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Swine Production in Virginia: A Summary Using Data from the 2022 Census of Agriculture

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Introduction

The National Agricultural Statistics Service of the U.S. Department of Agriculture conducts a Census of Agriculture every five years. The census is a complete count of farms and ranches in every county of every state in the U.S. Other information gathered during a census includes, but is not limited to, land use and ownership, operator characteristics, production practices, income and expenditures, and market value of agricultural products. By comparing data to earlier censuses, trends and new developments in the agricultural sector of the Virginia and U.S. economies can be measured.

Information collected in the Census of Agriculture is used by entities that provide services to farmers, including federal, state, and local governments, and agribusinesses. Indeed, Census data are used when making decisions that affect rural communities, such as community planning, location of sites for new stores or companies, availability of operating loans and other funding, location and staffing of USDA Service Centers (single locations where customers can access the services provided by the Farm Service Agency, Natural Resources Conservation Service, and the Rural Development agencies), and farm programs and policies. Farmers and ranchers themselves use Census data to help make decisions about the future direction of their operations.

The release of results of the 2022 Census of Agriculture began in February of 2024. The objective of this paper is to provide a summary of Census data reflective of swine production in Virginia.

General Comments about the Census of Agriculture

For purposes of the Census of Agriculture, a farm was defined as any place from which $1,000 or more of agricultural products were produced and sold or normally would have been sold, during the census year. This farm definition has been in effect since 1974. In late 2022, Census questionnaires were mailed to over 3 million known and potential U.S. farmers and ranchers.

The response rate was 61.0%, a decrease when compared with the 2012 and 2017 Census response rates of 74.6% and 71.8%, respectively. For the 2022 Census, more than 40% of the responses were submitted online. All tabulated data were subjected to an extensive disclosure review before publication. Any tabulated item (at either the county or state level) that identified data reported by an individual respondent or allowed a respondent's data to be accurately estimated or derived was "suppressed" and coded with a "D." For example, if there was only one pig farm in a particular county in Virginia, then data such as number of hogs and pigs sold, or the value of hogs and pigs sold, were not reported. A "D" would appear for those items on the appropriate line and in the proper column of the table, so specifics of an individual's operation were not disclosed. In contrast, the actual number of farms reporting an item is not considered confidential information and is provided even though other information is withheld.

Swine Production in the United States

The number of U.S. farms with hogs and pigs, the December 31 inventory, the number of farms with sales of pigs, total hogs and pigs sold, and the value of hogs and pigs sold for 2022 and 2017 are contained in tables 1a., 1b., 2a., 2b., and 3. The number of hog farms nationally decreased from 2017 to 2022; however, the inventory, number, and value of hogs and pigs sold increased.

Table 1a. Number of farms1 in the South Atlantic Region and the U.S. with hog and pig inventory2 in 2022 and 20173.

State	2022	2017
DE	46	55
FL	1,486	1,810
GA	1,053	1,091
MD	550	562
NC	2,492	2,426
SC	923	1,005
VA	1,246	1,461
WV	882	892
Region Total	8,678	9,302
U.S. Total	60,809	66,439
Region % of U.S. Total	14.3	14.0

[1]Farm is defined as any place from which $1,000 or more of agricultural products were produced and sold or normally would have been sold during the census year.
[2]Data as of December 31 of the census year.
[3]Data from USDA Census of Agriculture, 2022.

Table 1b. Hog and pig inventory1 in the South Atlantic Region and U.S. in 2022 and 20172.

State	2022	2017
DE	2,935	5,980
FL	14,482	15,567
GA	41,671	81,197
MD	20,219	18,379
NC	8,191,751	8,899,459
SC	153,888	183,069
VA	282,797	249,231
WV	5,204	5,314
Region Total	8,712,947	9,458,196
U.S. Total	73,817,751	72,381,007
Region % of U.S. Total	11.8	13.1

1Data as of December 31 of the census year.
2Data from USDA Census of Agriculture, 2022.

Table 2a. Number of farms1 in the South Atlantic Region and the U.S. with hog and pig sales in 2022 and 20172.

State	2022	2017
DE	49	50
FL	924	1,224
GA	640	811
MD	432	509
NC	2,105	2,145
SC	613	735
VA	974	1,244
WV	826	922
Region Total	6,563	7,640
U.S. Total	56,265	64,871
Region % of U.S. Total	11.7	11.8

[1]Farm is defined as any place from which $1,000 or more of agricultural products were produced and sold or normally would have been sold during the census year.
[2]Data from USDA Census of Agriculture, 2022.

Table 2a. Hog and pig sales in the South Atlantic Region and U.S. in 2022 and 20171.

