

NASS Survey Training

Bee and Honey Inquiry - December 2021 (BEE AND HONEY PDI)



**United States Department of Agriculture
National Agricultural Statistics Service**



NOD-Training Group
December 2021



Survey Overview

- *Apiculture*: The raising and care of bees.
- The Bee and Honey Inquiry is conducted:
 - To compare conditions from year to year:
 - # of colonies, production, honey inventory (by state)
 - Sales and revenues
 - To help promote industry programs.
 - To provide information on the viability of beekeepers and agricultural pollination services.

Survey Information

- Project Code: **196 - Bee and Honey Survey**
- Target population:
 - All known U.S. producers with 5 or more colonies
- Questionnaires:
 - Mailed out around December 21st
 - Web reporting option available
- Release:
 - *Honey* Report
 - March 18, 2022

Additional Information

- Honey production down 6% in 2020
- Average of 54.5 pounds of honey per colony
- Average price of \$2.03 per pound
 - Value of production approximately \$300M
- North Dakota #1 producer
 - Followed by SD, CA, MT, FL
 - These five states produce almost half of US honey

Screening Questions

- Own or control any apiaries in 2021?
 - “Yes”: Continues to Colonies & Honey Stocks
- “NO”: Have any honey stocks for sale in 2021?
 - “Yes”: Continues to Colonies & Honey Stocks
- “NO”: Sell any honey during 2021?
 - “Yes”: Continues to Honey Sales
- “NO”: Receive income from pollination services?
 - “Yes”: Report \$ received
- “NO”: Any other income from bees in 2021?
 - “Yes”: Report income received
 - “No”: Other Bee activity/status of operation? (Leave good notes)

General Information: Multiple States

- Many operators have multiple states in which they harvest (“pull-off”) honey.
- For example:
 - A beekeeper is based in North Dakota.
 - The operator trucks the same hives across states to use as pollinators for multiple crops.
 - Starts in California (for almond pollination) for a few weeks, then moves hives to other states for several weeks at a time.

Colonies & Honey Stocks

- Colonies and honey stocks for each state
- Begins with the state the operation is located in
 - **Largest number of colonies** in that state?
 - From **how many colonies** was **honey harvested**?
 - **How many pounds** were harvested from those colonies?
 - **Pounds of honey stocks** this operation had for sale in *[state]* on December 15?
 - Exclude honey under government or CCC loans.

Colonies & Honey Stocks

- Then report for any *additional* states in which there were colonies or stocks of honey.
 - Repeats for each state where operation has colonies or stocks
 - Can report the same colonies in more than one state
 - Especially if they traveled as pollinators
- Total pounds of honey harvested in all states in 2021?
 - Sum of production from all states

Honey Sales

- Any honey sold during 2021?
 - Including honey produced in 2021 **and** 2020
 - Exclude honey purchased from other operations and resold
- If “Yes”:
 - What Honey Color Class sold?
 - Amount sold and dollars received:
 - For each color class of honey
 - For honey produced in 2021 **and** 2020, reported separately
 - Reported for each marketing channel:
 - Cooperatives
 - Private processors
 - Wholesale
 - Retail

General Information: Honey Classes

- Honey is classified into colors based upon how much light passes through a sample.
- Four Classes:
 - Water white, extra white, white
 - Extra light amber
 - Light amber, amber, dark amber
 - Area specialties such as Sourwood, Tupelo, Buckwheat, etc.
 - Also anything not included in any other class

Survey Questions

- Notes/ Comments
 - Space is provided for operator to include comments on bee/honey production in their area.
- Receive any income from contracting colonies as pollinators?
 - Report total received to nearest whole \$
- Any other income from honey bees?
 - Includes: sales of queens, beeswax, propolis, royal jelly, etc
 - Report total received to nearest whole \$

- **Propolis** (or bee glue) is a resinous mixture that honey bees produce by mixing saliva, beeswax, and exudate gathered from tree buds, sap flows, or other botanical sources. It is used by the bees as a sealant for unwanted open spaces in the hive
 - Some human uses include: varnish ingredient for stringed instruments, types of chewing gum, and car wax
- **Royal Jelly** is a secretion from the glands in the heads of worker bees. It is fed to all bee larvae. Is fed to worker and drone larvae for three days, but fed to queen larvae throughout their development
 - Sold as a dietary supplement for humans. However, claims of health benefits have been disputed recently

Survey Questions Cont'd.

- During 2021 how many self-created queens used for requeening or creating new colonies?
 - Exclude queens raised for sale
- In 2021, number purchased and amount spent on:
 - Purchased queens/queen cells
 - Purchased packages
 - Purchased nucs

Expenses

- In 2021, what were the total expenditures on the operation for:
 - Varroa control/treatment
 - Prevent/treat other colony health issues
 - Include: Nosema, tracheal mites, foulbrood, paralysis, Kashmir, cloudy wing, etc.
 - Feed
 - Include: Syrup, sugar water, pollen patties, etc.
 - New foundation for combs
 - Exclude if comb purchased with nucs
 - New hives/woodenware
 - Langstroth, Top bar, other

Survey Questions, Cont'd.

- During 2021, did this operation pay to winter colonies in a warehouse or on land?
 - If yes, report total wintering fees to nearest whole \$ amount
- Peak number of people working on your apiaries in 2021?
 - Include “yourself”
 - Exclude employees that did not work with colonies, i.e. office staff, etc.

Things to watch out for:

- High/low production per colony
 - 2020 state averages ranged from 29-105 pounds per colony
- Unusually high/low price per pound
 - 2020 state averages ranged from \$1.60-\$7.99 per pound (national average was \$2.03)
- Total sales of 2021 honey exceeds total production of 2021 honey

In conclusion:

- NASS is the only comprehensive source of this vital bee, honey, and pollinator information
 - Colonies, honey production and stocks
 - Important that we have the information correctly recorded for each state
 - And honey sales
- Work through some practices on your iPad
- Leave good notes
- Contact your supervisor/local office for any questions specific to your area