

Growing Christmas: Origins of Western North Carolina's Fraser Fir Industry

They called them foolish. During the 1950s and 1960s most commentators saw Christmas tree plantations as inane, for not only did the crop grow wildly and abundantly in the mountains of western North Carolina, but it also diverted resources away from practical agrarian customs. These southern Appalachian agriculturalists kept livestock. They tended tobacco fields. Their boots were clumped with soil that nourished corn and beans—not trees. The Fraser firs dotting ridges and valleys were part of an unappreciated landscape that offered little utilitarian use to these mountaineers. The holiday commodity was then mostly an obstacle, a type of environmental nuisance that clashed with the established agricultural capitalism. Livestock paid. Corn sold. And although tobacco fluctuated quite dramatically, it remained the region's central cash crop. There was always next year.

Yet, by the mid-twentieth century a few agriculturalists began dabbling in the yuletide business. Inundating these enterprising mountaineers were critiques from their family, neighbors, and even the occasional stranger. They refused to accept that they would “starve to death” because “you can't make a living growing Christmas trees.”¹ This new Tar Heel farmer weathered the abrasive “it will never be worth anything” insult concerning their investment. When told that they would be “dead and in hell before they'd grow” these farmers grinned and continued their work undeterred.² As the years passed these initial farmers became more central to the origin story. Mythologized, they increasingly became the primary explanation for the foundation of a flourishing sector of the regional agricultural economy. The depiction of their relentless efforts remains romantic, yet neglects too many important causes. Four overarching forces helped establish the holiday crop: Cold War consumers, tree extraction from public lands, governmental programs and agents, and the mountain environment.

This essay focuses on the efforts of government agents who emphasized environmental factors in their promotion of Fraser firs that lead to the region's native Christmas tree species increasingly becoming part of a managed landscape. Trees no longer seemed to sprout chaotically from the mountains, but instead grew in neat, manicured rows. Post-war prosperity brought Americans suburbs and cookie-cutter houses. It ushered in an age of uniformity. This homogeneity seeped into the Appalachian countryside. Suburbia fueled the area's Christmas tree industry, but its influence did not stop there.

In *Environmental History and the American South* Paul Sutter's introduction highlights the major trends in the discipline. He argues that environmental historians have characterized southerners as predominately exploitative of their land, as essentially too preoccupied with potential profits to care much for their soil.³ Southern Appalachia, by contrast, has a more convoluted past. There, "mountain residents have not merely rejected environmentalism as dispossessive, though they have often been skeptical of urban-based preservation efforts that threatened local land use traditions and interest."⁴ Scholars portray southern Appalachian environmentalism largely through the lens of the land's utilitarian use. Kathy Newfont's *Blue Ridge Commons* shows that while western North Carolinians opposed preservation because it would end traditional uses of the region's forests, these mountaineers were not exploitative capitalists either. They attempted to preserve the land while maintaining a type of European commons system.⁵ This story of the Christmas tree industry fits into the southern Appalachian narrative while offering one major revision. Adopting the crop helped mountaineers use the land while maintaining an environmental conscience, which places them directly in the narrative of responsible land use. Yet, the development also exposes the wedding of agricultural capitalism with the resident's own conceptions of stewardship. It reveals how this crop allowed farmers in

the region to maintain a profitable, modern agricultural enterprise while promoting respect for the soil.

In the 1950s and early 1960s, despite the industry's pioneers, few people grew Christmas trees in western North Carolina. Instead, local entrepreneurs looking for a piece of the holiday economy extracted the crop from state and national parks and drove them to urban consumers in places like Atlanta. This might put some quick cash in the hands of those willing to make the effort, but this was not a system that could fairly be described as an industry. The sprouting suburbs outside of Tar Heel cities such as Charlotte and Asheville supplied demand for live trees to celebrate their holiday. Extraction of natural species could not meet this surging demand and finally gave way to domestication. Large scale farms could satiate this growing consumer appetite while also galvanizing the virtue of American families. Keeping up with the Jones' not only meant a suitable house or a second car, but around the holidays it meant adorning a live tree. Material goods were the external edifice that supposedly undergirded the family's cohesion and penchant for tradition. Few traditions were more universally celebrated or patriotic than Christmas.

