

# INTRODUCTION

This product is the result of the National Agricultural Statistics Service, Census Division's effort to offer electronic maps in graphical image file (GIF) format in responding to an increasing number of requests by data users.

### **HISTORY**

For more than 150 years, the U.S. Department of Commerce, Bureau of the Census, conducted the census of agriculture. However, the 1997 Appropriations Act transferred the responsibility from the Bureau of the Census to the U.S. Department of Agriculture (USDA), National Agricultural Statistics Service (NASS). The 1997 Census of Agriculture is the first census conducted by NASS.

The census of agriculture is taken to obtain agricultural statistics for each county, State, and the Nation. The first agriculture census was taken in 1840 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. This adjustment in timing established the agriculture census on a 5-year cycle collecting data for years ending in 2 and 7.

### AUTHORITY AND AREA COVERED

The census of agriculture is required by law under the "Census of Agriculture Act of 1997," Public Law 105-113 (Title 7, United States Code, Section 2204g). The law directs the Secretary of Agriculture to conduct a census of agriculture in 1998 and in every fifth year after, covering the prior year. The 1997 census includes each State, Puerto Rico, Guam, the U.S. Virgin Islands, and the Commonwealth of the Northern Mariana Islands.

### **SUMMARY OF MAPPED DATA**

The maps in this report show data for 1997. A few maps showing increases or decreases include 1992 data. The 1997 totals, along with the comparable 1992 totals, are shown in the appendix table.

Most data are comparable between the 1997 and 1992 censuses. A few important changes for the 1997 census may affect comparability for some data. Farms with all acreage in the

Conservation Reserve Program (CRP) or Wetlands Reserve Program (WRP) are included as farms in the 1997 census tabulations. For the 1992 census, farms that had all their acreage in the CRP or WRP were not included in the census tabulations.

For the 1997 census, farms were classified according to the new North American Industry Classification System (NAICS). Due to NAICS, short rotation woody crops, which includes Christmas trees and maple sap gathering, are considered crop production. Emus, ostriches, and rhea are now tabulated in other poultry. In previous agriculture censuses, farms were classified by the Standard Industrial Classification System (SIC).

Items removed from the 1997 census:

- 1. Land diverted under annual commodity adjustment programs
- 2. Commodity Credit Corporation loans for honey and rye

Dollar value for expenses and agricultural product sales are expressed in current dollars and are not adjusted for inflation or deflation.

These files graphically illustrate the Nation's agriculture by dot and multicolor pattern maps. The maps provide displays on major topics from the 1997 Census of Agriculture including number of farms, value of land and buildings, farm size, farms by value of sales, tenure and characteristics of farm operators, principal occupation of operator, and farms by type of organization. In addition, they cover land in farms and land use, irrigation, market value of agricultural products sold, farm-related income, farm production expenses, machinery and equipment, agricultural chemicals, livestock and poultry inventories and sales, crops harvested including vegetables, fruit, and nursery and greenhouse crops.

#### SOURCES OF INFORMATION

The data used to prepare the maps shown were obtained from the 1997 Census of Agriculture. Detailed statistics for States and counties may be found in Volume 1, Geographic Area Series, of the 1997 census publications.

The 1997 Census of Agriculture was conducted primarily by mail. The appendix in Volume 1, Geographic Area Series, provides a more detailed description of how the 1997 census was taken.

Detailed discussions of the census report forms, the use of sampling, and estimates of sampling error are included in Volume 1.

#### FARM DEFINITION

The definition of a farm for census purposes was first established in 1850. It has been changed nine times since. The current definition, first used for the 1974 census, is 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. The farm definition used for the outlying areas varies according to area. The report for each U.S. territory varies. The report for each territory includes a discussion of its farm definition.

#### REFERENCE PERIODS

Inventories of livestock, poultry, and machinery and equipment are measured as of December 31, of the census year. Crop and livestock production, sales, expenses, income from federal farm programs, irrigation, Commodity Credit Corporation loans, Conservation Reserve and Wetlands Reserve Programs, direct sales, chemicals and fertilizer, farm-related income and hired workers are measured for the calendar year, except for a few crops (such as citrus, avocados, and olives) for which the production year overlaps the calendar year.

#### RESPONDENT CONFIDENTIALITY

In keeping with the provisions of Title 7, United States Code, no data are published that would disclose the operations of an individual farm. However, the number of farms in a given size category or other classification, such as size of farm, is not considered a release of confidential information and is provided even though other information is withheld.

### **HOW THE MAPS WERE MADE**

Computer graphics techniques and technology were used to produce the electronic version of the map files based on the data from the 1997 and 1992 Censuses of Agriculture.

The multicolored choropleth maps and the dot-patterned maps are the products of the Atlas GIS mapping software, and software that transformed the mapping output into a electronic graphical image file (GIF) format. The software is compatible with most of the commercially available electronic graphics browsers and computer graphics and multimedia software.

The mapping software used data files from the 1997 Census of Agriculture tabulations to create the maps. The data files contained data for each county and county equivalent in the United States and its associated Federal Information Processing Standards (FIPS) code. The coordinates for each county were also identified by FIPS codes, allowing a 1-to-1 correspondence between the data and the geographic area to which they belong. Statistical calculations were performed that classed the data into categories or dot values and the symbols used to represent the data for each county were determined.

#### **CHOROPLETH MAPS**

A choropleth map uses a sequence of colors or shades to show the density of a phenomenon within the boundary of a geographic area. Most often, the data have been grouped into classes. The classed county data were created by matching the FIPS codes of the data values with the coordinates of the appropriate county boundaries.

## **DOT DISTRIBUTION MAPS**

A dot map uses a dot to represent the number of a phenomenon found within the boundaries of a geographic area. Two types of dot maps are included: a traditional type of dot map and an increase/decrease (two color) dot map. The first type shows location of a phenomenon and the second type shows increase/decrease data as they relate to the last agriculture census. The dot distribution maps use blue dots, while the increase/decrease dot maps use blue and red dots, respectively.

