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The End of Tobacco and the Rise of Local Food in Western North Carolina

Charlie Jackson and Allison Perrett
March 2018

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Abstract

This report presents the findings of an analysis of Census of Agriculture data that assessed changes that occurred to food and farms in Western North Carolina (WNC) in relation to the “tobacco buyout” and to an effort to build a more localized food and farming economy. In WNC, the mid-1990s marked the beginning of a significant period of transition in agriculture. After more than 70 years as the dominant cash crop for farmers, production of burley tobacco had entered a period of sharp decline. Anticipating the economic and cultural impacts the loss of tobacco would have on communities, a group of farmers and citizens launched a local food campaign in 2000 to provide farmers with alternatives.

In this report, WNC is a 20-county region in the Appalachian region of North Carolina that consistently grew burley tobacco under the federal quota and price support program. Nine of the 20 counties, which were the focus of the analysis, accounted for the majority of tobacco production prior to the buyout. The analysis, which used data from the 1997 to 2012 censuses, shows significant shifts in agriculture related to tobacco and food production for local markets. Though the region experienced a dramatic loss of farms with the end of tobacco, the data from census period just after the 2004 buyout shows the region’s farm loss leveled off with a rate far less than the state and US loss rates. As tobacco declined, production for local markets increased with an increase in the production of produce and in the value of direct sales.

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The End of Tobacco and the Rise of Local Food in Western North Carolina

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What is the issue?

In the last 20 years, agriculture in WNC has been impacted by two significant developments: the loss of burley tobacco as the dominant cash crop with the end of the federal quota and price support program and the emergence of an effort to develop markets for locally grown food as an alternative to tobacco. This report used data from the Census of Agriculture to assess changes to the region's agriculture and food landscape over this 20-year time span.

What did the study find?

The findings show both a dramatic decline in tobacco production and a significant shift to food production and local sales. While local food has not replaced tobacco as a means of livelihood for the farmers of the region, it has emerged as a significant new direction for agriculture.

How was the study conducted?

The study analyzed data from the 1997, 2002, 2007, and 2012 censuses for the top burley tobacco-producing counties in WNC. Analyses focused specifically on data related to tobacco production, vegetable production, and the sale of local products to local markets and customers. The region, 20 counties located in the Appalachian region of North Carolina, were the only counties to consistently grow burley tobacco under the federal quota and price support program. Nine of the 20 counties, an area referred to in this report as the "NC burley belt", accounted for 94% of tobacco farms, 95% of tobacco acres, and 95% of tobacco sales in WNC in 1997. As these counties made up the vast majority of burley production in WNC, they were the focal point for analysis.

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EXECUTIVE SUMMARY

In the Appalachian region of Western North Carolina (WNC), the mid-1990s marked the beginning of a significant period of transition in agriculture. After more than 70 years as the dominant cash crop for farmers, production of burley tobacco had entered a period of sharp decline.¹

In the 1920s, farmers in WNC adopted the production of burley, a tobacco variety well-suited to the region's soils and valued in the market for its capacity to absorb flavorings.² Beginning in 1933, the Agricultural Adjustment Act (AAA), a federal quota and price support program, protected growers from market volatility and stabilized prices and made burley a profitable crop for the region's smaller-scale farms and a primary source of income for many farming households.³

The market stability that resulted from the AAA created a unique opportunity for farmers, and burley tobacco became a sustaining feature of WNC farming for most of the twentieth century. While the program went through adjustments, it continued to keep burley tobacco production profitable for the smaller farms in Appalachia that participated in the program. As recently as 1992, over half (58%) of the farms in the most tobacco dependent counties reported growing tobacco.

Federal policy changes in the 1980s and 1990s shifted program costs to producers, opened tobacco to greater global competition, and significantly eroded the effectiveness of the program. Changing societal attitudes about tobacco culminated in the 1998 Master Settlement Agreement (MSA). The MSA, an accord reached between the states and the tobacco companies, required tobacco companies to pay \$206 billion over 25 years to reimburse states for costs related to the treatment of smoking-related diseases.^{4,5} Following the adoption of the MSA, tobacco companies further cut the amounts of tobacco they purchased from Appalachian farms, which resulted in a continued decline in tobacco production and revenue in the region.⁶

In 2004, the Fair and Equitable Tobacco Reform Act, commonly referred to as the “tobacco buyout,” ended all government protections and opened tobacco production to global competition.⁷ Agricultural economists anticipated that the elimination of federal price and production controls on tobacco would

¹ Algeo, Katie. 1997. “The Rise of Tobacco as a Southern Appalachian Staple: Madison County, North Carolina.” *Southeastern Geographer* XXXVI (1): 46–60.

² Ibid.

³ Wood, Lawrence E. 1998. “The Economic Impact of Tobacco Production in Appalachia.” Appalachian Regional Commission Washington, DC. Retrieved from https://www.arc.gov/assets/research_reports/EconomicImpactofTobaccoProductioninAppalachia.pdf. To stabilize prices, one of the key strategies the AAA employed was to restrict where different types of tobacco could be grown. Two types of tobacco, flue-cured and burley, dominated commercial production, accounting for over 90% of all tobacco grown. Historically, burley tobacco was the primary variety grown in the Appalachian region and the type restricted to the region through the quota system. This system effectively eliminated the competition for burley tobacco production from larger farms in other regions and the program was widely supported by farmers growing burley.

⁴ Craig, Verdie A. 2005 “Restructuring Tobacco Livelihoods: Burley Growers and the Federal Tobacco Program.” Ph.D. dissertation, Rutgers University.

⁵ Perrett, A. 2013. “Cultivating Local: Building a Local Food System in Western North Carolina.” Ph.D. dissertation, University of South Florida.

⁶ Ibid.

⁷ Ibid.

have disproportionate economic impacts on the producers of burley tobacco compared to producers growing other types of tobacco.⁸ In the 1995-1996 time period, burley tobacco generated an average of \$2,165 an acre above cash expenses, and in 1997 tobacco farmers on average earned 79% of their gross farm income from tobacco.⁹ Production of burley tobacco was unique in that it was concentrated in Appalachia in some of the most economically distressed counties.¹⁰ In comparison to producers of flue-cured tobacco, producers of burley in Appalachia had smaller, less diversified farming operations¹¹ and fewer opportunities to earn off-farm income than farmers growing tobacco in other parts of the country.¹²

Anticipating the devastating impacts the loss of tobacco could have on the region, a group of farmers, agricultural support professionals, and other community stakeholders met in 1995 to look for community-based solutions to the challenges facing small farmers. This effort developed into the Appalachian Sustainable Agriculture Project (ASAP), which launched a local food campaign in 2000 to build a market alternative for farmers.¹³ Over the next decade and a half, campaign efforts focused on increasing the visibility of the region's farms, connecting people to farms and food, and building consumer demand for locally grown farm products. This report assesses changes that occurred to food and farms in the region in the aftermath of the tobacco buyout and in relation to the effort to build a more localized food and farming economy.

The most comprehensive and consistent data available for the region for the time period comes from the United States Department of Agriculture (USDA) National Agricultural Statistics Service (NASS) Census of Agriculture, which is conducted every five years. To account for the 1998 MSA and 2004 tobacco buyout, this report used data from the 1997, 2002, 2007, and 2012 censuses for the top burley tobacco-producing counties in WNC. Analyses focused specifically on data related to tobacco production, vegetable production, and the sale of local products to local markets and customers. The region, 20 counties located in the Appalachian mountains of North Carolina, were the only counties to consistently grow burley tobacco under the federal quota and price support program. Nine of the 20 counties, an area referred to in this report as the "NC burley belt," form a contiguous strip beginning with Alleghany County in the northeast and ending with Haywood County in the center of WNC. This contiguous belt accounted for 94% of tobacco farms, 95% of tobacco acres, and 95% of tobacco sales in WNC in 1997. As these counties made up the vast majority of burley production in WNC, they were the focal point for analysis.

Key Findings: Farms in Transition

Findings show significant shifts in agriculture related to tobacco and food production for local markets. From 1997 to 2012, tobacco production in the NC burley belt counties declined sharply in terms of acreage, number of farms growing tobacco, and in tobacco-related revenue. The number of tobacco farms declined 97% from 2,707 farms in 1997 to 74 farms in 2012. Tobacco acreage dropped from 8,344 acres

⁸ Ibid.

⁹ Gale, H. Frederick, Foreman, Linda, and Capehart, Thomas (2000) "Tobacco and the Economy: Farms, Jobs, and Communities." Economic Research Service, U.S. Department of Agriculture, Agricultural Economic Report No. 789. Retrieved from https://www.ers.usda.gov/webdocs/publications/41156/14951_aer789_1.pdf?v=41318, 18-19

¹⁰ Wood, "The Economic Impact of Tobacco Production."

¹¹ Though many producers of burley had beef cattle, cattle sales generated relatively little income.

¹² Wood, "The Economic Impact of Tobacco Production."

¹³ ASAP later incorporated as a nonprofit to formalize the effort to transform the region's food and farm system.

in 1997 to 441 acres in 2012, a 95% decline. Revenue decreased by 96%, dropping to \$892,000 in 2012 from \$20.9 million in 1997.

The loss of tobacco farms disproportionately impacted total farm numbers for the burley belt counties. The burley belt lost 1,841 farms overall (-24%) compared to the rest of NC (-15%) and the US (-5%) between 1997 and 2012. Looking at changes in total farms after the buyout in 2004 provides perspective on the loss of farms in the post-tobacco burley belt. By the 2007 census, the burley belt counties had lost 91% of the tobacco farms that existed in 1997. Comparing the 2007 total farm numbers to 2012 shows overall farm loss stabilized with a 2.4% decline, less than half of the state loss (-5.1%) and better than the national rate (-4.3%) during the same time period.

The farm loss sustained illustrates the particular vulnerability of farms growing burley tobacco. The structure of the burley program made it possible for farms to profitably and reliably grow tobacco as a single crop on small acreages.¹⁴ Burley tobacco quotas were tied to the land and coupled with production restrictions, making burley tobacco a uniquely profitable enterprise for small mountain farms. Compared to producers of flue-cured tobacco, burley tobacco farmers were less likely to have diversified farming operations, and they disproportionately grew tobacco as their only crop.¹⁵ Burley tobacco farmers were also much less likely than flue-cured growers to have farming as their principal occupation.¹⁶

From 2002 to 2012, the former burley-dependent counties saw a 98% increase in the number of farms growing vegetables, melons, potatoes, and sweet potatoes, from 264 farms in 2002 to 524 farms in 2012. In addition, the nine counties reported a 193% increase in sales of these products, from \$5.7 million in 2002 to \$16.6 million in 2012. In the context of a declining tobacco market and emerging market for local food, the increase in vegetable, melon, potato, and sweet potato production was significant; it marked a shift from non-food production of tobacco to production of foods. Not all vegetables, melons, potatoes, and sweet potatoes were produced for local markets, but generally speaking fruits and vegetables are commonly produced for sale in local markets and, for farmers, can have a lower barrier to market entry. Data on the sale of products to local customers and businesses indicates that the shifts to local markets were significant, and this corresponds to the increased fruit and vegetable production.

While there is no census data that specifically measures local production for local sales there are several sub-categories of measures for local sales. In the census category of direct sales, the number of farms in the NC burley belt selling their products directly to consumers increased 128%, from 280 farms in 1997 to 638 farms in 2012. In addition, direct sales revenue increased from \$866,000 in 1997 to over \$3.6 million in 2012 (320%). The pace of growth in direct sales in the NC burley belt counties surpassed the pace of growth at the state and national levels. From 1997 to 2012 the rest of NC reported a 73% increase in the number of farms engaged in direct sales and a 149% increase in the value of direct sales; the US overall reported a modest 31% increase in the number of farms engaged in direct sales and a 121% increase in the value of direct sales.

In 2012, the census began reporting the number of farms marketing product direct to retail outlets. While trend data does not yet exist for this data point, a total of 443 farms, or 7% of all farms in the nine counties, reported that they marketed product direct to retail outlets. This proportion is higher than that of the state (4%) and nation (2%).

¹⁴ In 1997, 66% of NC burley belt farms produced tobacco on less than three acres.