State	2022	2017
DE	24,714	56,154
FL	32,196	38,561
GA	261,426	573,727
MD	54,119	64,614
NC	32,258,332	35,800,173
SC	534,392	536,221
VA	691,829	664,342
WV	9,156	10,467
Region Total	33,866,164	37,74,259
U.S. Total	240,064,008	235,282,860
Region % of U.S. Total	14.1	16.0

[1]Data from USDA Census of Agriculture, 2022.

Table 3. Value ($1,000) of hogs and pigs sold in the South Atlantic Region and U.S. in 2022 and 20171.

State	2022	2017
DE	2,058	2,712
FL	4,695	3,989
GA	26,224	53,265
MD	7,972	7,250
NC	4,130,307	3,216,902
SC	87,150	68,599
VA	157,542	96,223
WV	Not disclosed	1,316
Region Total	4,415,948	3,450,256
U.S. Total	36,357,726	26,266,765
Region % of U.S. Total	12.1	13.1

[1]Data from USDA Census of Agriculture, 2022.

For 2022, Iowa led the nation in hog and pig inventory (23.8 million) and sales of hogs and pigs ($67.6 million). Minnesota was second in hog and pig inventory (8.9 million) and third in sales of hogs and pigs ($28.5 million) in 2022. North Carolina was third in inventory (8.1 million) and second in sales ($32.2 million). The states of Iowa, Minnesota, and North Carolina accounted for more than 56% of the total sales of hogs and pigs in the U.S. in 2022.

The 2022 Census of Agriculture also captured demographic data for 41,493 producers on farms for which more than 50% of sales came from raising hogs and pigs. Sixty-five percent of the farmers were male; 67% were between the ages of 35 and 64 years, with an average age of 49.6 years; 59% had been farming for less than 11 years; 76% lived on their farm; 68% worked one or more days off-farm, with only 44% identifying farming as their primary occupation; and 96.9% were white.

Swine Production in the South Atlantic Region

Tables 1a., 1b., 2a., 2b., and 3 also contain swine production data for states within the South Atlantic region, which includes Delaware, Georgia, Florida, Maryland, North Carolina, South Carolina, Virginia, and West Virginia. Of the U.S. total for 2022, these states accounted for approximately 14% of the farms with hogs and pigs, 12% of the December 31 inventory, and 14% of the hogs and pigs sold.

North Carolina was the dominant pork producer in the region, with 11.1% of the U.S. total hog and pig inventory and 13.4% of the nation's hogs and pigs sold. In 2022, Sampson County, North Carolina, had sales of $966 million, accounting for almost 3% of all U.S. hog and pig sales.

Except for North Carolina, the number of hog and pig farms decreased from 2017 to 2022 in all the region's states. Inventory increased in Maryland and Virginia, with all other states recording a decrease. All states experienced a decrease in the number of farms with hog and pig sales. The number of hogs and pigs sold increased by 4.1% in Virginia, with all other states reporting decreases. Except for Delaware and Georgia, the value of hogs and pigs sold increased in all states, with Virginia showing the largest percentage increase at 63.7%.

Swine Production in Virginia

When compared with all other states, Virginia ranks 18th in the number of farms with hogs and pigs, 19th in hog and pig inventory, 21st in farms selling hogs and pigs, 23rd in total sales of hogs and pigs, and 18th in value of hogs and pigs sold. In Virginia, the sale of hogs and pigs ranks 7th among all agricultural products sold, with 2.9% of the State's total market value (table 4). Surry County was the top producer of hogs and pigs.

Table 4. Market Value of Virginia Agricultural Products Sold

Rank	Item	Farms	Sales ($1,000)
1	Poultry and eggs	4,683	2,232,576
2	Grains, oilseeds, dry beans, and dry peas	4,074	843,372
3	Cattle and calves	14,730	695,326
4	Nursery, greenhouse, floriculture, and sod	1,270	398,562
5	Milk from cows	386	353,750
6	Other crops and hay	13,131	184,958
7	Hogs and pigs	974	157,542
8	Fruit, tree nuts, and berries	1,830	144,372
9	Vegetables, melons, potatoes, and sweet potatoes	1,576	134,618
10	Aquaculture	219	118,832

Appearing in tables 5a and 5b are the ownership categories and types of farms in Virginia selling hogs and pigs as documented in the 2022 Census. There was a total of 38 farms that sold a combined 596,500 hogs and pigs (86.2% of the State total) under the Smithfield Foods, Inc. umbrella. Vertical integration occurs when a company owns or controls various components of its supply chain. In the Commonwealth of Virginia, Smithfield raises pigs in company-owned (in other words, contractor or integrator) farms and maintains production arrangements with contract growers, as well as operates a large feed mill.

