

# Virginia Cooperative Extension



## Farm Business Management Update August-September 2011

**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 and economic education, natural resources, and CRD. Please feel free to reproduce any article. However, please cite the title, author(s), date, and this newsletter.

**Farm Business Management Update** is electronically accessible via the Virginia Cooperative Extension World Wide Web site ([www.ext.vt.edu/news/index.html](http://www.ext.vt.edu/news/index.html)). To see the articles listed in the reverse chronological order, look under the listing of “Newsletters,” then select “Farm Business Management Update.”

Gordon E. Groover  
[groover@vt.edu](mailto:groover@vt.edu)  
Extension Economist  
Farm Management and Farm Management Coordinator

<u>Item</u>	<u>Page</u>
High Profit Beef Producers .....	1
A Mid-Year Financial Check-up.....	2
The Management Calendar .....	4
A Comparative Analysis Between Virginia and North Carolina’s Wine Industries .....	5
Insurance for the Potential Drought for 2012.....	12
Virginia Tech Income Tax School .....	16
Kathy Voth of Livestock for Landscapes to Speak at the 2012 Winter Forage Conferences .....	18
Calendar of Events .....	19



## **High Profit Beef Producers**

**By Carl C. Stafford ([ccstaffo@vt.edu](mailto:ccstaffo@vt.edu)), Extension Agent, Agriculture and Natural Resources, Animal Science, Northern District**

The cost of production has far more to do with farm profitability than does the value or volume of your production. This statement is proven by Kansas State University in a study at [www.agmanager.info](http://www.agmanager.info) (Dhuyvetter, K. 2011) comparing characteristics of high, medium, and low profit beef producers.

Here in Virginia, we know there are premiums to be had in the feeder cattle market place, discovered through the added value of health, sire, source, and age verified marketing programs. Buyers show they are willing to offer premiums for these features and for the additional value they see in feeder cattle prepared for the feedlot through a short co-mingled feeding period prior to sale. However, the Kansas study suggests we can make nearly three times as much difference in our bottom line through cost savings.

Kansas State University, Department of Agricultural Economics offers its beef producers the opportunity to enroll their herds in their Farm Management Association. A program with cow-calf enterprise records accumulated over 32 years, used to evaluate and compare member's profitability. Here in Northern Virginia, we offer similar management services under the Beef Management Institute records program. The intent is similar - keep records, use records, and compare records from multiple producers to evaluate differences and identify reasons for profitability.

From the Kansas study, it is "important to recognize which characteristics determine relative farm profitability between producers." We must ask questions about the size of the operation, the weight and price of calves sold, the level of costs and areas these costs cover. What are the features of profitable producers? Answers to these and related questions provide curious managers choices.

"High profit farms were larger on average and had slightly heavier calves." They also received "slightly higher prices" and generated "almost \$95 more revenue per cow, but the "differences in costs between operations were much larger than the revenue differences." "High profit operations had a cost advantage in every cost category" resulting in a net return advantage of as much as \$345 per cow between the most and the least profitable farms. To be clear, the study found cost competitive farms in all categories - large size does not guarantee low costs. Overall, the analysis found that the largest cost to manage is winter feed costs.

Most of the net return (72%) came from cost differences, while a much smaller amount (28%) of the net return came from the gross income from higher prices and heavier calves. Dhuyvetter summarizes this situation as not "unexpected in a commodity market where producers are basically price takers, i.e. the ability to differentiate oneself financially from the average is typically done through cost management."

While economists tend to speak a different language than the rest of us, we all understand the power of profit. The reasons for profit are uncovered through keeping records and then using them to manage among other things, your biggest cost which is winter feed.

## **A Mid-Year Financial Check-up**

**By Peter Callan ([peter.callan@vt.edu](mailto:peter.callan@vt.edu)), Extension Agent, Farm Business Management, Northern District**

Early July is an excellent time for farmers to evaluate the financial status of their businesses. By updating financial and production records through the end of June, producers are able to analyze the financial performance of their business compared to previous years. The first place to start in the analysis is the creation of a balance sheet.

A June 30 balance sheet provides a snap shot of the financial status of the business. The first area to look at is accounts payable. Are there accounts payable for livestock and crop expenses e.g. seed, fertilizer, herbicides, fuel, equipment repairs and feed? What are the reasons that the expenses have not been paid? Are input costs higher than expected? Have input costs exceeded the line of credit? Is projected dairy, livestock and/or crop income lower than expected? Lenders understand that input costs and commodity prices have become extremely volatile. Likewise, they do not like “surprises.” If there are operating expenses (seed, fertilizer, fuel, feed etc.) which have not been paid, I would suggest that the producer request a loan from their lender to pay these expenses. Crop input suppliers and feed companies are not lenders. Many of these suppliers charge interest rates of one and a half to two percent per month, which correlates to annual interest rates of 18-24 percent. Significant interest payments are saved with a bank loan which will have an annual interest rate of 4.5 – 7.0 percent.

The next step in analysis of the business is to look at the assets on the balance sheet. An analysis of intermediate and current assets on a balance sheet provides producers with a snapshot of the income producing assets of their businesses. Has herd size increased or decreased? If herd size has decreased by more than 10%, why has this happened? What changes need to be made to prevent further declines in herd numbers? What is the amount of cash in the farm checking account? What are the crop inventories, e.g. hay and grain that will be sold as cash crops etc.? What are forage inventories? What was the yield for first cutting hay crop since the first cutting provides approximately 50% of annual hay yield? If the first cutting crop was lower than normal and there is dry weather through July and August, will there be sufficient hay to cover annual forage needs for dairy and livestock producers? If a dairyman or livestock producer expects that hay will need to be purchased, many times it is cheaper to purchase the hay before winter when prices are usually higher. How will the hay be paid for? Crop prices have been extremely volatile in the past year; what is the plan for marketing the current year’s crop? Have prices been locked in for a portion of the 2011 crops? Are additional sales of 2011 crops warranted prior to the 2011 harvest? Likewise dairy and livestock producers who purchase feed inputs (corn, soybean meal etc.) should start to develop a plan to purchase these inputs based on nationally projected yields and international supply and demand estimates.

An analysis of updated production records will enable producers to determine if production and profitability goals (milk sold per cow, daily rate of gains, culling rates and grain yields) that were set at the beginning of the year have been met. What is the net profit per unit of product sold, e.g. pound of milk, bushel, and beef calf? If production and profit goals are not being met are there factors within the control of the manager (e.g. change timing of harvesting of forages, increase utilization of grass as feed source in rations etc.)? By answering these questions, the manager can implement changes that will help the farm maximize profits. High production yields does not always equate to maximizing profits. Remember, maximizing net profit pays the bills.

