32 065 10 965 6 728	5.9 9.4 11.2	4 004 2 288 1 144	21.2 28.0 39.7	28 061 8 677 5 584	6.0 9.3 10.7	5 434 16 016 3 718	18.1 10.5 22.0
Less than \$10,000	166 053	1.5	136 413	.03	38 792	5.3	5 148	18.6	33 644	5.4	9 152	13.9
\$10,000 or more	128 527	1.3	136 587	.02	4 238	16.4	1 144	39.7	3 094	17.0	12 298	12.0
Farms by standard industrial classification: Crops (01) Livestock (02)	126 201	1.4	128 275	.06	10 796	8.4	2 288	28.0	8 508	7.6	12 870	11.7
	168 379	1.4	144 725	.07	32 234	6.0	4 004	21.2	28 230	6.2	8 580	14.4
Farms by size: 1 to 49 acres 50 to 179 acres 180 acres or more	149 065	1.6	123 600	.10	35 189	5.7	4 862	19.2	30 327	5.8	9 724	13.5
	53 798	2.1	51 931	.16	6 157	11.1	858	45.8	5 299	10.5	4 290	20.4
	91 717	1.4	97 469	.09	1 684	30.3	572	56.1	1 112	35.6	7 436	15.5
Farms by tenure of operator: Full owners Part owners Tenants	193 410	1.3	175 681	.05	34 031	5.6	4 004	21.2	30 027	5.7	16 302	10.4
	66 776	1.6	65 850	.10	4 644	14.9	1 144	39.7	3 500	14.9	3 718	22.0
	34 395	2.6	31 469	.19	4 356	16.9	1 144	39.7	3 212	18.0	1 430	35.5
Farms by age of operator: Under 35 years 35 to 54 years 55 years and over	32 552 131 653 130 376	2.7 1.6 1.4	28 763 119 673 124 564	.20 .09 .09	5 505 22 276 15 250	12.0 7.0 8.4	2 002 4 290	30.0 20.4	5 505 20 274 10 960	12.0 7.1 8.6	1 716 10 296 9 438	32.4 13.1 13.7
Farms by principal occupation of operator: FarmingOther	146 602	1.3	148 381	.06	11 091	10.0	1 716	32.4	9 375	10.3	12 870	11.7
	147 978	1.5	124 619	.09	31 939	5.7	4 576	19.8	27 363	5.8	8 580	14.4
Farms by residence of operator: On farm operated Not on farm operated Not reported	211 153	1.2	196 580	.06	31 733	5.9	4 004	21.2	27 729	6.0	17 160	1.1
	59 940	1.9	59 981	.14	4 249	17.2	2 288	28.0	1 961	18.0	4 290	20.4
	23 487	3.4	16 439	.25	7 048	11.2	(²)	(²)	7 048	11.2	(²)	(²)
Farms by sex of operator: Male Female	268 534	1.0	249 296	.02	37 256	5.5	5 434	18.1	31 822	5.6	18 018	9.9
	26 046	4.2	23 704	.23	5 774	13.1	858	45.8	4 916	13.1	3 432	22.9

¹Census published farms plus estimated undercounted farms minus estimated overcounted farms. ²All cases edited to either "on farm operated" or "not on farm operated" categories.

Table 2. Estimated Undercount for Selected Agricultural Items: 1987

[Detail may not add to total due to rounding]

	Census publi undercounte		Census publis	shed farms	Estimated undercounted farms						
Geographic area and item	Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)	Misclassified total (number)	Relative standard error of estimate (percent)	Not on mail list total (number)	Relative standard error of estimate (percent)	
UNITED STATES											
Farmsnumber_	2 379 248	.2	2 082 315	.01	296 933	1.9	54 080	6.0	242 853	1.9	
Land in farmsacres_	980 072 515	.1	961 722 372	.02	18 350 143	6.4	4 557 964	15.4	13 792 179	6.9	
Average size of farmacres_	411.9	.3	462.0	.02	61.8	6.7	84.0	16.5	56.0	7.1	
Market value of agricultural products \$1,000_ Sold	137 077 713 652 550 59 264 383 358 222 53 713 718 451 625 55 787 803	.1 .3 .2 .3 .4	135 420 801 627 602 58 701 505 352 231 53 224 055 441 899 55 291 205	.01 .03 .04 .05 .05	1 656 912 24 948 562 878 5 991 489 663 9 726 496 598	8.4 8.8 18.5 20.1 42.6 13.7 19.8	807 922 2 986 73 444 1 768 161 514 1 556 60 024	14.8 24.6 39.8 27.8 55.4 39.2 47.5	848 990 21 962 489 434 4 223 328 149 8 170 436 574	8.3 9.4 20.4 26.5 57.5 14.5 21.6	
Hay farms	1 069 759	.3	994 253	.03	75 506	4.9	11 226	11.9	64 280	5.4	
acres	59 330 280	.2	57 943 823	.04	1 386 457	9.1	290 618	26.0	1 095 839	9.2	
Tobaccofarms	145 565	1.0	136 682	.07	8 883	16.8	3 180	24.1	5 703	22.4	
acres	6 544 916	1.0	6 333 104	.10	211 812	32.1	202 584	33.6	9 228	23.8	
Cattle and calves inventory farms	1 323 567	.4	1 175 173	.02	148 394	3.5	21 468	9.4	126 926	3.8	
number	97 472 804	.1	95 626 821	.02	1 845 983	6.6	461 530	18.1	1 384 453	6.4	
Hogs and pigs inventory farms	279 372	1.0	242 981	.07	36 391	7.6	3 920	25.6	32 471	7.9	
number	53 382 391	.5	52 222 983	.06	1 159 408	21.0	446 488	36.5	712 920	25.4	
Hens and pullets of laying age inventory farms number	192 106	1.7	141 622	.10	50 484	6.6	3 110	20.4	47 374	6.9	
	321 972 049	.9	315 507 008	.05	6 465 041	44.7	5 274 634	54.7	1 190 407	16.9	

Table 2. Estimated Undercount for Selected Agricultural Items: 1987—Con.

	Census publ undercounte		Census publis	shed farms	Estimated undercounted farms						
Geographic area and item	Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)	Misclassified total (number)	Relative standard error of estimate (percent)	Not on mail list total (number)	Relative standard error o estimate (percent	
NORTHEAST								-			
Farmsnumber_	152 476	.9	123 482	.04	28 994	4.9	4 140	11.4	24 854	5.4	
Land in farmsacres_ Average size of farmacres_	_ 23 219 882 _ 152.3	.9 1.3	21 425 906 174.0	.08 .08	1 793 976 61.9	12.1 13.1	445 680 107.7	37.7 39.3	1 348 296 54.2	10.1 8.1	
Market value of agricultural products sold \$1,000_	7 793 318	.3	7 639 461	.04	153 857	17.3	79 228	30.4	74 629	15.	
Gorn for grain farms_ acres_	_ 41 438	1.8	38 272 1 771 354	.13 .13	3 166 26 943	22.9 26.6	270 3 240	45.0 58.3	2 896 23 703	24.1 29.1	
Wheat for grain farms_ acres_	_ (S)	(S) (S)	12 727 294 678	.27 .28	(S) (S)	(S) (S)	(S) (S)	(S) (S)	(S) (S)	(S (S	
Soybeans for beans farms_	- 5 773 309 432	.4 .5	5 773 309 432	.41 .48	-	-	_	-	-	-	
Hay farms_ acres_	95 766 5 550 321	1.3 .8	83 279 5 251 775	.08 .11	12 487 298 546	9.9 14.6	1 170 36 630	21.6 31.3	11 317 261 916	10.1 16.1	
Tobacco farms_ acres_	1 297 91 362	1.0	1 297 91 362	.97 .86	-	-	-	-	-		
Cattle and calves inventory farms_ number_	82 127	1.5 .8	69 736 4 099 565	.10	12 391 144 251	10.1 23.2	810 44 100	25.9 66.2	11 581 100 151	10.7 16.2	
Hogs and pigs inventory farms_ number_	_ 16 208	4.8 5.3	12 173 1 106 419	.34	4 035 92 317	19.2 69.1	(S) (S)	(S) (S)	(S) (S)	(S (S	
Hens and pullets of laying age inventory farms_		4.6	12 949	.34	6 376	14.0	450	34.8	5 926	14.8	
number_		.1	40 030 675	.07	127 239	18.0	5 670	43.8	121 569	18.7	
MIDWEST											
Farmsnumber_		.3	861 982 350 467 836	.01 .03	67 402 4 049 941	3.8 12.0	12 560 485 444	17.7 29.9	54 842 3 564 497	2.3 13.0	
Land in farmsacres_ Average size of farmacres_		.1 .3	407.0	.03	60.1	12.6	38.7	34.7	65.0	10.3	
Market value of agricultural products sold \$1,000_	_ 58 176 757	.2	57 633 116	.02	543 641	17.5	247 292	35.0	296 349	13.1	
Corn for grain farms_ acres_	_ 469 931 _ 49 672 511	.3 .2 .4	460 489 49 339 003	.03 .04	9 442 333 508	13.8 25.7	(S) (S)	(S) (S)	(S) (S)	(S) (S) 33.6	
Wheat for grain farms_ acres_	_ 28 765 926	.1	214 802 28 712 950	.06 .07	2 240 52 976	33.6 39.3			2 240 52 976	33.6 39.3	
Soybeans for beans farms_acres_		.3 .1	352 929 41 271 413	.04 .05	6 419 258 637	15.3 22.4	(S) (S)	(S) (S) 56.2	(S) (S)	39.3 (S) (S) 10.6	
Hay farms_ acres_	_ 463 293 _ 28 195 833	.5 .3	441 971 27 838 599	.04 .06	21 322 357 234	10.5 19.8	1 256 20 724	56.2 56.5	20 066 336 510	20.7	
Tobacco farms_ acres_	_ (S) _ (S)	(S)	8 970 204 801	.34 .55	(S) (S)	(S) (S) 9.1	(S) (S)	(S) (S)	(S) (S)	(S) (S) 9.2 20.3	
Cattle and calves inventory farms_ number_	_ 479 373	.5	451 586 37 937 299	.04 .04	27 787 362 776	9.1 18.9	4 396 82 896	30.0 46.4	23 391 279 880	9.2 20.5	
Hogs and pigs inventory farms_ number_	_ 163 357	(S) (S) .5 .2 .9	155 752 41 921 642	.08	7 605 706 626	19.2 30.4	1 884 314 000	45.9 47.7	5 721 392 626	20.5 39.3	
Hens and pullets of laying age inventory farms_		2.6	49 871	.17	8 058	18.4	_	_	8 058	18.4	
number		.2	88 366 646	.09	280 459	44.7	-	-	280 459	44.7	
SOUTH											
Farmsnumber_ Land in farmsacres_		.4 .3	823 851 281 242 891	.01 .03	157 507 10 097 631	2.7 8.7	31 088 3 094 880	6.5 19.8	126 419 7 002 751	2.9 9.0	
Average size of farmacres_		.5	341.0	.03	64.1	9.1	99.6	20.8	55.4	6.6	
Market value of agricultural products sold \$1,000_	_ 41 047 031	.2	40 266 753	.02	780 278	12.0	453 050	17.4	327 228	15.4	
Corn for grain farms_ acres_	- 131 477 - 6 665 289	1.2 .9	119 364 6 467 703	.09 .09	12 113 197 586	12.6 29.3	2 088 60 784	25.2 46.3	10 025 136 802	14.3 36.9	
Wheat for grain farms_ acres_	_ 11 855 463	1.0 1.8	82 915 11 424 286	.11 .11	2 988 431 177	29.9 48.2	1 392 160 312	30.9 55.8	1 596 270 865	49.1 69.2	
Soybeans for beans farms_ acres_	1 13 940 951 1	.9 .6	83 103 13 702 990	.10 .08	3 307 237 961	22.6 33.3	928 48 720	37.8 55.5	2 379 189 241	27.7 39.4	
Hay farms_ acres_	_ 399 396 _ 14 616 047	.6 .4	368 274 14 151 373	.05 .07	31 122 464 674	7.7 12.2	7 656 124 584	13.1 21.2	23 466 340 090	9.3 14.7	
Tobacco farms_ acres_	134 373 6 228 426	1.0 1.1	126 415 6 036 941	.07 .10	7 958 191 485	17.6 34.7	2 552 183 744	22.8 36.1	5 406 7 741	23.6 28.4	
Cattle and calves inventory farms_ number_	_ 614 495	.6 .2	527 689 33 500 690	.03	86 806 1 103 025	4.6 7.7	13 688 263 320	9.8 21.8	73 118 839 705	5.1 7.4	
Hogs and pigs inventory farms_ number_	_ 81 280	2.4 1.1	62 707 8 103 986	.15	18 573 323 198	10.3 29.1	1 856 118 088	26.7 53.6	16 717 205 110	11.1 33.9	
Hens and pullets of laying age inventory farms_		3.0	56 741	.16	24 098	10.1	2 088	25.2	22 010	10.8	
number		2.1	130 092 556	.09	5 757 755	50.1	5 261 528	54.8	496 227	16.8	
WEST											
Farmsnumber_ Land in farmsacres_	_ 316 030 _ 310 994 334	.7	273 000 308 585 739	.02 .03	43 030 2 408 595	5.2 24.3	6 292 531 960	16.8 48.9	36 738 1 876 635	5.3 27.9	
Average size of farmacres_		.2 .7	1 130.0	.04	56.0	24.8	84.5	51.7	51.1	23.2	
Market value of agricultural products sold \$1,000_	_ 30 060 608	.1	29 881 472	.02	179 136	16.0	28 352	29.7	150 784	18.2	
Corn for grain farms_ acres_	- (S) - (S)	(S) (S)	9 477 1 123 445	.27 .17	(S) (S)	(S) (S)	(S) (S) (S) (S)	(S) (S) (S) (S)	(S) (S) (S) (S)	(S (S (S)	
Wheat for grain farms_ acres_	_ 12 796 520	.4 .1	41 787 12 792 141	.11 .07	506 4 379	29.7 58.0	(S) (S)	(S)	(S) (S)	(S (S	
Soybeans for beans farms_acres_	1 7 370 1	2.5 1.1	7 370	2.45 1.11		-	-				
Hay farms_ acres_	- 111 304 - 10 968 079	1.2 .7	100 729 10 702 076	.08 .07	10 575 266 003	12.1 28.5	1 144 108 680	39.7 63.4	9 431 157 323	12.7 20.2	
Tobacco farms_ acres_		-	-	-	-	-	-	-	-	-	
Cattle and calves inventory farms_ number_	_ 147 572	1.3 .2	126 162 20 089 267	.07 .04	21 410 235 931	8.7 18.8	2 574 71 214	26.4 51.9	18 836 164 717	9.2 14.8	
Hogs and pigs inventory farms_ number_	18 527	5.6 .8	12 349 1 090 936	.31 .31	6 178 37 267	16.9 23.0	-	-	6 178 37 267	16.9 23.0	

Table 2. Estimated Undercount for Selected Agricultural Items: 1987—Con.

	Census published and undercounted farme1		Census publi	shed farms	Estimated undercounted farms						
Geographic area and item	Total (number)	Relative standard error of estimate (percent)	Total (number)	Relative standerd error of estimate (percent)	Total (number)	Relative standard error of estimate (percent)	Misclassified total (number)	Relative standard error of estimate (percent)	Not on mail list total (number)	Relative standard error of estimate (percent)	
WEST-Con.											
Market value of agricultural products sold—Con. Hens and pullets of laying age inventory	34 013 57 316 719	4.3 .2	22 061 57 017 131	.23 .02	11 952 299 588	12.2 43.6	572 7 436	56.1 63.7	11 380 292 152	12.5 44.7	

¹Differs from estimated farms given in tables B and 1 because overcounted farms are not subtracted from total.