¹⁵ Gale, "Tobacco and the Economy: Farms, Jobs, and Communities"

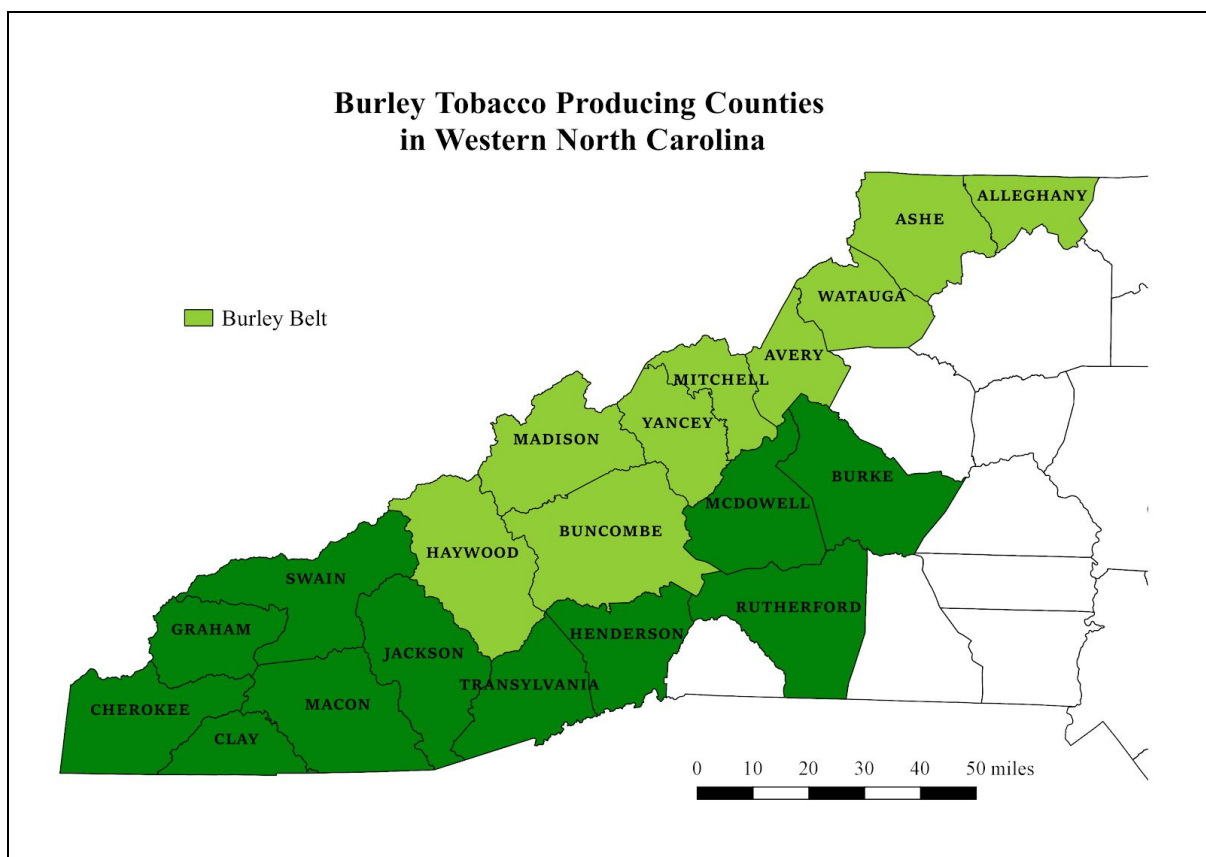
¹⁶ Ibid.

The Appalachian region of WNC benefited tremendously from the production of tobacco. It also experienced the traumatic consequences of being heavily dependent on a single crop. With the end of tobacco complete, farming in the region is shifting in a new direction. For many farmers there are new and expanding opportunities to continue farming by growing food for local markets.

METHODOLOGY

Historically, farms in 20 WNC counties consistently engaged in the production of burley tobacco. These counties are: Alleghany, Ashe, Avery, Buncombe, Burke, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Rutherford, Swain, Transylvania, Watauga, and Yancey. In order to understand the dynamics between the decline of burley tobacco and rise of food production, the counties most impacted by the loss of tobacco were isolated for analysis and comparison. As such, the findings in this report are based on an analysis of Census of Agriculture data for the top burley producing counties in the region for the years 1997, 2002, 2007, and 2012.

WNC’s top burley producing counties were identified through an analysis of each county’s census data related to number of farms growing tobacco, number of farm acres dedicated to tobacco, and overall value of tobacco sales in 1997, the census year most immediately preceding the MSA. The final top nine counties include: Alleghany, Ashe, Avery, Buncombe, Haywood, Madison, Mitchell, Watauga, and Yancey counties and are collectively referred to as the “NC burley belt” in this report.



For this report, summary statistics provided for the NC burley belt farms come from the following census variables: tobacco production (farms engaged, acres, sales); vegetable, melon, potato, and sweet potato production (farms engaged, acres, sales); principal operators by years on present farm; direct to consumer marketing (farms engaged, sales); community supported agriculture (farms engaged); and direct to retail marketing (farms engaged).

Tobacco data were analyzed to assess the rate and extent of decline in production of tobacco in the NC burley belt counties over the study time period. Vegetable, melon, potato, and sweet potato data, which are combined into a single variable within the census, were analyzed to determine changes in the volume, distribution, and sales value of these crops in the NC burley belt.¹⁷ Analysis of data on principal operators by years on present farm was used to shed light on shifts in crop production from tobacco. Direct to consumer marketing data, community supported agriculture data, and direct to retail marketing data were analyzed to evaluate any changes in number or percentage of farms engaged in local food activities within the NC burley belt, as well as any changes in the dollar value of sales through these marketing channels.

For comparative purposes, data on food and farming trends for North Carolina (NC) and the United States (US) were also analyzed. All data were manually extracted from the Census of Agriculture databases into a Microsoft Excel spreadsheet for analysis. The Census of Agriculture uses a series of abbreviations and symbols (i.e., (D), (Z), (NA)) to indicate data that have been withheld or left uncalculated to avoid disclosing information on individual farms. In this report, these data points were treated as “zero” for all summative calculations.

Limitations

While the Census of Agriculture is the most complete and comprehensive account of US agricultural activities and the most precise publicly-available database by which to compare agricultural data at a variety of geographic levels, the information the census provides is limited. Alone, census data cannot provide a complete picture of the shifts that have taken place in WNC around food and farming over the past 20 years. The census is a snapshot in time every five years and does not provide data on individual farms but only for farms in aggregate. At county-level scales, data gaps affect accuracy to a greater extent than at regional scales. Census data are primarily collected through voluntary mail-in questionnaires and, though NASS attempts to reach nonresponders, not all farmers respond to the census.¹⁸ In 2002, the USDA introduced a new Census of Agriculture methodology to better account for all farms. To ensure comparability between the 2002 and 1997 data, NASS reweighted the 1997 data to account for any undercoverage. While the majority of the calculations in this report used the reweighted 1997 data, a few data points from the 1997 census were not published with reweighted values. We identify those unweighted numbers in the footnotes and acknowledge they can not be accurately compared to newer data points. Furthermore, though the data and analyses in this report show trends in tobacco production, vegetable production, and local food economic activity (e.g., direct sales to consumers, direct marketing to retailers, farms with community supported agriculture), the data cannot be used to conclude direct correlation or causation.

¹⁷ Until 1997, the census tracked the production of vegetables using the category, “vegetables, sweet corn, and melons.” In 2002, the census shifted this category to “vegetables, melons, potatoes, and sweet potatoes.” To maintain consistency and comparability of data, this report focuses on the vegetables, melons, potatoes, and sweet potatoes variable available for the years 2002, 2007, and 2012.

¹⁸ To account for undercoverage and misclassification of farms/non-farms, NASS uses a system of capture-recapture methods to adjust the census data.

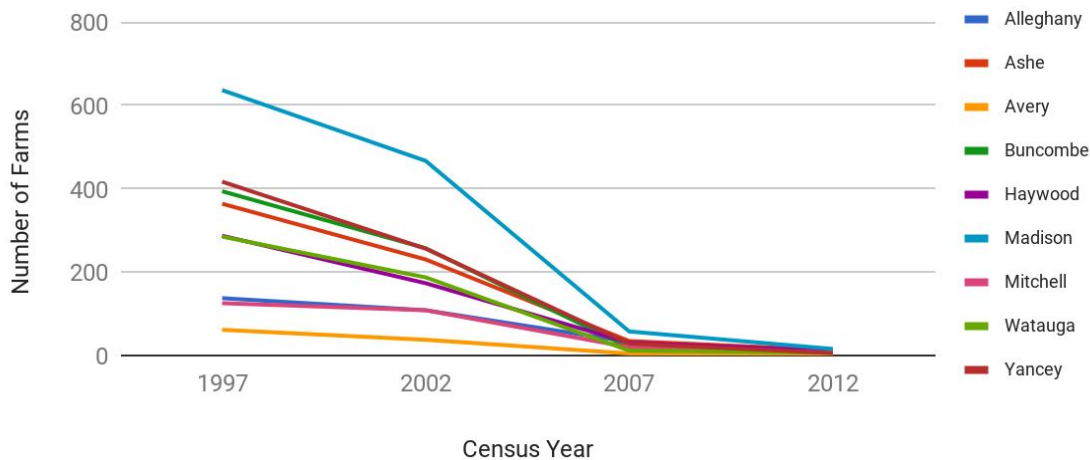
DATA

Trends in Tobacco

Number of Farms Growing Tobacco, 1997-2012

Though tobacco production was in decline both nationally and in WNC, thousands of farms were still growing tobacco in the nine NC burley belt counties in 1997 and in 2002. In 1997, the NC burley belt accounted for 2,707 of WNC’s 2,876 tobacco farms (94%), and in 2002, it accounted for 1,823 of WNC’s 1,937 tobacco farms (94%). By 2007, three years after the tobacco buyout, the total number of farms producing tobacco in the NC burley belt counties dropped significantly to 233, followed by another decline in 2012 to just 74 farms producing tobacco (Figure 1). Overall, there was a 97% loss from 1997 to 2012 in the number of farms that produced tobacco in the NC burley belt.

Figure 1: *Number of Farms in the NC Burley Belt Growing Tobacco, 1997-2012*



Each of the nine NC burley belt counties experienced a 93% or greater decrease in the number of farms producing tobacco during this timeframe (Table 1). Madison County reported the greatest losses in number of farms producing tobacco (-622 farms) while Yancey County had the greatest percentage loss in farms producing tobacco (-99%).

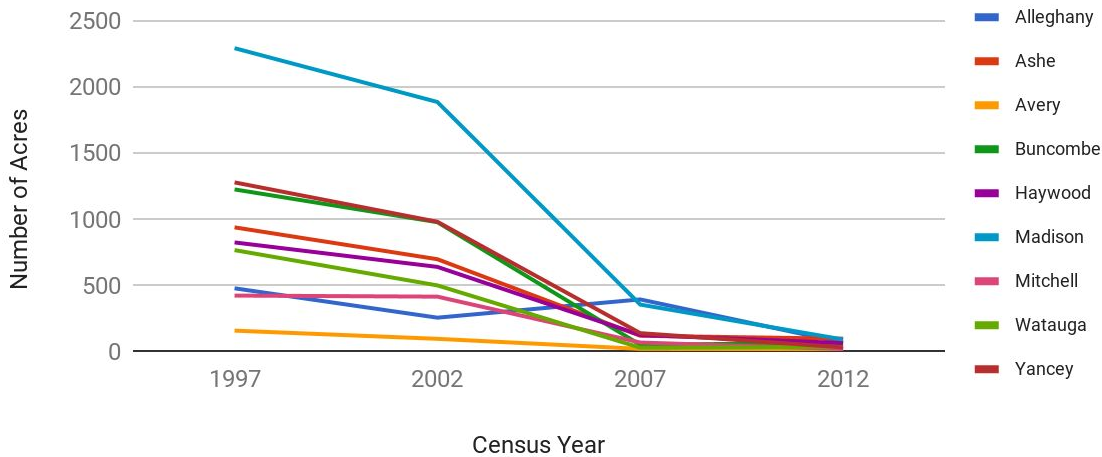
Table 1: *Change in Number of Farms in the NC Burley Belt Growing Tobacco, 1997 and 2012*

| | 1997 | 2012 | % change 1997-2012 |
|--------------|--------------|-----------|--------------------|
| Alleghany | 137 | 7 | -95% |
| Ashe | 364 | 12 | -97% |
| Avery | 61 | 4 | -93% |
| Buncombe | 394 | 9 | -98% |
| Haywood | 287 | 10 | -97% |
| Madison | 637 | 15 | -98% |
| Mitchell | 125 | 6 | -95% |
| Watauga | 285 | 6 | -98% |
| Yancey | 417 | 5 | -99% |
| Total | 2,707 | 74 | -97% |

Total Acres Dedicated to Tobacco Production, 1997-2012

The reduction in the number of farms that reported tobacco production is mirrored in the reduction of farm acres dedicated to tobacco in the NC burley belt (Figure 2). Farms in the NC burley belt accounted for 95% of WNC’s 8,780 tobacco acres in 1997 (8,344 acres), 95% of WNC’s 6,777 tobacco acres in 2002 (6,406 acres), 99% of WNC’s 1,262 tobacco acres in 2007 (1,255 acres), and 99% of WNC’s 446 tobacco acres in 2012 (441 acres). Overall, the NC burley belt experienced a 95% reduction in the number of acres dedicated to tobacco production, from 8,344 tobacco acres in 1997 to 441 tobacco acres in 2012.