Many times the owner's labor management skills are ignored in the analysis of farm profitability. Are the employees viewed as individuals who have "strong backs and weak minds" needed to complete tasks or are employees viewed an integral part of the financial success of the farm? What is the employee turnover rate? If employees have left the business in the past six months, what were the reasons? The owner's attitude toward hired labor can have a major impact on farm productivity and profitability.

As the former owner-operator of a dairy farm, I believe that a farm's employees are the business' most important asset. Staff meetings provide a forum where the owner and employees can air concerns about management of the farm. Employees can be recognized for making decisions that contributed to the success of the farm (e.g. quickly repairing broken equipment, taking care of the herd with a limited amount of help etc.). Discussion may be focused around the following questions: What has worked well? What changes should be made? Prioritize the changes. The owner and employees need to reach a consensus when the changes should be implemented. Then the owner makes the changes. Employees relish the opportunity to work for a business where the owner acknowledges and implements employees' suggestions that will improve productivity and profitability.

Finally, an area that can have a significant impact on farm productivity and profitability is the farm's policy towards vacations for the owners and employees. Employees and owners should be encouraged to schedule vacation time during slower times between planting and harvesting seasons. Vacations allow people to get rested and recharged. Taking time off will help owners and employees gain a new perspective. Owners and employees who are well rested will be able to address the production and financial challenges with a clear mind in a year that has had numerous weather and financial challenges.

A mid-year review can help producers understand current financial status of their businesses. Then producers can make changes which can help maximize farm profitability during the last half of the year.

Best wishes for a safe and profitable 2011.

## The Management Calendar

By Gordon Groover ([xgrover@vt.edu](mailto:xgrover@vt.edu)), Extension Economist, Farm Management, Department of Agricultural and Applied Economics, Virginia Tech

Listed below are a few items that might be of interest to farm business managers:

- Need to begin the process of creating a farm transition plan? If yes, consider YouTube. Go to [www.youtube.com/](http://www.youtube.com/) and in the search region enter both "farm transition" and "farm succession" -- you can view a number of short videos that will introduce the topic and get you started on the long process of creating a plan. Just be aware that it took decades to create your farm business, so watching a few videos will not make you an expert on farm transition; but, it will help create an understanding of the process.
- A must read for all of us involved in agriculture is the current issue of "Choices," published by the Agricultural and Applied Economics Association and can be found at [www.choicesmagazine.org/](http://www.choicesmagazine.org/). In this issue are three themes:
  - Farmland Values - Recent farmland price increases have caused many to question whether the current situation will result in a repeat of the 1970s farmland value boom and 1980s bust. See [www.choicesmagazine.org/choices-magazine/theme-articles/farmland-values](http://www.choicesmagazine.org/choices-magazine/theme-articles/farmland-values) for details.
  - Innovations to Support Beginning Farmers and Ranchers - The aging population of farmers and ranchers is a key issue in the U.S., so recent community-based and governmental programming targeting beginning farmers is popular. This theme showcases what is known about the newest cohort of producers, as well as highlighting the resources and programming focused on improving their chances for success. See [www.choicesmagazine.org/choices-magazine/theme-articles/innovations-to-support-beginning-farmers-and-ranchers](http://www.choicesmagazine.org/choices-magazine/theme-articles/innovations-to-support-beginning-farmers-and-ranchers).
  - The Environment of the Next Farm Bill Debate - Volatile commodity and input markets combined with a nagging recession, budget limits, an uncertain global trade setting, and complex politics create a dynamic landscape for the impending farm bill debate. See [www.choicesmagazine.org/choices-magazine/policy-issues](http://www.choicesmagazine.org/choices-magazine/policy-issues).

Farm business managers should consider the following activities for their management calendars in August-September.

- As you start into harvest season, be sure to think about your crop records. Make sure you get information on yields, machine times, and equipment used (this information will help with next year's budgeting); identify weed problems and differences in varieties. In addition to recording information on weeds, etc., think about labor constraints and bottlenecks slowing down tasks during the harvest season. Have employees and family members record problems and successes (maybe give them a cash payment for each problem identified). When the crunch is over, spend a couple hours reviewing notes on what can be done next year to solve the problems and duplicate the successes. Family business meetings should focus management discussion on how to resolve problems, not who to blame. Also take a close look at the yield potential of each field; with input costs at their current levels, some fields may no longer provide a sufficient profit margin

during periods of moderate drought – changing crops may provide that hedge against a major loss.

- Always pay close attention to cash flow needs as you generate cash reserves during fall harvest, and get ready for real estate and personal property taxes this winter. Almost all computerized recordkeeping software, e.g. Quicken® and accounting software, e.g. QuickBooks® or FarmWorks, create cash flow reports that assist in managing cash available for debt service, family living, and cash expenses. Compare this year's cash flow to the budgeted amount and highlight deviations. If you did not develop a budget for this year, compare your inflows and outflow to last year's August totals. Make sure you have a series of possible plans to address any projected cash short falls.
- The time to make tax management decisions is quickly approaching. Make sure that you have set aside a few days in October to summarize all farm and family financial records, and make an appointment now with your accountant to work on end-of-year tax management strategies. As the forms and publications for the 2011 tax year become available, they can be obtained from the Internal Revenue Service site. [www.irs.gov/formspubs/index.html](http://www.irs.gov/formspubs/index.html). Consider attending one of the farm tax workshops conducted by the Virginia Tech Income Tax School, see the article below titled *Virginia Tech Income Tax School*.
- Livestock producers should develop a feed budget for the next 12 months. Make use of the feed budget just like you would a projected cash flow statement. Chart out deficits and develop strategies to fill in the deficits using local sources at harvest or planned purchase during the next 12 months.

