THE TIMBER INDUSTRY IN JACKSON COUNTY, NORTH CAROLINA

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ABSTRACT OF THESIS

ROBERT ANDREW MC CALL, M.A., May 1984. History

THE TIMBER INDUSTRY IN JACKSON COUNTY, NORTH CAROLINA

The purpose of this thesis is to examine the timber industry in Jackson County, North Carolina. It is hoped that the study may also shed light on lumbering in the Appalachian region. By adapting Ronald D Eller's chronology for the economic development of the Appalachian South, the growth of local timber activities will be considered against the backdrop of the regional experience.

This study surveys the early history of logging and sawmilling in the county, with special emphasis on the methods and equipment used. The first commercial firm to attempt serious utilization of Jackson County's resources was the Blue Ridge Lumber Company. An account of this company is offered as is one concerning the activities of the Blackwood Lumber Company. The Blackwood Lumber Company was representative of highly mechanized, large-scale commercial operations which developed within western North Carolina in the 1900s.

The section dealing with the more recent period centers around Woody Clifton Hennessee and the Mead Corporation. Hennessee is representative of an independent Appalachian lumber entrepreneur, while the Mead Corporation is a major firm operating in the region, but with its headquarters elsewhere. Also, passing attention is

given to the independent circular sawmill operators such as Quince Heddon.

The thesis shows how the timber industry in Jackson County served as a vehicle for change from a subsistence agricultural society to a wage-oriented one. The timber industry in this county was not as exploitative as in other areas of Appalachia. It has exerted a positive influence here and will undoubtedly do so in the foreseeable future.

Approved **Max R. Williams**
Thesis Director

INTRODUCTION

The timber industry in Jackson County, North Carolina, plays a significant role in the local economy and in people's lives there. It provides employment opportunities and income for both the individual and the county as a whole. Its origin and development are deeply rooted in county history, and it can be said that the history of the timber industry parallels the other economic changes associated with the coming of industry. It is my intention to study the impact of the industry on the county and its people and to explore its harmful and beneficial effects. My conclusions on the cultural and economic development and environmental impact are based on evidence offered in the text. The information gathered for this task will be presented as a narrative history of commercial and non-commercial logging and sawmilling in the county.

Jackson County is located in the mountains of western North Carolina and was named in honor of President Andrew Jackson. It is bordered by the Balsam Mountain chain on the north and by the Cowee Mountains on the west. Most of the creeks and lesser streams flow into the Tuckasegee River.[1] About 78 percent of the county's 319,360 acres is forested; the majority of trees are hardwoods such as oak

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[1] Tuckasegee has several spellings. One older variation is Tuckaseigee. This writer will use the spelling listed in the North Carolina Gazetteer which is Tuckasegee.

and poplar. Nearly seventy-six thousand acres are under the supervision of the United States Forest Service. Over 17,000 acres are included in the Cherokee Indian Reservation and the Great Smoky Mountains National Park, leaving some 226,280 acres in private holdings. The highest point is at Richland Balsam which is 6,540 feet above sea level. Access to the area is provided by US Highway 441 and US Highway 19A-23.[2]

The boundaries of the county follow geographic features, either mountains or creeks. The county is divided into fifteen townships, with Sylva the county seat. The largest employer is Western Carolina University, located at Cullowhee. Other significant employers include Sylco Corporation, a child's clothing manufacturer; the Jackson Paper Company, a cardboard recycling firm; the W. C. Hennessee Lumber Company, Incorporated; and the Jackson County school system.[3]

Jackson County was and is unique in its experience with the timber industry. In order to place Jackson County's experience against the broader background of the entire Appalachian South, I will adapt a chronology developed by Appalachian historian Ronald D Eller in his book, Miners, Millhands,

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[2]Joel Kilpatrick, A Tale of Two Counties (Cullowhee: Extension Division, Western Carolina University, 1967), pp. 1-5, 32.

