NASS Survey Training

2019 Census of Horticultural Specialties
(HORT SPECIALTIES CENSUS)

United States Department of Agriculture
National Agricultural Statistics Service

NOD-Training Group
April 2020
Telephone Data Collection... From Home

• Two slightly new (to NASS) situations:
  – Phone enumerators calling from home on iPads
  – Field enumerators doing more telephone data collection

• Data collection is still the same
  – Be familiar with the survey and its uses
  – Make sure to have done some practices...before calling
  – Don’t skip questions, ask everything as its written, don’t lead the respondents, etc.
Telephone Data Collection... From Home

• The surveys and survey questions are all things that you’re familiar with
  – Just a slightly different data collection venue
• Use your experience and what you know already to make the interview work
• We are all in this together, and we shall persevere!
Survey Overview

• This is a “follow-on” to the 2017 Census of Agriculture
  – Those reporting horticultural production then are re-contacted now for additional, detailed information

• ONLY source of this type of detailed information for the horticultural industry

• This makes the data very important to:
  – Industry support groups, growers, legislators, lenders, ag economists, horticultural researchers, other USDA agencies, etc
Survey Overview

• The 2020 Commercial Floriculture Survey will be combined with the 2019 Census of Horticulture Specialties.
  – Same questions and data collection time frame

• Asking about 2019 production and sales
  – Even if they went out of business during 2019, any partial year data still needs to be collected
What is the Census of Horticultural Specialties?
The Census of Horticultural Specialties collects information to provide a comprehensive and detailed picture of the horticultural sector of the U.S. economy. It is the only source of detailed production and sales data for floriculture, nursery, and specialty crops for the entire United States. For the 2019 census, an operation is defined as any place that grew and sold $10,000 or more of horticultural specialty products during the census year.

Why should I respond to the Census of Horticultural Specialties?
Your response will help the continued growth and sustainability of horticultural production in the United States. In addition, census results can help you make informed decisions about the future of your own horticultural operation.

Must I respond to the survey?
Yes. United States law (Title 7 USC 2204(g) Public Law 105-113) requires all who receive a census form to respond.

How will the census be conducted?
Census forms will be mailed in December 2019 to more than 40,000 operations nationwide who are currently engaged in horticultural production activities. Responses are due by February 5, 2020.

What types of questions will be asked?
The census will look at horticultural activities during 2019, including:
- Production of horticultural crops
- Value of horticultural products
- Square footage used for growing crops
- Production expenses, and more
Will my information be kept confidential?
Absolutely. Respondents are guaranteed by law (Title 7 USC 2204(g) Public Law 105-113) that their individual information will be kept confidential. NASS uses the information only for statistical purposes and publishes data only in aggregate form. The report cannot be used for purposes of taxation, investigation, or regulation. The privacy of individual records is even protected from Freedom of Information Act requests.

Where can I find the survey data?
Results from the Census of Horticultural Specialties will be published in December 2020 and will be available online at www.nass.usda.gov/go/hort.

Who will use the data published from the Census of Horticultural Specialties?
The horticulture, floriculture, and nursery industries and all levels of government use the information to prepare a wide variety of horticultural-related programs, economic models, legislative initiatives, market analysis, research, and feasibility studies. These programs directly affect the life and communities of growers and help to improve horticultural technologies and practices.

What if I want more information?
For more information, call (800) 727-9540 or visit www.nass.usda.gov/agcensus.
Who Should Report?

• Everyone who received a questionnaire should report
  – For those who were not involved in horticulture.... code as out of business and leave notes
  – If only in business for part of the year.....record all information for that portion of the year they were in business
    • Leave a note stating when they stopped operations
  – If more than one operation.....do not combine all information on one report. A separate form should be completed for each operation.
Who Should Report?

- Everyone who received a questionnaire should report
  - If they received more than one form for the same operation, complete the correct one and ask them to write “Duplicate” on the extra forms and return them.
  - For partnership operations, complete one form with all partners’ shares on the one form. Ask them to return all the forms with “Duplicate” written on the extra forms.
Why Should People Report?

