



Key Accomplishments

FY 2002

National Agricultural Statistics Service (NASS)

Mission: To provide timely, accurate, and useful statistics in service to U.S. agriculture.

To achieve this mission, NASS administers the U.S. Department of Agriculture's (USDA) program of collecting and publishing national, State, and county agricultural statistics. The census of agriculture, conducted every five years, provides comprehensive, local level data about agricultural communities across America.

The statistical data provided by NASS are essential to both the public and private sectors for making effective policy, production, and marketing decisions on a wide range of agricultural commodities.

Below are FY 2002 achievements that met specific goals outlined in the Research, Education, and Economic (REE) mission area.

Goal 1: To promote an agricultural food and fiber system that is productive and highly competitive in the global economy.

New and Expanded Agricultural Statistics. NASS provides timely and accurate statistics that are used throughout the agricultural sector to evaluate supplies and determine competitive prices for world marketing of U.S. commodities. These statistics promote a level playing field in production agriculture with impartial statistics available to everyone at a publicized, predetermined date and time.

- A new report, *Poultry Slaughter - Annual Summary*, was released in April 2002. This report included revisions for monthly releases from the previous calendar year. Additionally, the *Poultry Slaughter* monthly release began to publish percent changes from the previous year and the previous month for all U.S. data.
- In September, NASS issued an update of the *U.S. Hog Breeding Structure* report. This report built on information provided in the 2001 report and included analyses of the breeding herd by size of operation and the efficiency of the breeding herd in recent years.
- A new *U.S. Dairy Herd Structure* report was also released in September, summarizing changes in the U.S. dairy herd structure by size of operation and geographic location.
- Detailed field counts from the *Objective Yield* surveys, including the number of wheat heads, corn ears, soybean pods, and cotton bolls, are now published monthly during the forecast season. This will provide customers additional data to evaluate the current month's forecast against crop conditions, final- end- of season counts, and historic yields.
- Missouri rice was added to the U.S. crop progress and condition tables, increasing coverage to 100 percent of the U.S. planted acreage.
- NASS conducted two re-interview data collection projects because of adverse weather conditions. Significant acreage in Indiana, Illinois, and Ohio remained to be planted at the time of data collection for the June *Acreage* report. All

operators reporting acreage left to be planted were recontacted during July and results were incorporated into the August *Crop Production* report. Similarly, during data collection for the September *Small Grains Summary* report, adverse weather delayed harvest of other spring and Durum wheat in North Dakota and Montana. Operators reporting acreage left to be harvested were recontacted during October for preparation of the November *Crop Production* report.

- In response to extreme drought, NASS added harvested area questions to the September Agricultural Yield surveys. Updates were made to the harvested areas for the corn, soybean, and sorghum crops in the September *Crop Production* report.
- Vegetable acreage, yield, production, price, and value of production statistics were added to the NASS Internet *Quick Stats*. *Quick Stats* is an on-line database that enables data users to produce custom queries.
- The monthly *Cold Storage* report added three new data series. These are pounds of stocks in cold storage for turkey toms and turkey hens; individually quick frozen (IQF) and poly, pails and tubs, barrels and drums, and juice stock for strawberries; and public warehouse stocks for total turkeys.

Security and Contingency Planning. NASS continues to move toward a comprehensive security contingency plan for the Agricultural Statistics Board to ensure continuation of official data reports and to prevent data from being compromised prior.

Farm Bill. Special data tabulations and published statistics were provided for extensive use by both Congressional and USDA analysts during development, impact analysis, and implementation of the *Farm Security and Rural Investment Act of 2002* (the 2002 Farm Bill). The counter-cyclical payment method introduced in the 2002 Farm Bill is calculated in part by using market year average (MYA) prices estimated by NASS. The magnitude of payments potentially affected by the accuracy of the MYAs has led to a self-initiated review of the Prices Received by Farmers survey.

Data Users Meeting. The annual data users forum in Chicago, Illinois, had a record attendance of 91 non-USDA participants. This annual Meeting was hosted by NASS, the Economic Research Service (ERS), the Agricultural Marketing Service (AMS), the World Outlook Board (WOB), the Foreign Agricultural Service, and the Foreign Trade Division of the Bureau of the Census. Each participating agency provided a mission overview.

Advisory Committee on Agriculture Statistics. The committee met to provide input on the 2002 Census of Agriculture promotion, Agriculture Resource Management Survey improvements, and confidentiality issues.

