

Farm Business Management Update

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Farm Business Management Update is a joint effort of the Agricultural and Applied Economics faculty and the area farm management educators. Subject matter areas include timely information on farm management, marketing, tax management, finance, credit, labor, agricultural law, agri-business, estate planning, 4-H economic education, natural resources, and CRD. Please feel free to reproduce any article. However, please cite the title, author(s), date, and this newsletter. Access the update online by visiting <http://www.pubs.ext.vt.edu/news/farm-business-management-update.html>.



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Management Reading List

By **Gordon Groover** Extension Economist, Department of Agricultural & Applied Economics, Virginia Tech

Below are suggested readings for the farm business manager.

- ✓ “Pink Slime” anyone? A must read for all of us involved in agriculture is the current issue of “Choices,” published by the Agricultural & Applied Economics Association www.choicesmagazine.org/. This issue contains a set of three articles examining the impacts of the “pink slime” incident on the food and agricultural sectors.
- ✓ Also in www.choicesmagazine.org there are three submitted articles—including one policy issue article on implementing dietary goals and guidelines by Palma and Knutson; one on trade distorting impacts of the U.S. Renewable Fuel Standards, by Yano, Blandford and Surry; and one on the shifting to developing countries of productivity growth in global agriculture, by Fuglie and Wang.
- ✓ USDA Economic Research Service has a mapping application called *The Atlas of Rural and Small-Town America* to help users assemble statistics on four broad categories of socioeconomic factors: People, Jobs, Agriculture, County classifications. This application can be found at <http://www.ers.usda.gov/data-products/atlas-of-rural-and-small-town-america.aspx>.
- ✓ Beginning Farmers & Ranchers should take a look at *Farm Cost and Return Tool (CART)* developed by the Food and Agricultural Policy Research Institute (FAPRI) at the University of Missouri. The 5-year projections are based on farmer imputed data and supplemented with FAPRI and USDA baseline information. The tool can be found at <http://www.fapri.missouri.edu/projects/>.

New Publication from Agricultural and Applied Economics

Guidance on the current land rental/lease rates for farmland in Virginia is one of the most frequent calls many agents and specialists receive over the years. Annually USDA National Agricultural Statistical Service (NASS) released cash rental rates for irrigated and non-irrigated cropland and pastureland for Virginia counties and cities. The report titled *2012 NASS Cropland and Pastureland Rental Rates* authored by Lex Bruce and Gordon Groover can be found at http://www.pubs.ext.vt.edu/AAEC/AAEC-44/AAEC-44_PDF.pdf.

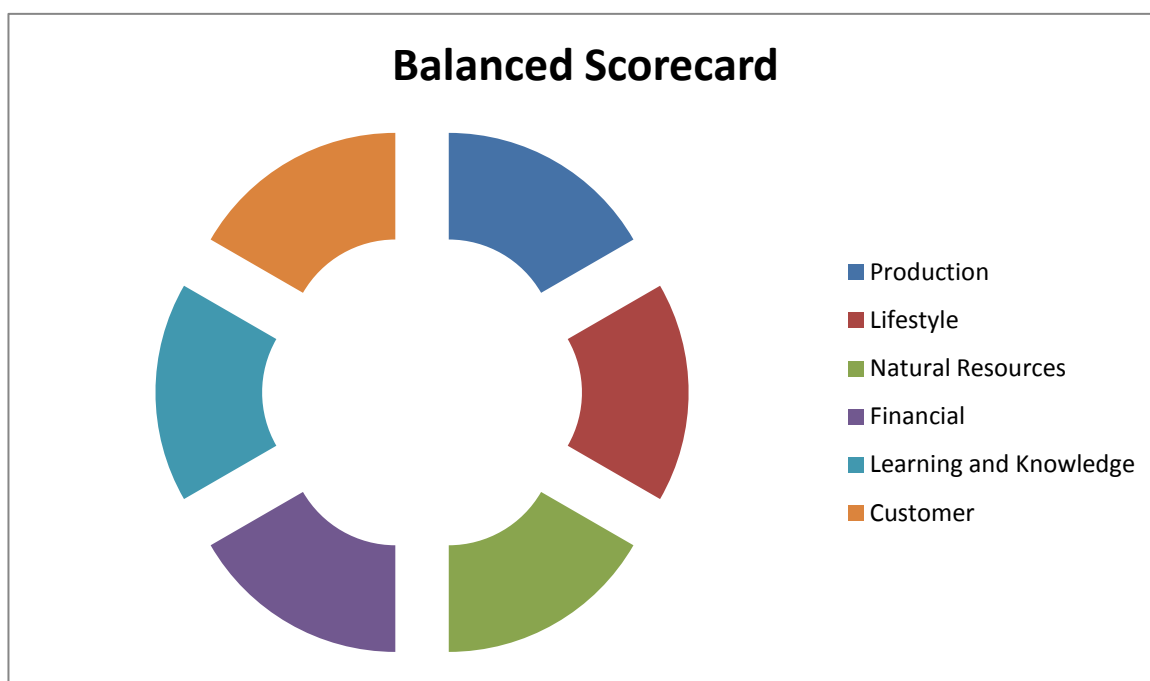
Is Your Scorecard Balanced?¹

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Farmers and ranchers often meet at the sale barn, coffee shop, feed store, or Extension meeting to discuss their parameters of success. More often than not it begins and ends with weather and yields and prices. Inherently, these are issues that often garner the greatest attention, but as in cattle selection, pressure on one trait or criteria does not result in a holistic or balanced result. The Balanced Scorecard approach is an easy to understand and easy to implement method of evaluation of your farming business. Much like spokes on a wheel, the balanced scorecard requires evaluation of multiple facets of the farm business with none more important than the other in an effort to obtain a holistic and well rounded farming operation. The Balanced Scorecard also creates a strategic approach rather than a reactionary approach requiring you not only assess where you are now but where you need to get to for business success.

The six wheel spokes or measures on the scorecard consist of:

- Financial
- Production
- Customer
- Lifestyle
- Natural Resources
- Continued Learning and Growth



This list is short enough but will certainly challenge the farming operation to be holistic in its design. While Production and Financial are our traditional measures of evaluation, success in these two criteria does not achieve a balanced scorecard. Instead an operation must first create a vision or mission statement. I fully realize the words “mission statement” are rarely, if ever spoken, at the farm dinner table, so let’s call it a farm goal or direction. Then the business must assess where it is currently in the six parameters. Production may be high but the farm’s infrastructure and natural resources are neglected. The farm may be paying the bills and cash flowing, but the household couple could be dysfunctional or in a divorce. Are you able to leave the farm to learn and grow in

¹ This article highlights detail from the South Dakota State University and Texas A&M University publication “Using the Balanced Scorecard for Ranch Planning and Management: Setting Strategy and Measuring Performance,” found at http://www.agrisk.umn.edu/conference/uploads/AArzeno0205_02.pdf .

knowledge? Does your customer like your product? Is it a product that is marketable? These questions must be answered to honestly rank and sort where the farm is currently and if the scorecard is balanced.

Finally, the real value in the balanced scorecard is determining a path to get where you need to go. Once you have completed your assessment, where are you falling short? You had the highest calf weaning weight ever but the cows were all body condition score 4's going in to the winter. Your banker is pleased with your loan repayment but your wife and kids moved in with your mother-in-law or you haven't attended a meeting off the farm in 5 years. The scorecard gives you a snapshot of the areas to address. Perhaps at the next visit to the feed store when the neighbor is bragging about 250 bushel corn yields, you may answer that yours was only 185 but also that corn took your entire family on a much needed vacation or paid for the dream kitchen your spouse had requested. It is extremely easy to focus on one or two pieces of the scorecard and universities are partly to blame. For years, Extension has taught how to increase yields or do an enterprise budget. Seldom do we discuss a holistic approach, when the reality is the scorecard must be balanced for the family business to survive and thrive. I hope you take the time on the back of the coffee house napkin or calf closeout data to write down your scorecard. I have often said we have plenty of tools to achieve success once we identify what we are trying to build. For the vast majority of you, your production or even your financial sections are not the areas requiring the greatest attention. I think you will find the Balanced Scorecard will lead you in the direction of both greater personal and business success.