## **A Comparative Analysis Between Virginia and North Carolina's Wine Industries**

**By Gustavo Ferreira ([gferre3@vt.edu](mailto:gferre3@vt.edu)), Extension Economist, Department of Agricultural and Applied Economics, Virginia Tech**

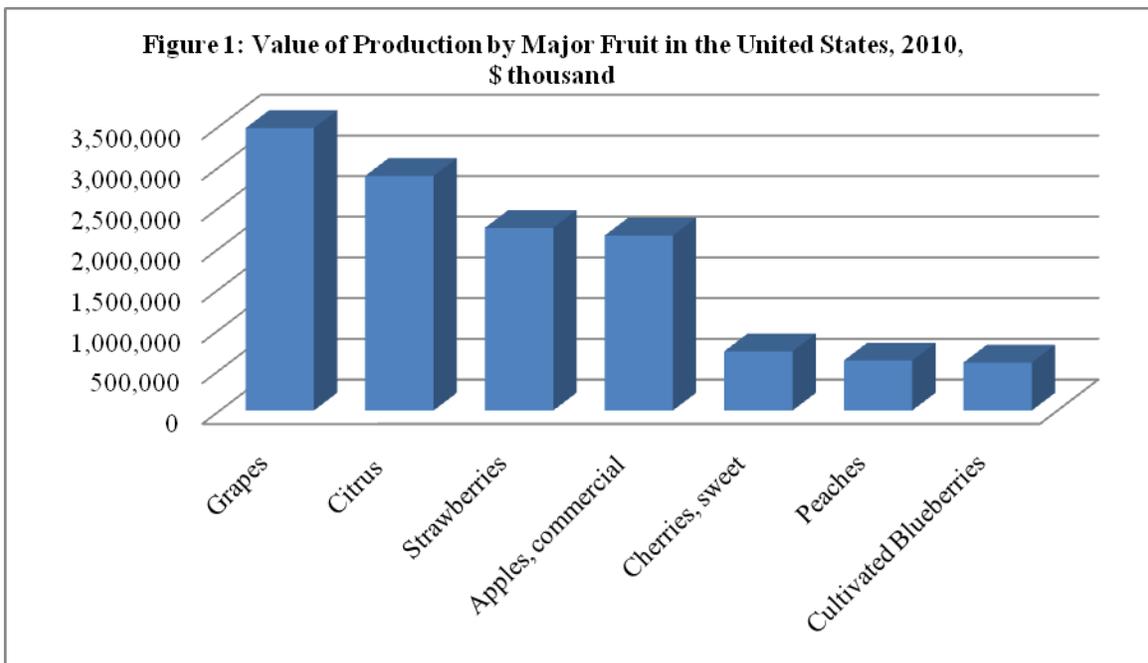
### The Economic Impact of the Wine Industry in the United States

The economic importance of the grape and wine sector has increased in recent decades, and in 2007 the U.S. wine, grape, and grape product had an estimated \$162 billion economic impact on the American economy. The sector also accounted for more than one million jobs in the U.S., for a payroll of almost \$33 billion (MFK, 2007). Today, the grape and wine production is spread across all 50 states, and is carried primarily by family and multi-generational businesses. However, the state of California alone accounts for close to 90 percent of total U.S. wine production.

Unlike what has been happening in other parts of the World, the U.S. wine industry has witnessed consistent growth on both the supply and demand sides. From 1999 to 2007, the national number of bounded wineries increased by 83 percent, from 2,688 to 4,929. Furthermore, the sales of domestic wine accounted for almost two-thirds of the 2005 total sales of wine in the U.S. In terms of international trade, this industry still plays a relatively modest role with 35 percent of grapes and only 6 percent of wine produced in the U.S. being exported (MFK, 2007). On the demand side, the U.S. has been the only major growing market for mid-

priced and more expensive wines. In 2010, a total of 784 million gallons were consumed in the U.S. in comparison to 267 million in 1970. The wine per capita consumption in the U.S. went from 1.31 gallons in 1970 to 2.54 gallons of wine in 2010 (The Wine Institute, 2011). These positive trends indicate that, despite the current saturation in the World wine market, the U.S. still is an appealing and promising market for domestic wine producers.

Wine grapes produced in the U.S. can be broadly categorized in three different groups: (1) *Vitis Vinifera* – the traditional European wine grape; (2) *V. labrusca* – wine grapes native to the North American continent; (3) and interspecific hybrid grapes. Table 1 shows that grapes are the highest value fruit crop produced in the United States. However, the industry often goes through surplus and shortages cycles and it is characterized for high volatility and price swings. For example, during times in where the demand for specific wine grapes far exceeds supply, prices will soar. Producers will respond to it by increasing their production of those particular grapes, and consequently increase its supply. At one point in time, supply will exceed demand, which will depress grape prices and send a signal to producers that they need reduce production of those grapes. This will likely lead to another shortage in the future and a similar cycle will start over again.



Source: NASS

### An Overview of the Wine Industry in Virginia and North Carolina

Virginia’s wine industry dates back to the early seventeenth century at the Jamestown Colony and continued with the efforts of Thomas Jefferson, George Washington, and James Madison to promote the development of an American wine industry. The number of wineries and production of wine has been steadily growing, particularly since the mid-1990s. Virginia has a major competitive advantage over North Carolina, and that is its geographic proximity to affluent and densely populated areas that include Washington D.C., Richmond, and Norfolk/Virginia

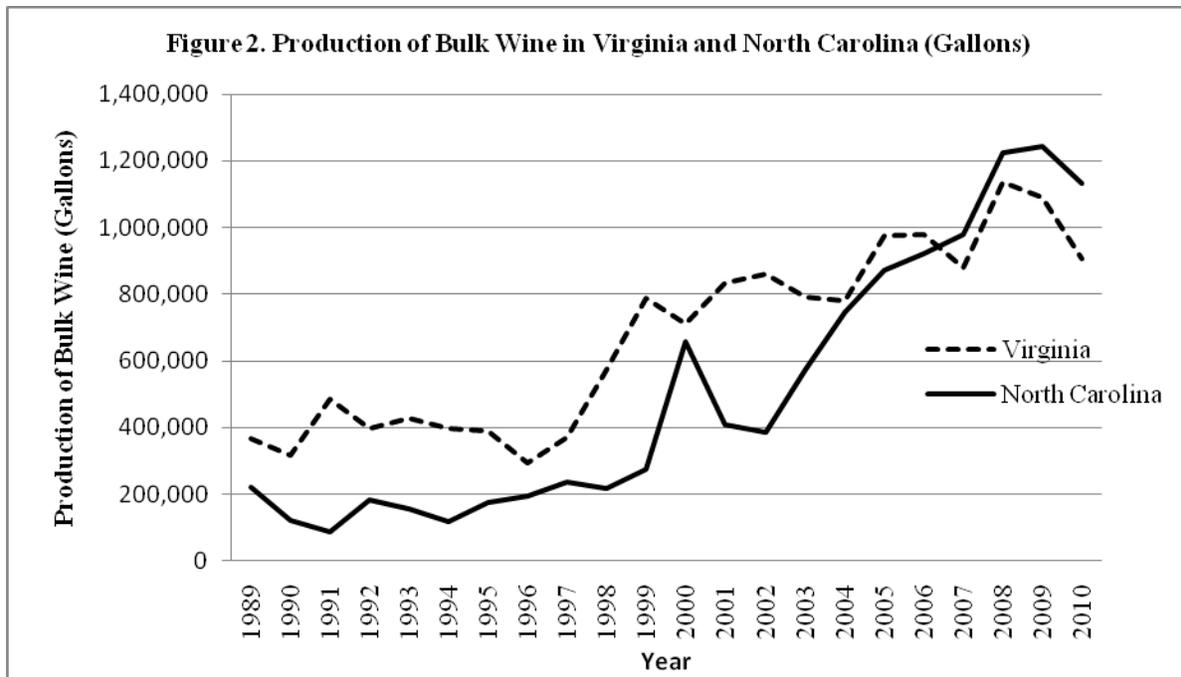
Beach. Virginia wine producers should fully explore these market opportunities, and be ready to meet increases in the demand for wine in these areas. In North Carolina, commercial wine consumption and wine production can be traced back to the state's first winery in Halifax County that grew a native Muscadine varietal (Scuppernong). It was not until the early 1970s that *Vinifera* grapes began to be planted for wine production in North Carolina (MFK, 2005).