This cultural attachment to the holiday created an expansive yuletide tree market. In 1948 Americans bought 29,382,778 Christmas trees and 79% of families used one in their homes. Imported trees amounted to 7,932,378, or 27% and they typically came from Canada. These Canadian imports represented an opportunity for North Carolina growers as extension agents and other interested commentators pointed to the possibility of southerners growing their own products to sell. They reasoned that their geographic relationship to urban centers placed them at an advantage, and that they also benefitted from not having to pay taxes to import their good. A growing domestic segment of the industry is exemplified by the decline of imported trees into

the United States. In 1955 imports hit a high at 33% before steadily declining to 25% in 1960, 23% in 1962, and just 19% by 1964.⁶ Americans increasingly began buying American grown trees.

Not only did foreign companies lose part of their market share but domestic consumption also surged. In 1955 United States consumers bought 37,790,801 live Christmas trees. This rose to 43,486,955 by 1962. That year 94% of Americans placed a tree in their homes, but in 1964 this figure dramatically dropped to 86%.⁷ The high proportion of Americans buying trees from 1955-1962 most likely stems from the tensions of the Cold War and an increased patriotism, after all, a natural tree symbolized tradition and family values during the holiday. The religiosity a tree represented was one way to distinguish American culture from that of the Soviets. Likewise, the eight percent drop off in 1964 probably resulted from the Vietnam War, either disillusion from the military affair or as a distraction that rendered Christmas less meaningful. Nonetheless, throughout the 1950s and into the mid-1960s American consumers created an expansive industry by purchasing the holiday product in such high numbers.

Initial efforts in southern Appalachia to tap these expanding markets often did not take place on Fraser fir plantations, but instead on public land. Roan Mountain, in eastern Tennessee (just across the NC-TN border), was the site of the first wholesale clearing of Fraser firs in the region. In 1955 the U.S. Forest Service allowed 22,000 trees to be harvested from the park and sold throughout the South with “an attractive red tag” that denoted how the “cutting was not destructive but gave needed room for neighboring trees to grow faster and better.”⁸ Red tag aside, it remains doubtful that such large-scale clearing had no measurable ecological consequences, but the success selling these trees presaged a new, viable industry for the region.

Even in 1955 the supply of 22,000 trees could not exceed the demand for these mountain Fraser firs.

In western North Carolina a handful of growers were cultivating the holiday crop in the 1950s, but the business was not yet widespread enough to capture the publishing attention of the state's extension agents. In 1959 growers almost entirely from Avery County founded the North Carolina Christmas Tree Association, a group with multifaceted goals. Its members were to combine their products and sell in bulk, and also craft marketing strategies for their trees. The new association also desired to spread their new agricultural product throughout the mountains, essentially to entice other locals in the region to become growers themselves. Only two of the thirteen founding members were full-time cultivators. They grew trees in conjunction with their careers as foresters, farmers, lawyers, nurses, physicians, and teachers. Interestingly, of the thirteen members of the association growing Fraser firs in the 1950s, three came from a forestry background, the next most represented occupation were physicians with two members. The economic history of the earliest growers suggest either a fairly intimate knowledge with how to grow the crop, or a socioeconomic position that allowed risky investment in a fledgling industry.⁹ Their relative occupational security also serves as a counterbalance to the overarching narrative of part-time Appalachian farmers who supplemented their income with factory work.

The North Carolina extension service eventually responded to this growing agricultural sector by not only sending agents to advise growers, but by publishing pamphlets with step-by-step instructions on how to grow trees. In 1962 John Gilliam published one of the earliest such guides in the region. In his first sentence Gilliam argued that "North Carolina *could* be a major producer of Christmas trees" (emphasis added).¹⁰ The optimism stemmed in part from the region's climate, access to major southern cities, and what Gilliam described as an "excellent"

transportation network.¹¹ The focus, however, was on the market for this agricultural product. The state of North Carolina alone consumed about 1 million live trees during the time period, and 80% were imported from Canada to meet the state's demand. Tar Heel growers only contributed the remaining 20%. Thus, both the environment and market were readily conducive to a large-scale Christmas tree industry in the mountains.¹²

Justification for this agricultural shift also took other forms. Extension agents and farmers further supported Christmas tree farms as the savior of western North Carolina's agricultural economy. Building on momentum for social and economic reform brought by the War on Poverty and the Appalachian Regional Commission (ARC), in 1965 the state extension service published a surprising number of pamphlets on Christmas trees, which came in tandem with a program of extension agents boosterism. These agencies underscored the possibility of the crop as an economic and environmental boon for the state.

