



USDA Livestock Data Collection

Agriculture Workgroup Conference Call

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Topics



About NASS

Who is it for

Who Participates and How

Response Rates

Non-Response Adjustment

Disclosure

Data Collection Challenges



What is NASS?

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

The calendar displays the release schedule for various agricultural statistics reports throughout 2022. The reports are organized by month, with each day of the month showing the specific report(s) being released. The reports are color-coded by category: Livestock (pink), Crops (blue), and Other (grey). The calendar also includes a legend at the bottom for report types: National Agricultural Statistics Service (NASS), National Agricultural Experiment Station (NAES), and National Agricultural Research Service (NARS).

- ~400 National Reports Annually
- ~40 Livestock Commodities
- Census of Agriculture

Non-Policymaking
Non-Political

Who Uses NASS Data?

Used by...

- Farmers
- Policymakers
- Agribusinesses
- State & Local Government
- Researchers
- USDA
- Etc.

Used for...

- Marketing Decisions
- Designing Programs
- Product Distribution
- Local Programs
- Varietal Improvements
- Designing & Administering Farm Bill Programs
- Etc.



Levels the Playing Field

Equal Access

NASS

Unbiased

Who Participates and How?

Census of Agriculture

- **All Farms (Census)**
- **Virtually All Items**
- **Conducted Every 5 Years**
- **Required by Law**

Annual Surveys

- **Sample/Census**
- **Commodity & State**
- **Weekly, Monthly, Annual**
- **Mostly Voluntary**



2022 Census of Agriculture Timeline

June 2022 – Signup Ends

Nov/Dec 2022 – Mail Out

Dec 2022-Jan 2023 – Reminders, Follow-Up Contact

Feb 2023 – Response Deadline

2023 – Data Processing & Analysis

Early 2024 – Data Release



Typical Annual Survey Process

Mail Questionnaire & Web Response Instructions

Follow-Up Contact

Telephone (Call Centers)

Personal Enumeration (Limited)

Data Analysis & Estimate Establishment

Report Release



Where NASS Estimates Come From

Farmer

Livestock Surveys

Cattle

Survey

- ~37,000 Farmers
- ~15 days

Hogs & Pigs

Survey

- ~6,000 Farmers
- ~15 days

Sheep & Goats

Survey

- ~20,000 Farmers
- ~15 days

Milk Production

Survey

- ~11,000 Farmers
- ~First 2 Weeks



Where NASS Estimates Come From

Operations

Poultry Surveys

Chickens & Eggs

Survey

- ~900 operations
- ~First 2 Weeks

Turkeys Raised

Survey

- ~300 Farmers
- ~3-4 Weeks



Where NASS Estimates Come From

Hatcheries

Poultry Hatchery Surveys

Broiler Hatchery

Survey

- ~180 Hatcheries
- ~Monday and Tuesday

Turkey Hatchery

Survey

- ~40 Hatcheries
- ~10 days



Where NASS Estimates Come From

Farmer

Aquaculture Surveys

Catfish Survey

- ~370 Farmers
- ~three-weeks

Trout Survey

- ~390 Farmers
- ~six-weeks



Where NASS Estimates Come From

Producers

Honey Bee Surveys

Honey

Survey

- ~7,200 producers
- ~December - January

Colony Loss

Survey

- ~3,100 producers
- ~two weeks



Where NASS Estimates Come From

Producers

Mink Survey

Mink
Survey

- ~150 producers
- ~April-May

Certain Requirements Must be Met to Publish

Confidentiality

- Must have at least 3 positive reports.
- No single operation can represent large proportion of total.

Fit for Use

- Data must be sufficient to meet statistical standards.
- Various “Publication Standards” in place across programs.

NASS Confidentiality Pledge

USDA's National Agricultural
Statistics Service protects your
privacy and your data.

It's the law.



United States Department of Agriculture
National Agricultural Statistics Service
www.nass.usda.gov

Nonresponse Adjustment

Nonrespondents are accounted for by adjusting the weights of the respondents

The adjustment occurs by stratum as the bounded strata represent the homogeneous groupings of similar sized operations

Very large and unique operations must be manually estimated by analysis

Estimators

Direct Expansions

Weighted total of reported and manually estimated reports using nonresponse adjusted sampling weights

Ratios

Ratio of two direct expansions

All records must have complete data for each item

Sources of Error (Uncertainty)

Sampling Error

Created by taking a sample rather than a census

Measured with coefficient of variation (CV)

Evaluated against target CV's each year

Nonsampling Error

Reporting, recording, editing, nonresponse error, etc.

