

# 2022 CENSUS OF AGRICULTURE

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## CENSUS OF AGRICULTURE AND CHEMICAL USE

Presented by: Tony Dorn

[www.nass.usda.gov](http://www.nass.usda.gov)



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National Agricultural Statistics Service

# Census of Agriculture History

The first Census of Agriculture was conducted in **1840** in **26 states** and the District of Columbia.



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# 170 Years Later

NASS conducts the Census of Agriculture in:

- all 50 states
- Puerto Rico
- Guam
- U.S. Virgin Islands
- Commonwealth of Northern Mariana Islands
- American Samoa

That's data for more than 3,000 U.S. counties and 30,000 zip codes.



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# Census of Agriculture

A complete count, taken every five years, of America's farms and ranches and the people who operate them.



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# Census of Agriculture

- The most complete agricultural data available.
- The only source of uniform, comprehensive and impartial agricultural data for every county in the nation.
- Information on land use and ownership, producer characteristics and demographics, production practices, income and expenditures, and more.
- 1997 was the first Census of Agriculture conducted by NASS after the transfer of authority from the Census Bureau.



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# Farm Defined

Any place from which at least **\$1,000** of agricultural products were produced and sold, or normally would have been sold, during the census year.



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# Some Census Products

- National, state and county data in database and PDF formats.
- Congressional Districts.
- Watersheds.
- State and County Profiles.
- Race, Ethnicity and Gender Profiles.
- Ranking: Market Value of Ag Products.
- Typology.
- American Indian Reservations.
- Specialty Crops



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# Demographics

- In 2022, there are counts of 2 items: Farms and producers.
- Since 2017, up to 4 producers were accounted for as decision-makers on each farm.
- Based on an expert panel, the past designations of principal producer in 2017 and principal operator in 2002-2012 was removed to account for everyone's contributions to ag production, especially new and female producers.
- Race and demographic content is expected to continue to evolve in 2027.



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# Census Special Studies

- Census of Aquaculture
- Irrigation and Water Management Survey
- Census of Horticulture
- Tenure and Transition of Agricultural Land (TOTAL)
- Local Foods
- Organics



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# Key Dates

**November 21, 2022:** Census mail out

**February 6, 2023:** Census deadline

**Spring 2024:** Census data available. Table 40, Fertilizers and Chemical Applied, is the primary Chemical Use data for 2017 and 2022.

[https://www.nass.usda.gov/Publications/AgCensus/2017/Full\\_Report/Volume\\_1,\\_Chapter\\_2\\_US\\_State\\_Level/](https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_2_US_State_Level/)



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# CHEMICAL USE



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# Chemical Use History

- NASS began collecting and publishing chemical use data in the early 1990's.
- Partially in reaction to the 1990 Alar scare, the Government responded to public concerns with initiatives on Food Safety and Water Quality. These Initiatives have evolved over the years, but the need for reliable, timely environmental data has not changed.
- Since 1990, NASS has surveyed U.S. farmers to collect information on the chemical ingredients they apply to agricultural commodities through fertilizers and pesticides. On a rotating basis, the program currently includes fruits, vegetables and major field crops.
- The program also collects information on the pest management practices farmers implement to reduce their dependence on agricultural chemicals (e.g., practices that make pesticides more effective or are an alternative to pesticides).



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# Field Crop Chemical Use Partnerships

- NASS conducts chemical use surveys for **field crops** in cooperation with the USDA's Economic Research Service as part of the [Agricultural Resource Management Survey](#) (ARMS II) program.
- The ARMS II Survey is conducted annually from October through December.
- Integrating ARMS II as part of the ARMS survey cycle allows fertilizer and pesticide data to be analyzed with farm finances, farm household characteristics and other production practices.