Figure 2: Number of Acres in the NC Burley Belt Dedicated to Tobacco, 1997-2012



From 1997 to 2012, Madison County reported the greatest loss in acreage dedicated to tobacco production (2,203 acres) while Yancey County reported the greatest percentage loss (98%; Table 2).

Table 2: Change in Number of Acres Dedicated to Tobacco in the NC Burley Belt by County, 1997 and 2012

| | 1997 | 2012 | % change 1997-2012 |
|--------------|-------------|------------|-----------------------|
| Alleghany | 473 | 62 | -87% |
| Ashe | 934 | 92 | -90% |
| Avery | 153 | 12 | -92% |
| Buncombe | 1,221 | 61 | -95% |
| Haywood | 820 | 59 | -93% |
| Madison | 2,289 | 86 | -96% |
| Mitchell | 418 | 14 | -97% |
| Watauga | 762 | 29 | -96% |
| Yancey | 1,274 | 26 | -98% |
| Total | 8344 | 441 | -95% |

Total Sales of Tobacco, 1997-2012

As farmers in the NC burley belt cut back on tobacco production, the revenue generated from the sale of tobacco also declined (Figure 3). In 1997, farms in the NC burley belt accounted for 95% of WNC’s \$22.0 million in total tobacco sales (\$20.9 million), 97% of WNC’s \$18.0 million in tobacco sales in 2002 (\$17.4 million), 100% of WNC’s \$2.1 million in tobacco sales in 2007, and 99% of WNC’s \$904,000 in

tobacco sales in 2012 (\$892,000). Overall, revenue generated from tobacco sales in the NC burley belt declined 96%, from \$20.9 million in 1997 to \$892,000 in 2012.

Figure 3: Tobacco Sales in the NC Burley Belt, 1997-2012

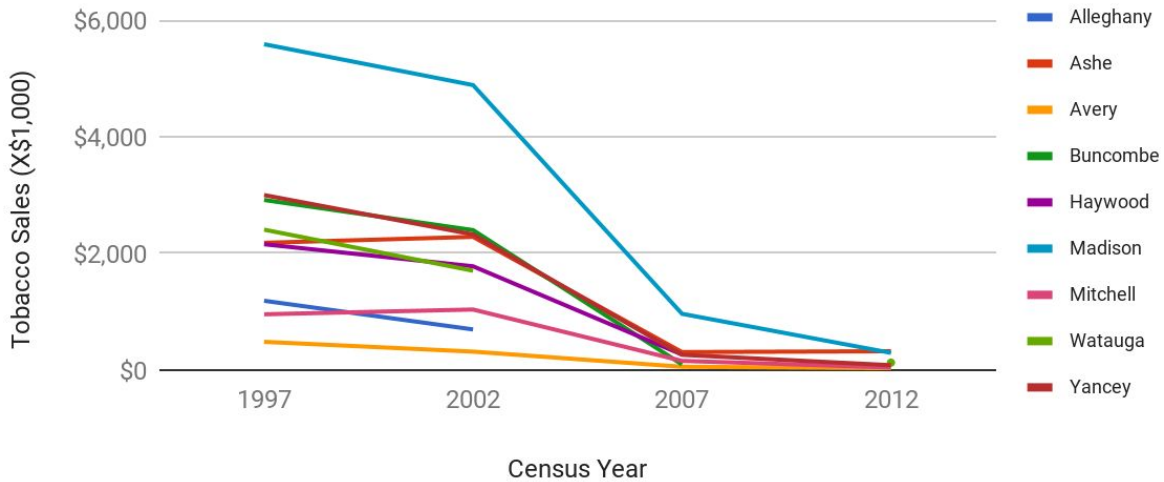


Table 3 shows that, as with tobacco producing farms and acres dedicated to tobacco, Madison County also reported the greatest dollar value loss in annual tobacco sales from 1997 to 2012 at \$5.3 million. Yancey County reported the greatest percentage loss at 97%.

Table 3: Change in Tobacco Sales in the NC Burley Belt, 1997 and 2012

| | 1997 | 2012 | % change 1997-2012 |
|--------------|---------------------|-------------------|---------------------------|
| Alleghany | \$1,187,000 | (D) ¹⁹ | n/a |
| Ashe | \$2,182,000 | \$321,000 | -85% |
| Avery | \$482,000 | \$30,000 | -94% |
| Buncombe | \$2,918,000 | (D) | n/a |
| Haywood | \$2,158,000 | (D) | n/a |
| Madison | \$5,592,000 | \$293,000 | -95% |
| Mitchell | \$955,000 | \$42,000 | -96% |
| Watauga | \$2,408,000 | \$125,000 | -95% |
| Yancey | \$3,002,000 | \$81,000 | -97% |
| Total | \$20,884,000 | \$892,000 | -94% ²⁰ |

¹⁹ In the census, (D) is a symbol used to indicate data that have been withheld or left uncalculated to avoid disclosing information on individual farms.

²⁰ This percentage is calculated without Alleghany, Buncombe, and Haywood counties, which had no published value for 2012.

Tobacco Farms by Acres of Tobacco Harvested, 1997

In 1997, 66% of farms in the NC burley belt harvested tobacco from fewer than three acres. Table 4 shows that the majority of farms growing tobacco in Ashe, Avery, Buncombe, Haywood, Watauga, and Yancey counties harvested it from fewer than two acres. By comparison, Alleghany, Madison, and Mitchell had a more even spread across harvested tobacco acres up to farms harvesting from ten acres.²¹

Table 4: Number of Tobacco Farms in the NC Burley Belt by Acres of Tobacco Harvested, 1997

| | 0.1 to 0.9 acres | 1.0 to 1.9 acres | 2.0 to 2.9 acres | 3.0 to 4.9 acres | 5.0 to 9.9 acres | 10.0 to 24.9 acres | 25.0 to 49.9 acres | 50.0 acres or more |
|--------------|------------------|------------------|------------------|------------------|------------------|--------------------|--------------------|--------------------|
| Alleghany | 28 | 28 | 24 | 22 | 19 | 5 | 4 | 0 |
| Ashe | 85 | 94 | 59 | 50 | 28 | 14 | 1 | 0 |
| Avery | 13 | 15 | 7 | 9 | 6 | 2 | 0 | 0 |
| Buncombe | 39 | 142 | 57 | 53 | 44 | 16 | 5 | 0 |
| Haywood | 55 | 90 | 37 | 34 | 35 | 15 | 1 | 0 |
| Madison | 50 | 173 | 116 | 107 | 92 | 29 | 10 | 0 |
| Mitchell | 10 | 31 | 23 | 22 | 13 | 8 | 0 | 0 |
| Watauga | 59 | 74 | 36 | 39 | 15 | 13 | 0 | 1 |
| Yancey | 84 | 97 | 84 | 51 | 26 | 16 | 3 | 2 |
| Total | 423 (17%) | 744 (31%) | 443 (18%) | 387 (16%) | 278 (11%) | 118 (5%) | 24 (1%) | 3 (<1%) |

Farm Loss, 1997-2012

The burley belt lost 1,841 farms overall (-24%; Table 5) compared to the rest of NC (-15%) and the US (-5%) between 1997 and 2012. By 2007 (the first census after the buyout), the burley belt counties had lost 91% of the tobacco farms that existed in 1997. The rate of farm loss for the 2007-2012 period dropped 2.4% in the burley belt compared to losses of 5.1% in NC and 4.3% in the US.

Table 5: Total Number of Farms in the NC Burley Belt

| | Farms, 1997 | Farms, 2002 | Farms, 2007 | Farms, 2012 | Change 1997-2012 | Change 2007-2012 | % Change 1997-2012 | % Change 2007-2012 |
|--------------|--------------|--------------|--------------|--------------|------------------|------------------|--------------------|--------------------|
| Alleghany | 652 | 544 | 519 | 567 | -85 | 48 | -13% | 9% |
| Ashe | 1,290 | 1,152 | 1,125 | 1,140 | -150 | 15 | -12% | 1% |
| Avery | 535 | 495 | 477 | 483 | -52 | 6 | -10% | 1% |
| Buncombe | 1,266 | 1,192 | 1,077 | 1,060 | -206 | -17 | -16% | -2% |
| Haywood | 962 | 795 | 707 | 597 | -365 | -110 | -38% | -16% |
| Madison | 1,071 | 973 | 801 | 719 | -352 | -82 | -33% | -10% |
| Mitchell | 375 | 358 | 314 | 286 | -89 | -28 | -24% | -9% |
| Watauga | 856 | 731 | 587 | 609 | -247 | 22 | -29% | 4% |
| Yancey | 745 | 622 | 447 | 450 | -295 | 3 | -40% | 1% |
| Total | 7,752 | 6,862 | 6,054 | 5,911 | -1,841 | -143 | -24% | -2% |

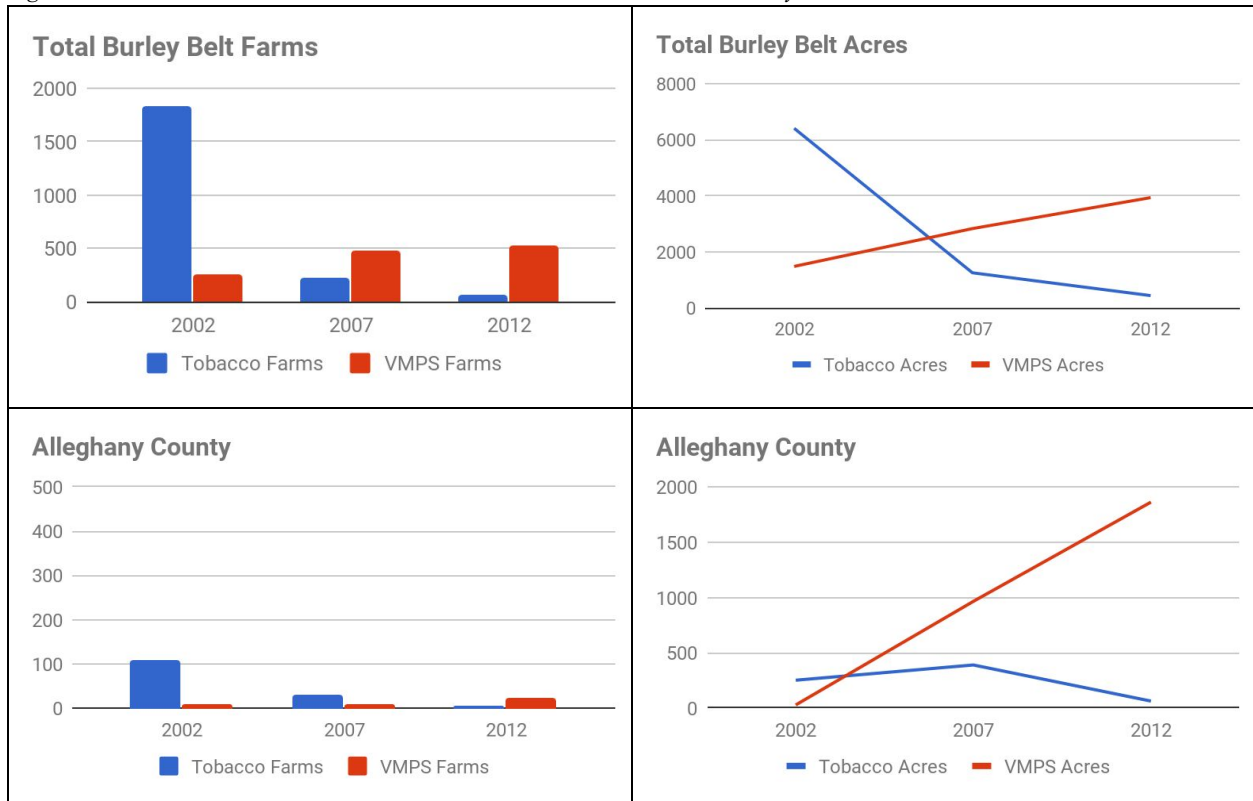
²¹ Census data for 1997 was reweighted with the 2002 census. However, the census category Tobacco Farms by Acres of Tobacco Harvested was not recalculated by NASS. Unweighted 1997 census data is contained in Table 4. Though the total number of farms would likely have changed with reweighting, the percentages in acre categories is unlikely to be significantly different. For this reason, and because there were so few tobacco farms left by the 2012 census, data from 1997 is not compared (and should not be considered directly comparable) to 2012 data.