[3]Interview with Clay Booth, Jackson County Chamber of Commerce, Sylva, North Carolina, October 12, 1982.

and Mountaineers: The Industrialization of the Appalachian South, 1880-1930 with respect to the timber industry.[4]

Eller's chronology begins with the mountain people using the available timber resources for their own needs. In time, logging became an additional means of raising income. Then, in an "early logging phase," the first truly commercial loggers arrived to take advantage of the abundant supply of trees available. They cut only the largest and most desirable trees and then used waterways to convey the logs to a sawmill. By adding a decade to Eller's timetable, this stage can easily be compared to the operations of the Blue Ridge Lumber Company at Dillsboro in the 1890s. Eller found the "Big Boom" in logging occurred in the 1890-1920 time-frame over most of Appalachia. "Alien owners," that is people living outside the area, bought up much of the Appalachian timberlands. They used large multi-state corporations, armed with the newest technology (band saws and logging trains) and backed by huge amounts of capital to emplace temporary company towns in the forests. These companies cut over thousands of acres in a matter of years. This type of development corresponds with the appearance of the Blackwood Lumber Company at East LaPorte, a company organized in Virginia with home offices in Philadelphia. Blackwood expected operations in Jackson County to augment the output

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[4]Ronald D Eller, Miners, Millhands and Mountaineers: The Industrialization of the Appalachian South, 1880-1930 (Knoxville: University of Tennessee Press, 1979), pp. 139-200, hereafter cited as Eller, Miners, Millhands and Mountaineers.

of a sister mill in Swain County, North Carolina (Norwood on Forney's Creek). The devastation of the forests of Appalachia by this type of private exploitation was awesome in terms of physical damage, and the economic losses of the local inhabitants were great as the profits generated in their forests went elsewhere.

Indeed, according to Eller, it was this physical destruction which paved the way for government intervention to preserve Appalachia by establishing national forests reserves and parks. The intervention brought on a troubled situation. Eller describes it as follows:

> This rapid growth of government-owned lands would bring the Forest Service and its sister agencies--the Tennessee Valley Authority and the National Park Service--into increasing conflict with local mountain people. As greater quantities of land were purchased and as larger numbers of remote farms and ancestral homesteads were acquired through condemnation, local hostility to these government agencies continued to grow. The fact, moreover, that the greatest expansion in government lands came during the depression decade of the 1930's made it appear that the federal government was following a well-laid plan to destroy the mountain way of life. In the minds of many local residents, the purchase of mountain land for forests, lakes and parks had not only contributed to the depression of the local agricultural and timber economy, but it was depriving a hard-hit people of their last chance at independent survival.[5]

A tremendous migration of people from Appalachia began. Eller explains, "As logging in the mountains declined . . . thousands of mountaineers began to search for other industries to fill their new

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[5]Eller, Miners, Millhands and Mountaineers, pp. 187-188. As early as 1909, men from Jackson County went to Oregon and Washington state to use their logging skills on the West Coast.

addiction to wage employment."[6] However, federal control over the area's resources has not been a very significant factor in Jackson County until recently. With the United States Forest Service's recent purchase of the old Mead property (formerly owned by Blackwood) and the Bonus Defeat Tract in 1980, the federal government now owns almost a third of Jackson County. So many of the problems caused by government ownership in other parts of Appalachia may develop in Jackson County as the tax base decreases.[7]

Much of the development of Jackson County fits into Eller's chronology; however, there are differences. The "early logging phase" and the "Big Boom" in logging occurred a decade or so later than in the rest of Appalachia. Also the company town run by Blackwood does not appear to be exactly like those described by Eller. Most importantly, Eller does not deal with the smaller-scale, commercial firms owned by Appalachian men, such as W. C. Hennessee. Nor does Eller devote much time to the cumulative effects of the numerous independent loggers and circular saw operators.