Table 3. Land in Farms by Sales Group for Estimated Undercounted Farms: 1987

[Detail may not add to total due to rounding]

	Census public undercounte		Census publis	hed farms	Estimated undercounted farms						
Geographic area and item	Total (acres)	Prelative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)	Total (acres)	Relative standard error of estimate (percent)	Misclassified total (acres)	Relative standard error of estimate (percent)	Not on mail list total (acres)	Relative standard error or estimate (percent)	
UNITED STATES											
Land in farms	980 072 515	.1	961 722 372	.02	18 350 143	6.4	4 557 964	15.4	13 792 179	6.9	
Sales group: Less than \$2,500	68 079 927 911 992 588 79 132 386	.7 .1 .5	59 584 838 902 137 534 75 320 568	.06 .02 .07	8 495 089 9 855 054 3 811 818	5.4 10.5 10.0	1 574 000 2 983 964 869 678	13.8 22.3 21.7	6 921 089 6 871 090 2 942 140	5.9 11.6 11.3	
Less than \$10,000 \$10,000 or more	147 212 313 832 860 200	.4 .1	134 905 406 826 816 966	.05 .02	12 306 907 6 043 234	5.0 15.7	2 443 678 2 114 286	11.8 30.2	9 863 229 3 928 948	5.5 17.8	
NORTHEAST											
Land in farms	23 219 862	.9	21 425 906	.08	1 793 976	12.1	445 690	37.7	1 348 296	10.2	
Sales group: Less than \$2,500	3 616 226 19 603 656 3 361 823	5.5 .4 1.8	2 437 675 18 988 231 3 013 460	.27 .08 .23	1 178 551 615 425 348 363	1 6 .9 13.2 17.1	327 420 118 260 77 670	50.2 28.8 41.3	851 131 497 165 270 693	13.3 14.8 18.5	
Less than \$10,000\$10,000 or more	6 978 049 16 241 832	3.0 .3	5 451 135 15 974 771	.18 .08	1 526 914 267 061	13.7 19.1	405 090 40 590	41.3 28.0	1 121 824 226 471	11.1 22.0	
MIDWEST											
Land in farms	354 517 777	.1	350 467 836	.03	4 049 941	12.0	485 444	29.9	3 564 497	13.0	
Sales group: Less than \$2,500 \$2,500 or more \$2,500 to \$9,999	16 002 955 338 514 822 22 192 284	1.1 .1 .8	14 583 821 335 884 015 21 351 802	.10 .03 .11	1 419 134 2 630 807 840 482	12.3 16.6 21.2	136 276 349 168 193 424	30.6 39.8 59.0	1 282 858 2 281 639 647 058	13.2 18.1 21.1	
Less than \$10,000 \$10,000 or more	38 195 23 9 316 322 537	.7 .1	35 935 623 314 532 213	.08 .03	2 259 616 1 790 324	11.1 21.0	329 700 155 744	36.8 50.8	1 929 916 1 634 580	11.4 22.5	
SOUTH											
Land in farms	291 340 522	.3	281 242 891	.03	10 097 631	8.7	3 094 880	19.8	7 002 751	9.0	
Sales group: Less than \$2,500	27 354 963 263 965 539 40 177 341	1.3 .3 .7	22 223 289 259 019 602 37 979 488	.11 .03 .09	5 131 694 4 965 937 2 197 853	7.2 15.6 13.4	940 992 2 153 888 583 712	12.5 27.9 25.0	4 190 702 2 812 049 1 614 141	8.3 17.3 15.8	
Less than \$10,000 \$10,000 or more	67 532 324 223 809 196	.7 .3	60 202 777 221 040 114	.07 .03	7 329 547 2 788 984	6.5 25.4	1 524 704 1 570 176	12.3 37.1	5 804 843 1 197 908	7.6 32.9	
WEST											
Land in farms	310 994 334	.2	308 585 739	.03	2 408 595	24.3	531 960	48.9	1 876 635	27.9	
Sales group: Less than \$2,500 \$2,500 or more \$2,500 to \$9,999	21 105 763 289 888 571 13 400 938	.5 .2 1.2	20 340 053 288 245 686 12 975 818	.09 .03 .20	765 710 1 642 885 425 120	13.8 32.6 36.9	169 312 362 648 14 872	41.3 69.1 55.6	596 398 1 280 237 410 248	13.2 37.0 38.2	
Less than \$10,000 \$10,000 or more	34 506 701 276 487 633	.6 .2	33 315 871 275 269 868	.10 .03	1 190 830 1 217 765	17.8 41.8	184 184 347 776	38.3 72.0	1 006 646 869 989	19.8 51.0	

Table 4. Market Value of Agricultural Products Sold by Sales Group for Estimated Undercounted Farms: 1987

	Census publicundercounte	shed and ed farms	Census put	lished farms	Estimated undercounted farms						
Geographic area and item	Value (\$1,000)	Relative standard error of estimate (percent)	Valu (\$1,000		Value (\$1,000)	Relative standard error of estimate (percent)	Misclassified value (\$1,000)	Relative standard error of estimate (percent)	Not on mail list value (\$1,000)	Relative standard error of estimate (percent)	
UNITED STATES										_	
Value of sales	137 077 713	.1	1 135 420 80	1 .01	1 656 912	8.4	807 922	14.8	848 990	8.3	
Sales group: Less than \$2,500	654 617 136 423 096 3 137 647	2.0 .1 .4	496 38 1 134 924 42 2 897 34	0 .01	158 235 1 498 676 240 299	8.4 9.2 5.3	25 664 782 257 54 220	10.2 15.3 14.6	132 571 716 419 186 079	9.8 9.4 5.4	
Less than \$10,000 \$10,000 or more	3 792 265 133 285 446	.5 .1	3 393 73 132 027 07		398 535 1 258 374	4.5 10.5	79 885 728 035	10.4 16.4	318 650 530 339	5.0 10.8	
NORTHEAST											
Value of sales	7 793 318	.3	7 639 46	1 .04	153 857	17.3	79 228	30.4	74 629	15.1	
Sales group: Less than \$2,500 \$2,500 or more \$2,500 to \$9,999	40 321 7 752 997 186 659	3.2 .3 2.7	31 04 7 608 41 154 30	4 .04	9 274 144 583 32 354	13,7 18.4 15.5	1 234 77 994 5 624	24.0 30.9 23.9	8 040 66 589 26 730	15.4 16.6 18.1	
Less than \$10,000 \$10,000 or more	226 980 7 566 338	2.4 .3	185 35 7 454 10		41 628 112 229	12.8 22.7	6 858 72 370	20.1 33.3	34 770 39 859	14.8 20.8	
MIDWEST											
Value of sales	58 176 757	.2	57 633 11	6 .02	543 641	17.5	247 292	35.0	296 349	13.1	
Sales group: Less than \$2,500 \$2,500 or more \$2,500 to \$9,999	167 697 58 009 060 1 072 268	2.1 .2 .6	132 18 57 500 92 1 015 58	8 .02	35 509 508 132 56 684	10.1 18.6 11.9	5 187 242 105 14 296	31.5 35.8 41.0	30 322 266 027 42 388	10.5 14.4 8.0	
Less than \$10,000 \$10,000 or more	1 239 965 56 936 791	.6 .2	1 147 77 56 485 34		92 193 451 447	8.3 20.3	19 483 227 808	31.2 37.9	72 710 223 639	6.4 13.5	
SOUTH											
Value of sales	41 047 031	.2	40 266 75	3 .02	780 278	12.0	453 050	17.4	327 228	15.4	
Sales group: Less than \$2,500	356 990 40 690 039 1 532 637	3.5 .2 .6	265 85 40 000 89 1 411 17	5 .02	91 133 689 144 121 458	13.7 13.3 7.2	15 421 437 628 29 502	11.3 18.0 16.1	75 712 251 516 91 956	16.3 18.8 8.0	
Less than \$10,000 \$10,000 or more	1 889 628 39 157 402	.8 .2	1 677 03 38 589 71		212 591 567 686	6.9 15.7	44 923 408 126	11.2 19.3	167 668 159 560	8.2 26.0	
WEST									į		
Value of sales	30 060 608	.1	29 881 47	2 .02	179 136	16.0	28 352	29.7	150 784	18.2	
Sales group: Less than \$2,500 \$2,500 or more \$2,500 to \$9,999	89 609 29 970 999 346 082	2.7 .1 1.1	67 29 29 814 18 316 27	2 .02	22 319 156 817 29 803	10.7 17.7 12.9	3 822 24 530 4 798	27.1 34.1 40.6	18 497 132 287 25 005	11.7 20.0 13.3	
Less than \$10,000 \$10,000 or more	435 692 29 624 915	1.1 .1	383 56 29 497 90		52 123 127 012	9.1 19.7	8 621 19 731	25.6 41.3	43 502 107 281	9.7 22.0	

Table 5. Estimated Farms Not on the Mail List: 1987

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text]

[Detail may not add to total due to rounding. For	i meaning or a	boreviations	and symbo	ois, see imi	oductory textj				
Geographic area and item	Total¹ (number)	Relative standard error of estimate (percent)	Percent ²	Standard error of percent	Geographic area and item	Total ¹ (number)	Relative standard error of estimate (percent)	Percent ²	Standard error of percent
NEW ENGLAND					NEW ENGLAND—Con.				
Farmsnumber Land in farmsacres	7 767 569 081	10.4 15.6	23.6 11.8	2.4 1.8	Farms by value of sales: Less than \$2,500 farms	5 642	8.7	40.7	3.5
Farms by size: Less than 50 acres farms 50 acres or more farms	4 276 3 491	15.5 9.6	32.9 17.5	5.1 1.7	\$2,500 or more	2 125 1 459	27.0 38.6	11.2 19.6	3.0 7.6
Harvested cropland farms	5 398 150 362	16.5 28.1	20.4 9.9	3.4	Less than \$10,000 farms \$10,000 or more farms	7 101 666	11.1 12.6	33.3 5.7	3.7 .7

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text]

Market value of agricultural products Solid	2.7 24.2 3.8 8.0 2.0 23.1 5.1 12.3 18.0 1.2 .7 13.1 8.7 14.1 3.0 6.0 4.3 17.4	2. 1. 2. 2. 1. (2.
Market value of agricultural products \$1,000 \$25,984 \$24.0 \$1.6 \$4.5 \$4.	2.7 24.2 3.8 8.0 2.0 23.1 5.1 12.3 18.0 1.2 .7 13.1 8.7 14.1 3.0 6.0 4.3 17.4	2. 1. 2. 2. 1. 1. 2.
Sold S1,000 S1,000 S2,984 24,0 1,6 4 Earm by standard industrial classification: Tarms by standard industrial classification: Tarms S2,000 S1,000 S2,000 S3,994 S2,9 S2,000 or more Tarms S2,000 S3,995 S3,000 S3,995 S3,000 S3,995 S3,000 S3,995 S3,000 S3,995 S3,000 S3,995 S4,000 S3,995 S4,000 S4,000 S3,000 S4,000 S4,000 S3,000 S5,290 S3,000	2.7 24.2 3.8 8.0 2.0 23.1 5.1 12.3 18.0 1.2 .7 13.1 8.7 14.1 3.0 6.0 4.3 17.4	2. 1. 2. 2. 1. 1. 2.
Farms by standard industrial classification: Crops (01)	3.8 8.0 2.0 23.1 5.1 12.3 18.0 1.2 .7 13.1 8.7 14.1 3.0 6.0	1. 2. 2. 1. (2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2
Livestock (02) farms	3.8 8.0 2.0 23.1 5.1 12.3 18.0 1.2 .7 13.1 8.7 14.1 3.0 6.0	1. 2. 2. 1. (2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2
Farms by tenure of operators farms	2.0 23.1 5.1 12.3 18.0 1.2 .7 13.1 8.7 14.1 3.0 6.0 4.3 17.4	2. 1. (2. (2. (2. (2. (2. (2. (2. (2. (2. (2
Part owners and tenants farms 1 124 14.1 11.3 1.6 Farms by value of sales: Less than \$2,500 farms 2 105 14.2 12.3 10.2 16.2	5.1 12.3 18.0 1.2 .7 13.1 8.7 14.1 3.0 6.0	2. 1. 2. 1. (2.
Colter	12.3 18.0 1.2 .7 13.1 8.7 14.1 3.0 6.0	2.
Other	1.2 .7 13.1 8.7 14.1 3.0 6.0 4.3 17.4	2. 1. (2
MIDDLE ATLANTIC Farms	13.1 8.7 14.1 3.0 6.0 4.3 17.4	2. 1. (Z
Farms	8.7 14.1 3.0 6.0 4.3 17.4	1. (Z
Farms	8.7 14.1 3.0 6.0 4.3 17.4	1. (Z
Farms by size: Less than 50 acres farms.	3.0 6.0 4.3 17.4	(2
Farms by size: Less than \$10,000 rorrore farms. Less than \$2,500 rorror fa	3.0 6.0 4.3 17.4	(2
Harvested cropland	17.4	
Acres	17.4	
East han \$10,000 farms. 1 1 858 6.5 32.2 2.1	(X)	1
\$2,500 or more		(>
Less than \$10,000 farms 15 997 6.0 24.9 1.5 Land in farms acres 1 569 971 13.2 \$10,000 or more farms 1 333 18.4 2.6 5 5 Farms by size: Less than 50 acres farms 24 814 3.3 Market value of agricultural products sold \$1,000 52 197 18.7 .9 2 4.2 Farms by standard industrial \$1,000 farms 21 085 7.6 Harvested cropland acres 541 151 20.1		
Market value of agricultural products sold\$1,000		
Sold		
	6.1	
classification: Crops (01) farms _	1.0	
Livestock (02) farms 9 388 6.4 13.7 .9 Less than \$2,500 farms 25 808 3.2 \$2,500 or more farms 7 785 4.0	2.5	
Full owners farms _ 14 067 6.5 18.8 1.2 Less than \$10,000 farms _ 30 149 2.8	1 1	
Part owners farms 2 436 8.9 7.7 7	1.5	
Operators by principal occupation: \$1,000- 146 490 17.8	.7	
Other farms_ 12 338 6.7 23.0 1.5 classification: classification:	7.1	
Average age of operator years		
New Jersey Farms by tenure of operator: farms	12.5 2.2	
Farmsnumber_ 1 705 11.4 15.9 1.8 Tenantsfarms_ 1 931 5.0	4.3	
Land in farmsacres 58 906 30.0 6.2 1.9 Operators by principal occupation: Farming farms 6 184 5.0		
Farms by size: Less than 50 acres farms _	15.3 (X)	. (2
Harvested cropland farms 827 28.4 10.2 2.9 Ohio		
acres 9 757 27.2 2.0 .5 Farmsnumber 10 471 3.8	11.7	
Farms by value of sales: Less than \$2,500 farms_ 1 247 16.6 28.8 4.8 tarms_ acres_ 506 847 21.7	3.3	
\$2,500 or more farms_	24.2 5.4	1.
Less than \$10,000 farms_ 1 593 12.3 22.4 2.8 Harvested croptand farms_ 6 388 15.3 \$10,000 or more farms_ 112 4.8 3.1 .1	8.3	1.
Market value of agricultural products Farms by value of sales:	28.7	
\$1,000 3704 20.3 1.1 \$2,500 or more farms_ 3 537 2.1	5.4 6.9	1.
classification: Less than \$10,000 farms_ 8 583 4.5	17.9	
Crops (01)	4.5	
Farms by tenure of operator: \$1,000 57 470 56 174 22.3	1.6	
Part owners and tenants farms_ 396 47.2 13.1 6.2 classification:	11.8	
Operators by principal occupation: 521 6.8 11.1 8 Livestock (02) farms 4 508 5.0	11.5	
Other		:

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text]

Geographic area and item	Total ¹ (number)	Relative standard error of estimate (percent)	Percent ²	Standard error of percent	Geographic area and item	Total ¹ (number)	Relative standard error of estimate (percent)	Percent ²	Standard error of percent
EAST NORTH CENTRAL—					EAST NORTH CENTRAL—				
Con.					Con. Michigan				
Ohio—Con.					Farmsnumber	8 711 442 047	4.0 27.2	14.5 4.1	.6 1.1
Operators by principal occupation: Farming	1 596 8 876	2.3 4.3	3.9 18.3	.1	Land in farmsacres Farms by size: Less than 50 acres farms	6 340	4.0	29.7	1.2
Average age of operatoryears	42.1	5.2	(X)	(X)	50 acres or more	2 371 6 382 178 145	10.1 11.1 45.8	6.2 12.2 2.8	1.3 1.3
Indiana					Farms by value of sales: Less than \$2,500 farms	7 382	3.6	36.8	1.3
Farmsnumber	4 164	9.9	5.6	.6	\$2,500 or more	1 329 (S)	16.9 (S)	3.3 (S)	.6 (S)
Land in farmsacres	193 653	39.1	1.2	.5	Less than \$10,000 farms \$10,000 or more farms	(S) (S)	(S) (S)	(S) (S)	(S) (S)
Farms by size: Less than 50 acres	3 240	12.3	13.7	1.7	Market value of agricultural products sold \$1,000	15 193	43.1	.6	.3
50 acres or more farms	924	10.4	1.8	.2	Farms by standard industrial classification: Crops (01) farms	3 167	2.8	9.6	.3
Harvested cropland farms acres	1 697 80 208	29.8 69.9	2.7 .7	.8 .5	Livestock (02) farms Farms by tenure of operator:	5 544	5.7	20.7	1.2
Farms by value of sales:	0.070	40.5	19.3	2.6	Full ownersfarms	7 346 1 365	4.6 2.9	19.1 6.4	.9 .2
Less than \$2,500 farms_ \$2,500 or more farms_ \$2,500 to \$9,999 farms_	2 973 1 191 (S)	13.5 8.4 (S)	2.0 (S)	.2 (S)	Operators by principal occupation: Farming farms	1 929	7.4	6.9	.5
Less than \$10,000 farms	, ,			1	Other farms	6 782 48.1	4.2 6.3	21.3 (X)	.9 (X)
\$10,000 or more farms	(S) (S)	(S) (S)	(S) (S)	(S) (S)	Wisconsin]		
Market value of agricultural products sold \$1,000	21 957	68.7	.5	.4	Farmsnumber_ Land in farmsacres	1 944 35 222	7.5 45.1	2.5 .2	.2 .1
Farms by standard industrial					Farms by size: Less than 50 acres farms	(S)	(S)	(S)	(S)
classification: Crops (01) farms Livestock (02) farms	1 536 2 628	2.1 15.8	3.5 8.4	.1 1.3	50 acres or more	(Š) 1 375	(S) (S) 24.2	(S)	(S) (S) .5
Farms by tenure of operator:					acres	25 221	71.0	.3	.2
Full owners farms farms farms farms	3 649 515	11.3 2.0	8.2 1.7	.9 (Z)	Farms by value of sales: Less than \$2,500	1 178 767 371	12.6 3.4 6.9	10.7 1.2 2.7	1.3 (Z) .2
Operators by principal occupation: Farming	1 084 3 081	11.7 12.3	2.9 8.3	.3 1.0	Less than \$10,000 farms \$10,000 or more farms	1 549 396	9.5 .9	6.2 .8	.6 (Z)
Average age of operatoryears	44.1	11.9	(X)	(X)	Market value of agricultural products sold \$1,000	27 315	67.4	.6	.4
					Farms by standard industrial classification:				
Illinois					Crops (01) farms Livestock (02) farms	737 1 208	9.8 5.7	3.4 2.2	.3
Farmsnumber Land in farmsacres	5 226 298 955	7.3 37.8	5.6 1.0	.4	Farms by tenure of operator: Full owners farms farms farms	1 675 (S)	7.1 (S)	3.7 (S)	.3 (S)
Farms by size: Less than 50 acres farms	3 758	9.5	16.6	1.6	Operators by principal occupation: Farming	543	9.6	1.0	.1
50 acres or more farms	1 468	8.1	2.1	.2	Other farms Average age of operator years	1 401 43.7	9.8	6.0 (X)	.6 (X)
Harvested cropland farms acres	3 235 95 733	22.8 51.0	3.9 .5	.9 .2	WEST NORTH CENTRAL				
Farms by value of sales: Less than \$2,500 farms	4 184	8.7	28.2	2.5	Farmsnumberland in farmsacres	23 423 2 146 318	· 3.3 18.2	4.5	.2 .1
\$2,500 or more farms \$2,500 to \$9,999 farms	1 042 (S)	9.2 (S)	1.3 (S)	.1 (S)	Farms by size:				
Less than \$10,000 farms_	(S) (S)	(S) (S)	(S) (S)	(S)	Less than 50 acres farms 50 acres or more farms	14 739 8 685	4.7	15.3 2.0	.7
\$10,000 or more farms	(S)	(S)	(5)	(S)	Harvested croplandfarms acres	13 904 1 175 434	9.5 29.7	3.2 1.0	.3 .3
Market value of agricultural products sold \$1,000	24 866	48.5	.4	.2	Farms by value of sales: Less than \$2,500 farms \$2,500 or more farms	13 662 9 761	5.2 3.7	17.8 2.2	.9 .1
Farms by standard industrial classification:					\$2,500 to \$9,999 farms	5 327	5.0	5.2	.3
Crops (01) farms_ Livestock (02) farms_	2 667 2 559	13.0 5.3	4.2 8.4	.5 .4	Less than \$10,000 farms \$10,000 or more farms	18 989 4 434	4.0 5.2	10.6 1.3	.1
Farms by tenure of operator:					Market value of agricultural products sold \$1,000	162 494	17.6	.4	.1
Full owners farms Part owners and tenants farms	4 421 805	8.3 11.8	10.2 1.6	.8	Farms by standard industrial classification:	9 200	1.0	2.4	2
Operators by principal occupation: Farming farms	711	1.9	1.2	(Z)	Crops (01) farms Livestock (02) farms	8 200 15 223	4.6 4.4	3.4 5.4	.2 .2
Other farms_	4 515	8.2	12.5	1.0	Farms by tenure of operator: Full owners farms Part owners farms	17 056 2 932	3.0 14.9	6.5 1.7	.2 .2
Average age of operatoryears	54.6	8.3	(X)	(X)	Tenants farms_	3 435	6.9		.3

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[Detail may not add to total due to rounding. Fo	Total ¹ (number)	Relative standard error of estimate (percent)	Percent ²	Standard error of percent	Geographic area and item	Total ¹ (number)	Relative standard error of estimate (percent)	Percent ²	Standard error of percent
WEST NORTH CENTRAL— Con.					WEST NORTH CENTRAL— Con.				
Operators by principal occupation:					Missouri				
Farming farms Other farms	7 992 15 430	4.9 4.4	2.3 8.6	.1 .4	Farmsnumber Land in farmsacres	3 043 324 659	5.9 31.7	2.8 1.1	.2 .3
Average age of operatoryears	44.5	4.3	(X)	(X)	Farms by size: Less than 50 acres farms farms	1 826 1 217 2 183	6.9 11.9	7.7 1.4 2.6	.5 .2
Minnesota					Harvested croplandfarms acres	119 006	22.7 42.0	1.0	.6 .4
Farmsnumber Land in farmsacres	5 711 305 599	3.4 21.1	6.3 1.1	.2 .2	Farms by value of sales: Less than \$2,500 farms_ \$2,500 or more farms_ \$2,500 to \$9,999 farms_	982 2 061 1 485	1.1 8.5 8.4	4.1 2.4 4.3	(Z) .2 .4
Farms by size: Less than 50 acres farms	3 128	4.8	18.2	.9	Less than \$10,000 farms \$10,000 or more farms	2 467 576	5.2 28.9	4.2 1.1	.2 .3
50 acres or more farms	2 583	4.3	3.5	.2	Market value of agricultural products sold \$1,000	21 798	34.1	.6	.2
Harvested cropland farms acres	3 181 94 258	19.0 31.0	4.0 .6	.8 .2	Farms by standard industrial classification: Crops (01) farms Livestock (02) farms	1 217 1 826	11.9 6.9	3.5 2.5	.4
Farms by value of sales: Less than \$2,500 farms	4 034	4.3	25.3	1.1	Farms by tenure of operator: Full owners farms	2 128	5.8	2.9	.2
\$2,500 or more farms \$2,500 to \$9,999 farms	1 678 (S)	4.3 (S)	2.2 (S)	.1 (S)	Part owners and tenants farms	915	16.7	2.5	.4
Less than \$10,000 farms \$10,000 or more farms	(S) (S)	(S) (S)	(S) (S)	(S) (S)	Farming farms Other farms	2 089 954	8.6 3.2	3.7 1.8	.3 .1
Market value of agricultural products					Average age of operatoryears	52.0	12.3	(X)	(X)
sold\$1,000	10 868	29.0	.2	.1	North Dakota Farmsnumber	483	_	1.4	(7)
Farms by standard industrial classification: Crops (01) farms	2 491	4.4	5.6	2	Land in farmsacres	452 184	68.2	1.1	(Z) .8
Livestock (02) farms	3 220	4.9	6.9	.2 .3	Less than 50 acres farms 50 acres or more farms	(S) (S)	(S) (S)	(S) (S)	(S) (S)
Farms by tenure of operator: Full owners farms	4 576	2.7	9.2	.2	Harvested cropland farms acres	483 438 325	68.4	1.5 2.3	(Z) 1.6
Part owners and tenants farms_	1 136	11.9	2.8	.3	Farms by value of sales: Less than \$2,500 farms \$2,500 or more farms	(S) (S) (S)	(S) (S) (S)	(S) (S) (S)	(S) (S) (S)
Operators by principal occupation: Farming farms Other farms	1 841 3 870	7.9 3.1	3.1 12.7	.2 .4	\$2,500 to \$9,999 farms Less than \$10,000 farms	(S) (S) (S)	(S) (S) (S)	(S) (S) (S)	(S) (S) (S)
Average age of operatoryears	45.6	7.3	(X)	(X)	\$10,000 or more farms Market value of agricultural products			. ,	
lowa					sold\$1,000	17 830	85.8	.8	.7
Farmsnumber_	5 573	8.3	5.0	.4	classification: Crops (01) farms Livestock (02) farms	483	_	2.1	(Z)
Land in farmsacres_	371 530	34.6	1.2	.4	Farms by tenure of operator: Full owners	322 (S)	1.3 (S)	2.7 (S)	(Z) (S)
Farms by size: Less than 50 acres farms 50 acres or more farms	4 068 1 506	11.1 2.5	17.7 1.7	2.0 (Z)	Operators by principal occupation: Farming	(S) (S)	(S) (S)	(S) (S)	(S)
Harvested cropland farms	3 190	22.5	3.3	.7	Other farms Average age of operatoryears	(S) 38.4	(S) 7.3	(S) (X)	(S) (X)
acres	206 697	40.6	1.0	.4	South Dakota				
Farms by value of sales: Less than \$2,500 farms	2 563	16.9	22.6	3.8	Farmsnumber Land in farmsacres	546 47 693	5.4 86.0	1.5	.1 .1
\$2,500 or more farms \$2,500 to \$9,999 farms	3 010 1 069	2.3 2.3	3.0 7.2	.1 .2	Farms by size: Less than 50 acres farms	47 093 (S)			(S)
Less than \$10,000 farms_ \$10,000 or more farms_	3 632 1 941	12.3 2.4	13.9 2.3	1.7 .1	50 acres or more farms Harvested cropland farms	(S) 360	(S) (S) 50.6	(S) (S) 1.1	(S) .6
Market value of agricultural products					Farms by value of sales:	37 433	88.5	.3	.3
sold\$1,000	61 063	38.1	.7	.3	Less than \$2,500 farms \$2,500 or more farms \$2,500 to \$9,999 farms	(S) (S) (S)	(S) (S) (S)	(S) (S) (S)	(S) (S) (S)
Farms by standard industrial classification:	4 544		20		Less than \$10,000 farms_ \$10,000 or more farms_	(S) (S)	(S) (S)	(S) (S)	(S) (S)
Crops (01) farms farms farms	1 514 4 059	2.4 11.1	2.8 7.3	.1 .8	Market value of agricultural products sold\$1,000	3 637	98.2	.1	.1
Farms by tenure of operator: Full owners	3 679	6.3	7.1	.4	Farms by standard industrial classification:				
Part owners farms Tenants farms	827 1 068	48.9 2.5	2.3 4.7	1.1	Crops (01) farms Livestock (02) farms	(S) (S)	(S) (S)	(S) (S)	(S) (S)
Operators by principal occupation: Farming farms Other farms	1 509 4 064	2.7 11.1	2.0 12.0	.1 1.3	Farms by tenure of operator: Full owners farms Part owners and tenants farms	546 -	5.4	3.6	.2
Average age of operatoryears	45.5	10.7	(X)	(X)	Operators by principal occupation: Farming	(S) (S)	(S) (S)	(S) (S)	(S) (S)

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Relative standard standard Geographic area and item Relative standard Geographic area and item Standard error of Standard Geographic area and item Total¹ estimate error of Total¹ estimate		l <u>.</u>
(number) (percent) Percent ² percent countries (number) (percent)	Percent ²	Standard error of percent
WEST NORTH CENTRAL— Con.		
Farms by tenure of operator:	23.1	1.0
South Dakota — Coll. Full owners	9.3	1.1
Mahwaka		
Famina farms 10.763 7.6	8.7	.7 1.2
Land in farmsacres 335 405 40.7 .7 .3	26.5	
Farms by size: Less than 50 acres farms	(X)	(X)
Harvested cropland		i
acres 169 499 37.2 1.1 .4 Farms by value of sales:	7.7	.8
Less than \$2,500	1,2	.9
\$2,500 to \$9,999 farms	(6)	(8)
\$10,000 or more	(S) (S)	(S) (S)
sold	6.8	2.9
Farms by standard industrial classification: Crops (01) farms 1 168 9.4 3.6 3	.6	.6
Livestock (02) farms 1 048 1.6 3.5 .1 Farms by value of sales: Less than \$2,500 farms 158 16.3	22.6	3.7
Farms by tenure of operator: Full owners farms	3.5 13.6	.3 1.0
Operators by principal occupation: Less than \$10,000 farms 247 10.7	18.2	1.9
Other farms 1 697 6.6 10.1 .7	-	-
Average age of operatoryears 39.0 13.7 (X) (X) Market value of agricultural products sold\$1,000 501 34.0	.1	(Z)
Kansas Farms by standard industrial		
Farms number 1 882 4.6 2.7 .1 classification: Land in farms acres 136 749 50.9 .3 .1 Crops (01) farms (S) (S) Livestock (02) farms (S) (S)	(S) (S)	(S) (S)
Farms by size: Less than 50 acres farms _ 1 411	(5)	(5)
50 acres or more farms	11.9	1.3
Harvested cropland farms _	-	_
Farms by value of sales: Less than \$2,500 farms 1 411	-	1 -
\$2,500 or more farms 471 8.2 8 .1 Other farms 247 10.7 \$2,500 to \$9,999 farms (S) (S) (S) (S)	17.2	1.8
Less than \$10,000 farms (S) (S) (S) (S) (S) Average age of operatoryears 50.2 21.5 (S) (S) (S) (S)	(X)	(X)
Market value of agricultural products sold\$1,000 6 558 53.2 .1 .1 Maryland		
Farms by standard industrial Farmsnumber_ 3 346 6.9	18.5	1.3
classification: Land in farms acres. 189 689 28.2 Crops (01) farms 1 882 4.6 5.4 .3	7.3	2.1
Farms by tenure of operator: Farms by size: Less than 50 acres farms 2 394 8.1	27.7	2.2
Full owners farms 1 882 4.6 5.9 .3 50 acres or more farms 953 13.6 Part owners and tenants farms =	10.0	1.4
Operators by principal occupation:	15.3 2.7	2.3 .7
Average age of operator years 38.3 6.1 (X) (X) Farms by value of sales:		
Less than \$2,500 farms 2 375 9.1 \$2,500 or more farms 971 10.0 \$2,500 to \$9,999 farms 726 12.9	36.3 8.4 15.9	3.3 .8 2.1
Forms 9 1990 56 565 40 101 8		
Land in farmsacres_ 2 908 370 10.1 5.4 .5 \$10,000 farms_ 246 7.9	27.9 3.5	2.1 .3
Farms by size: Less than 50 acres farms		_
Harvested cropland	1.0	.2
acres 426 770 22.5 2.7 6 Farms by standard industrial classification:		
Less than \$2,500 farms_	19.7 17.3	1.7 1.9
\$2,500 to \$9,999 farms 10 401 7.4 12.8 .9 Farms by tenure of operator:		
\$10,000 or more farms 1 753 19.7 1.9 4 Part owners and tenants farms (S) (S)	23.4 (S)	1.8 (S)
Market value of agricultural products sold\$1,000 111 146 12.8 .7 .1 Operators by principal occupation:	., .	
Farms by standard industrial Farming	7.5 28.2	1.4 2.1
Crops (01) farms 15 867 7.0 13.1 .9 15.5 Livestock (02) farms 40 699 4.6 23.2 1.1 Average age of operator	(X)	(X)