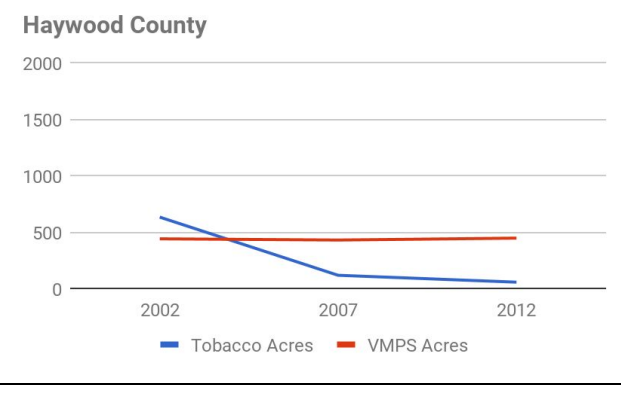
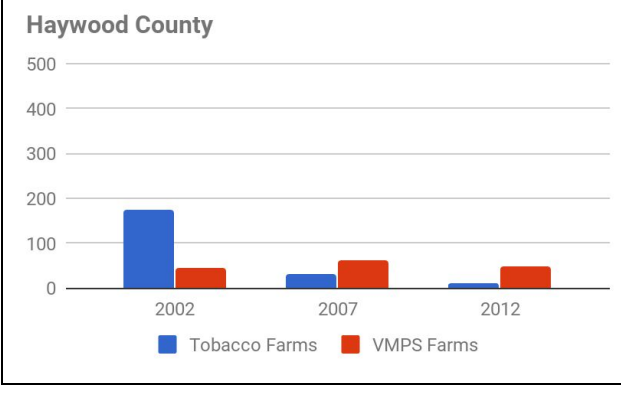
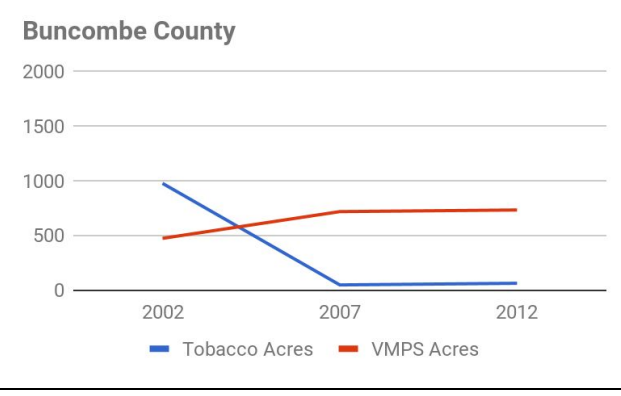
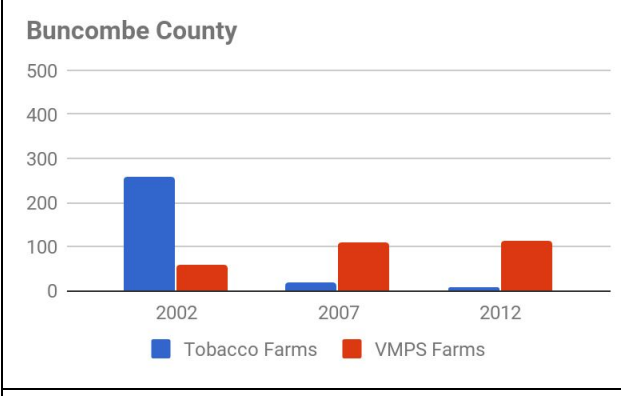
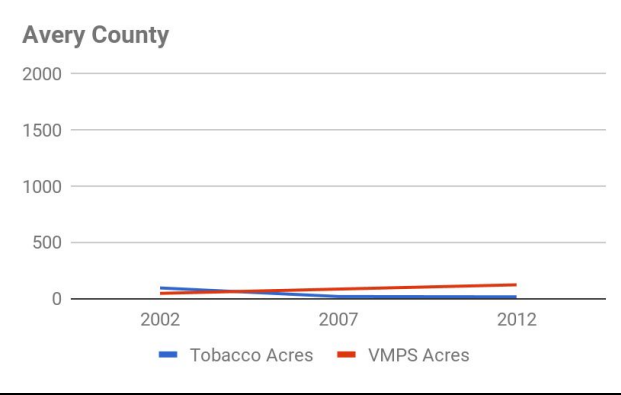
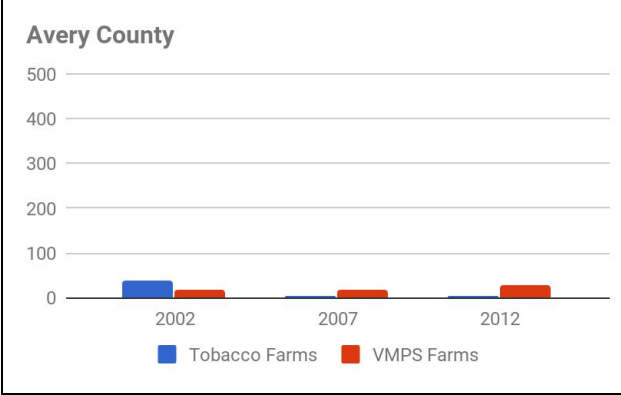
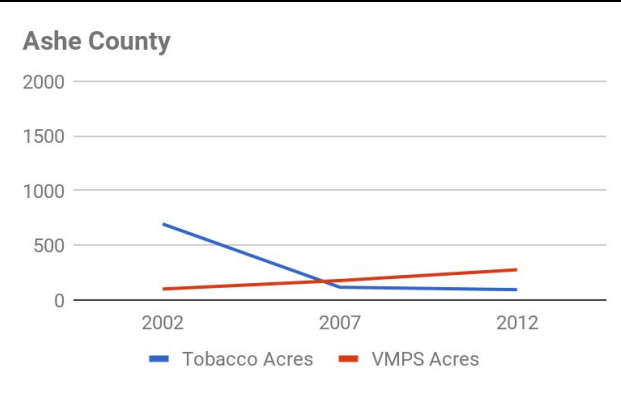
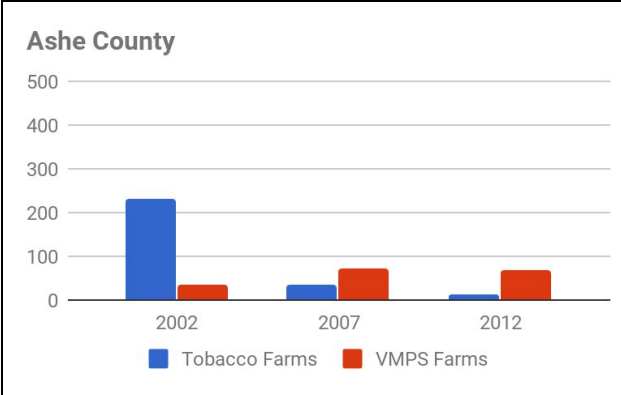
Transition Period: Decline in Tobacco, Rise in Vegetables, Melons, Potatoes, and Sweet Potatoes (VMPS)

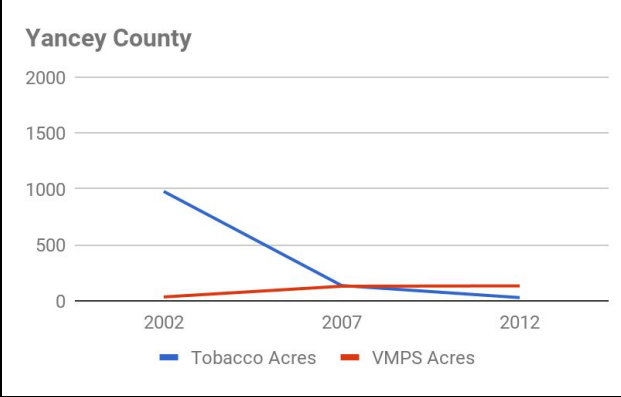
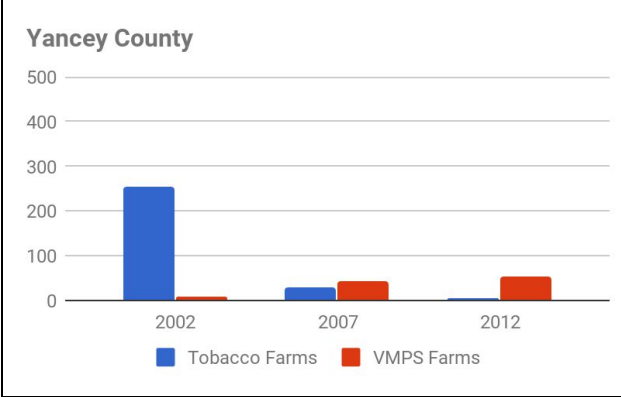
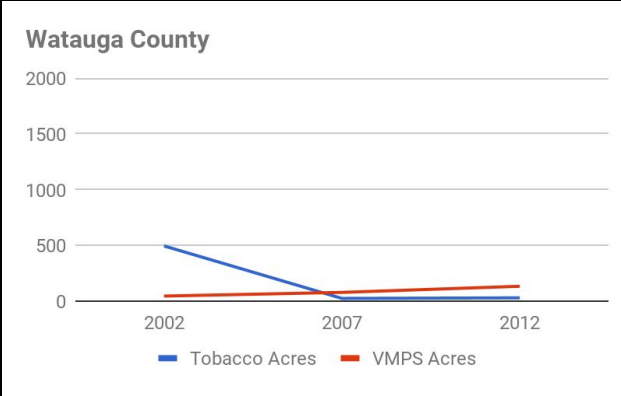
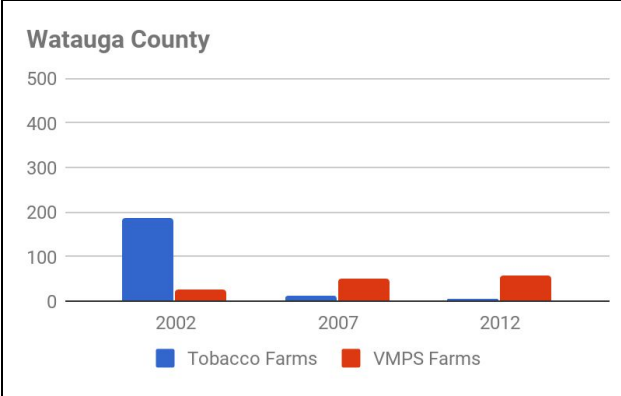
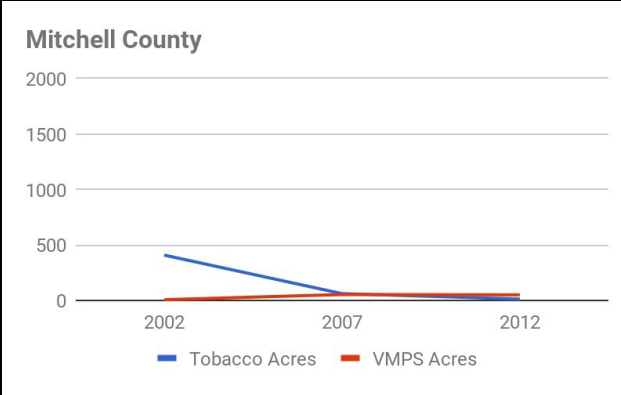
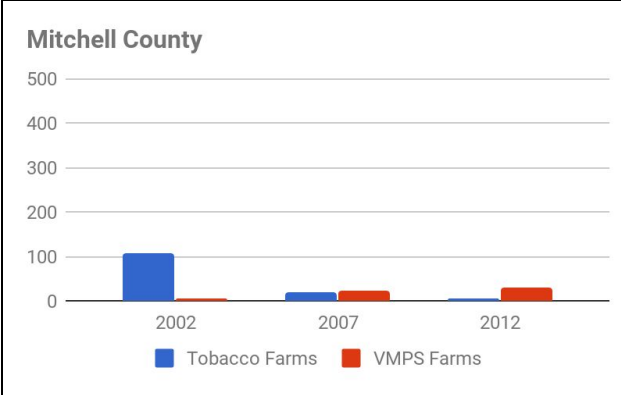
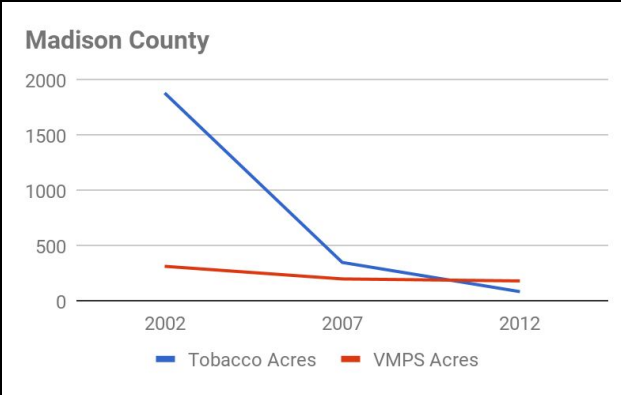
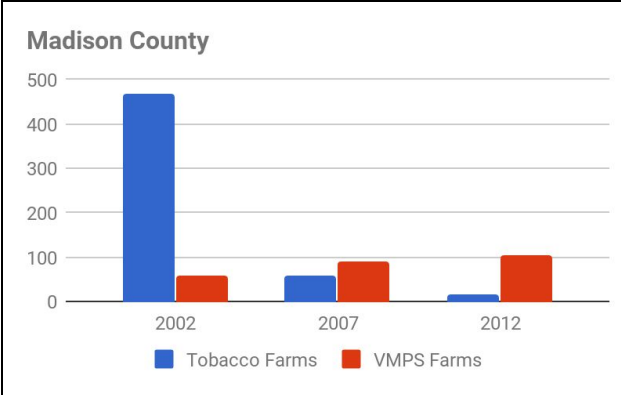
Farms and Sales of Tobacco Compared to VMPS, 2002-2012