Price Analysis of Virginia Wines

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1. Introduction

The Virginia wine industry has experienced an impressive growth in the number of operating wineries and their total production of wine. This trend has been accompanied by an increase in wine consumption in the state, and in 2010 Virginia ranked 9th nationally in per capita wine consumption - 15.26 liters per adult (ICEX, 2012). On the distribution side, 65 percent of the wine produced in Virginia is sold directly to consumers at the tasting rooms or via e-commerce (MFK, 2007). Direct sales facilitate the interaction with the final customer, circumvent restrictions at the distribution channels, and support higher margins of wine sales. On the other hand, Virginia wineries that manage to access the retail market must face intense competition from a large number of wines produced domestically and internationally. In this market environment, pricing is a central aspect of the marketing mix of small wine producers and there is an imperative need for a direct relationship between pricing strategies and the quality of the wine produced. A mismatch between quality of Virginia wines and their overall prices will likely push consumers to drink lower quality/cheaper domestic wines or find foreign substitutes. This is particular true for the premium wine segment, where an unsatisfactory customer experience will negatively impact the winery's image and preclude future sales. Consequently, this study analyzes the overall prices charged by Virginia wineries in nine different wine categories in order to better assess the competitiveness of industry.

1. Price Analysis of Virginia Wines

Data on selling prices of eight different categories of wines produced in Virginia was collected for this study. As shown in Table 1, five red and four white wine categories were selected based on grape varieties, and then red and white wine groups were separated into two sub-groups forming a total of four groups: (1) Red wines made from the most commonly produced grape varieties in the United States (Cabernet Sauvignon and Merlot); (2) Red wines made from grape varieties that grown well in Virginia (Cabernet Franc, Petit Verdot and Norton); (3) White wines made from the most commonly produced grape varieties in the United States (Chardonnay and Riesling); (4) White wines made from grape varieties that grown particularly well in Virginia (Vidal Blanc and Viognier).

Table 1. Selected Varieties of Red and White Wines Produced in Virginia

	Red Varieties	White Varieties
Most Commonly Produced in the U.S.	Caberner Sauvignon Merlot	Chardonnay Riesling
Most Commonly Produced in Virginia	Caberner Franc Petit Verdot Norton	Vidal Blanc Viognier

This selection is particularly important because it allows drawing comparisons between two very different markets. On one hand there are the two groups in which Virginia wineries face intense price competition from out-of-state wines (i.e. Cabernet Sauvignon or Chardonnay). On the other hand, the two other groups represent a market in which Virginia wineries may have a competitive advantage given that grapes like Cabernet Franc, Petit Verdot or Vidal Blanc are regarded as Virginia's "signature" grapes. Information on prices was collected from 191 Virginia winery websites. Once all websites were analyzed, only 112 provided sufficient information on wine prices. In addition, price information was analyzed for nine different wine producing regions in order to identify any regional differences in pricing strategies.

The following assumptions were applied to this analysis:

- The smallest price was selected when there were multiple offerings of the same variety;
- The most recent production year was selected;
- Only wines made from a single grape variety;

Prior to discussing the prices of Virginia wines, it is important to have a clear picture of the different prices segments in the United States. Table 2 shows the five different price segments, their respective average prices and market shares.

Furthermore, this information is shown for both domestic and imported wines. Unfortunately, and due to the level of data aggregation, this table only reveals average prices for all wines in the United States and does not give any information on different wine varieties. Nevertheless, these data allow for comparison with Virginia wines prices and serve as benchmarks.

Table 2. Different Wine Market Segments by Price (United States)

Segment	Average bottle price (750ml)	Market share of table wines (2009)
Value (<\$3)	\$2.26	7.30%
Domestic	\$2.26	7.30%
Imported	\$2.95	0.00%
Sub-premium (\$3-\$6.99)	\$5.55	31.90%
Domestic	\$5.29	19.30%
Imported	\$6.01	12.60%
Premium (\$7-\$9.99)	\$8.79	24.50%
Domestic	\$8.79	15.00%
Imported	\$8.80	9.50%
Super-premium (\$10-\$13.99)	\$13.21	24.90%
Domestic	\$13.30	18.80%
Imported	\$12.93	6.10%
Ultra premium (>\$14)	\$21.18	11.40%
Domestic	\$20.39	8.90%
Imported	\$24.52	2.50%
Total Table Wines	\$7.05	100.00%
Domestic	\$6.64	69.30%
Imported	\$8.19	30.70%

2.1 Virginia White Wines

Table 3 shows the average prices of four different Virginia white wines produced in the nine wines producing regions. The cells that are not populated signify that the region in question has no significant production of the particular grape.

Table 3. Average Prices White Wines Produced in Virginia

Region	Chardonnay	Riesling	Vidal Blanc	Viognier
Blue Ridge	\$12.00	\$9.00	\$10.50	\$13.25
Central Virginia	\$15.10	\$12.95	\$13.49	\$18.23
Chesapeake Bay	\$17.00	\$0.00	\$15.00	\$20.00
Eastern Virginia	\$17.99	\$0.00	\$0.00	\$0.00
Hampton Roads	\$18.00	\$14.95	\$0.00	\$20.00
Heart of Appalachia	\$0.00	\$15.00	\$0.00	\$0.00
Northern Virginia	\$19.05	\$16.96	\$16.50	\$22.27
Shenandoah Valley	\$22.10	\$18.99	\$19.75	\$25.16
Southern Virginia	\$29.24	\$21.00	\$25.00	\$29.50
State Average Price	\$17.96	\$16.27	\$16.63	\$21.04

Source: Authors' own calculations

Chardonnay

A total of 79 wineries were identified as producers of this variety and posted the prices on their websites. The computed average price for the Virginia Chardonnays is \$17.96, and the regional analysis shows that only the Northern Virginia region sells their Chardonnays for prices above the Virginia's average. In summary, all producing regions with the exception of Hampton Roads region sell their Chardonnay at the ultra premium segment, and of the 79 brands analyzed, seven sell their Chardonnay in the super premium price segment while the remaining and 72 sell in the ultra premium segment.

Riesling

After analyzing 20 wineries that posted their Riesling prices online, the average price of \$16.27 was computed. The regional analysis shows that there are 3 regions that sell their Riesling for prices above the state average (Northern Virginia, Shenandoah Valley and Southern Virginia). Finally, of the 20 brands analyzed, one sells their Riesling in the premium segment, four in the super premium segment and 15 in the ultra premium segment.

Vidal Blanc

The average price for the Vidal Blanc variety, after surveying 23 Virginia wineries is \$16.63. For this variety, the regional analysis shows that there are two regions that sell, in average, above the state average, Shenandoah Valley and Southern Virginia. Of the 23 brands analyzed, 4 sell their Vidal Blanc in the Super Premium segment and 19 in the Ultra Premium Segment.

Viognier

The average price charged by the 42 wineries producing Viognier is \$21.04. In this case the regional analysis shows that there are three regions (Northern Virginia, Shenandoah Valley and Southern Virginia) that on average sell this variety above the Virginia's average. Moreover, 41 wineries sell their Viognier in the ultra premium segment and only one sells this variety in the super premium segment.

1.2 Virginia Red Wines

Following the same approach, Table 4 shows the average prices of four categories of red wines produced in Virginia.

Table 4. Average Prices of Red Wines Produced in Virginia

Region	Cabernet Franc	Cabernet Sauvignon	Merlot	Petit Verdot	Norton
Blue Ridge	\$14.10	\$12.99	\$14.99	\$17.00	\$12.00
Central Virginia	\$17.25	\$18.10	\$16.75	\$20.83	\$16.43
Chesapeake Bay	\$19.00	\$20.66	\$18.33	\$24.00	\$18.00
Eastern Virginia	\$19.87	\$0.00	\$19.00	\$24.00	\$20.50
Hampton Roads	\$20.00	\$21.00	\$19.00	\$0.00	\$0.00
Heart of Appalachia	\$20.50	\$0.00	\$19.99	\$0.00	\$0.00
Northern Virginia	\$22.94	\$25.41	\$20.84	\$27.24	\$0.00
Shenandoah Valley	\$27.62	\$42.49	\$25.57	\$42.00	\$27.32
Southern Virginia	\$39.00	\$0.00	\$29.00	\$0.00	\$30.00
State Average Price	\$21.69	\$24.25	\$19.55	\$25.74	\$19.74

Source: Authors' own calculations.

Cabernet Franc

The State average price for the Cabernet Franc variety, after the analysis of 78 brands, is \$21.69. For this variety three regions (Northern Virginia, Shenandoah Valley and Southern Virginia) sell their wines for prices above Virginia's average. In addition, with the exception of one winery, all wineries position their Cabernet Francs in the ultra premium segment.