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Geographic area and item	Total ¹ (number)	Relative standard error of estimate (percent)	Percent ²	Standard error of percent	Geographic area and item	Total ¹ (number)	Relative standard error of estimate (percent)	Percent ²	Standard error of percent
SOUTH ATLANTIC—Con.	<u>`</u>				SOUTH ATLANTIC—Con.				
West Virginia					South Caralina Con				
Farmsnumber	6 238	8.3	26.6	2.2	South Carolina—Con.			:	
Land in farmsacres Farms by size:	511 334	23.1	13.2	3.0	Operators by principal occupation: Farming farms	1 290	8.4	12.6	1.1
Less than 50 acres farms farms	3 272 2 966	10.3 11.0	49.5 17.6	5.1 1.9	Other farms	3 964	4.2	25.6	1.1
Harvested cropland farms acres	4 570 64 782	11.0 21.3	23.3 10.5	2.6 2.2	Average age of operatoryears	51.5	4.1	(X)	(X)
Farms by value of sales:	4 757	8.3	37.4	3,1	Georgia				
Less than \$2,500 farms \$2,500 or more farms \$2,500 to \$9,999 farms	1 482 1 389	17.4 15.9	13.8 18.8	2.4 3.0					
Less than \$10,000 farms	6 145	8.1	30.5	2.5	Farmsnumber_ Land in farmsacres_	7 771 326 536	1.2 16.8	15.1	.2 .5
\$10,000 or more farms Market value of agricultural products	93	32.8	2.8	.9	Farms by size:				
sold\$1,000	12 403	27.5	4.4	1.2	Less than 50 acres farms 50 acres or more farms	5 337 2 435	1.5 1.8	27.8 7.6	.4 .1
classification: Crops (01) farms	1 675	13.8	27.8	3.8	Harvested cropland farms	3 226	21.2	9.6	2.0
Livestock (02) farms	4 563	9.0	26.1	2.3	acres	33 044	33.3	1.0	.3
Farms by tenure of operator: Full owners farms	5 183 766	8.3 28.2	28.7 17.7	2.4 5.0	Farms by value of sales:				
Part owners farms Tenants farms	289	34.1	26.7	9.1	Less than \$2,500 farms \$2,500 or more farms	5 470 2 302	1.5 1.7	29.3 7.0	.4
Operators by principal occupation: Farming	1 638	13.1	18.5	2.4	\$2,500 to \$9,999 farms	(S)	(S)	(S)	(S)
Other tarms	4 601	9.5 8.7	31.4 (X)	3.0 (X)	Less than \$10,000 farms_ \$10,000 or more farms_	(S) (S)	(S) (S)	(S) (S)	(S) (S)
Average age of operatoryears	48.1	0.7	(^)	(^)		(3)	(0)	(0)	(6)
North Carolina					Market value of agricultural products sold \$1,000	18 788	35.8	.7	.2
Farmsnumber Land in farmsacres	7 502 449 557	8.4 29.9	11.2 4.5	.9 1.4	Farms by standard industrial				
Farms by size: Less than 50 acres farms	5 031	12.5	17.7	2.2	classification: Crops (01) farms_	2 253	1.9	12.7	.2
50 acres or more farms	2 472	1.5	6.4	.1	Livestock (02) farms	5 519	1.5	16.4	.2
Harvested cropland farms acres	4 234 69 827	17.4 39.2	7.8 1.8	1.4	Farms by tenure of operator:	C 075	1.0	17.4	
Farms by value of sales: Less than \$2,500 farms	6 024	10.3	26.4	2.7	Full owners farms Part owners and tenants farms	6 275 1 496	1.3 1.7	17.4 9.8	.2
\$2,500 or more farms \$2,500 to \$9,999 farms	1 478 (S)	6.3 (S)	3.4 (S)	.2 (S)	Operators by principal occupation:				
Less than \$10,000 farms	(S)	(S) (S)	(S) (S)	(S) (S)	Farming farms farms farms	1 993 5 778	1.9 1.4	9.3 19.3	.2 .3
\$10,000 or more farms Market value of agricultural products	(S)	(8)	(5)	(5)	Average age of operatoryears	52.8	4.3	(X)	(X)
sold \$1,000	14 760	61.7	.4	.3	Average age of operatoryears	52.0	4.5	(^)	
Farms by standard industrial classification:	0.007				Florida				
Crops (01) farms Livestock (02) farms	3 067 4 435	3.4 14.1	8.2 15.1	.3 2.1	Farmsnumber	9 507	8.6	20.6	1.8
Farms by tenure of operator: Full owners farms	5 342	11.8	13.4	1.6	Land in farmsacres	299 448	34.1	2.6	.9
Part owners farms Tenants farms	1 219 941	1.0 3.6	6.1 14.1	.1	Farms by size:				
Operators by principal occupation:					Less than 50 acres farms 50 acres or more farms	8 585 923	9.2 6.4	29.4 5.5	2.7
Farming farms Other farms	917 6 586	1.2 9.5	2.9 18.7	(Z) 1.8	Harvested cropland farms	3 242	16.7	12.5	2.1
Average age of operatoryears	49.3	8.2	(X)	(X)	acres	19 892	21.7	.9	.2
South Carolina					Farms by value of sales: Less than \$2,500 farms	6 774	10.0	35.1	3.5
Farmsnumber_	5 254	3.9	20.4	.8	\$2,500 or more farms_ \$2,500 to \$9,999 farms_	2 734 2 244	12.0 14.0	10.2 19.4	1.2 2.7
Land in farmsacres Farms by size:	313 189	21.9	6.2	1.3					
Less than 50 acres farms 50 acres or more farms	3 442 1 813	5.1 4.3	33.7 11.7	1.7 .5	Less than \$10,000 farms \$10,000 or more farms	9 017 490	8.9 10.0	29.2 3.2	2.6
Harvested cropland farms	2 089	23.2	11.8	2.8	Market value of agricultural products			_	
acres Farms by value of sales:	31 042	67.1	1.9	1.3	sold \$1,000	25 334	17.0	.6	.1
Less than \$2,500 farms \$2,500 or more farms	4 243 1 011	4.4 7.4	36.4 7.2	1.6 .5	Farms by standard industrial classification:				
\$2,500 to \$9,999 farms	743	9.9	10.4	1.0	Crops (01) farms Livestock (02) farms	2 103 7 405	6.1 10.1	10.8 27.8	.7 2.8
Less than \$10,000 farms \$10,000 or more farms	4 986 268	4.1 1.9	26.5 3.9	1.1					
Market value of agricultural products	10 960	32.1	1.2	.4	Farms by tenure of operator: Full owners farms Part owners farms	8 308 956	9.4 6.2	22.8 14.2	2.1 .9
Farms by standard industrial	.0 000	J			Tenants farms	244	5.4	8.6	.5
classification: Crops (01) farms Livestock (02) farms	936	10.3	9.4	1.0	Operators by principal occupation:				
Livestock (02) farms Farms by tenure of operator:	4 318	4.1	27.4	1.1	Farming farms farms other farms	2 318 7 190	17.6 8.9	12.8 25.7	2.2 2.3
Full owners farms	4 986 268	4.1 1.9	28.3 3.3	1.2	Average age of operatoryears	51.7	5.1	(x)	(X)

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text]

Geographic area and item	Total ¹ (number)	Relative standard error of estimate (percent)	Percent ²	Standard error of percent	Geographic area and item	Total¹ (number)	Relative standard error of estimate (percent)	Percent ²	Standard error of percent
EAST SOUTH CENTRAL					EAST SOUTH CENTRAL— Con.				
Farmsnumber_ Land in farmsacres_	27 767 1 407 735	2. 8 12.0	10. 0 3.0	.3 .4	Tennessee—Con.				
Farms by size: Less than 50 acres farms_ 50 acres or more farms_	18 923 8 844	2.7 6.3	18.3 5.1	.5 .3	Average age of operatoryears	50.3	8.8	(X)	(X)
Harvested cropland farms acres.	13 717 211 984	9.1 26.6	6.4 1. 4	.6 .4	Alabama				_
Farms by value of sales: Less than \$2,500 farms	21 079	3.3	21.3 3.8	.7 .2	Farmsnumber Land in farmsacres	4 843 151 790	5.2 26.1	10.1 1.6	.5 .4
\$2,500 or more	6 687 6 188 27 268	4.5 4.7 2.8	6.4 14.0	.3	Farms by size: Less than 50 acres	3 812 1 031	6.5 4.9	20.3 3.5	1.3 .2
Less than \$10,000 farms_ \$10,000 or more farms_ Market value of agricultural products	499	19.2	.6	. i	Harvested cropland farms acres	1 223 9 139	35.9 49.6	4.1 .4	1.5 .2
sold\$1,000	73 639	24.9	1.0	.2	Farms by value of sales: Less than \$2,500farms	4 248	5.8	22.0	1.3
classification: Crops (01) farms	6 983	7.4	6.2	.5	\$2,500 or more farms \$2,500 to \$9,999 farms	596 (S)	8.4 (S)	2.1 (S)	.2 (S)
Livestock (02) farms Farms by tenure of operator:	20 783	3.1	12.6	.3	Less than \$10,000 farms \$10,000 or more farms	(S) (S)	(S) (S)	(S) (S)	(S) (S)
Full owners farms. Part owners farms. Tenants farms.	22 281 3 594 1 893	6.8 15.1	6.0 9.0	.3 .4 1.4	Market value of agricultural products sold \$1,000	8 548	47.2	.4	.2
Operators by principal occupation: Farming farms_ Other farms_	5 026 22 742	4.2 3.3	4.6 13.5	.2 .4	classification: Crops (01) farms Livestock (02) farms	414 4 430	12.1 5.7	3.5 12.2	.4 .7
Average age of operatoryears	50.1	4.0	(X)	(X)	Farms by tenure of operator: Full owners	4 479 364	5.5 .6	13.3 2.5	.7 (Z)
Farmsnumber_	7 550	3.8	7.5	.3	Operators by principal occupation: Farming farms	636	7.2	3.7	.3
Land in farmsacres Farms by size:	348 798 5 327	24.6	2.4 14.5	.6	Other farms Average age of operatoryears	4 20 8 51.6	6.0 7.7	13.5 (X)	.8 (X)
Less than 50 acres farms_ 50 acres or more farms_ Harvested cropland farms_	2 224 5 455	4.8 4.8 11.2	3.5 6.2	.2	Mississippi				
Farms by value of sales:	105 386	49.5	2.4	1.2	Farmsnumber Land in farmsacres	6 298 411 982	2.8 25.0	15.6 3.7	.4 .9
Less than \$2,500 farms_ \$2,500 or more farms_ \$2,500 to \$9,999 farms_	5 464 2 087 (S)	4.9 6.0 (S)	18.3 3.0 (S)	.9 .2 (\$)	Farms by size: Less than 50 acres farms	3 950 2 346	3.9	34.1 8.1	1.3 .3
Less than \$10,000 farms_ \$10,000 or more farms_	(S) (S)	(S) (S)	(S) (S)	(S) (S)	Harvested cropland farms acres	2 005 48 536	23.6 55.1	7.6 1.1	1.8 .6
Market value of agricultural products sold \$1,000 Farms by standard industrial	29 031	58.1	1.4	.8	Farms by value of sales: Less than \$2,500 farms	4 193	3.5	27.4 8.4	1.0
classification: Crops (01)farms	4 046 3 505	5.6 5.1	7.1 8.2	.4 .4	\$2,500 or more	2 105 (S)	4.1 (S) (S)	(S)	.3 (S)
Livestock (02) farms_ Farms by tenure of operator: Full owners farms_	5 224	4.8	7.3	.4	\$10,000 or more farms	(S)	(š)	(S) (S)	(S) (S)
Part owners tarms Tenants farms	681 1 645	4.0 8.7	3.6 16.5	.1 1.4	sold\$1,000	16 036	34.0	.9	.3
Operators by principal occupation: Farming farms_ Other farms_	1 844 5 706	7.1 4.5	4.3 10.1	.3 .5	classification: Crops (01) farms Livestock (02) farms	585 5 712	13.0 2.8	5.2 19.6	.7 .5
Average age of operatoryears Tennessee	46.5	5.8	(X)	(X)	Farms by tenure of operator: Full owners farms Part owners and tenants farms	4 635 1 661	3.1 6.0	17.4 12.1	.5 .7
Farmsnumber_ Land in farmsacres_	9 156 481 206	5.3 21.2	10.3 3.9	.5 .8	Operators by principal occupation: Farming	1 637 4 660	3.8 3.5	9.8 19.7	.4
Farms by size: Less than 50 acres	5 758	3.7	15.9	.6	Average age of operatoryears	49.6	4.9	(X)	(X)
50 acres or more tarms Harvested cropland farms	3 398 5 385	12.0 15.0	6.5 7.8	1.2	WEST SOUTH CENTRAL				
Farms by value of sales:	52 670 7 175	30.4 6.1	1.3 20.7	1.3	Farmsnumber Land in farmsacres	42 987 2 737 949	5.2 1 8 .1	11.4 1.5	.6 .3
Less than \$2,500 farms_ \$2,500 or more farms_ \$2,500 to \$9,999 farms_	1 980 1 980	9.2 9.2	3.7 6.1	.3 .6	Farms by size: Less than 50 acres farms	30 800	6.0	26.5	1.6
Less than \$10,000 farms \$10,000 or more farms	9 156	5.3	13.6	.7	50 acres or morefarms	12 185 11 772	9.9 13.5 54.4	4.7 5.4 1.9	.5 .7 1.0
Market value of agricultural products sold \$1,000	20 512	40.8	1.3	.5	Less than \$2,500 farms	661 636 34 885	6.2	26.1	1.6
Farms by standard industrial classification: Crops (01) farms	2 457	15.3	7.4	1.1	\$2,500 or more farms \$2,500 to \$9,999 farms	8 101 7 033	7.6 8.5	3.3 6.2	.3 .5
Livestock (02) farms Farms by tenure of operator:	6 698	4.5	12.0	.5	Less than \$10,000 farms_ \$10,000 or more farms_ Market value of agricultural products	41 919 1 067	5.4 9.6	17.0	.9 .1
Full owners farms farms Fart owners farms farms farms farms.	7 585 865 706	5.7 1.4 1.4	11.7 4.7 12.7	.7 .1 .2	soid\$1,000	132 336	31.1	.7	.2
Operators by principal occupation: Farming	1 023 8 132	9.0 5.8	3.2 14.2	.3 .8	classification: Crops (01) farms Livestock (02) farms	5 118 37 868	12.3 5.6	5.7 13.1	.7 .7

Table 5. Estimated Farms Not on the Mail List: 1987—Con.