Agriculture Counts Lesson Plans. The *Agriculture Counts Lesson Plans* curriculum, NASS's educational outreach initiative designed to incorporate agriculture into the curriculum

of grades kindergarten through 12 was updated this year. Lessons use NASS survey and census data to illustrate how agricultural statistics are important in today's world. Information is integrated into English, math, geography, science, and social studies lessons. These innovative, fun and informative agriculturally-based lessons can be accessed at <http://www.usda.gov/nass/nasskids/resources/resources.htm>

Data Warehouse. NASS integrated its strategic on-line database of historical farm survey and census responses into several applications for the 2002 Census of Agriculture and beyond. Data warehouse technology is being used to develop an edit and analysis system that will utilize over 1.5 billion survey and census data points from 1997 to the present. The use of this metadata will increase data quality while reducing burden on farmers and ranchers.

Agriculture Resource Management Survey (ARMS).

NASS worked closely with ERS to evaluate economic statistics programs and data needs. Integration and expansion of the economic surveys will reduce respondent burden, ensure definitions are consistent, and provide more detailed information about the farm economy for the agricultural sector, field crop chemical use and production practices.

ARMS Pilot Test. In collaboration with ERS, NASS developed a short version of the ARMS questionnaire to collect essential income and expense information. The form was pilot-tested in face-to-face interview and mail data collection modes. The two modes used in the pilot were compared by evaluating the quality of the collected data, response rates, and respondent burden. Plans are proceeding to use a modified version of the short form in the operational ARMS program.

Response Research. Maintaining high response rates is a key in all NASS surveys and programs. However, declining response rates are a problem, due in large part to heavy respondent burden. The actual effect of respondent burden on rates of response is unclear, as is the appropriate method of measuring respondent burden. To begin to address these issues and develop better survey methodology techniques, NASS is conducting research to analyze the effects of its repeated survey requests, also known as "accumulated burden," on its farmer and rancher target population.

Work Performed for Others. NASS provides statistical consultation for Federal and State agencies and private commodity organizations on a reimbursable basis. This effort by NASS staff contributes to improvements in the quality and consistency of statistical information produced for other organizations and branches of government.

Woodland Owners Survey. The Forest Service (FS) requested assistance to develop a National Woodland Owners survey. For this mail survey, NASS used its resources to develop and provide telephone follow-up with non-respondents. As a result of this work, FS received an increased response rate and higher quality data was collected.

FY 2002 Special Surveys	Number of Surveys
Seeds, Field Crops, Vegetables	38
Fruits and nuts	25
County Estimates	9
Cropping Practices, Pesticide Use	7
Livestock, Poultry	9
Safety, Health, Disability	3
Nursery and Floriculture	5
Farm Finance, and Land Values	10
Miscellaneous	58
TOTAL	164

Goal 2: To promote a safe food system and a secure agricultural production system.

Agricultural Estimates. NASS provides meaningful statistical data on chemical use, Integrated Pest Management (IPM) programs, and agricultural practices for use in evaluating risk assessments relative to both food safety and food security.

Chemical Use. In FY 2002, NASS published the first Nursery and Floriculture Chemical Use Survey. This made information about chemical application rates, total amounts of chemical applied, application methods, and pest management practices available from six major production states. Working in cooperation with North Carolina State University's Center for Integrated Pest Management, NASS created an online, interactive database which allows data users access to ten years of published chemical use data. Additionally, two new environmental data products were provided in FY 2002; the *Agricultural Chemical, Postharvest Applications - Wheat* and the *Agricultural Chemical Usage, 2001 Dairy Cattle and Dairy Facilities Summary* contain information about application rates for specific active chemical ingredients and total chemical amounts applied. In July 2002, NASS released the biennial *Agricultural Chemical Usage for Fruit* report, published every other year since 1991, which provides chemical use statistics for 24 different crops in 11 of the major fruit production states.

International Technical Assistance Provided. NASS provided technical assistance and training to improve agricultural statistics programs in 12 countries. Short-term assignments supported work in Australia, China, Dominican Republic, Ecuador, Ethiopia, Honduras, Kazakhstan, Mexico, Nicaragua, South Africa, Russia, and Ukraine. In addition, NASS coordinated and/or conducted training programs in the U.S. for 107 visitors representing 30 countries. These assistance and training activities promote better quality data and improved access to data from other countries, which allows U.S. analysts a better understanding of the world supply and demand situation.