Cabernet Sauvignon

A total of 46 wineries include the prices of their Cabernet Sauvignon, and the overall average price is \$24.25. Again Northern Virginia and Shenandoah Valley are the regions selling this variety for prices above the state average. Lastly, two brands are sold in the super premium segment and 44 in the ultra premium.

Merlot

The State average price for the Merlot variety, after analyzing of 51 wineries, is \$19.55. For Virginia Merlots, the regional analysis shows that there are four regions that on average sell this variety above the state average (Heart of Appalachia, Northern Virginia, Shenandoah Valley and Southern Virginia). Finally, all 51 brands analyzed are sold in the ultra premium segment.

Petit Verdot

On average, the 33 analyzed wineries sell their Petit Verdot for \$25.74 and they fall into the ultra premium segment. The regional analysis shows that the Northern Virginia and Shenandoah Valley sell this variety for prices above the average,

Norton

Lastly, the 18 brands disclosing price information on their Norton wines are selling it for an average price of \$19.74. A total of 17 wineries are selling this wine in the ultra premium segment and one in the super premium. The regional analysis shows that there are three regions that in average sell this variety above the state average (Eastern Virginia, Northern Virginia and Shenandoah Valley).

2. Conclusions

The production of fine wine is an expensive, lot-by-lot and barrel-by-barrel undertaking, and findings of this study show that all selected red and white Virginia wines are sold either on the ultra premium (>\$14) or the super premium (\$10-\$13.99) market segments. Based on market data, in 2009 these two segments accounted for a little over 36 percent of the nation's market share. To a great extent, the high prices of Virginia wines are due to the fact that most wineries in the state lack the economies of scale, and to the high labor and materials costs for vineyard spraying (Leahy, 2012). Nevertheless, Virginia wineries face intense price competition, especially those producing wines made from the most common grapes such as

Cabernet Sauvignon and Chardonnay. Thus, these wineries must build a marketing strategy that matches these higher price expectations of targeted consumers who are looking for fine locally produced wines. Consumers of fine wine in this information age are far more aware of what they like and don't like. While there are substitutions available for lower-priced wine, high-priced wines have fewer pure substitutes and they are more sensitive to changes in production. Another important conclusion is that winery location has an impact on the prices charged. The regional analysis reveals that the wineries located in the Shenandoah Valley and Northern Virginia producing regions produce and sell the most expensive wines. This holds for most of the varieties analyzed in this study. These higher prices may be the result of proximity to large population centers with higher household incomes (Northern Virginia) or in regions that receive a very large number of tourists every year (The Shenandoah Valley). Finally, Virginia wineries must assure that the prices for their wine are not only a result of higher production costs, but also a reflection of high quality.

References

ICEX (2012). "The U.S wine market report," prepared by Spanish Institute of International Commerce.

MFK Research (2007). "Assessment of the profitability and viability of Virginia wineries," presented to the Secretary of Agriculture and Forestry of Virginia.

Leahy, R. C. (2012). "Beyond Jefferson's vines: The evolution of quality wine in Virginia." Sterling Epicure, New York.



Did you know?

The Alberta Department of Agriculture and Rural Development has the most comprehensive listing of computer software designed for farm and agribusiness on the web

<http://www.agric.gov.ab.ca/app68/agsoft>.

Commercial Storage in the South Atlantic: A Summary of Four States

By Peter Caffarelli,² Gustavo Ferreira,³ Gordon Groover,⁴ and Kathryn Boys⁵

Whether in the form of off-farm or on-farm, storage is a critical component of the marketing channels for producers and buyers of grain. Specifically, off-farm or commercial facilitiesⁱ provide value through their merchandising functions of marketing, storing, and transporting grain.ⁱⁱ For instance, they link local farmers to wider markets and help producers manage risk by offering various options.

One of the primary collectors and distributors of commercial storage information is the United States Department of Agriculture's National Agricultural Statistics Service (USDA/NASS).ⁱⁱⁱ Every year they survey and compile data at the state level for off-farm storage capacity and the number of off-farm facilities. According to NASS, "off-farm grain storage capacity includes all elevators, warehouses, terminals, merchant mills, other storage, and oilseed crushers which store whole grains, soybeans, canola, flaxseed" and many other crops.^{iv}

In the previous December/January issue of *Farm Business Management Update*,^v movements in Virginia production and storage were examined. The purpose of this article is to expand the region of interest and highlight the commercial storage trends of Virginia and other nearby states of the South Atlantic^{vi} including North Carolina, South Carolina, and Maryland.^{vii} Across the board, the states show decreasing facility numbers over time. With respect to total capacity, the picture is less

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clear. For instance, over the past five years, off-farm storage levels have generally increased in Virginia and North Carolina, but remained the same in Maryland and decreased in South Carolina. Useful to industry stakeholders, highlighting such trends begins a broader assessment of an important facet to the South Atlantic grain sector.

Part 1: Off-Farm Storage in Virginia

According to USDA/NASS data, Virginia's off-farm capacity was 33.2 million bushels in 2011. This increased by 5.4 percent in 2012 to 35.0 million bushels. Out of forty states with reported data in 2012, Virginia's commercial capacity was tied for 31st with Alabama. Although commercial storage increased, the number of off-farm facilities held at 78 from 2011 to 2012. Table 1 contains Virginia's off-farm storage capacity and facility numbers for the last five years.

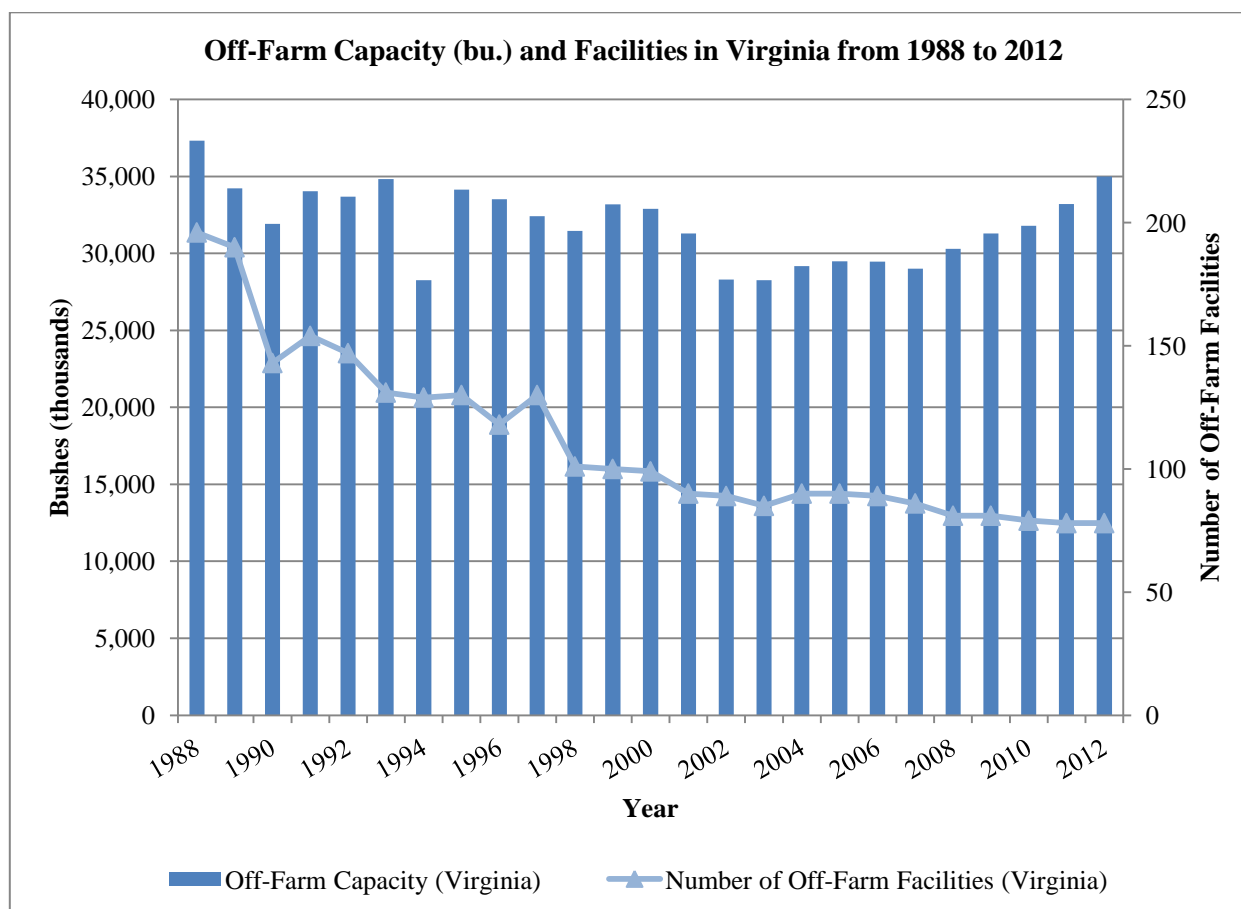
Table 1: Off-farm capacity and facilities for Virginia from 2008 to 2012.