Agricultural outreach in the Tar Heel state began utilizing the funds to plan regional development. Western North Carolina fell into what the ARC deemed Appalachia and thus outreach in the state focused on the mountains. In 1966, the efforts of extension agents helped produce tangible results. Tobacco rose by 144 million and broilers by 47 million in dollar gains. Because of ongoing farm consolidation, agricultural agents predicted that per capita farm income would continue to climb throughout the rest of the decade. Within the snapshot of the state's agricultural year, interestingly, Christmas trees made the biggest gains. The holiday crop underwent a 240 percent increase, although the report did not detail whether this growth was in planting or harvesting.¹³ Distinguishing how the crop expanded in North Carolina is important since trees take about seven years before they can be harvested, data relying on cut trees would note a growth years in the making. However, planting would indicate a more immediate

development and intricately tie the agricultural phenomenon to the changes wrought by the ARC. Regardless, such an impressive increase demonstrates how Christmas tree culture started to pervade North Carolina as a progressively viable and respected agricultural pursuit.

Despite increased tree plantations, there remained numerous obstacles to the enterprise. Yuletide entrepreneurs had to battle the elements by laboring up steep mountain slopes at high altitudes to extract a tree that proved physically taxing—but the environment that created such difficult work was precisely the reason for the unique characteristics of the Fraser fir. This evergreen species attracted the most attention of North Carolina extension agents looking to promote the Christmas tree industry throughout the state. In 1968 Fred Whitfield wrote an extension pamphlet that emphasized the environmental factors sustaining the species. Whitfield's scientific evaluation remains mostly unchanged today, supported by revised extension publications. This specific tree is only indigenous to the mountains of eastern Tennessee, southwestern Virginia, and western North Carolina. These trees grow in the southern mountainous region in part because of its need for a high altitude habitat. Wild Fraser firs thrive at elevations of 5,000 feet or higher with high levels of rainfall. They are capable of maturing on plantations with altitudes as low as 1,500 feet, but the soil requirements are less forgiving; fertility and a wet climate are imperative at lower elevations. Arid conditions are anathema to the Fraser Fir, without around 70 to 90 inches of rainfall a year (slightly less on well drained plantations) the tree will not grow regardless of elevation.¹⁴

The climatic crucible in this section of the southern Appalachian mountain chain nurtures the species. Fraser firs not only owe this environment their existence, but also with their characteristics. The trees mature in about seven to twelve years and, as Whitfield trumpeted in 1968, “[have] a natural Christmas-tree shape, glossy dark-green foliage, strong branches which

easily support ornaments, pleasing aroma, and excellent needle retention.”¹⁵ The capacity to support heavy ornaments and this strength of individual branches, in part, derives from the exacting conditions Fraser firs endure as they mature. Wind gusts in the mountains can reach impressive figures. An unofficial measurement at Grandfather Mountain in North Carolina neared 200 miles per hour, a wind anemometer on Mount Mitchell in North Carolina clocked gusts at 189 miles per hour before breaking. Frigid temperatures also contribute to the demands of this habitat, both of these mountains registered lows at negative 32 and negative 35 respectively.¹⁶ Harsh elements create a sturdy tree.¹⁷