As tobacco production declined in WNC, nearly all counties in the NC burley belt saw a steady, and in some cases steep, rise in the production of vegetables, melons, potatoes, and sweet potatoes (VMPS). The composite charts in Figure 4 compare the decline in the number of farms growing tobacco and acres devoted to tobacco with the increase in the number of farms growing VMPS and acres devoted to VMPS. The first two charts show this transition for all nine burley belt counties combined; the rest examine the transition for each county individually. For the nine counties, the number of VMPS farms increased from 264 in 2002 to 524 in 2012; VMPS acres increased from 1482 to 3935. Of the nine, by 2012, Buncombe County reported the highest number of VMPS farms at 114, while Alleghany County reported the greatest number of VMPS acres at 1,864.

Figure 4: Tobacco Farms and Acres vs. VMPS Farms and Acres in the NC Burley Belt, 2002-2012

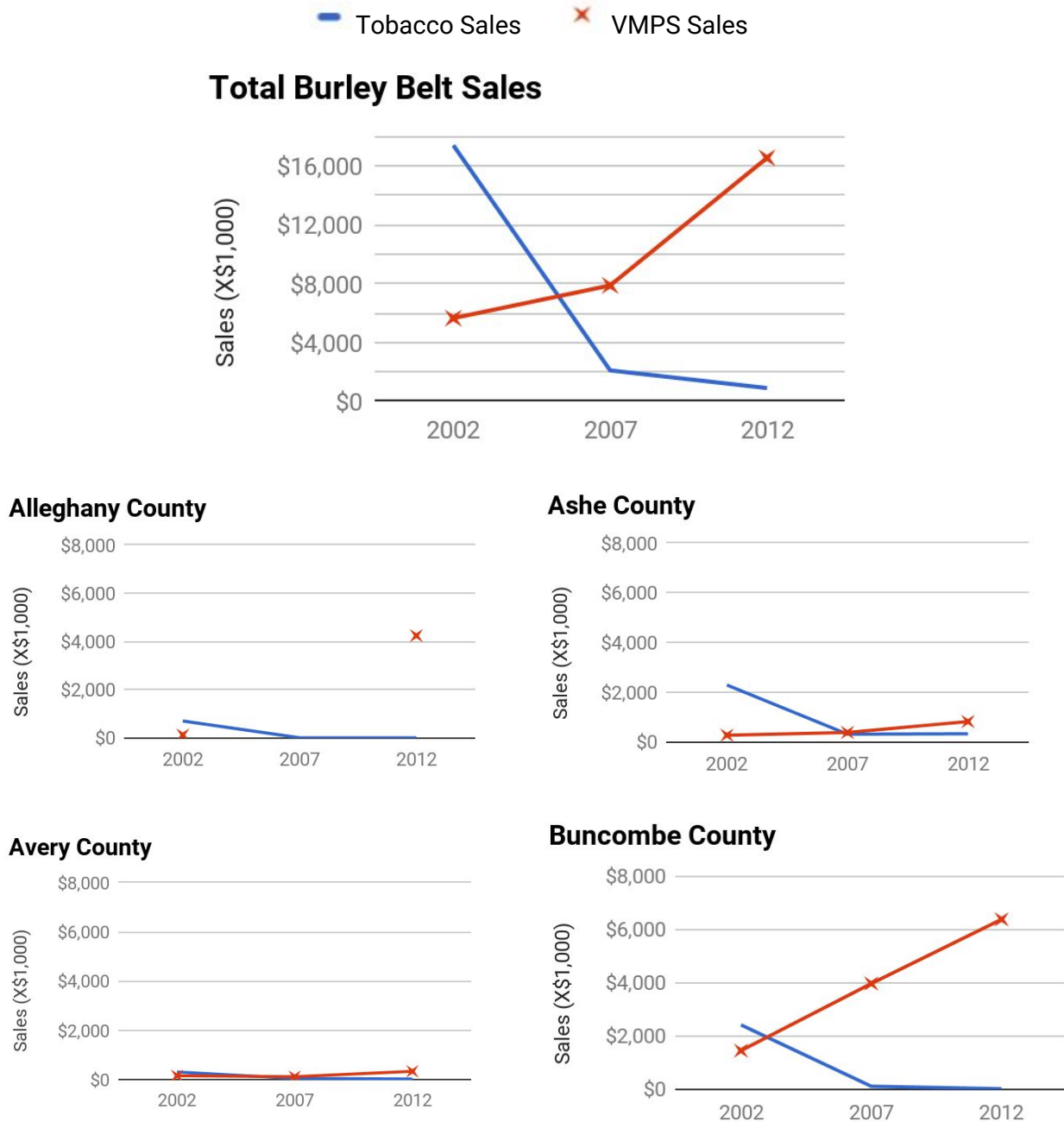






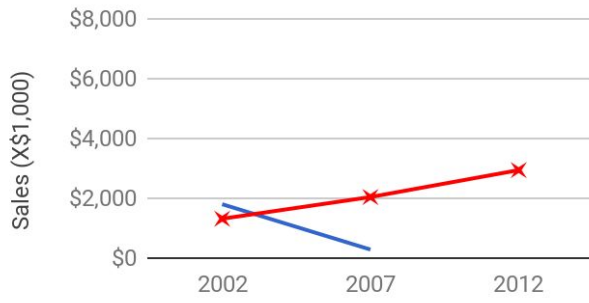
The composite charts of Figure 5 are similar to Figure 4 but show changes in the value of tobacco sales against the value of VMPS sales in the NC burley belt from 2002 to 2012. For the majority of the counties, as tobacco sales declined, sales of VMPS increased to surpass tobacco sales. Buncombe County led the NC burley belt in terms of VMPS sales, which increased from \$1.4 million in 2002 to \$6.4 million in 2012 (344%).

Figure 5: Tobacco Sales vs. Sales of VMPS in the NC Burley Belt, 2002-2012²²

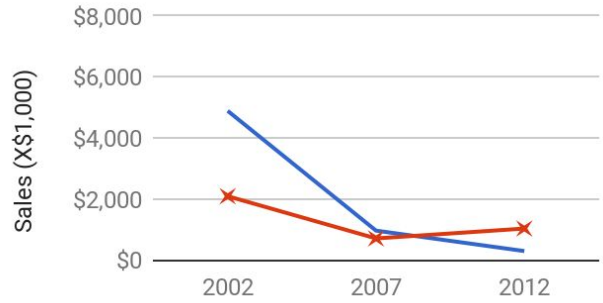


²² Note that the value for Alleghany VMPS sales in 2007 was reported as “(D)” in the census, a symbol used to indicate data that have been withheld or left uncalculated to avoid disclosing information on individual farms.

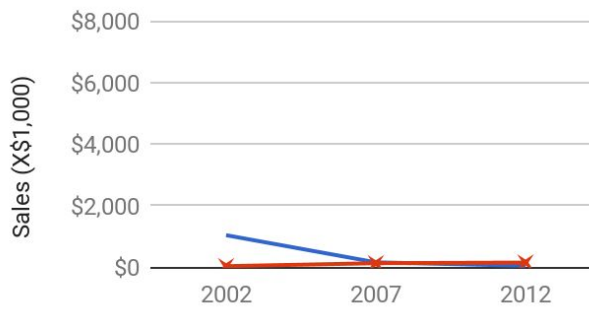
Haywood County



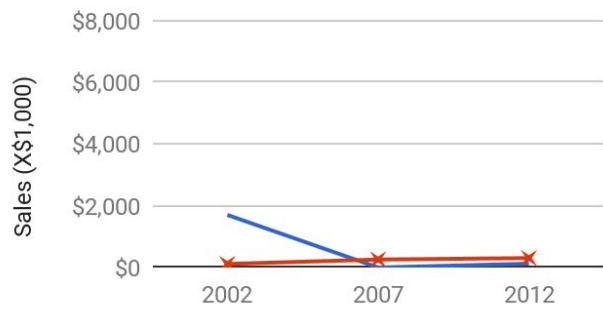
Madison County



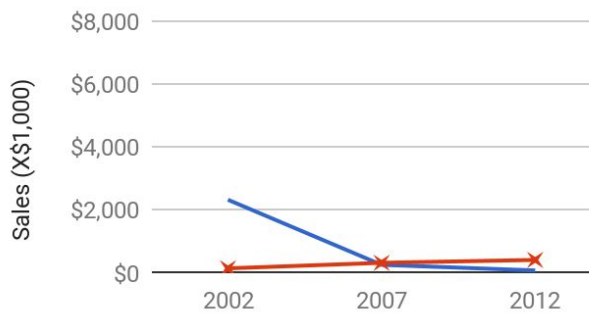
Mitchell County



Watauga County



Yancey County

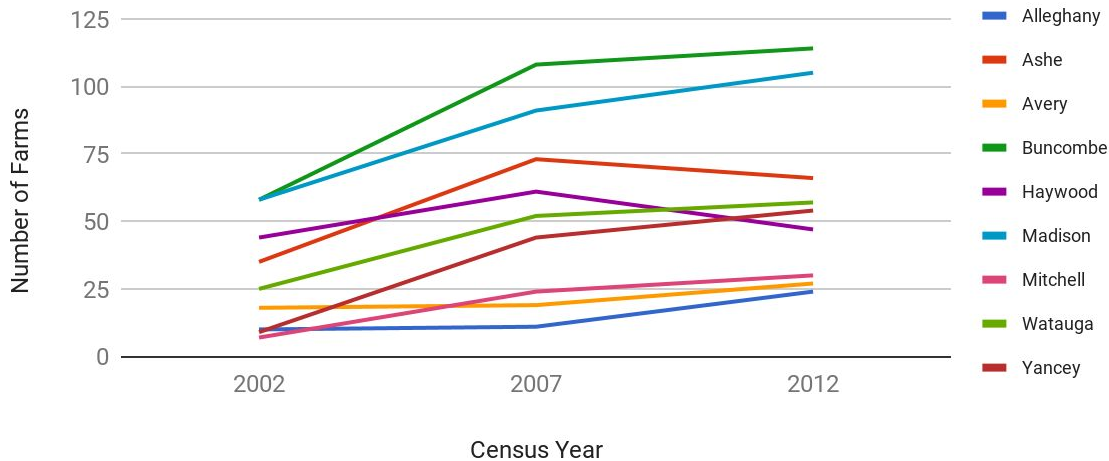


— Tobacco Sales x VMPS Sales

Number of Farms Growing Vegetables, Melons, Potatoes and Sweet Potatoes, 2002-2012

As a group, the NC burley belt counties accounted for 58% of WNC’s 456 farms that grew VMPS in 2002 (264 farms), 62% of WNC’s 783 farms that grew VMPS in 2007 (483 farms), and 63% of WNC’s 830 farms that grew VMPS in 2012 (524 farms; Figure 6). From 2002 to 2012, the NC burley belt saw a 98% increase in the number of farms growing VMPS.