Year	Off-Farm Storage Capacity (bushels)	Number of Off-Farm Facilities
2012	35,000,000	78
2011	33,200,000	78
2010	31,800,000	79
2009	31,300,000	81
2008	30,300,000	81

Source: USDA/NASS.

Two observations from Table 1 are apparent in Virginia: 1) off-farm storage capacity has steadily climbed and 2) the number of commercial facilities has typically decreased. Figure 1 expands the period of interest back to 1988 for these two parameters to visually show the trends in Virginia over time.

Figure 1: Off-farm capacity (in bushels) and facilities in Virginia from 1988 to 2012.



Source: USDA/NASS.

As Figure 1 shows, the drop in commercial facilities is, in fact, much more substantial when considering a broader period. For instance, in 1988, off-farm facilities were at a record high of 196, which fell by 60.2 percent to 78 seen in 2011 and 2012. Moreover, Virginia saw relatively large amounts of off-farm storage from 1995 to 2001 and lower levels from 2002 to 2007. The periods averaged 32.7 million bushels and 28.9 million bushels, respectively. As noted before, since about 2007, off-farm storage capacity has increased. Though high at 35.0 million bushels in 2012, the 1988 capacity of 37.3 million bushels has yet to be topped.

Part 2: Off-Farm Storage in North Carolina

North Carolina seems to parallel Virginia in off-farm storage trends, but differs significantly in amount. For example, according to USDA/NASS data, in 2011 and 2012, off-farm capacity in North Carolina was 85.0 million bushels. Compared to Virginia's 35.0 million bushels, North Carolina had 142.9 percent more commercial storage in 2012. This placed North Carolina 21st out of forty states with reported data for commercial capacity. Furthermore, North Carolina also has more off-farm facilities than Virginia. In 2011, North Carolina had 174 commercial facilities, which fell by 2.3 percent to 170 facilities in 2012. Table 2 contains North Carolina's off-farm storage capacity and facility numbers for the last five years.

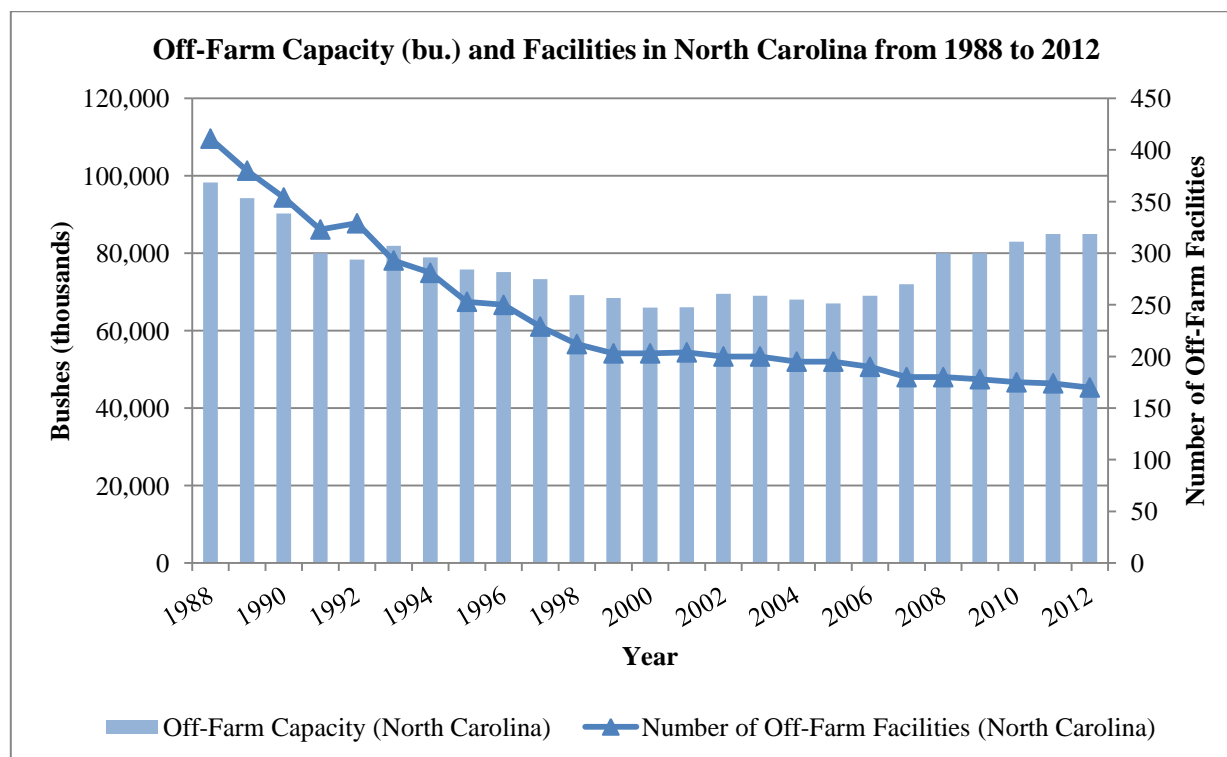
Table 2: Off-farm capacity and facilities for North Carolina from 2008 to 2012.

Year	Off-Farm Storage Capacity (bushels)	Number of Off-Farm Facilities
2012	85,000,000	170
2011	85,000,000	174
2010	83,000,000	175
2009	80,000,000	178
2008	80,000,000	180

Source: USDA/NASS.

Just like with Virginia, recent trends for North Carolina include deepening levels of off-farm storage juxtaposed with decreasing quantities of facilities. Figure 2 shows North Carolina's off-farm storage levels and the number of commercial facilities from 1988 to 2012.

Figure 2: Off-farm capacity (in bushels) and facilities in North Carolina from 1988 to 2012.



Source: USDA/NASS.

As depicted in Figure 2, the number of commercial facilities has consistently decreased over the last twenty-five years. Other than a small spike in 1992, the quantity of commercial facilities has either remained the same or decreased in every subsequent year. In addition, North Carolina had 411 off-farm facilities in 1988 compared to 170 in 2012—a 58.6 percent decrease. Next, in terms of capacity, levels seem to have fallen from 1988 to 2000; leveled through 2004; and increased from 2005 to 2012. The increase in off-farm storage seems to have occurred a couple years earlier than Virginia, which began its trek upward in 2007.

Part 3: Off-Farm Storage in South Carolina

Compared to Virginia and North Carolina, South Carolina has considerably less off-farm storage capacity. For instance, South Carolina had a capacity of 18.5 million bushels and 18.7 million bushels in 2011 and 2012, respectively. This represents 46.6 percent less off-farm storage than Virginia and 78.0 percent less than North Carolina in 2012. In 2012, South Carolina's commercial capacity ranked 35th out of forty states. Akin to smaller capacity levels, South Carolina also has fewer facilities than Virginia and North Carolina. Commercial facilities dropped 3.8 percent from 53 in 2011 to 51 in 2012. Table 3 contains South Carolina's off-farm storage capacity and facility numbers for the last five years.