AMS Pesticide Data Program. NASS provided statistical support to AMS and 9 cooperating State governments in an ongoing monitoring of selected commodities at the wholesale level for pesticide residues. Having selected the sites from which many of the samples originated, NASS computed statistically-defensible national level estimates from the sample data, and produced state-of-the-art graphical displays of the residue distribution in certain pesticide/commodity pairs. In addition, NASS provided statistical advice to AMS concerning the

nascent water-monitoring program for pesticide residues and the micro-biological monitoring program.

National Animal Health Monitoring System (NAHMS) Dairy Survey. In January 2002, NASS conducted a survey for the Animal and Plant Health Inspection Service (APHIS) to study health and management practices in the dairy industry. NASS collected general health management information from dairy producers in 21 dairy producing States and provided statistical services such as sample selection, questionnaire development, data collection, data keying, and editing. Following the survey, APHIS veterinarians completed follow-up interviews with a number of respondents and collected biological samples from the operation.

Wildlife Damage Survey. In May 2002, NASS released the U.S. Wildlife Damage report, conducted in cooperation with APHIS to study damage caused by predators to crops and livestock in 49 states. NASS provided statistical services for the project including sample selection, questionnaire development, data collection, data keying, editing, summarization and data dissemination. The report detailed total crop and livestock losses incurred by agricultural producers from predator damage during 2001 for field crops, livestock and poultry, and vegetables, fruits and nuts. Additionally the report distinguished damaged caused by type of wildlife specie.

Goal 3: To provide a healthy population through improved nutrition.

ARS Nutrient Data Laboratory. NASS provided continued statistical consultation to ARS's Nutrient Data Laboratory (NDL). In designing and implementing national-level plans for sampling retail foods and beverages for the laboratory's National Food and Nutrient Analysis Program. NASS developed and implemented :

1. Revised sample designs and data collection procedures for sampling both distributors and customers of USDA commodity foods in support of the laboratory's Nutrient Data Bank System;
2. Sampling plans for the collection of traditional Native American foods at the tribal level in 48 conterminous States for nutrient analysis;
3. Sampling and analysis plans for fast food outlets;
4. Numerous small scale sampling plans for individual foods;
5. Statistical analysis procedures to incorporate knowledge from non-survey data into the National Food and Nutrient Analysis Program (NFNAP);
6. Model based estimates of NFNAP serving-to-serving variability of using special variance sample data.

In addition, NASS refined and modified necessary data handling and statistical procedures previously developed for the NDL Architecture and Integration Management Nutrient Data Bank System.

Goal 4: To foster an agricultural system that protects natural resources and the environment.

Statistical Research and Service. Remote sensing technology employed by NASS provides valuable information used to monitor the environment and study interrelationships between man and all natural resources.

Vegetation Condition Monitoring. In FY 2002, NASS returned to monitoring vegetation condition using the Advanced Very High Resolution Radiometer (AVHRR) sensor data from NOAA satellites. NASS studied the data from the new NOAA 16 satellite AVHRR sensor, determined the best method to use the data, and reinstated production of the vegetation condition products. This allowed monitoring of the extent of the 2002 drought in major winter wheat, corn, and soybean production areas.

Goal 5: To increase the capacity of communities, families, and individuals to enhance their economic well-being and quality of life.

Census of Agriculture. Information from the census of agriculture provides periodic detailed data down to the county level which facilitates locality-based policy and business decisions affecting the agricultural industry and rural residents.

2002 Census of Agriculture Preparations.

- NASS continued design, development, testing, and implementation efforts for the Project to Re-engineer and Integrate Statistical Methods (PRISM). The purpose of the project is to develop a streamlined system that will improve the quality of census and survey processes. The 2002 Census of Agriculture will be the first project completed using the newly developed integrated system.. PRISM includes an interactive system that provides a solid base for the integration of edit, imputation, and analysis systems. It also utilizes the retrieval and display of questionnaire-scanned images, alleviating labor intensive traditional searches. A one page Farm Identification Survey was conducted in April and July under a contract with the National Processing Center (NPC), Jeffersonville, IN. Results of this survey were captured using optical scanning technology and images were available electronically to all of our 45 State Statistical Offices. As a result of this survey, roughly 410,000 names and addresses were removed from the census mail list because they did not qualify as a farm.
- A mail out and data collection strategy was developed for handling 2.8 million census records. NASS initiated a series of quarterly meetings and weekly teleconferences to coordinate planning activities and develop processing procedures. Project work loads were prepared, along with staffing and cost estimates for all major processing functions. A mailing list was prepared by NASS and transmitted to the National Processing Center in mid-September. Labeling activities were underway at the conclusion of the FY 2002.
- In order to reliably measure the coverage of the census of agriculture mailing list, NASS utilized new procedures to target an additional 2,400 area sample units. These sample units were added to the operational 11,000 sample units and a survey conducted to measure the number of farms and food and fiber production from the farms not represented by the Census of Agriculture mailing list.
- Calling centers were established in KY, MT, OK, and WY. Staff have been working with the telecommunication people to establish routing procedures for handling incoming calls and logging caller information. This system was established to handle approximately 150,000 toll-free calls for assistance

during census processing. All components of the system were in place for the Farm Identification Survey and have been thoroughly tested.