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text]

Geographic area and item	Total ¹ (number)	Relative standard error of estimate (percent)	Percent ²	Standard error of percent	Geographic area and item	Total ¹ (number)	Relative standard error of estimate (percent)	Percent ²	Standard error of percent
WEST SOUTH CENTRAL— Con.					WEST SOUTH CENTRAL— Con.				
Farms by tenure of operator:					Oklahoma				
Full owners	31 708 7 691 3 588	5.6 11.5 26.6	13.5 7.6 8.6	.8 .9 2.3	Farmsnumber Land in farmsacres	8 212 586 513	8.1 19.2	10.5 1.8	.9 .4
Operators by principal occupation:				_	Farms by size: Less than 50 acres farms 50 acres or more farms	4 892 3 320	12.4 8.4	26.2 5.6	3.3 .5
Farming farms Other farms	9 808 33 178	11.1 5.8	6.0 15.6	.7 .9	Harvested cropland farms acres	2 197 72 413	26.1 32.7	4.8 1.0	1.3
Average age of operatoryears	49.9	4.7	(X)	(X)	Farms by value of sales: Less than \$2,500 farms \$2,500 or more farms	6 063 2 148	9.3 14.7	24.7 4.0	2.3 .6
Arkansas					\$2,500 to \$9,999 farms	2 148 8 212	14.7	8.5 16.5	1.2 1.3
Farmsnumber Land in farmsacres	2 730 156 911	5.6 28.5	5.4 1.1	.3 .3	Less than \$10,000 farms \$10,000 or more farms Market value of agricultural products	-	8.1	-	~
Farms by size:				_	sold \$1,000 Farms by standard industrial	14 661	17.6	.5	.1
Less than 50 acres farms 50 acres or more farms	1 905 825	6.5 11.2	13.7 2.2	.9 .2	classification: Crops (01) farms Livestock (02) farms	723 7 488	2.4 8.7	4.4 12.1	.1 1.1
Harvested cropland farms acres	1 061 32 225	30.8 53.8	3.2 .5	1.0 .3	Farms by tenure of operator:	6 835	9.5		1.4
Farms by value of sales:					Full owners farms Part owners and tenants farms Operators by principal occupation:	1 377	6.7	14.5 4.4	1.4 .3
Less than \$2,500 farms farms farms	2 124 606	6.1 11.9	14.9 1.7 (S)	.9 .2 (S)	Farming farms Other farms	2 336 5 876	15.4 9.3	6.6 13.6	1.0 1.3
\$2,500 to \$9,999 farms	(S)	(S)			Average age of operatoryears	49.4	5.7	(X)	(X)
Less than \$10,000 farms \$10,000 or more farms	(S) (S)	(S) (S)	(S) (S)	(S) (S)	Texas				
Market value of agricultural products sold \$1,000	8 371	64.9	.3	.2	Farmsnumber_ Land in farmsacres_ Farms by size:	26 581 1 820 515	7.7 25.6	12.3 1.4	.9 .4
Farms by standard industrial		:			Less than 50 acres farms forms farms farms farms farms farms farms farms farms	19 616 6 965	8.5 15.4	28.2 4.8	2.4 .7
classification: Crops (01) farms Livestock (02) farms	363 2 367	1.9 4.9	2.7 6.3	(Z) .3	Harvested cropland farms acres	7 877 559 750	18.3 66.3	6.7 3.3	1.2 2.2
	2 007	1.0	0.0		Farms by value of sales:				
Farms by tenure of operator: Full owners farms Part owners and tenants farms	2 312 418	5.6 13.4	6.9 2.4	.4 .3	Less than \$2,500 farms \$2,500 or more farms \$2,500 to \$9,999 farms	22 349 4 232 3 441	8.7 12.7 15.1	27.6 3.2 5.3	2.4 .4 .8
	410	15.4	2.7	.0	Less than \$10,000 farms	25 790	7.9	17.7	1.4
Operators by principal occupation: Farming farms Other farms	515 2 215	15.2 6.1	2.1 8.4	.3 .5	\$10,000 or more farms_ Market value of agricultural products sold \$1,000_	790 102 877	11.8 40.6	1.1	.1
Average age of operatoryears	57.0	7.2	(X)	(X)	Farms by standard industrial classification:	102 877	40.0	1.0	.4
Louisiana					Crops (01) farms Livestock (02) farms	3 727 22 854	15.5 8.5	7.7 13.7	1.2 1.2
Farmsnumber_	3 762	5.4	12.1	.7	Farms by tenure of operator: Full owners	18 180	8.7	13.6	1.2
Land in farmsacres	176 206	43.4	2.2	.9	Part owners farms Tenants farms	5 899 2 501	13.7 38.2	10.4 10.0	1.4 3.8
Farms by size: Less than 50 acres farms	2 828 934	6.6 8.6	22.3 5.1	1.5 .4	Operators by principal occupation: Farming	5 026 21 555	19.5 8.1	5.7 17.0	1.1 1.4
50 acres or more farms					Average age of operatoryears	48.8	7.5	(X)	(X)
Harvested cropland farms acres	356 2 511	68.9 92.3	1.9 .1	1.3	MOUNTAIN				
Farms by value of sales: Less than \$2,500 farms	2 649	6.9	22.2	1.5	Farmsnumberland in farmsacres	17 142 682 441	8.7 33.5	12.1 .3	1.1 .1
\$2,500 or more farms \$2,500 to \$9,999 farms	1 113 (S)	7.5 (S)	5.8 (S)	.4 (S)	Farms by size: Less than 50 acres farms	13 433	9.6	26.1	2.5
Less than \$10,000 farms	(S) (S)	(S) (S)	(S) (S)	(S)	50 acres or more farms	3 708	19.2	4.1	.8
\$10,000 or more farms	(S)	(S)	(S)	(S)	Harvested croplandfarms acres	8 293 170 761	12.7 23.7	8.7 .7	1.1
Market value of agricultural products sold \$1,000	6 799	29.7	.5	.1	Farms by value of sales: Less than \$2,500 farms_ \$2,500 or more farms_	12 926 4 215	10.1 16.0	29.4 4.3	3.0 .7
Farms by standard industrial					\$2,500 to \$9,999 farms	2 869	16.5	9.8	1.6
classification: Crops (01) farms Livestock (02) farms	(S) (S)	(S) (S)	(S) (S)	(S) (S)	Less than \$10,000 farms \$10,000 or more farms	15 795 1 347	8.8 37.8	21.6 2.0	1.9 .7
	(3)	(0)	(3)	(3)	Market value of agricultural products sold \$1,000	45 847	38.6	.4	.2
Farms by tenure of operator: Full owners farms Part owners and tenants farms	3 171 592	6.0 13.7	16.7 4.9	1.0 .7	Farms by standard industrial classification:				
Operators by principal occupation:					Crops (01) farms Livestock (02) farms	4 948 12 193	12.2 10.9	9.5 13.7	1.2 1.5
Farming farms	1 464 2 298	9.1 6.3	9.8 14.2	.9 .9	Farms by tenure of operator: Full owners farms	14 896	9.7	17.4	1.7
Average age of operatoryears	54.0	6.7	(X)	(X)	Part owners farms	1 512 734	19.5 31.4	3.8 4.6	.7 1.5

Table 5. Estimated Farms Not on the Mail List: 1987—Con.

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text]

Geographic area and item	Total ¹ (number)	Relative standard error of estimate (percent)	Percent ²	Standard error of percent	Geographic area and item	Total ¹ (number)	Relative standard error of estimate (percent)	Percent ²	Standard error of percent
MOUNTAIN—Con.					MOUNTAIN—Con.				
Operators by principal occupation: Farming farms Other farms	5 329 11 812	17.8 9.1	6.8 18.9	1.2 1.7	Wyoming—Con.				
Average age of operatoryears	47.9	7.3	(X)	(X)	Farms by tenure of operator: Full owners farms	556	25.3	11.0	2.8
Montana					Part owners and tenants farms	-	-	-	-
Farmsnumber Land in farmsacres Farms by size:	2 263 217 227	13.9 84.5	8.4 .4	1.2 .3	Operators by principal occupation: Farming farms Other farms	162 394	3.8 30.1	2.6 10.8	.1 3.3
Less than 50 acres farms farms farms	1 643 620	4.6 50.1	26.0 3.0	1.2 1.5	Average age of operatoryears	48.8	20.9	(X)	(X)
Harvested cropland farms acres	1 488 15 067	18.1 32.4	7.2 .2	1.3 .1	Colorado				
Farms by value of sales: Less than \$2,500 farms \$2,500 or more farms \$2,500 to \$9,999 farms	1 442 822 (S)	4.1 35.3 (S)	25.0 3.9 (S)	1.0 1.4 (S)	Farmsnumber_ Land in farmsacres_	3 577 213 671	10.9 27.4	11.6 .6	1.3 .2
Less than \$10,000 farms \$10,000 or more farms	(S) (S)	(S) (S)	(S) (S)	(S) (S)	Farms by size:	2.011	14.5	22.1	3.2
Market value of agricultural products sold \$1,000	18 639	83.6	1.2	1.0	Less than 50 acres farms 50 acres or more farms	2 011 1 567	15.7	7.2	1.1
Farms by standard industrial classification: Crops (01)	465 1 798	2.6 17.1	4.3 11.3	.1 1.9	Harvested cropland farms acres	2 561 89 681	17.2 31.5	11.6 1.6	2.0 .5
Livestock (02) farms Farms by tenure of operator: Full owners farms Part owners and tenants farms	1 907 357	16.4 13.3	13.6 2.8	2.2	Farms by value of sales: Less than \$2,500 farms_ \$2,500 or more farms_ \$2,500 to \$9,999 farms_	2 740 838 (S)	12.9 17.1 (S)	29.3 3.9 (S)	3.8 .7 (S)
Operators by principal occupation: Farming farms Other farms	822 1 442	35.3 4.1	4.5 16.8	1.6 .7	Less than \$10,000 farms_ \$10,000 or more farms_	(S) (S)	(S) (S)	(S) (S)	(S) (S)
Average age of operatoryears	50.9	15.7	(X)	(X)	Market value of agricultural products sold \$1,000	4 190	27.0	.1	(Z)
Farmsnumber_	1 870	17.8	7.2	1.3	Farms by standard industrial				
Land in farmsacres	30 992	26.0	.2	.1	classification: Crops (01) farms Livestock (02) farms	1 877 1 701	15.4 14.8	14.3 9.6	2.2 1.4
Less than 50 acres farms 50 acres or more farms	(S) (S)	(S) (S)	(S) (S)	(S) (S)	Farms by tenure of operator:	3 092	11.9	17.2	2.0
Harvested cropland farms acres	679 9 963	25.9 37.7	3.6 .2	.9 .1	Full owners farms Part owners and tenants farms	486	13.1	3.8	.5
Farms by value of sales: Less than \$2,500	1 227 642 528	12.2 47.0 57.1	18.7 3.3 9.3	2.3 1.6 5.3	Operators by principal occupation: Farming farms Other farms	1 259 2 318	15.1 14.4	7.1 17.7	1.1 2.5
Less than \$10,000 farms \$10,000 or more farms	1 755 114	18.6 6.0	14.3 .8	2.7 (Z)	Average age of operatoryears	46.7	11.9	(X)	(X)
Market value of agricultural products sold \$1,000	4 085	45.7	.2	.1	New Mexico				
Farms by standard industrial classification: Crops (01)	427 1 442	14.9 22.1	3.8 9.7	.6 2.2	Farmsnumber Land in farmsacres	951 29 225	23.0 46.0	6.3 .1	1.4 (Z)
Farms by tenure of operator: Full owners farms Part owners and tenants farms	1 639 231	19.8 25.3	10.2 2.3	2.0 .6	Farms by size: Less than 50 acres farms 50 acres or more farms	678 273	22.9 46.8	11.7 2.9	2.7 1.4
Operators by principal occupation: Farming farms Other farms	585 1 285	51.6 11.9	3.9 11.8	2.0 1.4	Harvested cropland farms acres	516 7 681	24.8 43.8	6.6 .8	1.6 .3
Average age of operatoryears	53.6	27.3	(X)	(X)	Farms by value of sales: Less than \$2,500 farms	768	26.6	13.1	3.5
Wyoming					\$2,500 or more farms \$2,500 to \$9,999 farms	183 183	22.1 22.1	2.0 5.0	.4 1.1
Farmsnumber and in farmsacres	556 34 256	25.3 51.7	5.7 .1	1.4	Less than \$10,000 farms \$10,000 or more farms	951 -	23.0	10.0	2.3
Farms by size: Less than 50 acres farms 50 acres or more farms	394 162	30.1 3.8	18.1 2.1	5.4 .1	Market value of agricultural products	1 100	21.2	4	(7)
Harvested cropland farms acres	216 7 225	55.2 79.3	3.3 .4	1.8 .3	sold\$1,000	1 109	31.2	.1	(Z)
Farms by value of sales: Less than \$2,500	385 171 (S)	30.5 42.3 (S)	16.2 2.3 (S)	5.0 1.0 (S)	classification: Crops (01)	405 545	16.4 35.0	8.7 5.2	1.4 1.8
Less than \$10,000 farms \$10,000 or more farms	(S) (S)	(S) (S)	(S) (S)	(S) (S)	Farms by tenure of operator: Full owners farms Part owners and tenants farms	741 210	27.7 14.2	7.9 3.6	2.2 .5
Market value of agricultural products sold \$1,000	2 362	76.4	.3	.3	Operators by principal occupation: Farming farms	505	32.5	6.5	2.1
classification: Crops (01) farms Livestock (02) farms	135 422	20.9 30.5	5.5 5.8	1.2	Other farms	446 52.0	17.9 17.3	6.0 (X)	1.1 (X)

Table 5. Estimated Farms Not on the Mail List: 1987—Con.