The importance of the characteristics Whitfield emphasized for the Fraser fir are directly related to the desires of consumers. Needle retention is one of most distinguishing factors for growers because it denotes the tree’s ability to keep its needles and its color throughout the holiday season (not only post harvest, but also the weeks indoors). Clearly the crop’s appearance and ability to maintain a festive green color become important factors on the market. Here, too, the Fraser fir benefits from its home in the mountains. Christmas trees begin to lose their needles and color as soon as they are cut. The saw slices through the tree, which then opens its stomates initiating a natural interaction of gases. During their growth cycle, trees, like plants, have stomata that exchange oxygen and carbon dioxide as part of the photosynthesis process. The stomata for plants is located under their leaves, Christmas trees have theirs under their needles. Fraser firs developed the ability to close their stomata to combat windy and foggy conditions. Their natural environment inundates the trees with more than 80 inches a year (this varies, of course, and can reach 110 to 115 inches) and during the summer months the trees can spend 35% of their life in the clouds. By closing their stomata to combat these conditions, especially the wind and cold of winter in between rainfall, Fraser firs are able to retain moisture that would

otherwise be lost. Once harvested for sale, the trees again close their stomata lengthening the time before loss of color and needles. This capacity distinguishes the Fraser fir from other species and makes the tree attractive to consumers because of its longevity post-harvest.¹⁸ The southern Appalachian environment makes the Fraser fir “the perfect Christmas tree.”¹⁹

Tar Heel growers, according to Fred Whitfield, were poised to make more gains than they had already experienced because the environmental benefits they enjoyed gave them “a virtual monopoly on Fraser fir.”²⁰ Whitfield not only stressed potential profits but consistently reiterated that the crop was no quick means towards wealth. Extension agents no longer needed to focus on the prospective economic gains because the crop had spread throughout the region and attracted considerable media attention, their goal shifted to demonstrate how labor intensive the practice was and that it represented a long-term investment. The crop had not only reached respectability and widespread cultivation, but markets continued to expand in the South and eastern United States. The emphasis now rested on educating any newcomer on the extent to which managing a Christmas tree farm “is an art.”²¹ North Carolina agricultural experts never typified the demands of trees as uncomplicated, however, with an established farming base they found the opportunity to reassert their expertise by forewarning interested mountaineers about the intricacies involved in the industry.

The differences between the two extension reports on Christmas trees in North Carolina published during the 1960s illuminates how expert advice concerning the crop changed over a six year period. John Gilliam’s earlier tract favored flat or rolling topography for tree plantation as did Whitfield, but the latter also noted that if owners planned to use hand labor for harvesting and cultural methods, steep inclines did not present that much of a deterrent.²² Further, Whitfield juxtaposed portions of North Carolina more thoroughly pointing to less favorable conditions in

the central and piedmont sections of the state. There, farmers could hope to grow a restricted set of pines and the red-cedar while “mountain landowners have a wider choice of trees.”²³ The primary obstacle for western North Carolinian growers were a large part of what made the region so compatible with the industry—the high elevations created ideal conditions for species to thrive, particularly the consumer favorite Fraser fir. However, this same topography was one element for owners to combat during annual work on their trees or during the harvest period.²⁴ The natural advantages of western North Carolina were simultaneously a boon and hindrance to mountain growers.

In *Nature's Perfect Food* Melanie DuPuis seethed that not only was nature incapable of producing something perfect, but by framing a commodity in such a manner we hide its true development story.²⁵ The same can be said of the “North Carolina Fraser fir—the perfect Christmas tree.”²⁶ While the mountains nurture the crop and provide it with certain characteristics, it is the national public who make it an appealing good, who find something inherently superior in this species than its competitors. Shackling the state to the tree’s title emphasizes the land these trees grow on while obscuring the many conscious actions and decisions that created the industry. It is as if, only naturally, people grew trees in western North Carolina because of their intrinsic perfection.

Such romanticism not only conceals the agricultural commodity’s rise in the mountains but also shields us from its complicated repercussions. Christmas trees provided farmers an alternative profitable crop that caused less environmental degradation than the region’s popular tobacco. Fraser firs allowed mountaineers to engage in agricultural capitalism while maintaining a sense of responsible stewardship—essentially a utilitarian environmentalism. This system merged modern economic reality with traditional conscientiousness. The crop further insulated

some local communities from a depressed agricultural economy. Yet, the change made the landscape less distinct. Suburbs brought uniformity to the rural region as plantations standardized the topography. Heavy doses of Christmas magic overwhelmed the mountains causing them to lose some of their traditional charm. With the ARC's help this transition brought social changes in southern Appalachia that hastened a shared national culture leaving only vestiges of an earlier, unique past. Growing Christmas came with a cost.