In both Virginia and North Carolina, increasing wine production has contributed to the diversification of agriculture and local economies, employment creation, and the development of new market opportunities in rural communities. This has been particularly important for areas that suffered from a change in market structure resulting in the decline of traditional crops and farming practices, for example tobacco or apples. For instance, starting in 1999, the North Carolina's Golden LEAF Foundation has supported those farmers who wanted to shift from tobacco to wine production (MFK, 2005).

The wine industries of Virginia and North Carolina are comparable in many dimensions due to the geographic proximity and a set of similar challenges and opportunities that both share. This paper does a comparative analysis of the wine industry in both states by looking at four specific issues: (1) grape varieties and viticultural areas in both states; (2) marketing and distribution issues; (3) wine-related tourism; and (4) shortages of skilled labor.

#### A Comparison of the Virginia and North Carolina Wine Industries

Both states are located in the Eastern Coast and, despite recent expansion, can be considered "peripheral" and "regional" given their volume of production (Rape, 2008). Virginia is currently home to 192 wineries in comparison to 107 in 2005, and only a handful in 1980. North Carolina has currently 104 wineries, compared to 55 wineries in 2005, and 21 in 2000. In both cases most of their wineries are characterized as small scale producers (producing less than 5,000 cases per year). Based on data from the Alcohol and Tobacco Tax Trade Bureau (TTB), Figure 1 shows how Virginia has produced slightly more bulk wine than North Carolina until 2007. Since that year, North Carolina's wineries have outperformed Virginia's, and North Carolina has managed to climb up a few positions in the national ranking of wine producing states. In 2010, North Carolina ranked 8<sup>th</sup> and Virginia 13<sup>th</sup> in terms of production of bulk wine. For the same year, North Carolina ranked 9<sup>th</sup> at the national level in the production of bottled wine, while Virginia ranked 15<sup>th</sup>. These figures indicate sustained growth of the wine industry in both states for the last two decades. However, they also show that North Carolina has experienced a more rapid growth that allowed its industry to "catch up" and actually surpass Virginia's.



Source: Author’s own calculations using data from the TTB.

### **Grape Varietal and Viticultural Areas**

Both regions rely heavily on the production of varieties of red (Cabernet Franc, Merlot, and Cabernet Sauvignon) and white (Chardonnay, Vidal blanc, and Viognier) grapes. North Carolina also produces a noteworthy quantity of native grape varieties (Muscadine, Norton, and Niagara) that favor the hot and humid weather of North Carolina’s coastal region, and tend to be more resistant to fungal attacks, namely the Pierce’s Disease (MFK, 2005). Many wineries in the U.S. struggle financially in part due to the lack of a *varietal focus*. Wineries that produce different grapes and wines in an attempt to reach a broader customer base may not be able to concentrate their limited resources on a specific product and then develop expertise and a marketing image (MFK, 2007). For example, the state of Oregon has successfully pursued a long-term grape and wine specialization strategy with the Pinot Noir and Pinot Gris varieties, and it seems reasonable to argue that North Carolina and Virginia would benefit from a similar approach. According to a study, Virginia has been fairly successful in building up a wine state identity via varieties that perform particularly well there such as Viognier and Cabernet Franc (MFK, 2007).

As Table 1 shows, both North Carolina and Virginia have a number of wine producing regions that have been designated as American Viticulture Areas (AVA). More specifically, the TTB has approved six viticultural areas in the state of Virginia since the mid-eighties, and more recently it recognized three areas in North Carolina. In Virginia most of the wineries are located at the Northern Virginia Region, the Shenandoah Valley, and the Monticello AVAs. In North Carolina there is a great concentration of wineries, in particular at the Yadkin Valley and Swan Creek AVAs – which includes the Western and Piedmont regions of the estate. Finally, North Carolina and Virginia are characterized by relatively high costs in the production of Vinifera due

to small volume produced, and to the expenses associated with wine grape cultivation in this region.

**Table 1. List of American Viticultural Areas approved by the TTB in North Carolina and Virginia**

<b>State</b>	<b>Name</b>	<b>Effective Date</b>
North Carolina	Haw River Valley	2009
North Carolina	Swan Creek	2009
North Carolina	Yadkin Valley	2003
Virginia	Virginia's Eastern Shore	1991
Virginia	Rocky Knob	1987
Virginia	North Fork of Roanoke	1987
Virginia	Northern Neck George Washington Birthplace	1987
Virginia	Shenandoah Valley	1987
Virginia	Monticello	1984

Source: Alcohol and Tobacco Tax Trade Bureau

### Marketing and Distribution

The Alcoholic beverages industry and the sales of wine in the U.S. are ruled by a series of complex regulations and structures that vary by state. This system is commonly known as the “three-tier-system” in where wineries sell to licensed distributors, which in turn sell to retail or restaurant outlets. The three-tier-system represents a major obstacle to smaller wineries that normally do not produce enough quantity to convince wine distributors to commercialize their products – especially in the current overcrowded wine market. Another issue is that this system may be too expensive for smaller wineries because they typically have to sell their products to a distributor for 50 percent of the retailer price. In contrast, wineries are able to receive the full retail value when selling in tasting rooms, and between 65 to 80 percent of the final retail price when selling directly to a restaurant or retailer outlet (MFK, 2007).

In Virginia, by 1980, the General Assembly adopted a series of measures to give Virginia wineries the right to bypass the three-tier system, and thus self-distribute their products. Such system was very favorable for small and family-owned wineries and allowed them to sell their bottles directly to restaurants and retail outlets without the need of middlemen. However, in 2005, an adverse federal court opinion ended this self-distribution system, and self-distribution became illegal in July of 2006. In order to help small producers, in 2007 the General Assembly came up with an alternative scheme and passed legislation that allows the Virginia Department of Agriculture and Consumer Services to serve as a wholesaler. More specifically, the Virginia Winery Distribution Company – a non-profit, non-stock corporation – was created to provide wholesale wine distribution services for Virginia farm wineries. Currently, more than 100 wineries use this organization to distribute as many as 3,000 cases of their own wine each year to retail and restaurant outlets .