• The data is used by government agencies, academia, nursery and floriculture industries, and the general public to:
  – Evaluate, change, promote, and formulate policies and programs that help horticultural specialty producers
  – Study historic trends, assess current conditions, and plan for the future
  – Strengthen insurance options for Horticulture and Floriculture operations
  – Design new and improved methods to increase horticultural specialty production and profitability
  – Analyze and report on the current state of horticultural specialty production in the U.S.
Survey Information

• Project Code: 657-C&P Horticulture
• Questionnaires:
  – Mailed out December 30
    • Pre-survey postcard Dec 16; Second mailing Feb 24
  – EDR option also available
• Releases:
  – Floriculture Crops; Census of Horticulture
  – December 8, 12PM (ET)
Survey Specific Interviewer’s Manual

• Packed full of Horticultural goodness!
• Make sure to be familiar with the information
  – Keep it handy during interviews
    • Electronic version also on NASDA website
  – Extensive, in-depth information
  – Very useful for the “Well, I don’t know—should I include that or not? Is that what you’re asking about” situations
• See especially
  – Chapter 2: Terms and Definitions
  – Chapter 5: Completing the Questionnaire
Initial Screening Questions

• In 2019, did this operation grow and sell any:
  – Cut Flowers – through – Tobacco Transplants
    • 18 horticulture categories/sections
  – Exclude any plants “held” but not actually “grown-on”
    • Home Depot, Lowes, etc don’t “grow” horticulture crops, they “hold” them prior to sale
    • We are only looking for “growers” (producers) of hort/flor crops
Screening Questions

• Be sure to go over the Includes/Excludes carefully with the respondent.
  – Need to make sure each variety ends up in the correct section
    • Don’t want to enter a Cut Flower variety in the Potted Flowering Plant section
  – See also the Master Plant Listing as a quick reference
## Master Plant Listing - 2019 Census of Horticulture

<table>
<thead>
<tr>
<th>Section</th>
<th>Plant Name</th>
<th>Section</th>
<th>Plant Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Acaena (Broadleaf Evergreens)</td>
<td>3</td>
<td>Anthriscus (Herbaceous Perennial)</td>
</tr>
<tr>
<td>3</td>
<td>Acanthus (Herbaceous Perennial)</td>
<td>1</td>
<td>Anthurium (Cut Flowers)</td>
</tr>
<tr>
<td>3</td>
<td>Achillea (Herbaceous Perennials)</td>
<td>5</td>
<td>Anthurium (Foliage Plants)</td>
</tr>
<tr>
<td>2</td>
<td>Acidanthera (Potted Flowering Plants)</td>
<td>2</td>
<td>Anthurium (Potted Flowering Plants)</td>
</tr>
<tr>
<td>3</td>
<td>Aconitum (Herbaceous Perennial)</td>
<td>3</td>
<td>Aquilegia (Herbaceous Perennial)</td>
</tr>
<tr>
<td>3</td>
<td>Actaea (Herbaceous Perennial)</td>
<td>3</td>
<td>Arabis (Herbaceous Perennial)</td>
</tr>
<tr>
<td>3</td>
<td>Adenophora (Herbaceous Perennial)</td>
<td>6</td>
<td>Aralia (Cut Greens)</td>
</tr>
<tr>
<td>3</td>
<td>Adiantum (Herbaceous Perennial)</td>
<td>9</td>
<td>Arborvitae (Coniferous Evergreens)</td>
</tr>
<tr>
<td>4</td>
<td>Adonis (Annual Bedding/Garden Plants)</td>
<td>3</td>
<td>Arctostaphylos (Herbaceous Perennial)</td>
</tr>
<tr>
<td>3</td>
<td>Aegopodium (Herbaceous Perennial)</td>
<td>3</td>
<td>Artemisia (Herbaceous Perennial)</td>
</tr>
<tr>
<td>3</td>
<td>African blue lily (Herbaceous Perennial)</td>
<td>3</td>
<td>Aruncus (Herbaceous Perennial)</td>
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<tr>
<td>16</td>
<td>African Violets (Bedding and Flowering Plant Liners)</td>
<td>3</td>
<td>Asarum (Herbaceous Perennial)</td>
</tr>
<tr>
<td>16</td>
<td>African Violets (Cuttings)</td>
<td>3</td>
<td>Asclepias (Herbaceous Perennial)</td>
</tr>
<tr>
<td>2</td>
<td>African Violets (Potted Flowering Plants)</td>
<td>9</td>
<td>Ash (Deciduous Shade Trees)</td>
</tr>
<tr>
<td>3</td>
<td>Agapanthus (Herbaceous Perennial)</td>
<td>5</td>
<td>Asia bell (Foliage Plants)</td>
</tr>
<tr>
<td>3</td>
<td>Agastache (Herbaceous Perennial)</td>
<td>1</td>
<td>Asiatic Lilies (Cut Flowers)</td>
</tr>
<tr>
<td>5</td>
<td>Agave (Foliage Plants)</td>
<td>6</td>
<td>Asparagus, other (Cut Greens)</td>
</tr>
<tr>
<td>4</td>
<td>Ageratum (Annual Bedding/Garden Plants)</td>
<td>6</td>
<td>Asparagus, plumosus (Cut Greens)</td>
</tr>
<tr>
<td>16</td>
<td>Aglaonema (Foliage Plant Liners)</td>
<td>6</td>
<td>Asparagus, tree fern (Cut Greens)</td>
</tr>
<tr>
<td>5</td>
<td>Aglaonema (Foliage Plants)</td>
<td>3</td>
<td>Asphodeline (Herbaceous Perennial)</td>
</tr>
<tr>
<td>3</td>
<td>Ajuga (Herbaceous Perennial)</td>
<td>6</td>
<td>Aspidistra (Cut Greens)</td>
</tr>
<tr>
<td>9</td>
<td>Ajuga (Woody Ornamentals and Vines)</td>
<td>5</td>
<td>Asplenium (Foliage Plants)</td>
</tr>
<tr>
<td>3</td>
<td>Alcea (Herbaceous Perennial)</td>
<td>1</td>
<td>Aster (Cut Flowers)</td>
</tr>
<tr>
<td>3</td>
<td>Alchemilla (Herbaceous Perennial)</td>
<td>3</td>
<td>Aster (Herbaceous Perennial)</td>
</tr>
</tbody>
</table>
Sections Overview