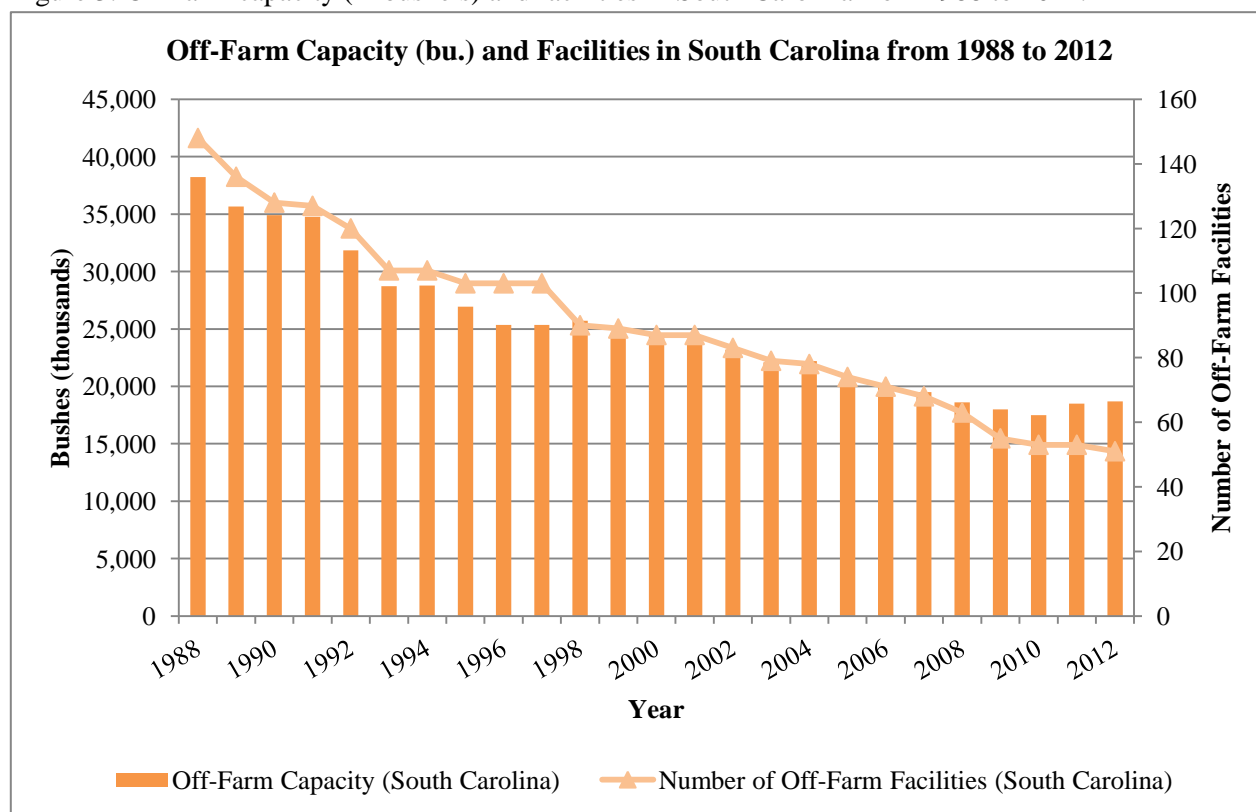
From Table 3, like Virginia and North Carolina, off-farm facilities in South Carolina moved in a downward direction. In addition, at least recently, off-farm storage capacity has remained relatively constant. To better visualize these trends, Figure 3 shows South Carolina's off-farm storage levels and the number of commercial facilities from 1988 to 2012.

Table 3: Off-farm capacity and facilities for South Carolina from 2008 to 2012.

Year	Off-Farm Storage Capacity (bushels)	Number of Off-Farm Facilities
2012	18,700,000	51
2011	18,500,000	53
2010	17,500,000	53
2009	18,000,000	55
2008	18,600,000	63

Source: USDA/NASS.

Figure 3: Off-farm capacity (in bushels) and facilities in South Carolina from 1988 to 2012.



Source: USDA/NASS.

Clearly shown by a downward slope in Figure 3, the number of commercial facilities decreased over the years in South Carolina. This result parallels previous findings in Virginia and North Carolina. On the other hand, unlike its northern two states, South Carolina's off-farm storage capacity has only gone down. Interestingly, from 1988 to 1991, commercial storage levels in South Carolina actually exceeded that of Virginia. Since 1992, however, amounts have been lower and continued to drop in successive years.

Part 4: Off-Farm Storage in Maryland

According to USDA/NASS survey data, in 2011 and 2012, Maryland's off-farm storage capacity was 47.0 million bushels. Out of forty states with reported data, Maryland's amount of commercial storage was ranked 28th in 2012. Next, also without change, the quantity of off-farm facilities held at 48 in 2011 and 2012. At a glance, these numbers reveal that, on average, Maryland's commercial facilities are larger than in Virginia; the total capacity in the state is greater and there are fewer facilities. In 2012, Maryland had 34.3 percent more off-farm storage than Virginia and 151.3 percent more than South Carolina. Table 4 contains Maryland's off-farm storage capacity and facility numbers for the last five years.

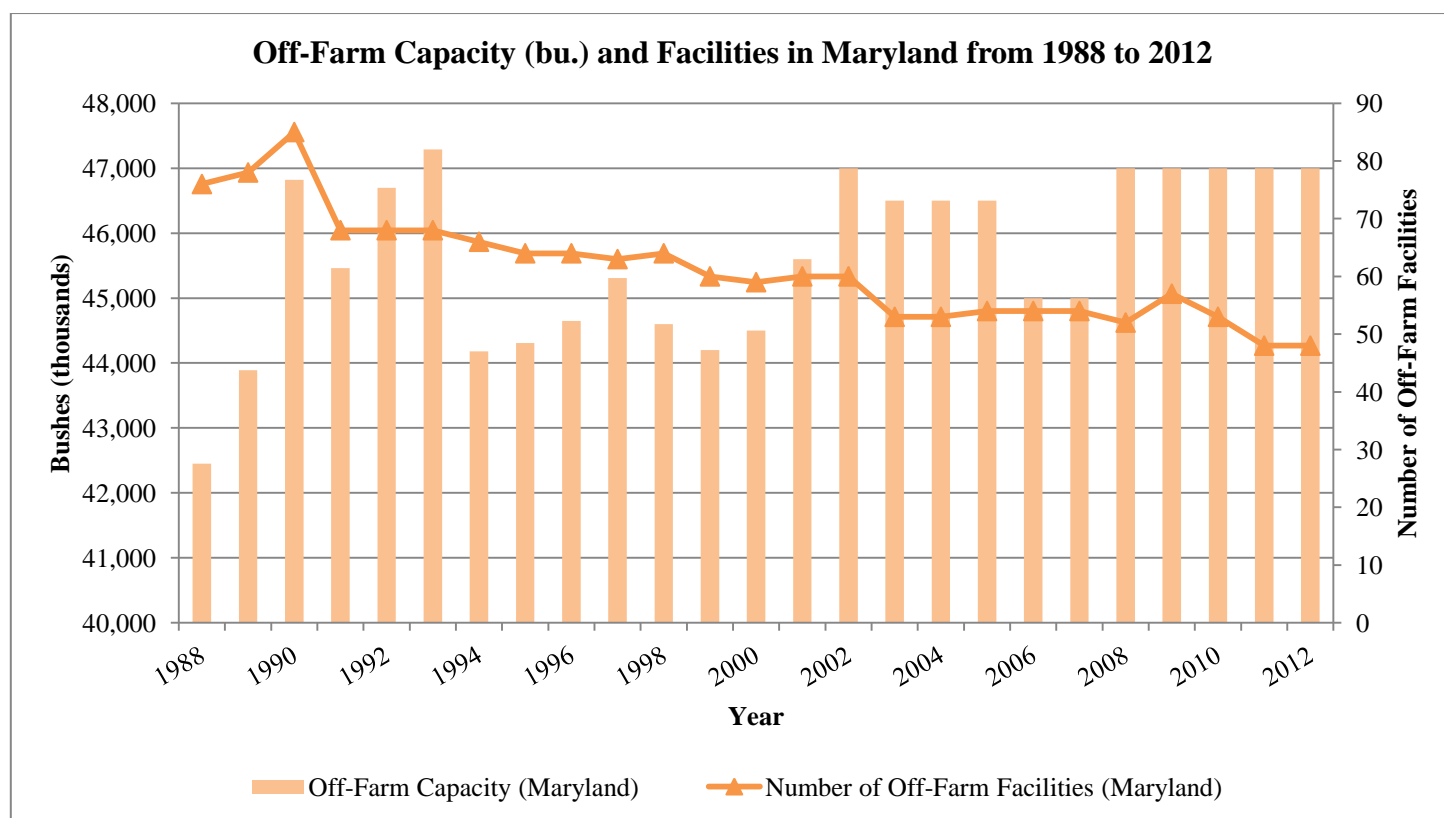
From Table 4, at least one trend is readily obvious: off-farm storage capacity in Maryland has remained quite stable. Unlike capacity, the picture is less clear for the number of commercial facilities from 2008 to 2012; the number of facilities goes up and down. Figure 4 illustrates Maryland's commercial storage levels and the number of off-farm facilities from 1988 to 2012.

Figure 4: Off-farm capacity (in bushels) and facilities in Maryland from 1988 to 2012.

Table 4: Off-farm capacity and facilities for Maryland from 2008 to 2012.