Minimized by:

Questionnaire testing

Interviewer training

Validation of processing systems

Detailed editing tools and extensive data analysis



Transparency



Methodology and Quality Measure Reports

[https://www.nass.usda.gov/Publications/Methodology and Data Quality/index.php](https://www.nass.usda.gov/Publications/Methodology%20and%20Data%20Quality/index.php)

- Survey Methodology Discussion
- Sample Size
- Survey Response Rate
- Weighted Item Response Rate
- Coefficient of Variation (CV)



ISSN:

Released July 6, 2021, by the National Agricultural Statistics Service (NASS), Agricultural Statistics Board, United States Department of Agriculture (USDA).

Scope and Purpose: The Annual Chickens and Eggs report is conducted in all States that have qualifying operations. The target population consists of all known contractors and independent producers who have at least 20,000 table egg layers, flocks of hatchery supply layers, or pullet only operations with at least 500 pullets. These operations are also contacted monthly except those with less than 30,000 table egg layers.

Data are summarized for all operations in the target population. Estimates are published for rate of lay and egg production, chicken inventories, and value of production at a National and State level. The publication contains combined estimates for 34 States with low levels of production labeled as "Other States".

Survey Timeline: The reference date for the Annual Chickens and Eggs Report is December 1 with a data collection period of approximately two weeks. States complete data collection, analysis, summarization, and submission of estimates during the month of January. During this time a National review is completed, and National estimates are established. Estimates are released to the public in late February on the date designated by the Agricultural Statistics Board (ASB) on its annual publications calendar.

Sampling: This survey is a complete census of the qualifying records described above on the NASS List Sampling Frame. The List Frame is a current and unduplicated list of agricultural operations, and all current layer and egg operations are assumed to be on the list. If a new layer and egg operation is found at any time, the operation is added to the List Frame. Since this is a census of layer and egg operations, all sample weights are equal to one. Each operation accounts only for itself.

Data Collection: All federal data collections require approval by the Office of Management and Budget (OMB). NASS must document the public need for the data, apply sound statistical practice, prove the data does not already exist elsewhere, and ensure the public is not excessively burdened. The questionnaire must display an active OMB number that gives NASS the authority to conduct the survey, a statement of the purpose of the survey and the use of the data being collected, a response burden statement that gives an estimate of the time required to complete the form, a confidentiality statement that the respondent's information will only be used for statistical purposes in combination with other producers, and a statement saying that response to the survey is voluntary and not required by law.

All Regional Field Offices (RFO) use the same, standardized questionnaire for data collection. For consistency across modes, the paper version is considered the master questionnaire and the web-based self-interview and Computer Assisted Telephone Interview (CATI) instruments are built to model the paper instrument. Questionnaire content and format are evaluated annually through a specifications process where requests for changes are evaluated and approved or disapproved.

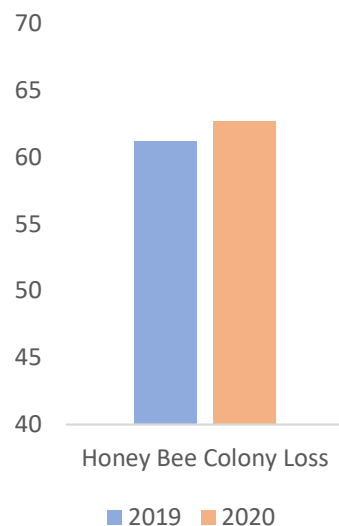
Sampled operations receive a pre-survey letter explaining the purpose and importance of the survey and that they are being contacted for survey purposes only. Attached to the letter is a complete copy of the paper questionnaire and a pass code to complete the survey securely online. RFOs are responsible for their data collection strategy which must include provisions for respondents to report securely online. If a response is not received by mail or online, respondents are contacted by CATI. Limited personal interviewing may be conducted, generally for large operations or those with special handling arrangements.