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text]

Detail may not add to total due to rounding. The	a meaning or a	DDICTIGNONS	una symbo	1.	T T T T T T T T T T T T T T T T T T T			I	
Geographic area and item	Total ¹ (number)	Relative standard error of estimate (percent)	Percent ²	Standard error of percent	Geographic area and item	Total ¹ (number)	Relative standard error of estimate (percent)	Percent ²	Standard error of percent
MOUNTAIN—Con.					PACIFIC—Con.				
Utah					Washington				
Farmsnumber_ Land in farmsacres	2 222 49 540	15.7 22.9	13.6 .5	2.1 .1	Farmsnumber Land in farmsacres	7 494 277 190	9.1 59.1	18.3 1.7	1.7 1.0
Farms by size: Less than 50 acres farms 50 acres or more farms	2 033 189	17.3 20.7	24.7 2.3	4.3 .5	Farms by size: Less than 50 acres farms_ 50 acres or more farms_	(S) (S)	(S) (S)	(S) (S)	(S) (S)
Harvested cropland farmsacres	901 14 257	28.3 36.3	7.7 1.3	2.2 .5	Harvested croplandfarms acres	3 448 33 689	18.9 49.3	12.5 .7	2.4 .4
Farms by value of sales: Less than \$2,500	1 874 347 178	18.9 15.7 13.0	30.0 3.5 4.5	5.7 .5 .6	Farms by value of sales: Less than \$2,500	5 765 1 729 (S)	9.6 22.2 (S)	35.2 7.0 (S)	3.4 1.6 (S)
Less than \$10,000 farms_ \$10,000 or more farms_	2 053 169	17.1 25.7	20.2 2.8	3.5 .7	Less than \$10,000 farms \$10,000 or more farms_	(S) (S)	(S) (S)	(S) (S)	(S) (S)
Market value of agricultural products sold \$1,000_	5 525	30.4	.9	.3	Market value of agricultural products sold \$1,000	17 008	29.0	.6	.2
Farms by standard industrial classification: farms	571 1 651	17.0 19.1	10.9 15.0	1.8 2.9	Farms by standard industrial classification: Crops (01)	1 041 6 454	23.8 9.4	5.9 27.5	1.4 2.6
Farms by tenure of operator: Full owners	1 547 286 389	21.3 8.6 8.4	14.9 6.3 28.1	3.2 .5 2.4	Farms by tenure of operator: Full owners farms Part owners farms Tenants farms	5 975 656 864	9.9 27.5 27.6	21.3 7.5 20.5	2.1 2.1 5.6
Operators by principal occupation: Farming	(S) (S)	(S) (S)	(S) (S)	(S) (S)	Operators by principal occupation: Farming farms Other farms	1 062 6 432	21.8 9.8	5.7 28.8	1.2 2.8
Average age of operatoryears	51.0	7.2	(X)	(X)	Average age of operatoryears	45.7	11.5	(X)	(X)
PACIFIC					Oregon				
Farmsnumber_ Land in farmsacres_	22 732 1 443 196	6.2 37.4	13.3 2.2	.8 .8	Farmsnumber Land in farmsacres	3 947 503 674	12.4 76.7	11.0 2.8	1.4 2.1
Farms by size: Less than 50 acres farms_ 50 acres or more farms_	19 273 3 460	6.8 11.7	18.4 5.2	1.3	Farms by size: Less than 50 acres farms 50 acres or more farms	2 981 967	14.6 21.9	15.0 6.0	2.2 1.3
Harvested cropland farms acres	9 981 204 667	12.0 22.7	8.7 1.3	1.0	Harvested cropland farms acres	2 281 55 747	23.1 45.5	9.5 1.9	2.2 .9
Farms by value of sales: Less than \$2,500 farms \$2,500 or more farms \$2,500 to \$9,999 farms	16 857 5 875 3 651	7.1 11.0 13.8	27.0 5.4 9.9	1.9 .6 1.4	Farms by value of sales: Less than \$2,500	3 164 783 342	15.1 9.5 4.2	21.2 3.7 3.8	3.2 .4 .2
Less than \$10,000 farms \$10,000 or more farms	20 509 2 224	6.5 16.8	20.6 3.1	1.3 .5	Less than \$10,000 farms_ \$10,000 or more farms_	3 506 440	13.7 15.0	14.7 3.6	2.0 .5
Market value of agricultural products sold \$1,000	129 009	20.1	.7	.1	Market value of agricultural products sold\$1,000	29 157	50.5	1.6	.8
Farms by standard industrial classification: Crops (01)	4 566 18 167	9.2 7.0	5.3 21.1	.5 1.5	Farms by standard industrial classification: Crops (01)	1 002 2 946	15.0 15.5	7.6 12.9	1.1 2.0
Farms by tenure of operator: Full owners farms Part owners farms Tenants farms	17 805 2 331 2 597	6.6 19.5 21.0	14.5 7.9 13.7	1.0 1.5 2.9	Farms by tenure of operator: Full owners	3 132 816	11.4 33.9	12.3 7.7	1.4 2.6
Operators by principal occupation: Farming	5 171 17 562	11.7 7.0	6.5 19.2	.8 1.3	Operators by principal occupation: Farming	970 2 978	22.0 14.5	5.9 15.2	1.3 2.2
Average age of operatoryears	46.6	5.8	(X)	(X)	Average age of operatoryears	52.0	14.6	(X)	(X)

Table 5. Estimated Farms Not on the Mail List: 1987—Con.

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text]

Geographic area and item	Total ¹ (number)	Relative standard error of estimate (percent)	Percent ²	Standard error of percent	Geographic area and item	Total ¹ (number)	Relative standard error of estimate (percent)	Percent ²	Standard error of percent
PACIFIC—Con.		i			PACIFIC—Con.	_			
					California—Con.		'		1
California					Farms by value of sales—Con. \$2,500 or more—Con. \$2,500 to \$9,999 farms	1 803	14.1	9.5	1.3
Farmsnumber Land in farmsacres	10 934 608 233	8.8 37.0	11.6 1.9	1.0	Less than \$10,000 farms \$10,000 or more farms	9 142 1 792	8.6 24.6	18.5 4.0	1.6 1.0
Land in family	000 200	07.0	1.0		Market value of agricultural products sold \$1,000	82 956	24.7	.6	.1
Farms by size: Less than 50 acres farms	8 668	9.9	14.5	1.4	Farms by standard industrial classification:	0.700	40.4	5.0	
50 acres or more farms	2 266	15.5	6.6	1.0	Crops (01) farms Livestock (02) farms	2 733 8 201	10.4 10.5	5.0 20.9	.5 2.2
Harvested cropland farms acres	3 796 110 797	15.3 30.6	6.0 1.4	.9	Farms by tenure of operator: farms. Full owners. farms. Part owners farms. Tenants farms.	8 506 1 189 1 239	8.9 33.7 17.3	12.3 8.9 10.7	1.1 3.0 1.8
Farms by value of sales: Less than \$2,500	7 339 3 595	9.7 14.4	24.0 5.7	2.3	Operators by principal occupation: Farming	3 326 7 607 43.5	17.2 9.1 5.6	7.4 15.6 (X)	1.3 1.4 (X)

¹State totals may not add to division totals because estimator was applied separately to each State and division.
²Base used for computing percent is total of census published and not on mail list farms.

Table 6. Selected Agricultural Items for Estimated Farms Not on the Mail List: 1987

Geographic area and item	Not on mail list (number)	Relative standard error of estimate (percent)	Not on mail list ¹ (percent)	Relative standard error of estimate (percent)	Geographic area and item	Not on mail list (number)	Relative standard error of estimate (percent)	Not on mail list ¹ (percent)	Relative standard error of estimate (percent)
NEW ENGLAND					MIDDLE ATLANTIC—Con.				
Farmsnumber Land in farmsacres Average size of farmacres	7 767 569 081 73.3	10.4 15.6 11.4	23.6 11.8 (X)	2.4 1.8 (X)	Market value of agricultural products sold\$1,000 \$1,000 farms	52 197 2 785	18.7 24.4	.9 6.9	.2 1.7
Market value of agricultural products sold\$1,000 Corn for grain or seed farms	25 984	24.0	1.6	.4	acres Wheat for grain farms	23 008 (S)	28.9	1.3 (S) (S) (S)	I ∧
acres Wheat for grain farms	(S) (S) (S)	(S) (S) (S) (S) (S) (S)	999999	(S) (S) (S) (S) (S) (S)	Soybeans for beans farms acres	(S) (S) (S)	(S) (S) (S) (S)	(S) (S)	(S) (S) (S) (S)
Soybeans for beans farms acres	(S) (S) (S)	(S) (S) (S)	(S) (S) (S)	(S) (S) (S)	Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc farms acres	8 463 164 285	12.3 19.1	11.0 3.7	1.4 .7
Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc farms acres	2 998 109 396	19.1 29.1	16.6 10.3	3.2 3.0	Tobacco farms acres	(S) (S)	(S) (S)	(S) (S)	(S) (S)
Tobaccofarms acres	(S) (S)	(S) (S)	(S) (S)	(S) (S)	Other small grains—oats, barley farms acres	1 265 5 463	41.5 43.2	4.6 1.1	1.9 .5
Other small grains—oats, barley farms acres Vegetables harvested for sale farms	112 1 948 1 393	70.9 73.2 52.5	(Z) 4.8 87.7	(Z) 3.5 46.1	Vegetables harvested for sale farms acres Fruits and nuts farms	612 3 501 377	48.7 66.7 51.4	57.0 2.2 5.2	27.7 1.4 2.7
acres_ Fruits and nuts farms_ acres_	2 104 (S) (S)	64.5 (S) (S)	2.6 (S) (S)	1.7 (S) (S)	acres_ Cattle and calves inventory farms number_	1 380 8 181 74 582	77.7 12.7 19.8	.1 12.4 2.1	.1 1.6 .4
Cattle and calves inventory farms number	3 512 26 605 1 152	18.1 21.9	22.8 3.8 38.2	4.1 .8	Hogs and pigs inventory farms number_	(S) (S)	(S) (S)	(S) (S)	(S) (S)
Hogs and pigs inventory farms number	4 098	42.0 55.1	6.9	16.0 3.8	Sheep inventory farms	1 379	30.3	18.8	5.7
Sheep inventory farms number Goats inventory farms	(S) (S) (S)	(S) (S) (S) (S)	(S) (S) (S)	(S) (S) (S) (S) 6.7	Goats inventory farms number	21 366 1 062 4 585	43.6 36.3 50.1	9.6 25.3 17.9	4.2 9.2 8.9
number Horses inventory farms number	(S) 3 312 16 857	(S) 19.2 30.5	(S) 35.0 30.8	(S) 6.7 9.4	Horses inventory farms number Hens and pullets of laying age	8 769 60 962	11.0 18.6	28.9 30.1	3.2 5.6
Hens and pullets of laying age inventory farms number	2 653 50 768	24.1 33.8	47.1 .4	11.4 .1	inventory farms number Pullets 3 months old or older not yet	3 425 73 208	18.3 22.0	25.6 .3	4.7 .1
Pullets 3 months old or older not yet of laying age inventory farms number	(S) (S)	(S) (S)	(S) (S)	(S) (S)	of laying age inventory farms number Broilers, fryers, and other meat-type	413 7 160	57.4 61.0	(Z) .1	(Z) .1
Broilers, fryers, and other meat-type chickens inventory farms number	(S) (S)	(S) (S)	(S) (S)	(S) (S)	chickens inventory farms number	840 26 856	42.3 56.3	28.2 .1	11.9 .1
MIDDLE ATLANTIC	(5)	(3)	(3)	(3)	EAST NORTH CENTRAL				
Farmsnumber_ Land in farmsacres_	17 330 824 482	5.8 12.7	15.0 4.6	.9	Farmsnumberacres	33 593 1 569 971	2.7 13.2	8.4 1.8	.2 .2
Average size of farmacres_	47.6	10.7	(X)	(x)	Average size of farmacres_		10.0	(X)	κ̈́

Table 6. Selected Agricultural Items for Estimated Farms Not on the Mail List: 1987—Con.

Table 6. Selected Agricu	ilurai i	(CIII2	IOI E	Suma	teu i aillis Not oli tile Ma	III LIST	130		·
Geographic area and item	Not on mail list (number)	Relative standard error of estimate (percent)	Not on mail list ¹ (percent)	Relative standard error of estimate (percent)	Geographic area and item	Not on mail list (number)	Relative standard error of estimate (percent)	Not on mail list ¹ (percent)	Relative standard error of estimate (percent)
EAST NORTH CENTRAL—Con.					SOUTH ATLANTIC—Con.				
Market value of agricultural products sold	146 490 4 625 131 271 992 9 167 2 710 135 384 13 403 195 295 (S)	17.8 21.1 33.7 57.1 59.9 25.7 32.0 11.9 21.2 (S)	.7 2.0 .6 1.2 .3 1.7 .7 6.9 2.1 (S)	.1 .4 .2 .7 .2 .4 .2 .8 .4 .(S)	Market value of agricultural products sold	111 146 6 827 37 736 (S) (S) 1 838 99 302 14 879 169 776 847 2 451	12.8 17.3 21.0 (S) (S) 31.8 51.6 10.9 14.3 50.9 58.6	.7 10.7 1.3 (S) (S) 4.5 2.5 13.2 4.9 4.1 (Z)	.1 1.9 .3 (S) (S) 1.4 1.3 1.4 .7 2.1 (Z)
Other small grains—oats, barleyfarmsacres Vegetables harvested for salefarmsacres Fruits and nutsfarmsacres Cattle and calves inventoryfarmsnumber Hogs and pigs inventoryfarmsnumber	2 347 36 866 1 118 6 964 1 098 3 207 14 290 167 599 3 192 114 598	33.7 46.9 56.0 61.2 56.2 67.4 10.7 28.5 26.8 50.3	3.0 2.4 41.6 1.6 11.6 .1 7.7 1.7 5.2	1.0 1.1 23.3 1.0 6.5 .1 .8 .5 1.4	Other small grains—oats, barleyfarms acres Vegetables harvested for salefarms acres Fruits and nutsfarms acres Cattle and calves inventoryfarms Hogs and pigs inventoryfarms number	953 3 729 1 243 3 971 4 715 21 501 32 165 315 983 7 953 67 428	42.5 43.4 32.4 30.6 20.7 29.2 6.4 10.0 15.1 19.4	7.1 1.1 45.4 .5 19.3 .2 20.4 4.6 24.1 1.4	3.0 .5 14.7 .1 4.0 .1 1.3 .5 3.6 .3
Sheep inventory	2 189 17 942 (S) (S) 11 510 58 497 5 087 113 713 1 319 22 580 1 267 51 378	33.2 43.4 (S) (S) 13.3 17.4 21.3 26.0 42.6 48.2 42.6 75.5	11.3 2.7 (S) (S) 18.5 16.9 19.1 .2 34.7 .2 22.1	3.8 1.2 (S) (S) 2.5 2.9 4.1 .1 14.8 .1	Sheep inventory	874 16 681 (S) (S) 15 406 62 475 9 860 218 477 (S) (S) 1 208 20 721	41.2 48.1 (S) (S) 11.5 17.5 15.8 26.2 (S) (S) 32.4 50.9	13.4 5.3 (S) (S) 27.8 21.0 38.3 (S) (S) (S)	5.5 2.6 (S) (S) 3.2 3.7 6.0 .1 (S) (S)
WEST NORTH CENTRAL					EAST SOUTH CENTRAL				
Farmsnumber_ Land in farmsacres_ Average size of farmacres_	23 423 2 146 318 91.6	3.3 18.2 14.1	4.5 .8 (X)	.2 .1 (X)	Farms	27 767 1 407 735 50.7	2.8 12.0 10.3	10.0 3.0 (X)	.3 .4 (X)
Market value of agricultural products sold	162 494 5 367 219 223 1 501 96 858 3 500 290 308 8 610 198 314 (S)	17.6 17.2 33.1 33.2 51.7 19.5 54.9 15.9 28.6 (S)	.4 2.3 .8 1.1 .4 1.8 1.2 3.2 1.1 (S)	.1 .4 .3 .4 .2 .3 .7 .5 .3 .9)	Market value of agricultural products sold	73 639 3 953 82 620 (S) (S) 318 59 246 5 880 111 999 3 832 4 600	24.9 19.6 47.6 (S) (S) 69.6 73.3 15.8 28.4 24.6 29.1	1.0 7.3 4.0 (S) (S) 1.2 1.2 4.3 2.5 13.1	.2 1.4 1.9 (S) (S) .8 .9 .7 .7 3.2 (Z)
Other small grains—oats, barley farms—acres— Vegetables harvested for sale acres— Fruits and nuts farms—acres— Cattle and calves inventory farms—number—number—number—	997 13 318 (S) (S) (S) (S) 10 927 135 690 2 749 296 390	48.2 62.2 (S) (S) (S) (S) 13.2 22.0 28.3 47.3	.7 .2 (S) (S) (S) (S) 3.8 .5 2.7 1.1	.4 .1 (S) (S) (S) (S) (S) .5 .1 .8 .5	Other small grains—oats, barleyfarmsacres Vegetables harvested for salefarms acres Fruits and nutsfarms Cattle and calves inventoryfarms Hogs and pigs inventoryfarms number	(S) (S) 363 317 520 673 19 538 265 124 5 466 44 915	(S) (S) 70.6 69.1 56.2 56.0 6.1 11.2 17.2 22.7	(S) (S) 25.1 7.7 .1 10.9 3.7 19.5 2.1	(S) (S) 17.7 .1 4.3 .1 .7 .4 3.4 .5
Sheep inventory farms number. Goats inventory farms number. Horses inventory farms number. Hens and pullets of laying age inventory farms number. Pullets 3 months old or older not yet of laying age inventory farms number. Broilers, fryers, and other meat-type chickens inventory farms number.	1 299 40 386 861 3 809 6 544 22 387 3 839 181 548 (S) (S) (S)	41.5 50.1 53.8 60.3 18.2 19.8 28.3 64.4 (S) (S)	4.7 2.0 13.7 7.4 7.9 5.6 11.9 .5 (S) (S)	2.0 1.0 7.4 4.4 1.4 1.1 3.4 .4 (S) (S) (S)	Sheep inventory	341 2 581 879 4 882 5 067 27 058 4 892 77 947 1 426 21 215 990 25 967	68.9 69.4 43.6 52.6 16.9 28.7 18.2 20.5 37.2 41.7 43.4 50.8	14.3 4.0 14.0 8.2 10.5 11.2 22.6 .3 34.5 .5	9.9 2.8 6.1 4.3 1.8 3.2 4.1 .1 12.8 .2 7.3 (Z)
SOUTH ATLANTIC					WEST SOUTH CENTRAL				
Farmsnumber_ Land in farmsacres_ Average size of farmacres_	56 565 2 908 370 51.4	4.0 10.1 7.0	19.1 5.4 (X)	.8 .5 (X)	Farmsnumber_ Land in farmsacres_ Average size of farmacres_	42 987 2 737 949 63.7	5.2 18.1 12.7	11.4 1.5 (X)	.6 .3 (X)