Year	Off-Farm Storage Capacity (bushels)	Number of Off-Farm Facilities
2012	47,000,000	48
2011	47,000,000	48
2010	47,000,000	53
2009	47,000,000	57
2008	47,000,000	52

Source: USDA/NASS.



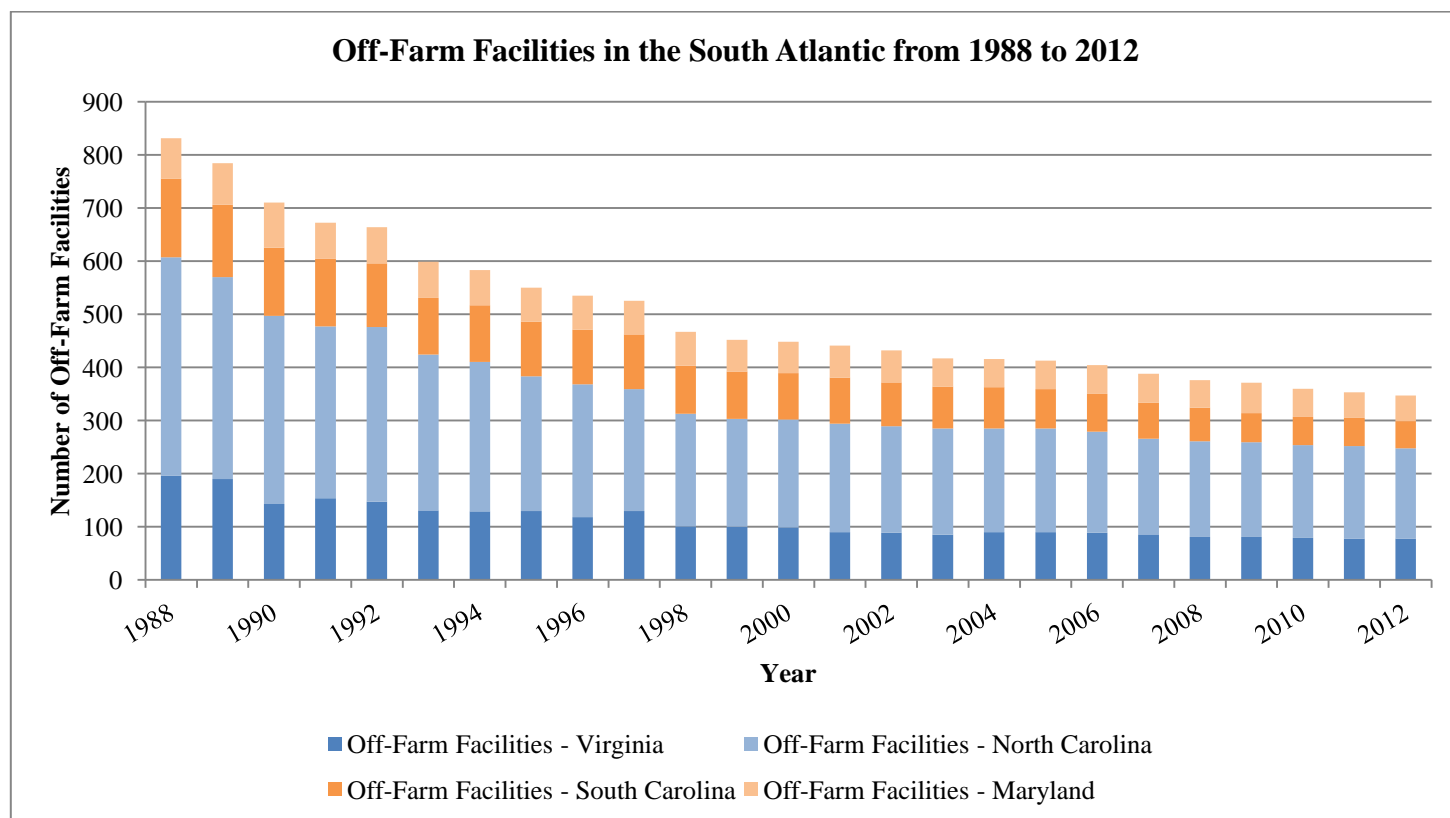
Source: USDA/NASS.

According to Figure 4, the number of commercial facilities in Maryland has typically decreased over the last twenty-five years. This result is similar to Virginia, North Carolina, and South Carolina. However, unlike South Carolina's falling off-farm storage levels from 1988 to 2012, Maryland seems to have generally increased capacity over time; there is an upward trend. Finally, though Virginia and North Carolina have exhibited increasing commercial storage levels over the last five years, Maryland's capacity has remained the same during the same span.

Part 5: Off-Farm Storage in the South Atlantic

Across the four states of interest, one movement is readily apparent: the number of commercial facilities has decreased over time. Figure 5 shows the share of each state to the total number of off-farm facilities from 1988 to 2012.

Figure 5: Number of off-farm facilities in the South Atlantic from 1988 to 2012.

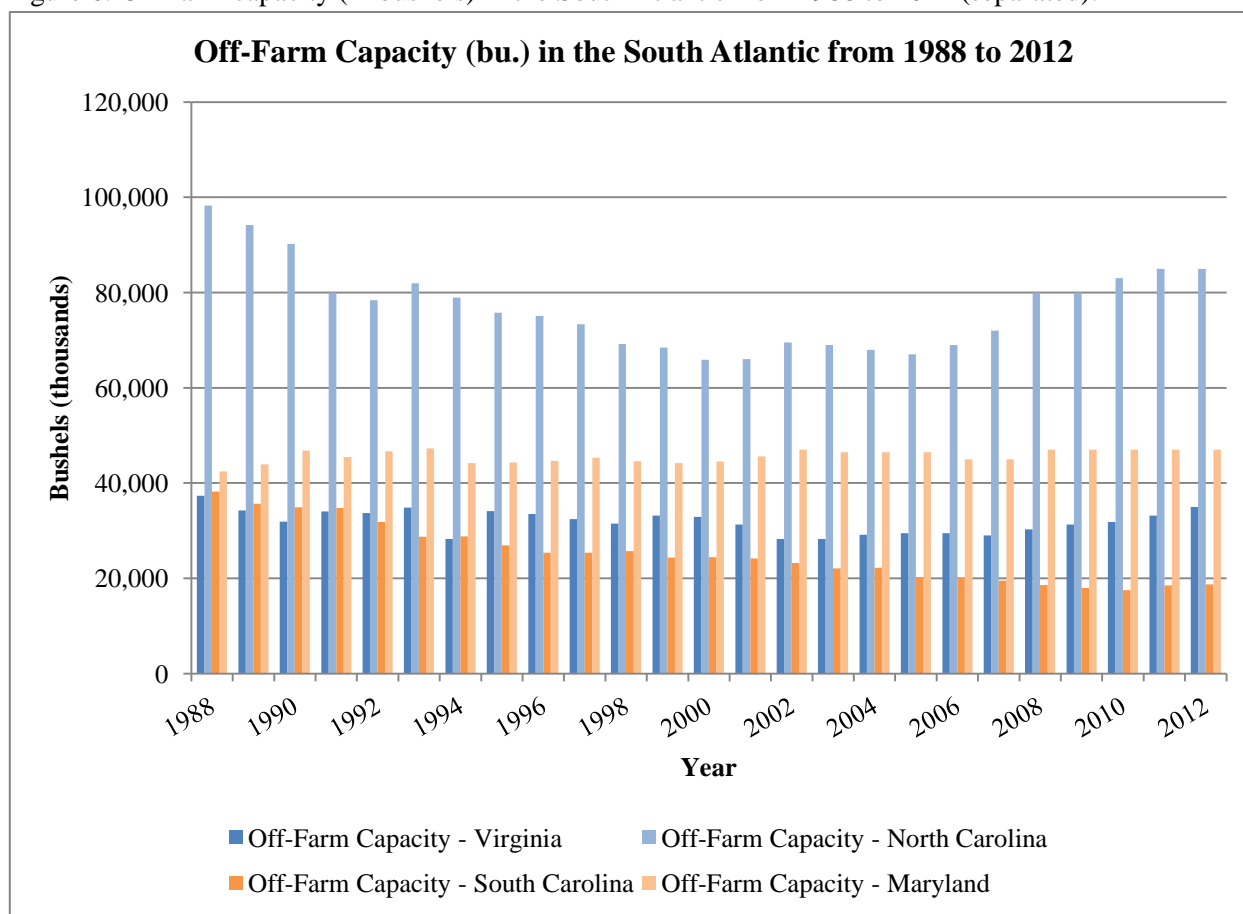


Source: USDA/NASS.