In contrast, the North Carolina General Assembly passed five laws in 2005 that streamlined distribution and allowed wineries to ship their products directly to consumers – both within state and nationally. Consequently, North Carolina’s wineries can choose between self-distributing their wine, selling it directly to restaurant or retail stores or simply using distributors (Ofori-Boady et al, 2010). Such flexibility has been vital in the development of direct marketing strategies within established businesses, and opens the way for the creation of new smaller wineries. For larger wineries this is not a critical issue because they often use distributors to market their wine. In summary, smaller wineries in Virginia are in clear disadvantage with respect to its peers in North Carolina, and many of them cannot afford to receive as little as 50 percent of the retail price or are too small in volume to be distributed into the wider marketplace. In the past, Virginia wineries have relied on wine festivals to sell their wine directly to consumers. However, even this market has become crowded with new competitors, making it more difficult for wineries to get included in the festivals or to differentiate themselves (MFK, 2007).

### Wine Tourism

Wine-related tourism and recreation have been a growing industry in the past decade, and wineries have proven to be important players in the tourism industries as they became effective tourist magnets. Increasing number of visitors to wineries will likely support other local businesses such as hotels, bed & breakfasts, restaurants, and other shops (MFK, 2007). Wine tourism is important not only in terms of promotion and marketing, but most importantly, it is a necessary condition for financial survival of many small wineries. This is because direct sales from the tasting room and gift shops are a major source of income to the industry. A 2007 national survey sponsored by the Travel Industry Association (TIA) in partnership with the Gourmet magazine and the International Culinary Tourism Association (ICTA) ranked both North Carolina and Virginia in the top-twelve destinations for wine related travel – although North Carolina ranked slightly higher than Virginia (TIA, 2007).

The promotion of wine tourism in North Carolina has been very effective and North Carolina wineries were visited by at least 800,000 tourists in 2005 (MFK, 2005). Moreover, the promotion of wine tourism in North Carolina can count on a very recognizable name, the Biltmore Estate, which is the most visited winery in the U.S. (Franson, 2004) Data on the number of visitors in Virginia was not available, but in 2008 the state spent \$387,000 to market its wine (Raper, 2008). The wineries located in the northern part of the state should benefit from their proximity to the Washington D.C. metro area, which includes parts of Maryland and Northern Virginia. This area has over five million residents and includes population segments with higher than average income levels. Hence, the northern Virginia wineries should strive towards attracting consumers from this market to their tasting rooms, and develop strong market relationships with restaurant and retail stores in the metro area. One study pointed at the fact that many wineries in Virginia struggle to attract significant number of visitors due to lack of concentration of wineries (MFK, 2007). In North Carolina, there is a high concentration of wineries at the Yadkin Valley and the Swan Creek area. This reduces the travelling distances for those tourists who plan to visit several wineries in a specific period of time. In sum, there is little doubt that both states should strongly support wine tourism activities in order to increase the number of visitors to the wineries and the direct sales to consumers.

## Shortage of Skilled Labor Force

Finally, as the vineyard acreage increases in both states, producers have had to deal with shortages in trained and skilled labor force (i.e. viticulturists and winemakers). This problem has become a major challenge for vineyard management, and often wineries end up hiring professionals from other states. Both states have made efforts to overcome this problem and invested in the creation of new education programs in universities and community colleges. Since 2000 North Carolina has developed a strong program at Surry Community College, and more recently, set up viticulture and enology programs at North Carolina State University and Appalachian State University (MFK, 2005). The College of Agriculture and Life Sciences at Virginia Tech does not offer a program in enology or viticulture but Agricultural Experiment Station has developed the Viticulture Research Program and Enology-grape Chemistry program to support the state's wineries. When compared, it appears that North Carolina has been more proactive in educating a new generation of professionals that will work in the state's vineyards and wineries. As a short-term solution for this problem, different parties in the local wine industry may encourage the dissemination of knowledge and experiences within wineries, and organize workshops and seminars. This could develop synergies that may help smaller wineries owners, who do not have the resources to hire professionals from out of state, to acquire some important production and management skills.

## Conclusion

The wine industries in North Carolina and Virginia are quite similar in several domains and they face common challenges. In the case of Virginia, smaller wineries may need to press for a more favorable distribution system that would allow them to obtain reasonable profit margins and reach larger markets. Moreover, Virginia should also push for the development of further educational programs preparing skilled professionals for the industry. The wine industry in North Carolina could benefit from a shift in production towards very specific varieties that perform well in the region. This would be an important step in the building of a wine state identity. Finally, wine tourism in North Carolina and Virginia should continue to be promoted via nationwide marketing campaigns and through the creation of recognizable "wine routes." This can only be achieved with the involvement of hotels, travel agencies, bed & breakfasts, state and local governments.

## References

MFK Research LLC (2007). *The Impact of Wine, Grapes and Grapes Products on the American Economy 2007: Family Businesses Building Value*. Unnumbered Research Publication, MFK Research LLC, Helena, California.

The Wine Institute (2011). *Wine Consumption in the U.S.* Retrieved from <http://www.wineinstitute.org/resources/statistics/article86>.

MFK Research LLC (2005). *Economic Impact of North Carolina Wine and Grapes*. Unnumbered Research Publication, MFK Research LLC, Helena, California.

Alcohol and Tobacco Tax and Trade Bureau: Statistical Report – Wine (Reporting Period: January 1985 – December 2010). Retrieved from [www.ttb.gov/wine/wine-stats.shtml](http://www.ttb.gov/wine/wine-stats.shtml).

MFK Research LLC (2007). *Assessment of the Profitability and Viability of Virginia Wineries*. Unnumbered Research Publication Presented to the Secretary of Agriculture and Forestry of Virginia, MFK Research LLC, Helena, California.

Ofori-Boady, V., Yeboah, O., Bhadury, J., Dobie, K., Troy, S., and Nicholas C. Williamson (2010). *The Emergent Vinifera Wine Industry in North Carolina: A Descriptive Overview*. Selected Paper presented at the Southern Agricultural Economics Association Annual Meeting, Orlando, Florida, February, 2010.

U.S. Travel Industry Association Press Released (2007). *Comprehensive Culinary Travel Survey Provides Insights on Food and Wine Travelers*. Retrieved from [www.ustravel.org/news/press-releases/comprehensive-culinary-travel-survey-provides-insights-food-and-wine-travelers](http://www.ustravel.org/news/press-releases/comprehensive-culinary-travel-survey-provides-insights-food-and-wine-travelers).