Figure 6: Number of Farms Growing VMPS in the NC Burley Belt, 2002-2012



Buncombe County had the greatest number of farms growing VMPS from 2002 to 2012 (49 farms; Table 6). Alleghany County had the greatest percentage increase of farms growing VMPS over the same time period (262%). Haywood County was the only county in the NC burley belt that reported a decrease in farms growing VMPS from 2002 to 2012, a loss of three farms or a 6% reduction.

Table 6: Change in Number of Farms in the NC Burley Belt Growing VMPS, 2002 and 2012

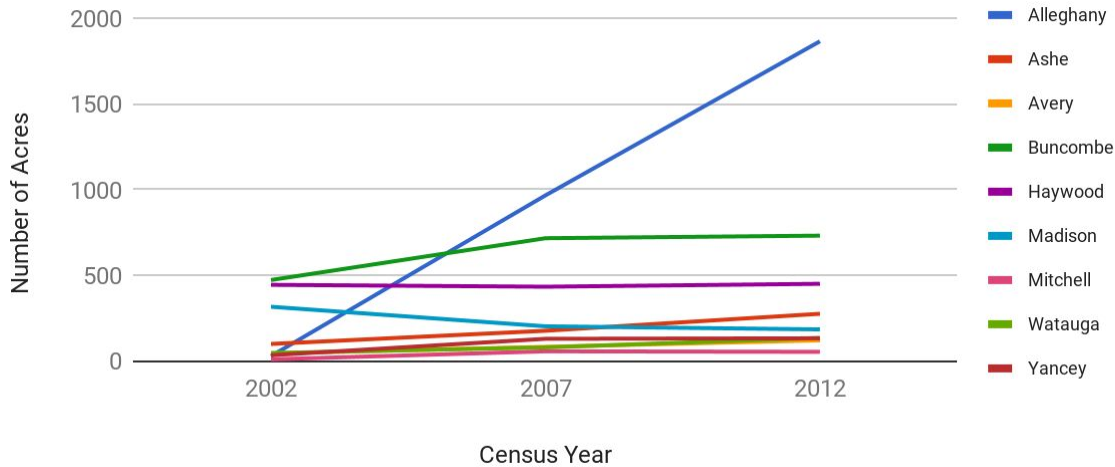
| | 2002 | 2012 | % change 2002-2012 |
|--------------|------------|------------|--------------------|
| Alleghany | 10 | 24 | 140% |
| Ashe | 35 | 66 | 89% |
| Avery | 18 | 27 | 50% |
| Buncombe | 58 | 114 | 97% |
| Haywood | 44 | 47 | 7% |
| Madison | 58 | 105 | 81% |
| Mitchell | 7 | 30 | 329% |
| Watauga | 25 | 57 | 128% |
| Yancey | 9 | 54 | 500% |
| Total | 264 | 524 | 98% |

Total Acres Dedicated to Vegetable, Melon, Potato, Sweet Potato Production, 2002-2012

As with numbers of farms producing VMPS, farm acreage dedicated to VMPS production also increased in the NC burley belt from 2002 to 2012 (Figure 7). Farms in the nine counties accounted for 21% of WNC’s 7,133 VMPS acres in 2002 (1,482 acres), 48% of WNC’s 5,894 VMPS acres in 2007 (2,830

acres), and 52% of WNC’s 7,638 VMPS acres in 2012 (3,935 acres). As a whole, the number of VMPS acres in the NC burley belt increased 166% from 2002 to 2012.

Figure 7: Number of Acres Dedicated to VMPS in the NC Burley Belt, 2002-2012



From 2002 to 2012, Alleghany County added the largest number of VMPS acres (1,837) and reported the largest percentage increase in acreage dedicated to VMPS production (6,804%). Madison County was the only county to report VMPS acreage loss from 2002 to 2012 at 42%.²³ See Table 7.

Table 7: Change in Number of Acres in the NC Burley Belt Dedicated to VMPS, 2002 and 2012

| | 2002 | 2012 | % change 2002-2012 |
|--------------|--------------|--------------|--------------------|
| Alleghany | 27 | 1,864 | 6,804% |
| Ashe | 98 | 274 | 180% |
| Avery | 43 | 119 | 177% |
| Buncombe | 471 | 730 | 55% |
| Haywood | 443 | 449 | 1% |
| Madison | 315 | 183 | -42% |
| Mitchell | 8 | 52 | 550% |
| Watauga | 45 | 133 | 196% |
| Yancey | 32 | 131 | 309% |
| Total | 1,482 | 3,935 | 166% |

Total Sales of Vegetables, Melons, Potatoes, Sweet Potatoes, 2002-2012

As production of VMPS increased in the NC burley belt, sales of VMPS products also increased (Figure 8). Seven of the nine counties reported steady increases in VMPS sales each year from 2002 to 2012. Madison County showed a 51% decrease in VMPS sales from 2002 to 2012 while Avery County reported a 25% decrease from 2002 to 2007. However Avery County rebounded with a 179% increase from 2007

²³Madison County lost two large vegetable farms during this time period; they moved for season extension and lower land prices (personal communication, Ross Young, Madison County Extension Director, October 6, 2017).

to 2012. Overall, the NC burley belt counties reported a 193% increase in VMPS sales from 2002 to 2012. For comparison, this was nearly double the rest of NC (100%) and significantly higher than the US (32%) over the same time period.

Figure 8: VMPS Sales in the NC Burley Belt, 2002-2012²⁴

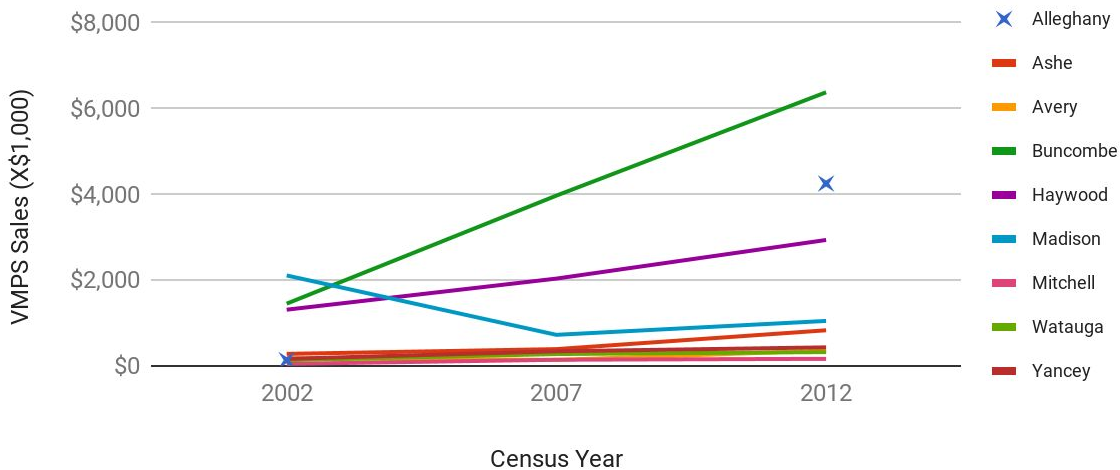


Table 8 shows that Buncombe County had the largest increase in the value of VMPS sales from 2002 to 2012 at nearly \$5 million. Alleghany County reported the greatest percentage increase in sales (3,550%) for the same time period.

Table 8: Change in VMPS Sales in the NC Burley Belt, 2002 and 2012

| | 2002 | 2007 | 2012 | % change 2002-2012 |
|--------------|--------------------|--------------------|---------------------|--------------------|
| Alleghany | \$116,000 | (D) | \$4,234,000 | 3,550% |
| Ashe | \$263,000 | \$374,000 | \$813,000 | 209% |
| Avery | \$162,000 | \$122,000 | \$340,000 | 110% |
| Buncombe | \$1,434,000 | \$3,952,000 | \$6,361,000 | 344% |
| Haywood | \$1,293,000 | \$2,018,000 | \$2,918,000 | 126% |
| Madison | \$2,091,000 | \$707,000 | \$1,031,000 | -51% |
| Mitchell | \$30,000 | \$126,000 | \$148,000 | 393% |
| Watauga | \$115,000 | \$259,000 | \$305,000 | 165% |
| Yancey | \$147,000 | \$323,000 | \$415,000 | 182% |
| Total | \$5,651,000 | \$7,881,000 | \$16,565,000 | 193% |

Scale of Vegetable, Melon, Potato, and Sweet Potato Production, 2002-2012

Over the 2002 to 2012 time period, an increasing number of farms in the NC burley belt engaged in VMPS production. This production tended to be done on a small scale using modest acreage. In 2002,

²⁴ Note that the values for Alleghany VMPS sales in 2007 was reported as “(D)” in the census, a symbol used to indicate data that have been withheld or left uncalculated to avoid disclosing information on individual farms.

76% of the 264 farms in the NC burley belt that harvested vegetables²⁵ for sale did so on less than five acres of land (Table 9). Less than 6% of VMPS farms harvested vegetables for sale on 25 or more acres.

Table 9: Number of Vegetable Farms in the NC Burley Belt by Acres of Vegetables Harvested for Sale, 2002²⁶

| | 0.1 to 4.9 acres | 5.0 to 24.9 acres | 25.0 to 99.9 acres | 100.0 to 249.9 acres | 250.0 to 499.9 acres | 500.0 acres or more |
|--------------|-------------------------|--------------------------|---------------------------|-----------------------------|-----------------------------|----------------------------|
| Alleghany | 9 | 1 | 0 | 0 | 0 | 0 |
| Ashe | 33 | 1 | 1 | 0 | 0 | 0 |
| Avery | 15 | 3 | 0 | 0 | 0 | 0 |
| Buncombe | 39 | 15 | 4 | 0 | 0 | 0 |
| Haywood | 21 | 15 | 8 | 0 | 0 | 0 |
| Madison | 49 | 8 | 0 | 1 | 0 | 0 |
| Mitchell | 7 | 0 | 0 | 0 | 0 | 0 |
| Watauga | 22 | 3 | 0 | 0 | 0 | 0 |
| Yancey | 5 | 4 | 0 | 0 | 0 | 0 |
| Total | 200 (76%) | 50 (19%) | 13 (5%) | 1 (<1%) | 0 (0%) | 0 (0%) |

By 2012, the total number of farms that grew vegetables for sale increased to 524, and 79% of these farms harvested from less than five acres (Table 10). A notable departure from this small-scale harvest pattern, four farms in Alleghany County harvested vegetables for sale on 100 or more acres in 2012.

