

1 Supporting Statement

FLORICULTURE SURVEY

OMB No. 0535-0093

B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS

- 1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g., establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection has been conducted previously, include the actual response rate achieved during the last collection.**

The Floriculture Survey is handled under the "limited coverage" survey plan. Data is collected in the 16 largest producing States, listed below, plus Alaska. The 16 states were chosen based on highest amount of total dollars in sales reported on the 2014 Census of Horticulture for floriculture commodities. Alaska was added on due to its unique growing conditions and expanding production.

Alaska	New Jersey
California	New York
Colorado	North Carolina
Connecticut	Pennsylvania
Florida	Texas
Illinois	Virginia
Michigan	Washington
Ohio	Wisconsin
Oregon	

Growers in these States, and who are on NASS's List Sampling Frame with annual gross sales of \$10,000 or more will be included in the universe. The entire universe will receive the initial mailing with a second-request mailing to non-respondents approximately 2 weeks later and telephone and/or personal follow-ups after that. The sample size, and response rates for each of the surveys are shown in the table below.

In 2017 the national floriculture survey was suspended due to budget cuts, however, Hawaii was funded through a cooperative agreement with the State.

Response Rates for Floriculture Surveys 2016 and 2017						
Survey		Sample Size	Freq.	Total Contacts	Total Responses	Response Rates
14 States - 2016						
Annual Floriculture Survey - Small Operations	Annual	3,274	1	3,274	2,273	69.4%
Annual Floriculture Survey - Large Operations	Annual	2,328	1	2,328	1,456	62.5%
Hawaii - 2017						
Annual Floriculture Survey - Small Operations	Annual	986	1	986	745	75.6%
Annual Floriculture Survey - Large Operations	Annual	82	1	82	53	64.6%

The 14 program States in 2016 were CA, FL, IL, MD, MI, NJ, NY, NC, OH, OR, PA, SC, TX, and WA

NASS used the standardized response rate calculations as identified in the OMB statistical directive (1 and 2), *Standards and Guidelines for Statistical Surveys* in the calculation of the response rates reported above.

The respondents who reported data and who are in scope, accounted for 67.9% of the total wholesale value of all plant categories for the operations in the 15 target states.

2. **Describe the procedures for the collection of information including:**
- **statistical methodology for stratification and sample selection,**
 - **estimation procedure,**
 - **degree of accuracy needed for the purpose described in the justification,**
 - **unusual problems requiring specialized sampling procedures**

Floriculture survey questionnaires are mailed to the target population either in late December or early January (mail dates are left to the discretion of each Regional Field Office (RFO)). Some RFOs will follow this with a second request mailing to non-respondents before beginning telephone follow-up. Large growers having complex operations are often surveyed by personal interview. Data for operations that refuse to respond or are inaccessible are manually estimated based on past reports or information supplied by other informed sources. The survey administrator and commodity statistician in NASS Headquarters has provided editing guidelines and a floriculture Estimation Manual to each RFO. All completed reports are given a preliminary review by the floriculture statistician in each RFO before running the data through a computer edit.

State survey indications and statistician recommendations are reviewed and combined to create US level results. The summarized data are checked through NASS's disclosure protocol before the data are published. This insures that no confidential data are published.

3. Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.

The NASS Regional Field Offices (RFOs) in conjunction with our Frames Maintenance Group (National Operations Center in St. Louis, MO) conducts list building efforts for this census-type survey; all available list sources are used to build the universe lists, including information compiled from the 2017 Census of Agriculture and the 2014 Horticulture Census. RFO's try to develop relationships with their State industries and large floriculture producers to encourage completion of this questionnaire. The survey enjoys significant industry support and producers respond because they are vitally interested in publication of this type of data.

Survey data are subject to non-sampling errors such as omissions and mistakes in reporting and in processing the data. While these errors cannot be measured directly, they are minimized by carefully reviewing all reported data for consistency and reasonableness.

No coverage adjustments are made to account for list incompleteness. Item and unit level non response are addressed by manual imputation by subject matter experts in the RFOs. The summary provides multiple point statistics at both the strata and state level to evaluate the quality of the survey estimates. These include response rates and number of usable positives reports for each item summarized. In cases where recommendations deviate from survey results, RFOs must provide written justification.

Industry representatives have mentioned in the past that the annual Commercial Floriculture Survey (CFS) serves as a strong indicator of change within this industry. The Horticulture Census provides detailed data on both state and national levels. While the CFS is only conducted in 17 key states, the data that is collected will represent just over 80% of the total US floriculture production.

Efforts to reduce non response bias prior to data collection includes extensive enumerator training, survey coordination, initiation of special agreements including but not limited to periods of reduced burden on future surveys. Data users would find this information in methodology and quality measures releases.

4. Describe any tests of procedures or methods to be undertaken.

No testing of procedures or methods is done.

5. Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), or other person(s) who will actually collect and/or analyze the information for the agency.

The sample size for each State is determined by the Sampling and Frame Development Section, Methodology Division; Section Head is Peter Quan, (202) 720-5269.

Data collection is carried out by NASS Field Offices; Western Field Operation's Director is Jay Johnson (202) 720-3638.

The national summary is the responsibility of the Summary, Estimation and Disclosure Methodology Branch, Methodology Division; Branch Chief is Jeff Bailey (202) 690-8141.

The NASS survey statistician in Headquarters for the floriculture survey is Daphne Schauber, (202)720-4215, in the Fruits, Vegetables, and Special Crops Section of the Crops Branch, Statistics Division. She is responsible for coordination of sampling, questionnaires, data collection, data processing, the Estimation Manual, and other RFO support. She is also responsible for national summaries, analysis, and a presentation to the Agricultural Statistics Board for final estimates, and publication.

September 2018