Franson, Paul (2004). *Biltmore Estate Winery: Americas's Most Visited*. BNET. Retrieved from [http://findarticles.com/p/articles/mi\\_m3488/is\\_11\\_85/ai\\_n8576708/](http://findarticles.com/p/articles/mi_m3488/is_11_85/ai_n8576708/).

Raper, Jim (2008). *Virginia's Wine Industry Has Matured*. Virginia Business. Retrieved from <http://www.virginiabusiness.com/index.php/news/article/virginias-wine-industry-has-matured/91792/>.

## **Insurance for the Potential Drought of 2012**

**Tom Stanley ([stanleyt@vt.edu](mailto:stanleyt@vt.edu)), Extension Agent, Farm Business Management, Northern District**

Forage producers in Virginia have the opportunity to secure insurance coverage against below normal rainfall through the 'Pasture, Range, and Forage Program' (PRFP) provided by private crop insurance providers and underwritten by the Risk Management Agency of the USDA.

Below are some key points and dates to remember:

- To secure coverage for the 2012 crop year, you need to notify your crop insurance agent by September 30, 2011 and be prepared to provide your farm's USDA FSA numbers and field numbers. An acreage report to Farm Service Agency is not required but your crop insurance provider will need farm, tract, and field numbers in order to verify the acreage you are insuring.
- You have until November of 2011 to decide which of your pasture and hay acres you wish to cover with a policy.
- Indemnity payments are based on rainfall indexes established by the National Climatic Data Center for the "12 mile by 12 mile" zone in which your acreage lies.
- No yield measurements or crop insurance adjustments are required. Payments are based entirely on the observed rainfall index.

- Indemnity payments are generally made within 90-days of the rain shortfall.
- Only pasture and hay fields established by July 1, 2011 are eligible for coverage during 2012.
- You decide which months of the year for which you need coverage.
- No more than 60% of your forage acres can be covered in a given two-month period. The balance of your acres can be covered in other months of the year.
- Forage values that serve as the basis of the policy premiums and indemnity payments are around \$40 per acre for pasture and \$260 per acre for hay land in the Western Virginia.
- A field need only be harvested for hay or haylage once in the course of the season in order to qualify as hay land. It can be grazed the rest of the season. Crop Insurance Agents and USDA do make additional allowances for drought circumstances where land intended for hay must be grazed due to dry conditions.

You can learn more at: <http://www.rma.usda.gov/policies/pasturerangeforage/>. There is a decision support tool available through this website where you can see 30-years of rainfall indices for your specific locality. The indices will help you identify the portions of the year that historically present the greatest risk of low rainfall to your operation.

Below are two possible scenarios using for utilizing PRFP “rainfall insurance” for a location in Rockingham County, Virginia. Farm A has 100 acres of highly productive hay land while Farm B represents 100 acres of pasture.

First, the two farms consider the rainfall history for the particular 12 mile x 12 mile grid in which their farms lie (Table 1).

<b>Table 1.</b>											
Grid: 22105, 100 =		..... Rainfall Index History of Example Farm Location for the past 20-years .....									
Rockingham Average											
County, VA Rainfall											
Year	Jan-Feb	Feb-Mar	Mar-Apr	Apr-May	May-Jun	Jun-Jul	Jul-Aug	Aug-Sep	Sep-Oct	Oct-Nov	Nov-Dec
2010	139.9	136	87.3	56	62.6	74.5	97.2	85.7	86.8	88.9	86.8
2009	63.9	52.1	103.8	164.7	167.2	105.8	75.5	89.5	89	120.9	191.5
2008	80.4	97.1	115.2	130.2	106	98.8	97	90.9	62.2	46.9	98.7
2007	77.1	103.7	113.9	76.2	88.4	106.3	128.7	104.8	85.8	92	77.5
2006	69.4	28.7	51.2	61	119.1	136.4	68.7	102.7	166.8	184.3	117.6
2005	43.3	56.7	70.1	55.2	38.4	75.3	90	36	64	131.1	89.5
2004	84.4	94	105	143.9	126	106.5	93.2	171.2	171.9	90	115.2
2003	162.6	172.5	125	149.8	174.2	155.8	145.6	220.4	175	101.3	130.4
2002	23.9	65.8	132.6	118.5	60.8	54.9	54.2	64.4	127.5	156.5	136
2001	56	93.7	96.3	76.8	98.2	111.1	98.5	61.6	32	14.5	35.2
2000	51.4	64.7	85.6	87	124.8	123.3	71.8	107.5	81.5	21.6	49.4
1999	130.8	86.6	67.3	62.5	48.2	37.3	55.2	130.1	131.9	40.5	52.8
1998	288.3	204	151.9	141.5	133.3	78.7	50.5	55.3	35.3	34	59.4
1997	74	113.2	106.8	51.7	86	133.2	102.6	87.3	85.7	126.5	133.7
1996	189.3	120.5	89.7	109.1	162.1	152.2	156.2	253.7	218	94.6	142.4
1995	119.1	42.7	44	90.7	145.2	145	109.1	83.8	133.9	157.1	89
1994	173.6	200.4	153	79.4	68.4	92.7	129.2	85.4	28.1	51	66.6
1993	94.5	172.8	193.2	94.1	52.6	53.8	61.8	89.2	91.6	105.1	137.1
1992	92.1	95.9	119.3	126.6	98	99.1	87.7	85	77.2	93.3	139.5
1991	104.3	124.3	117.3	57	76.8	161.3	133.2	34.9	19	38.2	118.2
1990	101.8	86	74.3	117.9	95.2	66.3	108.4	97.6	172	175.8	103
Frequency Index fell below											
...											
<90	10	8	8	10	9	7	8	12	12	8	9
<80	8	6	5	9	7	7	7	5	7	7	6
<70	6	6	3	6	6	4	5	5	6	7	5

After considering the rainfall data, Farm A decides their greatest risk of a poor season is when rainfall is deficient in the April-May time period and their second greatest risk is in the August-September time period. Farm A chooses to insure 60% of their acres in the April-May and the balance (40%) of their acres in the August-September time period. Farm A also chose to insure their crop with a value equivalent to 150% of the county average value. Using the previous 20 years of rainfall indices, the calculator available at [www.rma.usda.gov/policies/pasturerangeforage/](http://www.rma.usda.gov/policies/pasturerangeforage/) can tell us what the indemnity payments would have been for those years. The results are in Table 2 below.