Importantly, the quantity of commercial facilities decreased in every passing year. In terms of percentages, from a combined high of 831 facilities in 1988 to 347 in 2012, the number of off-farm facilities fell by over half at 58.2%.

Concerning overall commercial storage in the state, North Carolina occupies the largest share. In 2012, North Carolina possessed 45.8 percent of the total while Virginia, South Carolina, and Maryland had 18.8 percent, 10.1 percent, and 25.3 percent, respectively. Figure 6 shows the off-farm storage levels for the four states side-by-side from 1988 to 2012.

Figure 6: Off-farm capacity (in bushels) in the South Atlantic from 1988 to 2012 (separated).

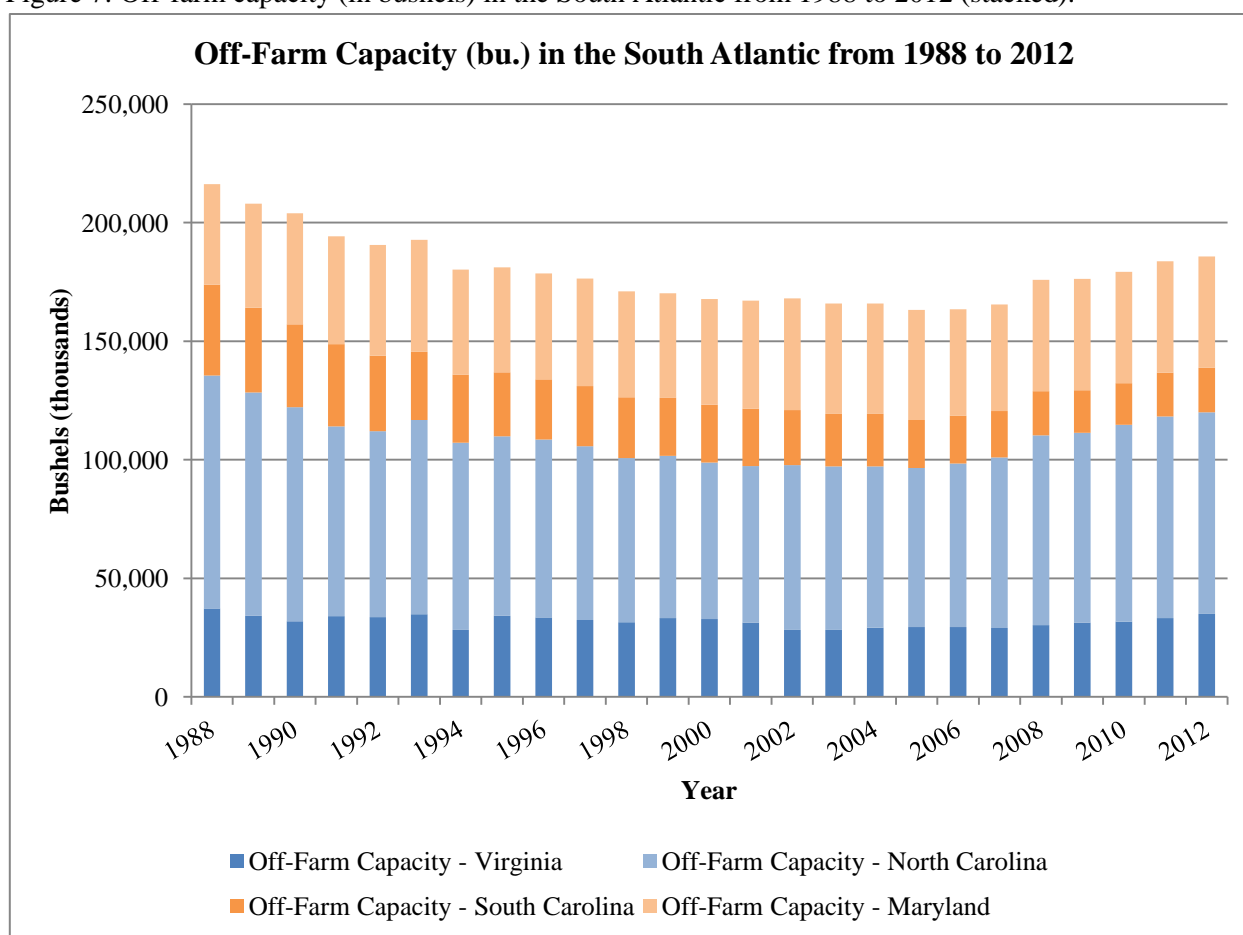


Source: USDA/NASS.

As shown in Figure 6, North Carolina clearly has the greatest portion of off-farm storage in the South Atlantic, followed by Maryland, Virginia, and South Carolina. Graphically, storage levels seem to remain stable for the most part in Virginia and Maryland. However, South Carolina shows evidence of decreasing commercial capacity. Though falling from 1988 to about 2000, off-farm storage in North Carolina has increased for the most part until 2012.

To better observe aggregate trends, Figure 7 stacks the commercial storage data for Virginia, North Carolina, South Carolina, and Maryland.

Figure 7: Off-farm capacity (in bushels) in the South Atlantic from 1988 to 2012 (stacked).



Source: USDA/NASS.

Taking the four states together, off-farm capacity decreased from 1988 to about 2000; stayed constant from 2001 to 2006; and increased from 2007 on. The recent increases suggest that commercial storage expansion in Virginia and North Carolina has exceeded the reductions in South Carolina (Maryland stayed the same).

Part 6: Conclusions and Implications

To summarize, at least regionally, some themes emerge: 1) the number of commercial facilities in the South Atlantic has decreased considerably over the last twenty-five years and 2) as a whole, off-farm storage capacity has been increasing since 2007. Further, experiencing relatively little change over the last five years, data for Virginia, South Carolina, and Maryland suggest that the number of commercial facilities may be leveling off. Consequently, instead of further consolidation, we may expect the number of off-farm facilities to stay the same in the near future. Notably, some limitations to the study and areas for future research remain. First, comments may be made on the general trends of the United States to see if the commercial storage experience in the South Atlantic is similar or different to the nation. Also, though data are less available, incorporating on-farm storage presents a fuller story of total storage. Moreover, in this vein, an analysis of production would reveal where constraints and areas of opportunity are in the system.

Notes and Sources:

¹The National Agricultural Statistics Service (NASS) uses “off-farm” and “commercial” interchangeably. See page 31 of their January 2012 Grain Stocks publication available at: <http://usda01.library.cornell.edu/usda/nass/GraiStoc//2010s/2012/GraiStoc-01-12-2012.pdf>.

²Source: http://www.kansascityfed.org/publicat/mse/MSE_0308.pdf.

³ For the USDA/NASS homepage, visit: <http://www.nass.usda.gov/> and to obtain NASS data, visit: <http://quickstats.nass.usda.gov/>.

⁴ Here is NASS' full definition for off-farm storage: "Off-farm grain storage capacity includes all elevators, warehouses, terminals, merchant mills, other storage, and oilseed crushers which store whole grains, soybeans, canola, flaxseed, mustard seed, safflower, sunflower, rapeseed, Austrian winter peas, dry edible peas, lentils, and chickpeas/garbanzo beans. Capacity data exclude facilities used to store only rice or peanuts, oilseed crushers processing only cottonseed or peanuts, tobacco warehouses, seed warehouses, and storage facilities that handle only dry edible beans, other than chickpeas/garbanzo beans" (<http://usda01.library.cornell.edu/usda/nass/GraiStoc//2010s/2010/GraiStoc-01-12-2010.pdf>).

⁵ For a link to the December/January issue of *Farm Business Management Update*, visit: <http://pubs.ext.vt.edu/AAEC/AAEC-42/AAEC-42.html>.

⁶ The United States Census Bureau (<http://www.census.gov/>) divides the nation into four regions: the "Northeast," "Midwest," "South," and "West." Segmenting it further, these four regions consist of nine divisions: "New England," "Middle Atlantic," "East North Central," among others. Specifically, Virginia sits in a subset of the South region called the "South Atlantic Division," which also includes Delaware, the District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, and West Virginia. Source: http://www.census.gov/econ/census07/www/geography/regions_and_divisions.html.

⁷ Though close in proximity, West Virginia was not included in the analysis due to its limited storage capacity. For example, according to the 2007 Census of Agriculture, on-farm capacity in West Virginia was 4.3 million bushels. In the same year, Virginia had 41.0 million bushels according to the Census. Sources: http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1_Chapter_1_State_Level/West_Virginia/st54_1_03_8_039.pdf and http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1_Chapter_1_State_Level/Virginia/st51_1_039_039.pdf.