Table 10: Number of Vegetable Farms in the NC Burley Belt by Acres of Vegetables Harvested for Sale, 2012

| | 0.1 to 4.9 acres | 5.0 to 24.9 acres | 25.0 to 99.9 acres | 100.0 to 249.9 acres | 250.0 to 499.9 acres | 500.0 acres or more |
|--------------|-------------------------|--------------------------|---------------------------|-----------------------------|-----------------------------|----------------------------|
| Alleghany | 15 | 3 | 2 | 2 | 1 | 1 |
| Ashe | 47 | 17 | 2 | 0 | 0 | 0 |
| Avery | 14 | 13 | 0 | 0 | 0 | 0 |
| Buncombe | 88 | 22 | 3 | 1 | 0 | 0 |
| Haywood | 27 | 10 | 10 | 0 | 0 | 0 |
| Madison | 98 | 7 | 0 | 0 | 0 | 0 |
| Mitchell | 27 | 3 | 0 | 0 | 0 | 0 |
| Watauga | 51 | 5 | 1 | 0 | 0 | 0 |
| Yancey | 46 | 7 | 1 | 0 | 0 | 0 |
| Total | 413 (79%) | 87 (17%) | 19 (4%) | 3 (1%) | 1 (<1%) | 1 (<1%) |

Farming in Transition

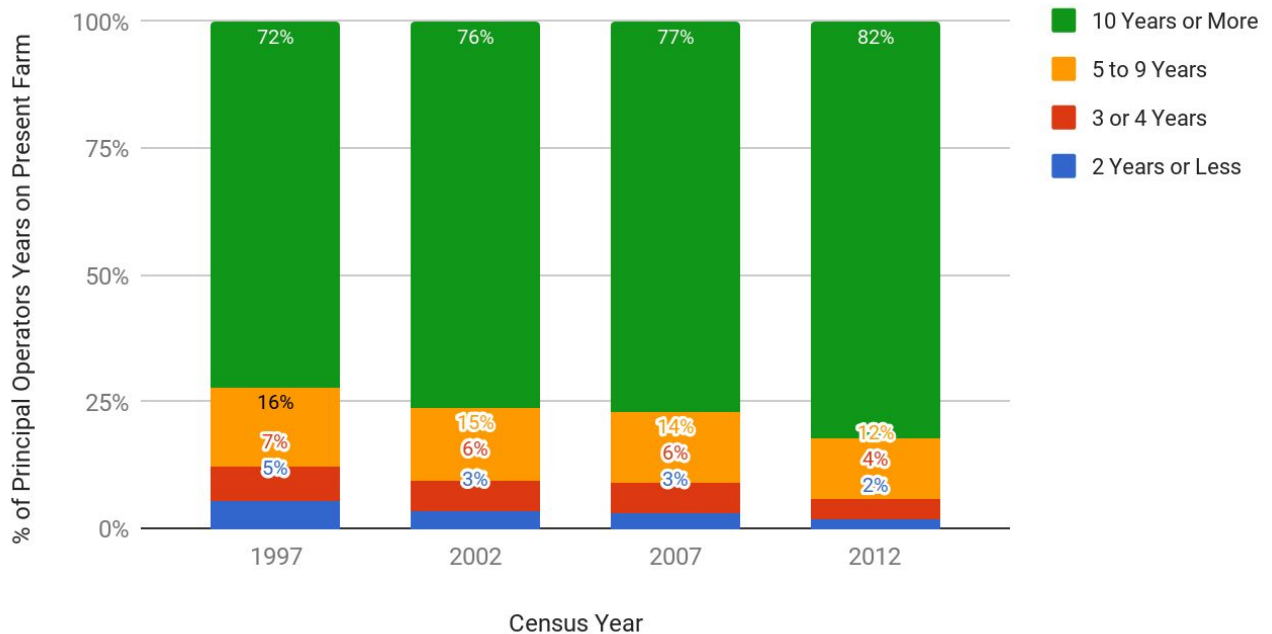
Overall, from 2002 to 2012, the number of farms growing VMPS increased 98% in the NC burley belt. At the same time, the percentage of farmers that reported they had been on their current farm for two years or less (i.e., new farms) decreased by half from 265 to 120 (Figure 9). Taken together these data suggest that

²⁵ According to the 2012 Census of Agriculture Appendix B General Explanation and Report Form, acres of vegetables harvested for sale is the summation of the acres of individual vegetables harvested. When more than one vegetable crop was harvested from the same acreage, acres were counted for each crop.

²⁶ The data point “Vegetables harvested for sale” was introduced in the Census of Agriculture in 2002. No prior data exists for this variable.

the farms responsible for the growth of VMPS production in the NC burley belt included farms already in operation, including tobacco farmers that transitioned into other types of production.

Figure 9: Principal Operators in the NC Burley Belt by Years on Present Farm, 1997-2012



Trends in the Sale of Local Products for Local Markets

The census provides a number of data points related to the marketing channels farmers use to sell their goods, including data related to the sale of local products to local markets and customers. This section focuses on data for the NC burley belt counties related to direct to consumer sales (dollar value of sales at roadside stands, farmers markets, u-pick, and through community supported agriculture), number of farms engaged in direct to retail sales (farms selling directly to restaurants, grocery stores, schools, hospitals, and other businesses), and the number of farms engaged in community supported agriculture (CSA).²⁷

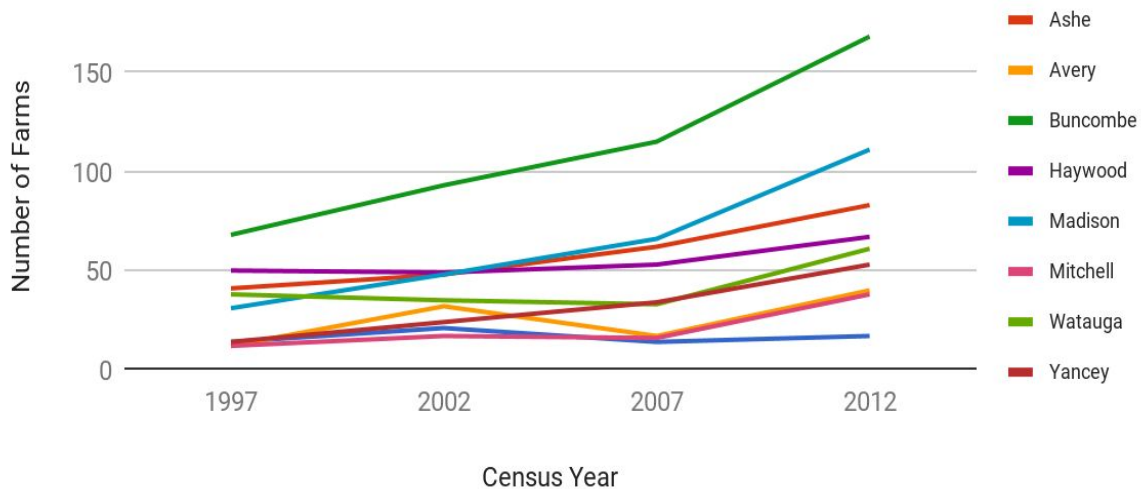
Direct to Consumer Farms and Sales, 1997-2012

In 1997, NC burley belt counties accounted for 55% of WNC’s 513 farms engaged in direct to consumer sales (280 farms; Figure 10). They accounted for 56% of WNC’s 659 farms engaged in direct sales in 2002 (367 farms), 55% of WNC’s 749 farms engaged in direct sales in 2007 (410 farms), and 60% of WNC’s 1,065 farms engaged in direct sales in 2012 (638 farms). Overall, from 1997 to 2012 the NC burley belt had a 128% increase in the number of farms engaged in direct sales to consumers; the 20 counties of WNC, as a whole, had a 108% increase. These increases far outpaced the growth of farms engaged in direct sales in the rest state of NC (73% growth) and the US as a whole (31% growth).

²⁷ Note that the Census of Agriculture contains no measure for farm product moving through wholesale channels that is destined for local markets, e.g., WNC farm product sold to distributors may end up at local restaurants, schools, or other food service locations but this data is not tracked or accounted for in census data.

The census data from the post-tobacco period shows even more dramatic contrasts between WNC and the burley belt and the rest of NC and the US. From 2007 to 2012, WNC had a 68% increase in direct sales and the burley belt a 29% increase. In comparison, direct sales in the US increased a modest 8%; direct sales in the rest of NC (not including WNC) actually declined 1% (Table 13).

Figure 10: Farms in the NC Burley Belt with Direct to Consumer Sales, 1997-2012



From 1997 to 2012, Buncombe County reported the greatest increase in number of farms engaged in direct sales at 100, while Yancey County reported the greatest percentage increase at 279% (Table 11). Of the nine NC burley belt counties, only Allegheny, Haywood, and Watauga counties fell below a triple digit percentage growth in farms engaged in direct sales from 1997 to 2012.

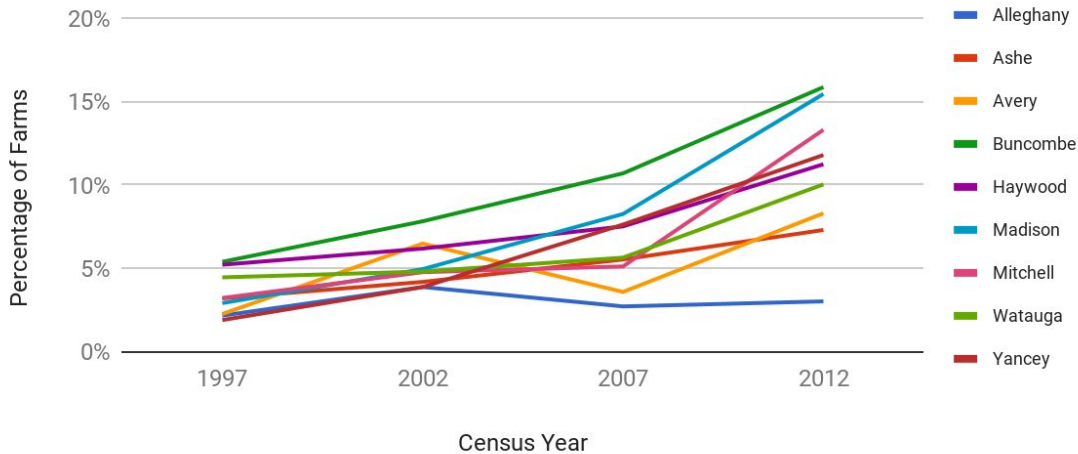
Table 11: Change in NC Burley Belt Farms Selling Direct to Consumers, 1997-2012

| | 1997 | 2012 | % change 1997 to 2012 |
|--------------|------------|------------|--------------------------|
| Alleghany | 14 | 17 | 21% |
| Ashe | 41 | 83 | 102% |
| Avery | 12 | 40 | 233% |
| Buncombe | 68 | 168 | 147% |
| Haywood | 50 | 67 | 34% |
| Madison | 31 | 111 | 258% |
| Mitchell | 12 | 38 | 217% |
| Watauga | 38 | 61 | 61% |
| Yancey | 14 | 53 | 279% |
| Total | 280 | 638 | 128% |

In 1997, 4% of farms in the NC burley belt were engaged in direct sales (Figure 11). By 2012 this figure climbed to 11% of all farms. These numbers were slightly higher for WNC as a whole; 5% of farms were engaged in direct sales in 1997 and 12% in 2012. Both the WNC and NC burley belt proportions for 2012 were higher than the NC statewide proportion of 9% and the national US proportion of 7%.