Farm B is devoted solely to grazing and depends heavily on stockpiled fescue but also depends on early spring growth for lactating cows. Because a farm cannot put all acreage in consecutive

time periods, Farm B cannot put all its acres in August-September and September-October time periods. Therefore they choose to insure 40% of their acres in April-May, 40% in August-September, and the remaining 20% in the October-November period. Farm B also elected to keep its premium payments low by insuring the equivalent yield of only 90% of the county average yield and by insuring against only those times the rainfall index drops below 70. Table 3 illustrates what the indemnity pay-outs would have been to Farm B based on the previous years' rainfall indices.

**Projected Returns based on 1990 - 2010 Rainfall Indices and expressed on net present value of expense (premiums) and income (indemnity payments) streams.**

<b>TABLE 2. Farm A</b>				<b>TABLE 3. Farm B</b>			
	150% of Avg County Yield	Rainfall Index below which indemnity is paid = 90%		90% of Avg County Yield	Rainfall index below which indemnity is paid = 70%		
	<b>Producer Premium Paid / Year</b>	<b>Indemnity Received</b>		<b>Producer Premium Paid / Year</b>	<b>Indemnity Received</b>		
2010	\$2,406	\$6,896		2010	\$70	\$210	
2009	\$2,406	\$128		2009	\$70	\$0	
2008	\$2,406	\$0		2008	\$70	\$173	
2007	\$2,406	\$2,353		2007	\$70	\$0	
2006	\$2,406	\$4,944		2006	\$70	\$135	
2005	\$2,406	\$19,742		2005	\$70	\$733	
2004	\$2,406	\$0		2004	\$70	\$0	
2003	\$2,406	\$0		2003	\$70	\$0	
2002	\$2,406	\$6,546		2002	\$70	\$84	
2001	\$2,406	\$9,513		2001	\$70	\$542	
2000	\$2,406	\$511		2000	\$70	\$363	
1999	\$2,406	\$4,688		1999	\$70	\$334	
1998	\$2,406	\$8,874		1998	\$70	\$491	
1997	\$2,406	\$7,220		1997	\$70	\$275	
1996	\$2,406	\$0		1996	\$70	\$0	
1995	\$2,406	\$1,586		1995	\$70	\$0	
1994	\$2,406	\$2,984		1994	\$70	\$143	
1993	\$2,406	\$205		1993	\$70	\$0	
1992	\$2,406	\$1,279		1992	\$70	\$0	
1991	\$2,406	\$19,716		1991	\$70	\$961	
Net Present Value	Premiums Paid \$35,795	Indemnity Received \$73,933	Difference* \$38,138	Net Present Value	Premiums Paid \$1,041	Indemnity Received \$3,419	Difference* \$2,378

\* Difference is the difference between the net present value of the premium expense versus the net present value of the projected income from indemnity payments.

At the bottom of Tables 2 and 3, one can see the potential benefit PRFP can bring to forage producers. In both scenarios, purchase of a PRFP policy over the last 20 years would have yielded a positive net present value (the difference between the premiums paid and indemnities received discounted at 3% per year). Farm A paid \$35,795 in premiums and received \$73,933 in indemnities for a net of \$38,138. Farm B paid premiums of \$1,041 and received \$3,419 in indemnities for a net of \$2,378. These payments come approximately 90 days after the rainfall deficiencies and there is no need for a drought declaration or other political statement from the locality. The producer gets the financial assistance closer to when he actually needs it.

Note: The data used in this calculation projects similar results though a range of discount rates and sequences of low rainfall periods. The only negative is that a producer can experience several years of no indemnity payments resulting in negative cash flows on the PRFP policy. Farms outside of grid 22105 will have different results.

If you would like assistance in utilizing the indemnity payment calculator or determining how PRFP could help your pasture or hay operations, feel free to contact Tom Stanley through the Rockbridge County Extension Office at (540) 463-4734.

## **Virginia Tech Income Tax School**

By L. Leon Geyer ([geyer@vt.edu](mailto:geyer@vt.edu)), Professor, Agricultural Law, Department of Agricultural and Applied Economics, Virginia Tech

This fall we offer two different seminars: 1) General Income Tax Seminar and 2) Introductory Tax Preparation.

### **1. General Income Tax Seminar**

Two days of general sessions of intensive study with farm tax, Maryland tax, and ethics sessions at selected locations (see Table 1). All details can be found by contacting

Income Tax School Registrar, Continuing and Professional Education  
702 University City Blvd., Virginia Tech, Mail Code 0272  
Blacksburg, VA 24061  
Fax: (540) 231-3306 Phone: (540) 231-5182  
Email: [vttax@vt.edu](mailto:vttax@vt.edu) Web Page: [www.tax.vt.edu](http://www.tax.vt.edu)

## **Topics Covered in the Agricultural Session**

### **Agricultural Issues**

- Wineries and vineyards
- Like-kind exchange of equipment and livestock
- Timber farming, sales at farmer's markets

## **Topics Covered in the General Sessions**

### **New Legislation**

- Cross-references to other chapters
- IRS guidance on implement prior legislation
- A table of effective dates

### **Rulings and Cases**

- Selected rulings and cases by.

### **Individual Taxpayer Issues**

- Filing status; Kiddie tax, Tuition refunds
- Self-employed health deduction for members of the clergy
- Schedule H Household Employment Taxes

### **Casualty Gains and Losses**

- Rules for income tax gains and losses from severe weather for individuals and businesses victims of these disasters.

### **Business Issues**

- Taxation of grants to businesses
- Commuting v. business travel and transportation expenses
- Recordkeeping requirements for listed property

### **Retirement**

- Retirement plan options for business entities, comparison of plans, contribution limits, and administrative rules.

### **Foreign Issues**

- Disclosure of foreign accounts
- Funds received from family members abroad—what is proper reporting?
- Due-diligence guidance for practitioners

### **Business Entities**

- Bargain sale of an interest in an entity with debt
- S corporation shareholder basis
- Owner's compensation
- Purchase of term interest in real estate by corporation

### **IRS Issues**

- Return preparer registration, testing, and fingerprinting
- Electronic filing requirements and handling client refusal
- IRS auditing with electronic accounting software--electronic records
- Fresh-start collection initiative, Changed criteria for lien filing
- Offer in compromise update, HIRE act tax reduction and retention credit

### **Ethics**

- Ethical situations CPA and Tax Practitioner guidance (CPA and Circ 230)

### **Real Estate Issues**

- Financial distress, Installment sales, Easements, Vacation rentals
- Like-kind exchanges, Information reporting, Real estate professionals

### **Trusts and Estates**

- Estates case study with an operating business that is transferred to a trust.