Survey Edit: As survey data are collected and captured, they are edited for consistency and reasonableness using automated systems. Relationships between data items on the current survey are verified and in certain situations those

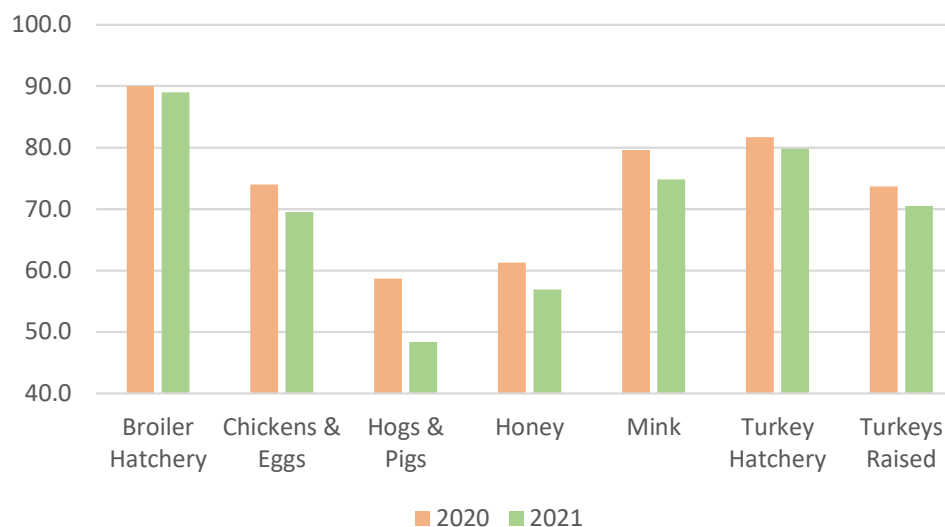
Transparency

Response Rates

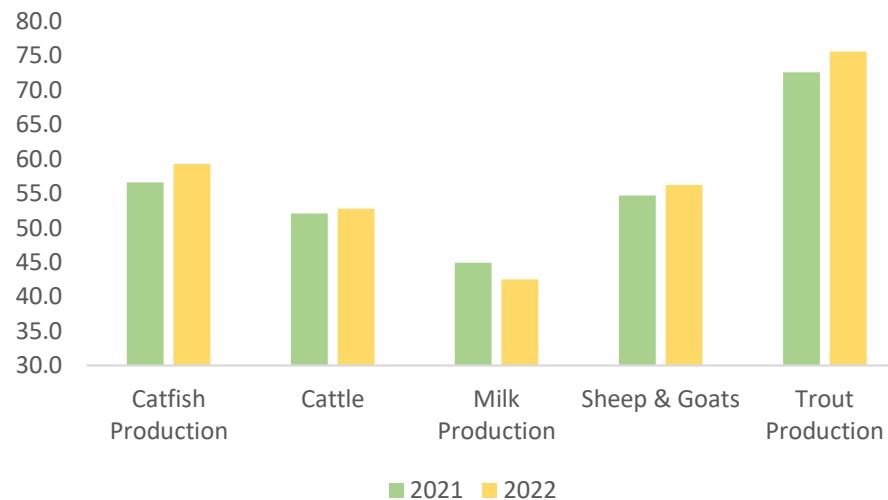
Response Rates



Response Rates



Response Rates



More Data is
Always Better!



Documentation/Information



Guide to NASS Surveys and Programs

[USDA - National Agricultural Statistics Service - Surveys - Guide to Surveys](#)

2022 Guide to Products and Services

United States Department of Agriculture
National Agricultural Statistics Service
Fact Finders for U.S. Agriculture

2022 Guide To Products and Services

Issued Annually



Today's Reports for Tomorrow's Decisions

#StatChat

**STAT
CHAT
SERIES**

Join NASS Livestock Branch Chief Travis Averill on Twitter after the release of major **@usda_nass** livestock reports every quarter for a live Q&A #StatChat. Check **www.nass.usda.gov** for the next scheduled chat.

@usda_nass
#STATCHAT





<https://www.youtube.com/usdanass>



Watch Live
Agricultural Statistics
Board Briefing

Following major reports
beginning 5 minutes after release

[youtube.com/usdanass](https://www.youtube.com/usdanass)

2022 Agricultural Statistics Briefing Livestream Schedule:

[https://www.nass.usda.gov/Newsroom/Executive Briefings/2022-livestreamschedule.pdf](https://www.nass.usda.gov/Newsroom/Executive_Briefings/2022-livestreamschedule.pdf)



United States Department of Agriculture
National Agricultural Statistics Service



All Reports Available At

www.nass.usda.gov

Executive Summaries Available At

[www.nass.usda.gov/Newsroom/Executive Briefings](http://www.nass.usda.gov/Newsroom/Executive_Briefings)

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