Table 6. Selected Agricultural Items for Estimated Farms Not on the Mail List: 1987—Con.

Geographic area and item	Not on mail list (number)	Relative standard error of estimate (percent)	Not on mail list ¹ (percent)	Relative standard error of estimate (percent)	Geographic area and item	Not on mail list (number)	Relative standard error of estimate (percent)	Not on mail list ¹ (percent)	Relative standard error of estimate (percent)
WEST SOUTH CENTRAL—Con.					MOUNTAIN—Con.				
Market value of agricultural products	132 336	31.1	.7	.2	Market value of agricultural products sold—Con.				
sold \$1,000 farms farms acres	(S) (S) (S) (S)	(S)	(S)		Fruits and nuts farms acres	527 1 952 8 292	39.3 47.8	9.1 .1 10.4	3.6 .1 1.6
Wheat for grain farms acres	(S)	(S) (S) (S) (S)	(S) (S) (S) (S)	(S) (S) (S) (S) 1.0	Cattle and calves inventory farms number	71 853 3 735	15.2 19.4 24.4	.6 36.0	1.6 .1 8.8
Soybeans for beans farmsacres	249 23 308	67.8 68.8	1.5 .5	1.0	Hogs and pigs inventory farms number	27 915	31.4	3.4	1.1
Hay—alfalfa, other tame, small grain, wild, grass silage, green chop, etc farms	6 483	19.8	4.4	.9	Sheep inventory farms number	2 747 30 778	29.4 38.4	18.9	5.5 .3
acres Tobaccofarms	94 957 (S) (S)	23.5 (S) (S)	1.4 (S) (S)	.3 (S) (S)	Goats inventory farms number	800 5 232 9 342	34.8 57.8 12.6	20.7 2.3 14.6	7.2 1.3 1.8
acres	(S)	,			Horses inventory farms number Hens and pullets of laying age	43 477	14.4	9.1	1.3
Other small grains—oats, barley farms acres	(S) (S)	(S) (S) (S) (S) (S) (S)	(9) (9) (9) (9) (9)	(S) (S) (S) (S) (S) (S) (S) (S) (S) (S)	inventory farms number	6 254 99 564	18.7 21.4	36.3 1.2	6.8 .3
Vegetables harvested for sale farms acres	(S) (S) (S)	(S) (S)	(S) (S)	(S) (S)	Pullets 3 months old or older not yet of laying age inventory farms	1 124	43.4	(Z) 3.0	(Z) 1.6
Fruits and nuts farms acres	(S) (S) 29 498	(S) (S) 8.6	(S) (S) 10.8	(S) (S)	number Broilers, fryers, and other meat-type	25 397	52.9		
Cattle and calves inventory farms number Hogs and pigs inventory farms	29 498 334 796 4 213	12.7 23.7	1.7 21.8	.9 .2 5.2	chickens inventory farms number	982 40 971	47.6 56.7	(Z) 18.3	(Z) 10.4
number	40 676	36.2	3.2	1.2	PACIFIC				
Sheep inventory farms number	1 946 39 143	66.6 67.6	15.5 1.7	10.3	Farmsnumber_	22 732	6.2	13.3	.8 .8
Goats inventory farms number	4 224 29 213	39.8 50.1	29.2 1.7	11.6	Land in farmsacres_ Average size of farmacres_	1 443 196 63.5	37.4 28.1	2.2 (X)	(X)
Horses inventory farmsnumber	16 642 93 051	14.5 22.5	16.4 16.9	2.4 3.8	Market value of agricultural products sold \$1,000	129 009	20.1	.7	.1
Hens and pullets of laying age inventory farms	8 481	17.9	26.0	4.7	Corn for grain or seed farms acres Wheat for grain farms	(S) (S) (S) (S) (S) (S)	(S) (S) (S)	(S) (S) (S) (S) (S) (S)	(S) (S) (S) (S) (S) (S)
Pullets 3 months old or older not yet	241 143	25.8	.6	.1	Soybeans for beans farms_	(S) (S)	(S)	(8)	(S)
of laying age inventory farms number_	3 057 84 280	32.5 66.3	44.7 .9	14.6 .6	acres Hay-alfalfa, other tame, small grain,	(S)	(S) (S)	(s)	1
Broilers, fryers, and other meat-type chickens inventory farms number	2 055 29 205	39.1 67.0	22.3 (Z)	8.7 (Z)	wild, grass silage, green chop, etc farms acres	4 444 78 479	20.2 34.6	10.7 2.4	2.2 .8
Tallbott.	20 200	07.0	(2)		Tobaccofarms acres	(S) (S)	(S) (S)	(S) (S)	(S) (S)
MOUNTAIN					Other small grains—oats, barley farms acres	(S) (S)	(S) (S)	(S) (S)	(S) (S)
Farmsnumber Land in farmsacres	17 142 682 441	8.7 33.5	12.1 .3	1.1	Vegetables harvested for sale farms acres	(S) (S) (S)	(S) (S)	(S) (S) (S) 5.6	(S) (S) (S) (S)
Average size of farmacres_	39.8	23.8	ίχ̈́)	(×)	Fruits and nuts farms acres	3 089 30 058	20.2 32.0	5.6 .1 20.5	1.1 (Z) 2.1
Market value of agricultural products	45 847	00.0			Cattle and calves inventory farms number Hogs and pigs inventory farms	14 190 177 489 3 696	10.1 29.0 19.8	20.5 2.3 39.3	0.7 7.8
sold \$1,000 farms acres	45 847 (S) (S) (S)	38.6 (S)	(S)	.2 (S)	number	18 518	25.9	5.9	1.5
Wheat for grain farms acres	(S)	(S) (S) (S) (S) (S)	⁴ (3) (3) (3) (3) (3)	(S) (S) (S) (S) (S) (S)	Sheep inventory farms number	3 189 54 729	28.2 54.4	23.6 3.5	6.7 1.9
Soybeans for beans farmsacres	(S)	(8)	(S)	(S)	Goats inventory farms number Horses inventory farms	2 001 8 004 10 855	28.1 32.6 12.5	32.4 14.6 22.3	9.1 4.8 2.8
Hay-alfalfa, other tame, small grain, wild, grass silage, green chop, etc farms	7 091	14.6	10.0	1.5	number Hens and pullets of laying age	46 533	18.0	14.9	2.7
acres Tobaccofarms	146 503 (S) (S)	23.7 (S) (S)	1.9 (S)	.5 (S) (S)	inventory farms number	6 335 232 325	16.2 58.5	36.4 .5	5.9 .3
acres	1		(S)		Pullets 3 months old or older not yet of laying age inventory farms	1 310	35.3	40.3	14.3
Other small grains—oats, barley farms acres	9 370	50.6 74.6	1.9 .3	1.0	Broilers, fryers, and other meat-type	10 991	42.6	.2	.1
Vegetables harvested for sale farms acres	(S) (S)	(S) (S)	(S) (S)	(S) (S)	chickens inventory farms number	1 142 2 811	41.0 36.9	40.5 (Z)	16.6 (Z)

Note: Division totals may not add to region totals in table 1 because the estimator used for volume 1 and tables 5 and 6 does not include estimates of classification error. Some estimates, relative standard errors, and standard errors were revised from those published in volume 1 due to minor errors discovered during additional processing of data for this report.

¹Base used for computing percent is total of census published and not on mail list farms.

APPENDIX A. 1987 June Enumerative Survey Items Used in the Coverage Evaluation Program

[The National Agricultural Statistics Service, U.S. Department of Agriculture provided to the Census Bureau the following acreage and livestock data items collected from the 1987 June Enumerative Survey. The supplemental items were requested specifically by the Census Bureau for the purpose of the coverage evaluation program.]

	Item	Present item	Key (codes on JES	Supplemental item
1.	State	x			
2.	District	l ×			
3.	Segment	×			
4.	Tract	×			
5.	County	×			
6.	Sample weight	×			
7. 8.	List sample frame identification number of operation	X X		786	
9.	Employer identification number of operation	î x		466	
	Name, address, phone number of operator	l		700	
	a. Name of spouse of operator				>
	b. Other addresses used by operator or for operation within past				
	2-year period, including any other ZIP codes				>
11.		×		790	
	Social Security number of operator	[<u> </u>		470	
	Type of operation	, X	015 -	845	
14.	Residence of operator with respect to segment	×	1010	fo ¹ , 816 nrfo ²	
13.	(section A, item 1)	x			
16.	Other names under which land is operated (section A, item 2)	Î xÎ			,
	Names, addresses, phone numbers of all other person(s) in the				·
	partnership or joint land operating relationship (section B, item 2)	x			
	LSF ID of each partner	x		792, 794, 796	
	SSN of each partner	x	4	472, 474, 476	
	Acres in tract	×		840	
21.	Acreage operated (section E, items 1 and 3)				
	a. owned	X		901	
	b. rented from others	X		902	
	c. rented to others	, X		905 906	
	e. total acres operated	X X		900	
	or total acres managed	î î		904	
22.	Acreage of crops on entire farm (see list below)	^		301	>
23.	Total hogs and pigs on entire farm	x		300	
24.	Total cattle and calves on entire farm (section G, item 9)	x		350	
25.	Total of sheep, lambs, and goats on entire farm (add goats to				
	section K)			1	×
26.	Total poultry on entire farm including hens, pullets, broilers, turkeys, and other				
07	poultry (add to section K))
	Total horses on entire farm (new section or add to section K)				>
	Reported total gross value of sales	x		860	^
	Edited sales	î 🕺		861	
	Type of farm	×		862	
32.	Respondent code	x		910	
33.	JES farm status of operation	x			
_	Acreage of crops on entire farm			Ougn	tity to be harvested ³
	Acreage of crops of entire family			Guani	ity to be harvested
	Corn				(acres)
	Sorghum				(acres)
	Wheat				(acres)
	Other small grain				(acres)
	Soybeans				(acres)
	Cotton				(acres)
g.	Alfalfa hay				(acres)
	Other hay				(acres)
i. '	Tobacco				(tenths of acres)
j. 1	rish potatoes				(tenths of acres)
k. '	Vegetables for sale				(tenths of acres
	Vegetables for home use				(tenths of acres
	Fruit, orchards, citrus, vineyards, berries, and nut trees				(tenths of acres)
	Nursery products—trees, shrubs, vines, sod, etc.				(tenths of acres)
	Greenhouse products under glass or other protection		1		(square feet)
	Other crops—specify crop name such as field seed and other crops				(acres)
μ. '	outer crops specify crop name such as held seed and other crops				(acres)

¹Resident farm operator.

²Nonresident farm operator.

³Quantity of crops on entire farm.

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APPENDIX B. Classification Error Survey Report Form

			oproval Expires 12/31/8
FORM 87-A90 U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS	TO THE CENSUS BUREAU IS CONFIDENTIAL. It may be seen only by swort used only for statistical purposes. Your report CANNOT be used for purpore regulation. The law also provides that copies retained in your files are immune	n Čensus emplo ses of taxation,	yees and may be investigation, or
	in correspondence pertaining to this report, please refer to your		
	_		
			1
EVALUATION OF THE			
1987 CENSUS OF AGRICULTURE			
Please complete and RETURN to Jeffersonville, IN 47133			
CENSUS 010 011 012			
ONLY 013 014 015	Please correct errors in name, address, and ZIP Code. ENTER street	and number if	not shown.
of your household migh	t the kinds of associations and the types of activities that you ht have with agriculture. The Census Bureau's definition of ''	'farming'' in	cludes
a large variety of activi each question carefully	ties, some of which you and others may not consider agricul y.	tural. Please	a read
a compare a sign of the contract of the contra			·
 Which of the following describes agriculture at anytime during 19 		YES	NO
a. Sold your farm or ranch?		020 1 🗆	2 🗆
b. Retired from farming or ranch	ning?	021	2 🗆
c. Operated a farm or ranch?		022	2 🗆
d. Operated a greenhouse or nurs	sery?	023	2 🗆
e. Operated a farm or ranch with under a custom arrangement o	all work being completed r by hired custom operators?	1 🗆	2 🗆
f. Participated as a landlord, part member of an agricultural ope	tner, investor, or corporate ration?	025	2 🗆
2. Which of the following describes activities at anytime during 1987	your agricultural production		
 a. Grew ANY CROPS (including h fruit, sod, etc.) or raised ANY L (including horses, goats, chick 	nay, tobacco, vegetables, .IVESTOCK OR POULTRY kens, fish, bees, etc.)?	030	2 🗆
b. Grew crops or raised livestock own or HOME USE?	or poultry for your	031	2 🗆
c. Grew crops or raised livestock	c or poultry as a HOBBY?	032	2 🗆
3. At any time during 1987 did you with an agricultural operation?	have any other involvement	1 🗆	2 🗆
If YES, describe the type of invol	vement		
If you marked ''YES'' to ANY of the ab	ove items, continue with section 2 on page 2.		
If ALL items were marked "NO," go to	section 6 on page 5.		