- Only looking for “finished” plants
  - Sold to end user
  - Section 16: unfinished (immature/started) plants sold to others for additional “growing on”
    - And then sold to end user
- If the operation had less than $10,000 in sales, you will skip all of the production/sales sections and route to Section 22 Total Area
Sections Overview

• Usually will start with a pick list of the most common plants
  – And an “Other” category
  • “Other” limited to ONLY plants valid for that section
Sections Overview

• Then for each variety of plant:
• Ask about Retail (direct to consumers) and Wholesale (to “resellers”) sales
  – Quantity sold, value of those sales
    • Units will vary by section, types of plants, etc
    • TOTAL value of sales, not a price per
• Generally, majority of sales will be wholesale
  • This can vary by type of plant, type of operation, etc.
• Retail prices will typically be higher than wholesale prices
1. Cut Flowers

• Cut Flower – A flower that has been removed from a growing plant.

• Note the units for each variety of flower
  – Bunches, spikes, stems, blooms
  – If something different is reported, leave a note
### 1. Cut Flowers

**Cut flowers**

<table>
<thead>
<tr>
<th>INCLUDE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>finished greenhouse and field grown cut flowers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EXCLUDE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>plants purchased from others but not finished (grown on) before resale</td>
</tr>
<tr>
<td>potted flowering plants for indoor or patio use. Report in Potted Flowering Plants for Indoor or Patio Use Section.</td>
</tr>
<tr>
<td>dried bulbs, corms, rhizomes, or tubers to be used for forcing or outdoor use. Report in Dried Bulbs, Corms, Rhizomes, or Tubers Section.</td>
</tr>
<tr>
<td>unfinished plants (plug seedlings, liners, tissue cultured plantlets, etc.). Report in Propagative Horticultural Material, Bareroot and Unfinished Plants Section.</td>
</tr>
</tbody>
</table>

**In 2019, did this operation grow and sell any cut flowers?**

- [ ] Yes
- [ ] No

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*Be sure to go over the includes/excludes carefully with the respondent in every section.*
2. Potted Flowering Plants
For Indoor or Patio Use

• Key to this section: “for indoor or patio use”
• Broken out by
  – Pots less than 5”; Pots 5” or more
  – For both retail and wholesale
    • Very large pots? Leave a note
3. Potted Herbaceous Perennials

• **Include**
  – *Potted* herbaceous (not a woody stem) *perennials*
    • Normally live 2 years or more under local conditions
      – Above ground portion dies with frost, but roots live through the winter

• **Exclude**
  – Ornamental grasses (like bamboo)

• **Units**
  – Chrysanthemums: Pots less than 5”; Pots 5” or more
  – All others: Pots/containers
    • Less than 1 gallon; 1 up to 2 gallons; 2 gallons or larger
4. Annual Bedding/Garden Plants