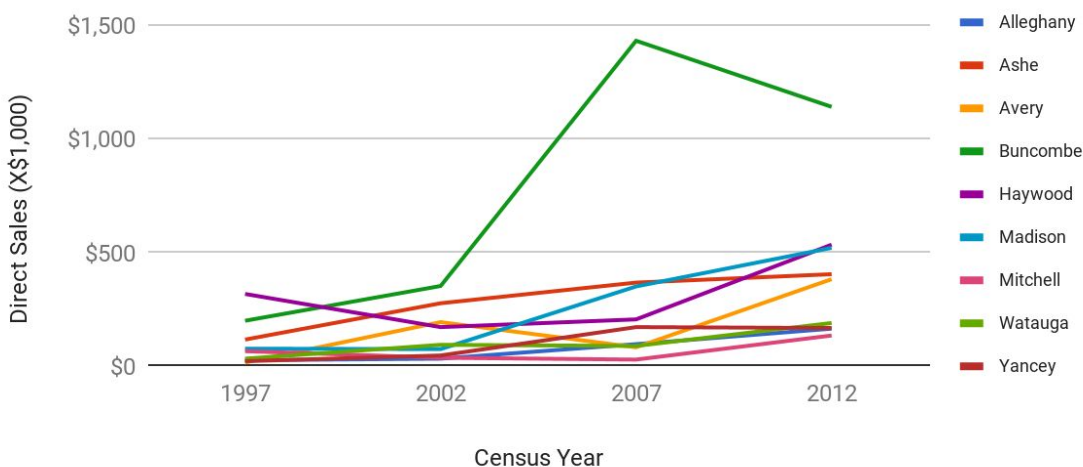
At the county level, Buncombe County and Madison County led in overall proportions of farms engaged in direct to consumer sales in 2012 at 16% and 15% of farms, respectively. Alleghany County was the only county of the nine to never exceed 5% of farms engaged in direct sales over the 1997-2012 time period.

Figure 11: Proportion of Farms Engaged in Direct to Consumer Sales in the NC Burley Belt, 1997-2012



As the number of farms in the NC burley belt engaged in direct sales increased, sales of product through these channels also increased (Figure 12). Farms in the NC burley belt accounted for 37% of WNC’s \$2.4 million in direct sales dollars in 1997 (\$866,000), 50% of WNC’s \$2.5 million in direct sales in 2002 (\$1.3 million), 63% of WNC’s \$4.5 million in direct sales in 2007 (\$2.8 million), and 49% of WNC’s \$7.5 million in direct sales in 2012 (\$3.6 million).²⁸ Overall, from 1997 to 2012 direct sales in the NC burley belt counties increased 320%. As with number of farms engaged in direct sales, the rate of increase in direct sales in the NC burley belt was far greater than that of the state of NC (161% growth) and the US (121% growth) over the same time period.

Figure 12: Direct to Consumer Sales in the NC Burley Belt, 1997-2012



²⁸ From 1997 to 2012, Henderson County, a significant producer of apples, was responsible for a disproportionate portion of direct sales (primarily through u-pick and roadside stands) in WNC accounting for 50% of all WNC’s direct sales in 1997, 30% in 2002, 13% in 2007, and 27% in 2012.

As with vegetable sales, direct sales did not have a smooth upward trend for all of the NC burley belt counties. Alleghany and Ashe counties reported year-to-year increases in direct sales from 1997 to 2012. The other seven counties (Avery, Buncombe, Haywood, Madison, Mitchell, Watauga, and Yancey) saw some ups and downs, most notably a 20% decrease in direct sales in Buncombe County from 2007 to 2012 (Table 12). Overall, however, the NC burley belt had a triple digit percentage increase in direct sales (320%) from 1997 to 2012.

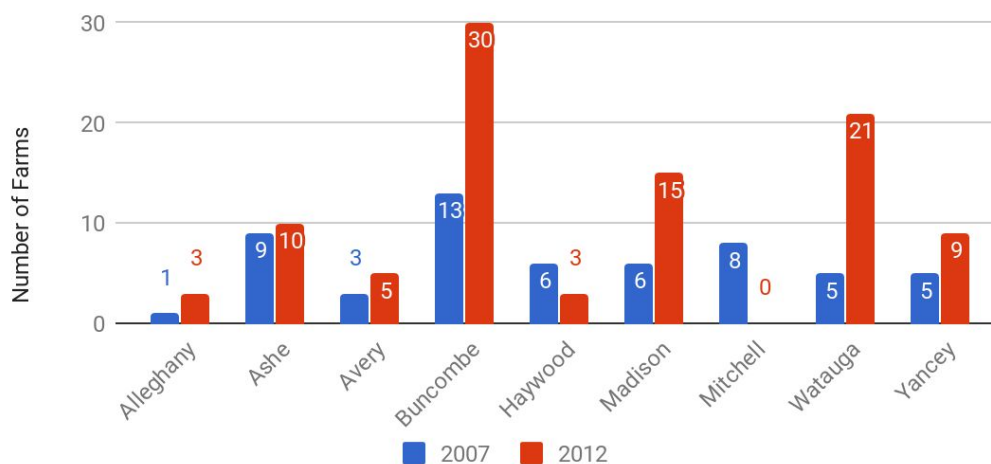
Table 12: Change in Direct Sales to Consumers in the NC Burley Belt, 2007 and 2012

| | 1997 | 2002 | 2007 | 2012 | % change 1997-2012 | % change 2007 to 2012 |
|--------------|------------------|--------------------|--------------------|--------------------|--------------------|-----------------------|
| Alleghany | \$25,000 | \$32,000 | \$96,000 | \$164,000 | 556% | 71% |
| Ashe | \$116,000 | \$276,000 | \$367,000 | \$404,000 | 248% | 10% |
| Avery | \$15,000 | \$193,000 | \$82,000 | \$382,000 | 2447% | 366% |
| Buncombe | \$199,000 | \$352,000 | \$1,432,000 | \$1,141,000 | 473% | -20% |
| Haywood | \$317,000 | \$171,000 | \$205,000 | \$534,000 | 68% | 160% |
| Madison | \$76,000 | \$74,000 | \$350,000 | \$520,000 | 584% | 49% |
| Mitchell | \$65,000 | \$36,000 | \$28,000 | \$134,000 | 106% | 379% |
| Watauga | \$32,000 | \$93,000 | \$88,000 | \$189,000 | 491% | 115% |
| Yancey | \$21,000 | \$46,000 | \$171,000 | \$167,000 | 695% | -2% |
| Total | \$866,000 | \$1,273,000 | \$2,819,000 | \$3,635,000 | 320% | 29% |

Community Supported Agriculture (CSA)

One facet of direct to consumer sales that the census provides specific information on is farms with CSAs. Beginning in 2007, the census asked farmers to report if they “market products through a Community Supported Agriculture (CSA) arrangement.” In that year, 56 farms in the NC burley belt reported marketing products through a CSA (Figure 13), which represented 55% of the 102 farms that reported marketing product through a CSA in WNC. By 2012 this number had increased to 96 NC burley belt farms, which represented 69% of the 139 farms with a CSA in WNC. Buncombe County was the leader both in number of farms marketing product through a CSA in 2007 and 2012. The counties with the greatest proportions of farms marketing products through a CSA were Mitchell in 2007 (2.5%) and Watauga in 2012 (3.4%).

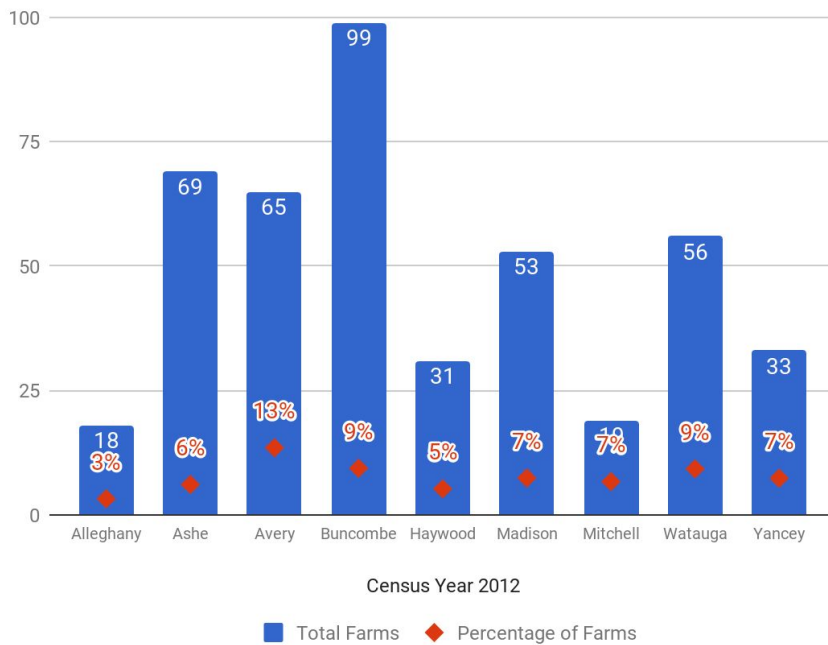
Figure 13: Number of Farms Offering Community Supported Agriculture (CSA) in the NC Burley Belt, 2007-2012



Farms Marketing Products Direct to Retail Outlets

In 2012, the census began reporting the number of farms marketing product direct to retail outlets. A total of 443 farms, or 7% of all farms in the NC burley belt, reported that they market product direct to retail outlets (Figure 14). The percentage was the same for the 20 county WNC region. This rate was higher than the percentage of farms that marketed direct to retail outlets in NC (4%) or the US (2%). Buncombe County led the NC burley belt counties with the greatest number of farms that marketed product direct to retail (99 farms), which corresponds to (and might explain) the decrease in direct sales in the county during the same time period. Avery County reported the largest percentage of farms marketing direct to retail at 13%.

Figure 14: Farms in the NC Burley Belt Marketing Products Direct to Retail Outlets, 2012



Comparative Trends in Local Products for Local Markets at County, Region, State, and Nation

An analysis of data from the Census of Agriculture combined with population data from the Census Bureau showed that farms in the NC burley belt and WNC as a whole were more engaged in local economic exchanges through direct to consumer and direct to retail sales than NC or US farmers (see Table 13) in 2012. Per capita direct to consumer sales in 2012 in the NC burley belt were \$6.75 and \$7.93 for WNC, much higher than those of NC (not including WNC) at \$2.76 and US (\$4.17). Though the proportion of all farms engaged in a CSA program was similar across all four of the geographic levels, per capita engagement was much higher in the NC burley belt and WNC compared to the rest of the state and the nation. In 2012, for every 5,607 residents living in one of the nine NC burley belt counties there was one farm with a CSA; for WNC the ratio was one CSA farm for every 6,786 residents. For the same year the state (not including WNC) had one CSA farm for every 20,027 residents and the US had one CSA farm for every 24,887 residents.

Table 13: Local Market Engagement at the County, Region, State, and National Level

| | NC Burley Belt | WNC | NC (not including WNC) | US |
|---|----------------|-------------|------------------------|-----------------|
| Direct sales to consumers, 2012 | \$3,635,000 | \$7,485,000 | \$24,341,0000 | \$1,309,827,000 |
| Direct sales to consumers per capita, 2012 | \$6.75 | \$7.93 | \$2.76 | \$4.17 |
| Direct sales to consumers percentage change, 2007 to 2012 | +29% | +68% | -1% | +8% |
| Percentage of all farms engaged in direct to consumer sales, 2012 | 11% | 12% | 8% | 7% |
| Percentage of all farms engaged in direct-to-retail sales, 2012 | 8% | 7% | 4% | 2% |
| Percentage of all farms engaged in CSA, 2012 | 2% | 1% | 1% | >1% |

CONCLUSION

The end of the federal tobacco program had a dramatic impact on the farms and communities of the burley tobacco growing region of WNC. Burley tobacco, and the federal program that supported it, uniquely protected the small farms that dominate the mountainous region of North Carolina. Anticipating the impact the loss of tobacco would have on communities, a group of farmers and citizens launched a local food campaign in 2000 to provide farmers with alternatives to tobacco. Localizing markets for farmers, it was hoped, would provide a place-based solution that engaged the greater community in the future of farming for the region.

An analysis of the data from the Census of Agriculture period from just before the 1998 MSA to just after the end of federal support for tobacco with the passage of the 2004 Fair and Equitable Tobacco Reform Act provided the opportunity to analyze the changes in agriculture in the region as they related to tobacco and local food production. The findings are striking - the region has all but lost tobacco while concurrently and significantly shifting to food production and local sales. Though the region did experience a dramatic loss of farms with the end of tobacco, the census period just after the 2004 buyout shows the region's farm loss leveled off with a rate far less than the state and US loss rates. While local food has not replaced tobacco as a means of livelihood for the farmers of the region, it has emerged as a leading new direction for agriculture.

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