SE	This section asks about the NUMBER OF ACRES that was owned or used at any time by the operator or operation named on the mailing label. Each census report should for land under the day-to-day management of the person or operation listed on the name The land does not have to be "agricultural"—it can include your residence, woodle	be com	pleted
	pastureland, etc. — and it does not have to be located in a single place.	None	Number of acres
_			050
٦.	What is the total number of acres that you, your spouse, or organization owned during 1987?		
	• Include acres owned for only part of the year as well as acres owned for		
	the whole year.		
2.	In 1987, how many acres of land did you, your spouse, or organization rent		051
	or lease FROM OTHERS?		
	 Include land you work on shares, use rent-free, or in exchange for services, payment of taxes, etc. 		
	Include leased Federal, State and railroad land.		
	Do not include land you use on a per-head basis under a grazing permit.		
3	In 1987, how many acres of land did you, your spouse, or organization		052
3.	rent or lease TO OTHERS?		
	Include land worked on shares by others and land subleased.		<u></u>
4	Of the land you rent to others reported in item 3, how many		053
7.	acres do you own?		
5	Please add the acres reported in items 1 and 2. Subtract the acres rented		054
٠.	to others in item 3. The resulting acreage is your CENSUS PLACE and should	_	
	be used for completing the remainder of this report form		
6.	Of the land in your CENSUS PLACE reported in item 5 above,		055
	a. How many acres were used as pasture?		
	 Include cropland used only for pasture, woodland pastured, and rangeland. 		056
	b. How many acres were cropland on which all crops failed?		056
	Do not include land in orchards and vineyards on which crops failed.	L	L
7.	In what county and State was the largest value of your agricultural products raised or produced?		
	County State		}
			J
8.	Did you have agricultural operations in any other county or counties?		
	1 YES — Enter the county and State name(s) and acreage		
	2 □ NO		
	County State		Number of acres
	County		058
			059
9.	Provide name and mailing address of each landlord FROM whom you rented land or use or worked land on shares (acres reported in item 2 above).	d land	rent free
	Name Mailing address, city, State, ZIP Code		Number of acres
			060
			061
			062
10.	Provide name and mailing address of each person TO whom you rented land and the nu acres rented (acres reported in item 3 above).	mber c	of
	Name Mailing address, city, State, ZIP Code		Number of acres
			063
			064
			1-3-
			085
			L

, 314	CENSUS P	asks for information about any LACE. We know that our mailin d to make sure we count each ''i	g list contain	s outdat	ed addresses			
1.	What is the name of t	the person making the majorit	y of the mai	nageme	nt			
	First name	Middle initial	Last name		 			
	This person will be refe	erred to as the OPERATOR of you	our CENSUS	PLACE	 [.]	
	a. What is the name o	of the operator's spouse?						
	First name	Middle initial	Last name				7	
							_	
	b. Does the operator	live on the CENSUS PLACE?	• • • • • • • • •	. 070	ı □ Yes		2□ No	
		e operator begin to operate a JS PLACE?		071	19	Year		
	d. At what occupatio majority of work t	on did the operator spend the ilme in 1987?	• • • • • • • • •	. 072	ı 🗌 Farmin	g	2□ Othe	r
	e. What is the operat	tor's age?		. 073		Yes	ars old	
	f. What is the operat	tor's sex?		. 074	ı □ Male		2 ☐ Fema	le
2.	In the past two years the one shown on the	, has the operator received man	ail at any ad	dress of	ther than			
			Mailing addre	ess				
	075 1 ☐ Yes — Provid	le other address	City			State		ZIP Code
	2 🗆 No							
3.	For business purpose	es, does the operator use any (other name	for the C	CENSUS PL	ACE?	•	<u></u>
			Name					
			Mailing addre					
	o76 1 ☐ Yes — Provid	le other name				,		
	2 🗌 No		City			State		ZIP Code
4.	Which type of organi	zation best describes your CE	NSUS PLAC	CE in 19	87?		,, -	
	or 1 Individual or f	family operation (sole proprietors	ship), excludi	ing partn	iership			
	<u> </u>	peration, including family partne	ership					
	·	- incorporated under state law, i	•	nily				
	·	n as cooperative, estate, trust, e	tc. —					
		· · · · · · · · · · · · · · · · · · ·						
5.	At any time during 19 operation of the CEN	187 were there any other indiv SUS PLACE?	iduals asso	clated w	ith the			
	⁰⁷⁸ 1 ☐ Yes — <i>Provid</i> 2 ☐ No — <i>Go to</i> s	le information requested below section 4						
	Name	Mailing address, city, State, Z	IP Code	individu	elationship of ual to operator US PLACE (e , uncle, son, n related)	of .g.	this indivi of CENS hired ma	s relationship of idual to operator US PLACE (e.g. nager, business s, partner, other)
								-
	-							

Page 3

3 S.E.	Please provide information about all crops important for this evaluation. If you rent I harvest. Do not include crops grown on la	s includand fro	ding those om others,	grown un be sure to	der contraction	t. This ir	formation is	ne
			a. How acres harve 1987	were sted in	b. How m was he in 198	rvested	c. What wa total doll of sales i	ar value
١.	Hay — all kinds except sorghum hay Include grain hay, grass silage, wild hay, etc.	None	1307	•			Dollars	Cents
	 If two or more cuttings were made from the 		101		102		103	ī
1	same land, REPORT ACRES ONLY ONCE but report total tons of all cuttings					Tons, dry	\$	00
9	Corn for grain or seed		104		105	Bu.	106	00
1			107			-	108	
3.	Corn for silage, cut for green chop or dry fodder. (Do not include acres already	_			1		\$	00
	reported in item 2.)		109		110		111	- 00
4.	Soybeans for beans					Bu.		00
	•	_	112		113	_	114	
5.	Wheat for grain					Bu.	\$	00
6.	Other small grains for grain — oats,							į
	barley, rye, rice, etc. Specify crop name(s):		115				116	
			117				\$ 119	00
_	Carabana farancia arand		'''		118	Bu.	1 -	00
ł	Sorghum for grain or seed		120				121	1
	Sorghum for silage, cut for green chop, dry forage or hay. Do not include acres already reported in item 7						\$	00
1	_		122		123	Bales	124 \$	00
9.	Cotton		125		126	Daies	127	
10.	Peanuts for nuts		128		129	Lbs.	\$ 130	00
111	Tobacco — all types		128	/10	I .	Lbs.	1.	00
l l	Irish potatoes		131	i	132		133	
•2.	• Exclude home use			/10		Cwt.		00
13	Sweetpotatoes and yams		134	1	135		136	i i
	• Exclude home use			/10		Bu.	L	00
14.	Vegetables, sweet corn, or melons for sale		137	1 1			138	1
	• Exclude home use		ļ	/10			\$	00
15.	Berries for sale			1	1			1
	Exclude home use			į				į
	Specify crop name(s):			l l]	į
l			139	l t			140	į
l				/10			\$	00
				1				İ
16.	Land in bearing and nonbearing fruit orchards, citrus or other groves, vineyards, and nut trees of all ages			[]]				! ! !
	Include land on which the fruit crop failed			1				i I
	Do not include abandoned acreages			1	1			-
ļ	Specify crop name(s):	ш	141	İ	000000000000000000000000000000000000000	0000000000000	142	1
1				İ				1
			<u> </u>	/10			\$	1 00
17	All other crops			į			1	1
' ' '	Include field seeds, sugar crops, dry beans,			į	ł			1
]	dry peas, sunflower seeds, etc.			į				1
1	Specify crop name(s):			į	**********)	1
}			143	1			144	i
			L	/10			\$	1 00
							1000	
			a. How r	e feet	b. How m	rere in	c. What was	e of
			glass	under or other	the ope 1987?	n in	sales in 1	987?
10	Graenhouse or numbers arone Chasife			tion in				
'5.	Greenhouse or nursery crops — Specify ⊋			· 	 		Dollars	Cents
			145		146	į	147	1
			1			/10	\$	1 00
FORM 8	7-A90 (2-8-88)	Page	4					

during 1987. 8. What was the INVENTORY on your CENSUS PLACE on December 31, 1987, how many CATTLE and CALVES of all ages were on your CENSUS PLACE?		value of
1. On December 31, 1987, how many CATTLE and CALVES of all ages were on	203) ! 1
1. On December 31, 1987, how many CATTLE and CALVES of all ages were on	206	00
	\$	1
Of these cattle and caives, how many were —		1
a. Milk cows? (Include dry milk cows and milk helfers that had calved.)		1 00
207 208	1	00
b. Other cattle and calves? (Include beef cows, heifers, steers, buils, and calves.)	\$ 210	00
What was the gross value of dairy products sold from on your CENSUS PLACE		1
in 1987?	\$	00
211 212	213	
3. On December 31, 1987, how many HOGS and PIGS of all ages were on your		
CENSUS PLACE?	216	. 00
4. On December 31, 1987, were there any POULTRY on your CENSUS PLACE?	\$	00
Of this poultry, how many were —	219	I
a. Hens and pullets of laying age?		1
• Exclude started pullets being raised for sale .	\$ 222	00
b. Pullets 3 months old or older not yet of	122	
laying age?	\$	00
c. Broilers, fryers, and other meat-type	225	i
chickens? Include capons and roasters	\$	00
d. Other poultry raised in captivity?	228	i
Include turkeys, ducks, geese, etc		
	\$ 229	00
5. What was the gross value of eggs sold from your CENSUS PLACE in 1987?		1 00
230 231	232	00
6. On December 31, 1987, were there HORSES and PONIES of any age on your	}	
CENSUS PLACE? • Include boarded horses and ponies	s	oo
7. On December 31, 1987, were there any	235	1
SHEEP and LAMBS of all ages on your CENSUS PLACE?	\$	00
8. On December 31, 1987, were there any other livestock or livestock products on your CENSUS PLACE? • Include goats, mules, fur-bearing animals, colonies of bees, fish in captivity, honey,		
goats milk, wool, mohair, etc		
Specify kind	226	!
236	238 \$	00
239 240	241	
242 243	244	- 00
	\$	00
SECTION 6: PERSON COMPLETING THIS REPORT Signature 300 Area code	Number	
Date completed (Month/day/year) What is your telephone number?		

FORM 87-A90 (2-8-88)

		· // // // // // // // // // // // // //	
	·		

APPENDIX C. References

1987 Census of Agriculture

- Volume 1, Summary and State Data, Part 51, United States.
- Procedural History, Reference Series.

1982 Census of Agriculture

- Volume 1, Summary and State Data, Part 51, United States.
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- Volume 1, Summary and State Data, Part 51, United States.
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Census of Agriculture



Statistical Data for all Counties, States, and the United States.

(Printed Reports, Computer Tapes, Compact Disc-Read Only Memory (CD-ROM) Diskettes)



For further information call (301) 763-1113

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PUBLICATION PROGRAM

1987 CENSUS OF AGRICULTURE

Results of the 1987 Census of Agriculture are being published in a series of reports which provide data for each county (or equivalent), each State, the United States, Puerto Rico, Guam, the Virgin Islands of the United States, American Samoa, and the Northern Mariana Islands. The publications include statistics on the number of farms; land in farms; farm and operator characteristics; livestock, poultry, and their products; crop production and value; operating expenditures; irrigation; and other characteristics of farms.

Publication order forms may be obtained from Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233, any U.S. Department of Commerce district office, or by calling (301) 763-1113.

ADVANCE REPORTS (AC87-A-01-000(A) TO 56-000(A)

Advance Reports are published separately for each county (or equivalent) in the United States with 10 farms or more, for each State, and the United States. The reports contain data for all agricultural operations with \$1,000 or more in actual or potential sales of agricultural products in the census year. The Advance Reports contain final data for major data items together with comparable data from the 1982 census. Included in the reports are data on number of farms, land in farms, size of farms, land use practices, farm operator characteristics, sales expenditures, machinery and equipment, livestock, poultry, dairy products sold, and major crops harvested (which vary by State). No advance reports are available for Puerto Rico, Guam, or the U.S. Virgin Islands.

VOLUME 1. GEOGRAPHIC AREA SERIES (AC87-A-1 TO 56)

State and County Data (A-1 to 50) are published showing detailed data in national and State tables for the United States, and in county and State tables separately for each State. These reports include data on number and size of farms; crop production; livestock, poultry, and their products; tenure, age, and occupation of operators; types of organization; value of products sold; and standard industrial classification of farms.

Summary and State Data (A-51)

- Chapter 1. National level data
- · Chapter 2. State level data

Outlying Areas (A-52 to 56) provide detailed data for the regions and municipios of Puerto Rico; the election districts of Guam; the U.S. Virgin Islands; American Samoa; and Northern Mariana Islands.

VOLUME 2. SUBJECT SERIES (AC87-S-1 TO 6)

Agricultural Atlas of the United States (AC87-S-1), formerly the *Graphic Summary*, presents a profile of the Nation's agriculture in a series of dot and multicolor pattern maps. The maps provide displays on size and type of farm, land use, farm tenure, market value of products sold, crops harvested, livestock inventories, and other characteristics of farms.

Coverage Evaluation (AC87-S-2) provides national and regional level estimates on the completeness of the census, in terms of both the number of farms missed and selected characteristics of those farms.

Ranking of States and Counties (AC87-S-3) presents the ranking of the top 20 States and the top 100 counties of importance of selected items from the 1987 census. Comparative data from the 1982 census are included in most tables. Tables also show cumulative totals for States and counties.

History (AC87-S-4) is a concise description of the major census operations together with facsimiles of selected data tables. It explains the history of the agriculture census, farm definition, data collection and processing, and dissemination of census data.

Government Payments and Market Value of Agricultural Products Sold (AC87-S-5) shows detailed data for farms cross-tabulated by combined market value of agricultural products sold and Government payments received, including detailed national data and selected data for each State.

ZIP Code Tabulations of Selected Items From the 1987 Census of Agriculture (AC87-S-6) provides tabulations by five-digit ZIP Code for selected items from the 1987 census. Data items include number of farms, land in farms, farms by size, market value of agricultural products sold by size of sale, livestock inventory, cropland harvested, and selected crops.

VOLUME 3. RELATED SURVEYS (AC87-RS-1 AND 2)

The Farm and Ranch Irrigation Survey (AC87-RS-1) provides statistical data collected from a sample of farm operations from the 1987 Census of Agriculture. The publication offers information on acres irrigated, land use, yields of specified crops, methods of water distribution, quantity of water used by its source, and other irrigation practices.

Agricultural Economics and Land Ownership Survey (AC87-RS-2) provides data on indebtedness, expenditures, income and assets for both farm operators and landlords. This report also includes measures of credit used for purchases and expenditures, debt by type of lender, assets, off-farm income, and other land ownership data.

VOLUME 4. CENSUS OF HORTICULTURAL SPECIALTIES (AC87-HOR-1)

This report includes detailed information on the horticultural establishments with production and sales of \$2,000 or more. It provides data on number of establishments, value of sales of horticultural products, type of horticultural products, and kinds of horticultural businesses, for the United States, States, and counties.

ELECTRONIC MEDIA

Flexible Diskette—The Advance Reports of the 1987 Census of Agriculture are available on flexible diskettes. The files can be used with any compatible microcomputer employing the PC-DOS 2.0 or higher operating system. Diskettes can be obtained by calling (301) 763-4100.

Computer Tapes—Public-use computer tapes contain the same summary statistics that are found in the published reports. Two files are available for each State: data for counties and the aggregated State-level data. Order forms may be obtained from the Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233 (or call (301) 763-4100).

Compact Disc-Read Only Memory (CD-ROM)— Data for the conterminous United States and Puerto Rico are available on CD-ROM. The CD-ROM can be obtained from the Data User Services Division, Customer Services, Bureau of the Census, Washington, DC 20233 (or call (301) 763-4100).

Online Access— National and State level data from the 1987 Census of Agriculture are available on CENDATA through two information vendors— CompuServe and DIALOG. In addition, the advance reports, highlights of the Subject Series, and Related Surveys reports, are available online from AGRIDATA. For information on these services call (301) 763-4100.