• Key is *annual* bedding/garden plants
  – Only live for 1 year/growing season

• Include
  – Mixed pots of annuals
    • Color bowls, combination planters
    • Report as “combination planter/color bowl” variety
  – Vegetable plants for home garden use
    • Broccoli, cabbage, cauliflower, herbs, peppers, tomatoes, etc
4. Annual Bedding/Garden Plants

- **Exclude**
  - Plants purchased and resold (not "grown-on")
  - Vegetable, etc transplants for *commercial* production
    - Cut herbs for consumption
  - Ground covers, florist chrysanthemums, foliage plants

- **Units**
  - Flats; Pots less than 5”; Pots 5” or more; Hanging baskets
4. Annual Bedding/Garden Plants

- For Flats:
  - “Standard” size is 10” x 20” to 11” x 22”
    - If size is not reported correctly, quantities and prices can be skewed, not comparable to other operations, etc.
    - Multiple sizes? Make sure to leave good notes on sizes used and which varieties used which size
  - DON’T record a ‘shuttle tray’, ‘carrier flat’, ‘flats of pots’ with 8 pots as a flat
    - This should be recorded as 8 pots

Flats and cell packs
Flats

• It is possible for a grower to use different flat sizes for different varieties – make good notes so they can all be converted to an equivalent flat price
  – If an operator says they use “606s” or “806s” etc. Please get dimensions of the flat, as “806” refers to the fact that the flat holds 8 packs with 6 cells rather than a specific dimension.
  – See IM pages 41-42, 63-67 for more info
5. Foliage Plants
For Indoor or Patio Use

• Looking for
  – Finished plants not intended for landscape use
    • KEY is “indoor or patio use”
  – Plants where “foliage” (leaves) is primary attribute
    • May be flowering, but that is secondary

• Do not want
  – Outdoor/landscape plants
  – Hardy garden ferns

• Units
  – Pots less than 6”; Pots 6” to 13”; Pots 14” or more; Hanging baskets
    • Some pots may be very large (tub sizes) – leave notes
6. Cut Cultivated Greens

- These are plants used for floral arrangements and other ornamental purposes
  - Sold as “cut”, not plants
  - Include anything sold for export (large portion of this market)
  - Do not want wild harvested greens; edible greens
  - Do not want Leatherleaf ferns sold as *plants* (in pots/baskets)
7. Food Crops Grown Under Protection

- **Includes** all food crops grown under protection (sold as food not as plants)
  - Including hydroponically grown
  - Includes herbs
  - Bean and alfalfa sprouts and other sprouts (coded as “Other greenhouse produced food crops”)

- Heated or unheated structures such as glass, rigid plastic, and plastic film
7. Food Crops Grown Under Protection

• **Exclude** any food crops started under temporary structures that were finished in the open

• Will ask for square feet under protection, total production, % of production from hydroponic systems, value of retail sales, and value of wholesale sales of each food crop
8. Cultivated Christmas Trees

• *Live* trees sold as balled and burlapped or in containers are considered nursery production (next section)

• “Area in Production” refers to acres of standing, un-cut Christmas trees

• “Number of Trees on Operation on Jan. 1” refers to live, uncut, standing trees

• % of live trees on the operation expected to be sold in coming years should sum to 100
9. Nursery Stock Production and Sales

• Any and all nursery plants should be included in this section.
  – Includes deciduous shade and flowering trees, evergreens, shrubs, bushes, groundcovers, fruit & nut trees, grapevines, small fruit plants, vines, etc
  – Regardless of how/where grown
    • Field (sold as bareroot, balled & burlapped); container; greenhouse
9. Nursery Stock Production and Sales

• Collecting 2019 sales information
  – Number and value (for both retail and wholesale)

• AND quantity on hand January 1, 2020

• Then % of Sales of Nursery Stock by:
  – Bareroot, Balled and Burlapped, Containers, Other
  – For each of the 10 nursery stock categories
    (broadleaf evergreen, deciduous flowering trees, etc)
• **10. Sod, Sprigs, Plugs**
  – Turfgrass, sod production
    • Grass and turf may also be marketed as sprigs/plugs for transplanting
  – No quantities, just area in production/harvested and value of sales

• **11. Short Rotation Woody Crops**
  – Quick growing trees
    • Mature/harvested in less than 10 years
  – Actively being “raised” (fertilized, thinning, watering, spraying, etc.)
    • Not *just* seedlings put out to grow into pulpwood
      – These operations are considered forestry operations and are to be excluded
Next four sections ask:

- Area used for production
  - Under protection (greenhouses, etc) OR in the open
  - Quantity harvested and sold, value of sales