- NASS prepared to conduct a study to evaluate the successfulness of publicity efforts being conducted by NASS to promote and encourage response to the 2002 Census of Agriculture. The study will assess the impact publicity has on a respondent's likelihood to answer the census. Two surveys will be conducted: a baseline survey in October 2002, and an additional follow-up survey in March 2003. The baseline questions are intended to assess respondent's knowledge about the upcoming census of agriculture.

Puerto Rico Census of Agriculture.

NASS coordinated with the Puerto Rico Department of Agriculture, the University of Puerto Rico, and the Puerto Rico Planning Board to finalize preparations for the 2002 Census of Agriculture in Puerto Rico. NASS worked with the Puerto Rico Department of Agriculture through a cooperative agreement to update the sampling area frame for the 2002 Census of Agriculture in Puerto Rico.

Minority Childhood Injury and Occupational Health Survey.

NASS conducted a nationwide survey to study childhood injuries and adult occupational health issues on U.S. farms. The study was conducted under contract for the Centers For Disease Control (CDC), National Institute of Occupational Safety and Health (NIOSH). NASS provided statistical services such as sample selection, questionnaire and CATI instrument development, data collection, data keying, and data editing.

Goal 6: Effectively marshal the diverse capabilities and resources of the four REE agencies.

e-Government. NASS developed a 5-year tactical plan creating a bold new vision for attaining long-term measurable results and laying the foundation for improving the management and performance of the Agency. The Plan takes advantage of NASS's strengths; relies heavily on outsourcing; meets the requirements of the USDA's e-Government initiatives and the President's Management Agenda; and allows NASS to make significant progress in achieving its goals. In FY 2002, as a first step towards supporting and providing leadership for the USDA and NASS e-Government initiatives, NASS hired an expert in data management and strategic planning. During FY 2002, NASS has taken a lead role within the USDA to establish the Department's e-Government program.. NASS continued developing its Electronic Data Reporting (EDR) program in 2002. The Cotton Ginnings Survey was expanded from one State to all cotton program states, and all states were able to utilize the Web for the Crop Progress Survey. A Web data collection instrument was also developed for a Texas grape survey. NASS began development of a Question Repository System (QRS) that will be used to create properly formatted paper and Web questionnaires. The QRS is a client-server application that allows customers to format and store individual questions in a database; the questions can then be retrieved and used in multiple questionnaires. Once created, questionnaires are stored in the database as both paper and Web versions. The QRS will serve as the basic infrastructure to efficiently generate Web data collection instruments for virtually all of NASS' surveys.

Cybersecurity. NASS provided numerous security training opportunities for staff during the past year. Security awareness was provided at a mandatory agency-wide staff meeting. This meeting was videotaped and provided to each of NASS's 45 field offices and Puerto Rico. All employees were provided information on physical and information technology security. NASS also issued written guidance on confidentiality, disclosure of information, and security expectations. The Agency also requested and participated in a security audit conducted by the Office of the Inspector General during March 2002.

NASS Chartered Teams.

- A NASS chartered Organizational Climate Survey Evaluation Team developed recommendations and implementation plans to improve NASS's working environment based on an FY 2001 Organizational Climate Survey of all NASS employees.
- Based on these recommendation, NASS formed a Career Opportunities Development Team to review and update NASS's career paths policy and documentation.
- The Field Office Operations Review Team was chartered to look at the NASS field offices and evaluate what NASS does, how it is done, and what might be done differently to maximize efficiency and effectiveness throughout the Agency. The team produced 55 specific action recommendations for Agency consideration.
- NASS also chartered a team to develop a plan that integrates the economic and environmental survey collections with other demographic, census, and annual NASS survey programs. The team is a collaborative effort between NASS, the Economic Research Service, and other federal and state government agencies benefitting from farm and household level data that use NASS services.

Want more information?

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www.usda.gov/nass/

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