¹ Jill Sidebottom, "History of the North Carolina Christmas Tree Industry," Chapter 5, Page 5, North Carolina State University Cooperative Extension, 2009, <http://www.ces.ncsu.edu/fletcher/programs/xmas/history/index.html> (accessed January 27, 2015).

² Ibid.

³ Paul S. Sutter and Christopher J. Manganiello eds. *Environmental History and the American South* (Athens: The University of Georgia Press, 2009), 9.

⁴ Ibid, 12.

⁵ Kathy Newfont, *Blue Ridge Commons: Environmental Activism and Forest History in Western North Carolina* (Athens, GA: University of Georgia Press, 2012).

⁶ A.M. Sowder, "Statistics for the U.S. Christmas Tree Industry," *Journal of Forestry* 63, no.11 (1965): 876.

⁷ Ibid.

⁸ Sidebottom, Chapter 3, Page 3.

⁹ Sidebottom, Chapter 3, pgs. 6-7.

¹⁰ John Gilliam, "Growing and Marketing Christmas Trees," The North Carolina Agricultural Extension Service, Circular 436, 1962, pg.3.

¹¹ Ibid.

¹² Ibid.

¹³ North Carolina State University, Annual Agricultural Extension Report, 1966, 3.

¹⁴ Fred Whitfield, "Growing Christmas Trees in North Carolina." Circular 486. The North Carolina Agricultural Extension Service, 1968, pg. 5-6. For an updated publication see: Craig Mckinley ed. *Growing Christmas Trees in North Carolina*. North Carolina Cooperative Extension Service, 1997, pg. 2. Whitfield is almost repeated verbatim, the major distinction is the altitude where wild Fraser firs naturally grow. Whitfield estimated it at 3,500 feet, for Mckinley, with the added benefit of almost thirty years of scientific advances, the altitude was gauged at 5,000 feet or higher.

¹⁵ Ibid, 5.

¹⁶ Sidebottom, chapter 2, page 2.

¹⁷ For more on Mount Mitchell consult Tim Silver's excellent *Mount Mitchell & the Black Mountains: An Environmental History of the Highest Peaks in Eastern America* (Chapel Hill: The University of North Carolina Press, 2003). A brief overview of western North Carolina scholarship is also pertinent. In terms of antebellum agriculture in the mountains, John Inscoe's *Mountain Masters, Slavery, and the Sectional Crisis in Western North Carolina* (Knoxville: The University of Tennessee Press, 1989) is unparalleled. Inscoe's interpretation relies on a diversified form of agriculture largely predicated on corn. He also emphasizes how conducive the environment was for the upkeep of livestock. For sustainability and the ecological impact of mountain farmers see: Sara M. Gregg "Uncovering the Subsistence Economy in the Twentieth-Century South: Blue Ridge Farms, *Agricultural History* 78,

no.4 (Autumn, 2004): 417-437. Broader Appalachian studies also touch on WNC agriculture, consult: Jane S. Becker *Selling Tradition*. Moreover, historians Wilma Dunaway, Paul Salstrom, and John Alexander Williams include WNC farming in their broad studies focused on Appalachia. For the convergence of tourism, agriculture, politics, and many other themes in WNC see Richard Starnes's *Creating the Land of the Sky*.

¹⁸ Sidebottom, Chapter 2, pgs. 1-2.

¹⁹ Dennis Hazel, "Considerations for Starting a Choose and Cut Christmas Tree Farm in the North Carolina Piedmont," North Carolina State University Cooperative Extension, 2009, <http://www.ces.ncsu.edu/fletcher/programs/xmas/production-east/starting-choose-cut.html> (accessed January 27, 2015).

²⁰ Whitfield, 5.

²¹ Ibid.

²² Ibid, 8.

²³ Ibid, 9.

²⁴ Ibid.

²⁵ Melanie DuPuis, *Nature's Perfect Food: How Milk Became America's Drink* (New York: New York University Press, 2002).

²⁶ Dennis Hazel, "Considerations for Starting a Choose and Cut Christmas Tree Farm in the North Carolina Piedmont," North Carolina State University Cooperative Extension, 2009, <http://www.ces.ncsu.edu/fletcher/programs/xmas/production-east/starting-choose-cut.html> (accessed January 27, 2015).

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