12. Aquatic Plants
- Underwater plants, floating leaf plants, floating plants

13. Vegetable Seeds
- Exclude sweet corn seed, potatoes for seed

14. Flower Seeds
- Exclude any seed gathered in the wild

15. Dried Bulbs, Corms, Rhizomes, or Tubers
- Include bulbs harvested that had also produced cut flowers
16. Propagative Horticultural Material, Bareroot and Unfinished Plants

• Think of these as started or young plants
  – In some cases, *just* the materials to start the plants

• Which are then sold (for “further growing-on”) to other horticulture producers
  – Who raise the plants and *then* sell them to the end user
    • Could even be multiple growers before the plant is at a saleable size (see IM pages 48 & 49)

• **BUT exclude**
  – Seeds, bulbs, tubers (those have their own categories)
  – Any finished plants
17. Transplants for Commercial Vegetable & Strawberry Production

- Sold to farmers who raise vegetables & strawberries
  - Home use transplants reported in Annual/Beding Garden Plants; Nursery Stock respectively
  - Multiple “turns” in one year?
    - Report square feet for all crops

18. Tobacco Transplants

- Typically started in greenhouses
- Exclude any tobacco transplants grown by a farmer for use on his farm (not for sale)
• **19. Marketing Channels**
  – Percent of “who” or how were the sales (wholesale and retail) made
    • Direct to consumers (retail); garden centers; landscapers, etc
  – Must add to 100%

• **20. Value of Land, Buildings, Equipment**
  – Current value of:
    • Owned/rented land & buildings
    • Machinery/equipment
  – Used for horticultural production
21. Horticultural Production Expenses

• The 2019 expenses to produce the products that have just been reported

• Exclude
  – Any expenses for other aspects of the operation
    • Retail store, landscaping business, other agricultural production, etc

• See IM pages 51-54 for specific details
• **22. Total Area**
  
  – Area of
    
    • Greenhouses; Shade structures; Natural shade area; Area in the open
  
  – Used for horticultural production
    
    • Exclude any non-ag areas, retail space, areas for other crop production, etc AND any area used for sod or Christmas tree production

• **23. Area Used for Horticultural Production**
  
  – How much area did the crops reported occupy of the area reported
    
    • If multiple groups ("turns") of different plant types grown in the same space, report the space occupied by each type
    
    • BUT if multiple groups of the same plant type grown, report the space only once
    
    • See IM pages 55 & 56 for an example
• **24. Horticultural Labor**
  – Workers for less than 150 days (“seasonal”); for 150 days or more; peak number in 2019  
    • Include *paid* family members. Exclude contract labor, landscapers, retail *only* clerks, etc.

• **25. Type of Horticultural Operation**
  – Legal status for tax purposes

• **26. Value of Horticultural Sales**
  – Gross value of *sales* in 2019  
    • Only horticultural crops grown and sold
Extra information

- Master Plant Listing
  - ALL plant varieties, arranged alphabetically
  - And which section they belong in
    - For example: “I produced 1000 pots of XYZ plant. Where does that get reported?”
      - This will help you figure out where in the interview you will record that information

- Average Price Listing
  - US average wholesale prices from 2018
    - Gives you a general idea of prices
      - Of course can still vary quite a bit
Things To Watch Out For

• Do your best to get items in the correct sections
  – Keep that master plant listing handy

• Extreme quantities, High/Low prices, Data Relationships, etc
  – Keep the IM and Avg Price sheet handy

• Stay alert: If something doesn’t seem to “fit”, is inconsistent, not what you were expecting
  – Probe, follow-up. Make sure to leave good notes
What to Do with Bamboo

- Bamboo can have many uses and can be recorded in a few different sections depending on the purpose for which it was harvested:
  - Ornamental Grass in Section 9 if sold for decorative use
  - Food Crop Under Protection in Section 7 if grown under protection for edible bamboo shoots
  - Short Rotation Woody Crops in Section 11 if grown for poles for fences, mulching, etc.
  - Propagative Horticultural Material, Bareroot and Unfinished Plants in Section 16 if sold as cuttings for growing on
Things to remember:

• Very important survey in service to the horticultural/floriculture industry

• Collecting detailed production and sales data
  – Make sure to get the screening questions correct, will make the interview much smoother

• Watch out for different units and sizes

• Generally, retail prices will be higher than wholesale price
More things to remember:

• Be familiar with the survey and CAPI...before calling!
• If it sounds odd, probe. Leave good notes

Thanks for all your work on the survey!