The Management Calendar

By **Gordon Groover** Extension Economist, Department of Agricultural & Applied Economics, Virginia Tech

Listed below are the items that managers should be aware of or need to be included on the farm business manager's calendar for the next two months.

- **Income taxes and related items:**

1. The "Fiscal Cliff" set back the IRS in finalizing the rules and regulations for the 2012 tax filings. The federal filing deadline for **all** farmers has been moved to April 15, 2013.
2. Virginia Income Taxes: In response to recent action by the IRS, the Virginia Department of Taxation is providing relief from the estimated tax underpayment penalty for farmers, fishermen, and merchant seamen who are unable to file and pay their 2012 individual income taxes by the March 1 deadline. In order to receive an automatic waiver of the estimated tax underpayment penalty, farmers, fishermen and merchant seamen must file their returns and pay the entire tax due by April 15, 2013. For more information, see [Tax Bulletin 13-2](#) (P.D. 13-12).
3. Need to find out more information about federal taxes? The Farmers Tax Guide IRS Publication 225 is online and can be found at: <http://www.irs.gov/pub/irs-pdf/p225.pdf>.
4. Decide how much you'll contribute to an IRA for the 2012 tax year and set goals for 2013. If you use a certified financial planner (CFP), consider his/her usefulness in helping plan for retirement, college, insurance coverage, and other items. Visit the web site for the CFP organization to get information on services and standards required for planners. You can search for a CFP in your area at <http://www.cfp.net/>.
5. Beginning on Jan. 1, 2013, the standard mileage rates for the use of a car (also vans, pickups or panel trucks) will be:
 - 56.5 cents per mile for business miles driven.

- 24 cents per mile driven for medical or moving purposes.
 - 14 cents per mile driven in service of charitable organizations.
 - For details see: <http://www.irs.gov/pub/irs-drop/n-12-72.pdf>
- **Virginia's Sales Tax:** How you file is changing. Quarterly filers will be required to file and pay Sales and Use Tax ([ST-9](#) and [ST-9CO](#)) electronically beginning with the July - September 2013 return, due October 20, 2013. Returns and payments can be filed electronically using [eForms](#), [Business iFile](#) or [Web Upload](#).

Farm business managers should consider putting the following activities on their management calendar this winter.

- Get your farm's 2012 financial records closed out: Post all income and expenses paid during 2012 in your record book or accounting software. You still have time to conduct an end-of-the-year inventory of all the farm assets and liabilities to provide data for the farm's net worth statement.
- Need another copy of the Farm Record Book: Annual Expenses and Receipts, Virginia Cooperative Extension publication 446-017? Then print the order form at www.ext.vt.edu/pubs/agecon/446-016/446-016.pdf. The price is \$12.00.
- Use your 2012 records to develop an itemized list of income and expenses. The categories found on the IRS Schedule F can serve as a starting point for estimating net income for the farm business. Compare your results to previous years, looking for both weaknesses and strengths.
- Seek assistance from Virginia Cooperative Extension's farm business management agents, lenders, or your accountant to develop a detailed financial analysis of your farm business, including the major 21 financial ratios. These ratios and a detailed financial analysis can be generated by using the Center for Farm Financial Management (www.cffm.umn.edu/) program FINAN (www.cffm.umn.edu/FINPACK/default.aspx). FINAN and other computer programs can be purchased annually for approximately \$100 or the whole analysis and planning package of three computer programs for \$395. Details are at www.cffm.umn.edu/FINPACK/default.aspx.
- Using last year's financial and production records, finalize your balance sheet, cash flow and income statements for 2012 and your projected budget for 2013. If you use Quicken® or QuickBooks® make use of the budget section to create a 2013 budget based on 2012 records. All 2012 budget entries can be modified to reflect anticipated changes in 2013.
- Take your 2012 financial records and 2013 projected whole-farm budgets and cash flow statements to your lender to discuss line-of-credit needs and plans for 2013. Using the FINPACK (www.cffm.umn.edu/FINPACK/default.aspx) programs or your Quicken® or QuickBooks® can help with this process.
- Grain and livestock producers should have their marketing strategies/plans in place for 2013 marketing year. Be sure to check with your local Farm Service Agency for changes in government programs and signup deadlines.
- The end of February and March 15 are the cutoff dates for signing up for most crop insurance policies in Virginia and dates depend on insurance product and where you live. Details on crop insurance and closing dates are best discussed with a local crop insurance agent. You can locate a local agent by visiting the following web site <http://www3.rma.usda.gov/apps/agents/>.
- Interested in finding a listing of all types of agricultural software? The Alberta Department of Agriculture and Rural Development has the most comprehensive listing of computer software designed for farm and agribusiness on the web <http://www.agric.gov.ab.ca/app68/agsoft>.

ⁱ The National Agricultural Statistics Service (NASS) uses “off-farm” and “commercial” interchangeably. See page 31 of their January 2012 Grain Stocks publication available at:
<http://usda01.library.cornell.edu/usda/nass/GraiStoc//2010s/2012/GraiStoc-01-12-2012.pdf>.

ⁱⁱ Source: http://www.kansascityfed.org/publicat/mse/MSE_0308.pdf.

ⁱⁱⁱ For the USDA/NASS homepage, visit: <http://www.nass.usda.gov/> and to obtain NASS data, visit:
<http://quickstats.nass.usda.gov/>.

^{iv} Here is NASS’ full definition for off-farm storage: “Off-farm grain storage capacity includes all elevators, warehouses, terminals, merchant mills, other storage, and oilseed crushers which store whole grains, soybeans, canola, flaxseed, mustard seed, safflower, sunflower, rapeseed, Austrian winter peas, dry edible peas, lentils, and chickpeas/garbanzo beans. Capacity data exclude facilities used to store only rice or peanuts, oilseed crushers processing only cottonseed or peanuts, tobacco warehouses, seed warehouses, and storage facilities that handle only dry edible beans, other than chickpeas/garbanzo beans”
(<http://usda01.library.cornell.edu/usda/nass/GraiStoc//2010s/2010/GraiStoc-01-12-2010.pdf>).

^v For a link to the December/January issue of *Farm Business Management Update*, visit:
<http://pubs.ext.vt.edu/AAEC/AAEC-42/AAEC-42.html>.

^{vi} The United States Census Bureau (<http://www.census.gov/>) divides the nation into four regions: the “Northeast,” “Midwest,” “South,” and “West.” Segmenting it further, these four regions consist of nine divisions: “New England,” “Middle Atlantic,” “East North Central,” among others. Specifically, Virginia sits in a subset of the South region called the “South Atlantic Division,” which also includes Delaware, the District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, and West Virginia. Source:
http://www.census.gov/econ/census07/www/geography/regions_and_divisions.html.

^{vii} Though close in proximity, West Virginia was not included in the analysis due to its limited storage capacity. For example, according to the 2007 Census of Agriculture, on-farm capacity in West Virginia was 4.3 million bushels. In the same year, Virginia had 41.0 million bushels according to the Census. Sources:
http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_1_State_Level/West_Virginia/st54_1_038_039.pdf and
http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_1_State_Level/Virginia/st51_1_039_039.pdf.

SAVE THE DATE – March 7 & 8, 2013
The Governor's Conference on Agricultural Trade
Omni Hotel, Richmond, Va.



***Organized by the Virginia Department of Agriculture & Consumer Services,
the Virginia Farm Bureau Federation, the Virginia Port Authority and
the Virginia Tech Department of Agricultural and Applied Economics
An outstanding and distinguished lineup of speakers has been invited.***

Past presenters have included:

Robert McDonnell, Governor of VA

Todd Haymore, Virginia Secretary of Agriculture & Forestry

Gabriel Silva Luján, Colombian Ambassador to the United States

Ambassador Islam Siddiqui, USTR Chief Agriculture Negotiator

Bob Stallman, President, American Farm Bureau Federation

Jerry Bridges, Executive Director, Virginia Port Authority

Registration opens in December at
www.vafarmbureau.org/Agriculture/AgTradeConference.aspx
Website will include program updates, agenda & registration information.

**In the meantime, for sponsorship opportunities, questions, information, assistance,
or to be added to mailing list,**

**Contact Brenda at 804.290.1155 or brenda.fleming@vafb.com
or Spencer at 804.290.1153 or spencer.neale@vafb.com**