## Tax Rates and Useful Tables

<b>Site</b>	<b>Date General Session 16 hrs.</b>	<b>Farm Session 2 hrs.</b>	<b>Maryland Session 2 hrs.</b>	<b>\$20 extra Ethics Session 2 hrs.</b>
Richmond I	October 31-Nov. 1	Day 1	none	Day 2
Weyers Cave	November 2-3	Day 1	none	Day 2
Abingdon	November 7-8	Day 1	none	Day 2
Roanoke	November 9-10	Day 1	none	Day 2
Lynchburg	November 14-15	Day 1	none	Day 2
Arlington	November 16-17	none	none	none
Herndon	November 28-29	none	Day 1	Day 2
Fredericksburg	Nov. 30-Dec. 1	Day 1	none	Day 2
Williamsburg	December 5-6	Day 1	none	Day 2
Chesapeake	December 7-8	none	none	Day 1
Richmond II	December 12-13	none	none	Day 1

## 2. Introductory Tax Preparation

Three 1-day seminars on Introductory Tax Preparation are scheduled for three locations and held in January 2011 (Table 2). These Introductory Tax Preparation Seminars are designed for those who are new or returning to tax preparation and want a course in basic preparation for a professional. The course is based on the 1040 Form. Other forms are discussed in terms of income and the 1040 Form.

<b>Site</b>	<b>Date</b>	<b>Time</b>
Roanoke	January 4, 2012	8:30-4:45
Falls Church	January 5, 2012	8:30-4:45
Richmond	January 6, 2012	8:30-4:45

## **Kathy Voth of Livestock for Landscapes to Speak at the 2012 Winter Forage Conferences**

By Gordon Groover ([xgrover@vt.edu](mailto:xgrover@vt.edu)), Extension Economist, Farm Management, Department of Agricultural and Applied Economics, Virginia Tech

*Integrated Weed Management: Putting Science into Practice* is the theme for the Virginia Forage and Grassland Council (VFGC) and Virginia Cooperative Extension winter forage conferences. This is an ideal opportunity for all livestock producers to gain an understanding of how to profitably integrate science and practice to manage weeds in pastures and hay land by smartly managing livestock, soil fertility, and herbicides.

This year's keynote speaker is Kathy Voth of *Livestock for Landscapes*, a nationally-known expert on using livestock as a land management tool. Using decades of university research and practical hands-on experience, she invented a process for teaching cows to eat weeds and other non-traditional forages. Ms. Voth makes use of livestock's natural behavior as an inexpensive alternative for managing weeds and other vegetation in pastures and other landscapes.

Participants will also hear from two Virginia Tech Extension Specialists, Scott Hagood, Professor of Weed Science, and Chris Teutsch, Associate Professor of Forage Management. Dr. Hagood will provide farmers with knowledge of the practical science behind developing a weed management. Dr. Teutsch will help farmers understand the relationships between soils and weeds, with insights on how to use fertility to shift the balance to favor of quality forages.

This year, VFGC will include local producers at each workshop to discuss how they balance grazing, re-establishment, mowing, and spraying to provide a quality forage for grazing and/or haying.

The day-long conference will be repeated at four locations:

- Tuesday, January 17, in Wytheville at the Wytheville Meeting Center.
- Wednesday, January 18, in Weyers Cave at the Weyers Cave Community Center.
- Thursday, January 19, in Gordonsville, at the Gordonsville Volunteer Fire Company Hall
- Friday, January 20, in Chatham, at the Olde Dominion Agricultural Complex.

The conferences will run from 8:30 am to 3:00 pm.

Please visit the VFGC web site (<http://vaforages.org>) for additional details and registration information.

The U.S. Department of Agriculture Natural Resources Conservation Service is also a sponsor.

## **Calendar of Events**

### **October**

31-Nov 1      Income Tax Seminar. Richmond I. General Session and Farm Session. Contact Income Tax School Registrar by phone at (540) 231-3306 or by email at [vttax@vt.edu](mailto:vttax@vt.edu).

### **November**

2-3              Income Tax Seminar. Weyers Cave. General Session and Farm Session. Contact Income Tax School Registrar by phone at (540) 231-3306 or by email at [vttax@vt.edu](mailto:vttax@vt.edu).

- 7-8 Income Tax Seminar. Abingdon. General Session and Farm Session. Contact Income Tax School Registrar by phone at (540) 231-3306 or by email at [vttax@vt.edu](mailto:vttax@vt.edu).
- 9-10 Income Tax Seminar. Roanoke. General Session and Farm Session. Contact Income Tax School Registrar by phone at (540) 231-3306 or by email at [vttax@vt.edu](mailto:vttax@vt.edu).
- 14-15 Income Tax Seminar. Lynchburg. General Session and Farm Session. Contact Income Tax School Registrar by phone at (540) 231-3306 or by email at [vttax@vt.edu](mailto:vttax@vt.edu).
- 16-17 Income Tax Seminar. Arlington. General Session. Contact Income Tax School Registrar by phone at (540) 231-3306 or by email at [vttax@vt.edu](mailto:vttax@vt.edu).
- 28-29 Income Tax Seminar. Herndon. General Session. Contact Income Tax School Registrar by phone at (540) 231-3306 or by email at [vttax@vt.edu](mailto:vttax@vt.edu).
- 30- Dec 1 Income Tax Seminar. Fredericksburg. General Session and Farm Session. Contact Income Tax School Registrar by phone at (540) 231-3306 or by email at [vttax@vt.edu](mailto:vttax@vt.edu).

## **December**

- 5-6 Income Tax Seminar. Williamsburg. General Session and Farm Session. Contact Income Tax School Registrar by phone at (540) 231-3306 or by email at [vttax@vt.edu](mailto:vttax@vt.edu).
- 7-8 Income Tax Seminar. Chesapeake. General Session. Contact Income Tax School Registrar by phone at (540) 231-3306 or by email at [vttax@vt.edu](mailto:vttax@vt.edu).
- 12-13 Income Tax Seminar. Richmond II. General Session. Contact Income Tax School Registrar by phone at (540) 231-3306 or by email at [vttax@vt.edu](mailto:vttax@vt.edu).

## **January**

- 4 Introductory Tax Preparation Seminar. Roanoke. Contact Income Tax School Registrar by phone at (540) 231-3306 or by email at [vttax@vt.edu](mailto:vttax@vt.edu).
- 5 Introductory Tax Preparation Seminar. Falls Church. Contact Income Tax School Registrar by phone at (540) 231-3306 or by email at [vttax@vt.edu](mailto:vttax@vt.edu).
- 6 Introductory Tax Preparation Seminar. Richmond. Contact Income Tax School Registrar by phone at (540) 231-3306 or by email at [vttax@vt.edu](mailto:vttax@vt.edu).