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# Sampled States

Fig. 1. States in the 2022 Potatoes Chemical Use Survey

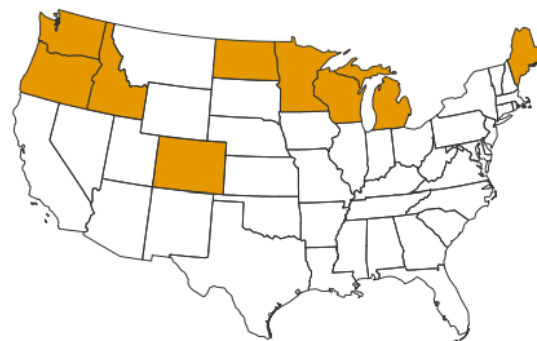


Fig. 1. States in the 2022 Wheat Chemical Use Survey

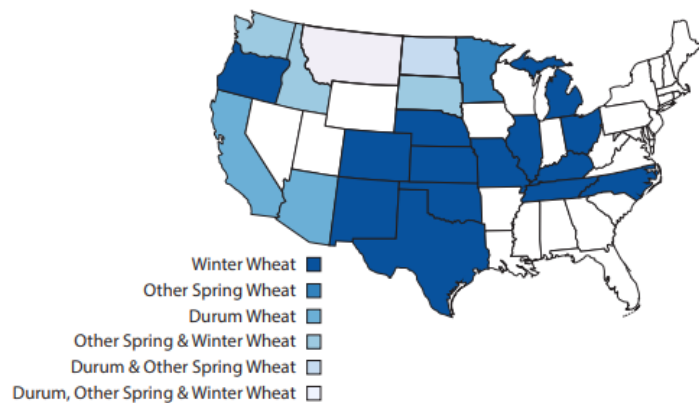


Fig. 1. States in the 2020 Vegetable Chemical Use Survey  
(number of crops surveyed in state)

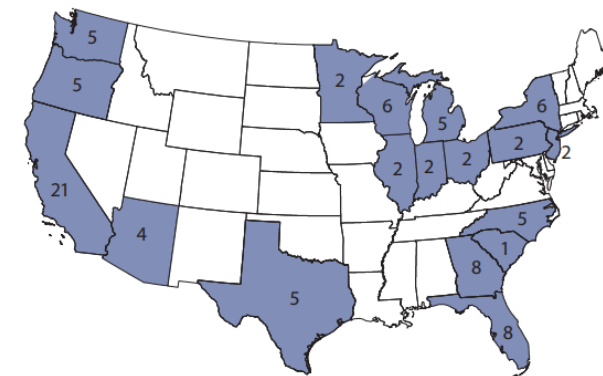
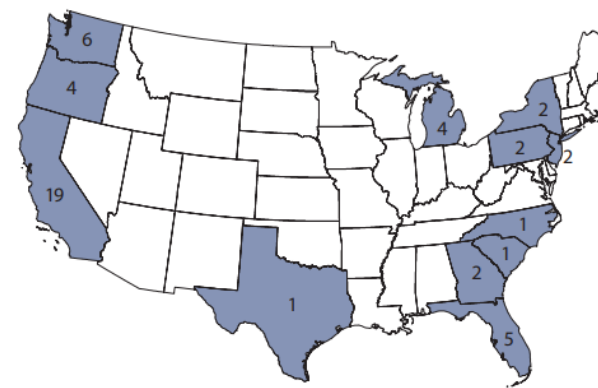


Fig. 1. States Included in the 2019 Fruit Chemical Use Survey  
(number of crops surveyed in state)





# ARMS II (Field Crop) and Chemical Use Crop Rotation

Crop Year	Commodity
2017	Fruit, cotton, soybeans, wheat
2018	Vegetables, corn, soybeans, peanuts
2019	Fruit, wheat, sorghum, cotton, barley
2020	Vegetables, soybeans
2021	Fruit, corn, cotton, rice
2022	Vegetables, wheat, potatoes



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# Data Products

- Methodology and Quality Measures
- Highlights
- QuickStats pre-defined queries for crops
- QuickStats ad hoc database and API
- Modernization of data dissemination is in progress.



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# Key Dates

**May 12, 2023:** Field Crops Chemical Use released: Potatoes and Wheat. Includes Methodology and Report Forms:

[https://www.nass.usda.gov/Surveys/Guide\\_to\\_NASS\\_Surveys/Chemical\\_Use/](https://www.nass.usda.gov/Surveys/Guide_to_NASS_Surveys/Chemical_Use/)

**July 19, 2023:** Vegetable Chemical Use released.



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# For More Information

Visit [www.nass.usda.gov/AgCensus](http://www.nass.usda.gov/AgCensus) and [www.nass.usda.gov](http://www.nass.usda.gov)

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