Nevertheless, the Virginia pork industry remains diverse, having independent, small-scale, and niche market pig farmers in addition to large, corporate-owned farms and contract growers. Indeed, there were 936 independently owned farms that sold 95,329 hogs and pigs, accounting for 13.8% of the state's total.

Table 5a. Ownership characteristics of farms selling hogs and pigs in Virginia1.

Ownership	Number of Farms	Hogs and pigs sold
Independent	936	95,329
Integrator or Contractor	8	430,135
Contract Grower	30	166,365
Total	974	691,829

[1]Data from USDA Census of Agriculture, 2022.

Table 5b. Type of farms selling hogs and pigs in Virginia[1].

Farms:	Number of Farms	Hogs and pigs sold
Farrow-to-wean	112	2,862
Farrow-to-feeder	64	D[2]
Farrow-to-finish	283	485,607
Nursery	12	D[2]
Finish	391	108,530
Other	112	2,951
Total	974	691,829

[1]Data from USDA Census of Agriculture, 2022.
[2]Any tabulated item that identifies data reported by a respondent or allows a respondent's data to be accurately estimated or derived was suppressed and coded with a "D."

Virginia has a variety of hog and pig farms, as shown in table 5b. On **farrow-to-wean farms**, pigs are born and reared by sows until weaning at approximately three weeks of age, at which time they are transported to nursery or finisher operations. After weaning, pigs born on **farrow-to-feeder farms** remain on site in nursery units until transportation to finisher farms after achieving body weights of 30 to 60 pounds. Pigs born on **Farrow-to-finish** farms are reared through finishing and then moved to slaughter at weights of 260 pounds or greater.

For **nursery farms**, weaned pigs are acquired, reared for five to seven weeks, and subsequently moved at body weights of 30 to 60 pounds to finisher operations. **Finisher farms** acquire weaned pigs (so-called **Wean-to-finish farms**) or feeders and rear them through finishing weights of 260 pounds or greater. "Other" types of hog and pig farms are those that do not precisely fit in one of the categories described previously, for example, **boar studs** where semen is collected and processed to provide artificial insemination doses used for breeding on farms with sow herds.

Where in Virginia Hog and Pig Farms are Located

Historically, most hogs in Virginia were produced in the coastal plains region of the southeast corner of the state. Many large production units remain there, although, for some counties, the numbers of hogs and pigs were not reported in the 2022 Census of Agriculture for the reasons described above. The latest census reveals that farms with hogs and pigs are distributed throughout the state. Tables 6a and 6b contain the leading counties in Virginia in terms of farms with hogs and pigs and farms with sales of hogs and pigs.

Table 6a. Leading counties in Virginia in terms of farms with hogs and pigs[1].

Rank	County	No. of Farms[2]
1	Augusta	51
2	Loudon	51
3	Rockingham	48
4	Bedford	45
5	Halifax	34
6	Campbell	31
6	Franklin	30
6	Buckingham	29
6	Warren	29
10	Shenandoah	28

[1]Data from USDA Census of Agriculture, 2022.
[2]Farm is defined as any place from which $1,000 or more of agricultural products were produced and sold or normally would have been sold during the census year.

6b. Leading counties in Virginia in terms of farms selling hogs and pigs[1].

Rank	County	No. of Farms[2]
1	Rockingham	61
2	Augusta	40
3	Shenandoah	37
4	Halifax	29
5	Fauquier	28
6	Bedford	22
6	Buckingham	22
6	Clarke	22
6	Culpepper	22
10	Appomattox	21

[1]Data from USDA Census of Agriculture, 2022.
[2]Farm is defined as any place from which $1,000 or more of agricultural products were produced and sold or normally would have been sold during the census year.

Concluding Comments

Viewing Census of Agriculture data emphasizes the changes that have occurred in the structure of the swine industry in Virginia. It has evolved into two production entities: 1) A vertically integrated company, in other words, Smithfield Foods, Inc., that controls its own hog production and supply through company-owned farms or contractual arrangements, and 2) independently owned, small-scale and niche market farms. Regarding hog production, it is naïve to think that there will ever be an increase in the number of smaller-size hog operations to levels that can supply the total demand for pork both domestically and internationally. Indeed, most pork consumed by citizens in Virginia and the U.S. will continue to be produced by large corporate entities. However, there is an increasing demand for pork by typical, but not necessarily, higher-income consumers who prefer their meat to be from hogs raised locally in less-intensive systems. With that in mind, it is noted that major population centers in Northern Virginia, the greater Richmond area, and Hampton Roads (Norfolk, Virginia Beach, Chesapeake, and so forth) offer large potential markets for locally produced pork from small-scale and niche market operations.

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