Another item which needs to be considered is the difference between government and private exploitation. To gain an understanding of just how much the federal government is involved in Appalachian life, it is helpful to look at Si Kahn's "The Forest Service and

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[6] Eller, Miners, Millhands and Mountaineers, p. 194.

[7] Sylva Herald and Ruralite, April 10, 1980.

Appalachia." Kahn contends that government-owned land in Appalachia is a resource for the large surrounding populations on the East Coast, specifically city dwellers. He criticizes national forests for being tax exempt, depriving the local mountain people of their tax base.[8] In counties where the government owns eighty percent of the available land, the result is a dearth of needed public services. Therefore, one must be aware that government-ownership of land brings its own kind of problems and exploitation to Appalachia.[9]

On the other hand, private exploitation can be even more destructive and blatant. Private enterprise in Jackson County is motivated by a quest for gain, with little concern for preserving resources for the future. A strong case against private exploitation is made in John Gaventa's "Property, Coal and Theft." Although the article deals with coal areas, the questions he raises are relevant to the timber industry. Gaventa sees Appalachia owned by "outsiders" and large corporations who exploit the natural resources and keep the profits with no regard to the effects on the mountain people.

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[8]The Weeks Act of 1911 authorizes the federal government to return twenty-five percent of the profits from national forests to the states in which the forest is situated. The state legislature is then mandated to spend the money on the public schools and roads of the counties where the forests are located. This can encourage high rates of timber cutting and can be subject to arbitrary decisions by the U. S. Forest Service which approves how much timber is cut during the year.

[9]Si Kahn, "The Forest Service and Appalachia," Colonialism in Modern America: The Appalachian Case (Boone: Appalachian Consortium, 1978), pp. 85-109, hereafter cited as Kahn, "The Forest Service and Appalachia."

He believes the mountain people sold their land for terribly low prices without recognizing the value of the resources they owned. Gaventa compared the corporate property holder with a "slave holder" wielding enormous power over the local mountain people's existence. Thus the reader needs to bear in mind the fact that private exploitation can be extremely damaging to a region.[10]

This thesis deals specifically with Jackson County and, more generally, with the southern Appalachian region. My intention is to show how outside capital and technological innovations combined with local human and forest resources to alter the nature of life in this immediate area. Two questions have been foremost in my consideration. First, how exploitative was the timber industry in Jackson County? Secondly, does Eller's chronology of economic development for the Appalachian region apply to Jackson County without important modifications? By considering significant Jackson County lumbering operations, I hope to answer these questions.

The topic and much of the resource material resulted from my work at the Mountain Heritage Center in Cullowhee. I participated in an oral history project concerned with obtaining and preserving information on local logging operations. Additional research was done at the North Carolina State Archives in Raleigh, the North Carolina Collection of the University of North Carolina at Chapel Hill, the North Carolina State University Library, and the archives

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[10]John Gaventa, "Property, Coal and Theft," Colonialism in Modern America: The Appalachian Case (Boone: Appalachian Consortium, 1978), pp. 141-159, hereafter cited as Gaventa, "Property, Coal and Theft."

at the Great Smoky Mountains National Park located at Gatlinburg, Tennessee. Further information was obtained from Special Collections, Hunter Library at Western Carolina University, and from back issues of the local papers.

CHAPTER I

TECHNIQUES OF LOGGING AND SAWMILLING

When the first pioneers entered Jackson County in the late 1700s and early 1800s, they must have been overwhelmed when they contemplated the time and effort it would require to remove the gigantic oaks, chestnuts, poplars and other trees that covered the mountain coves. In his book Our Southern Highlanders, Horace Kephart, naturalist and proponent of the Great Smoky Mountains National Park, provides a description of the western North Carolina region as the pioneers must have seen it.[11] Writing of areas still untouched by the commercial logger in the early 1900s, Kephart reports in impressive prose:

> The Carolina mountains have a character all their own. Rising abruptly from a low base and then rounding more gradually upward for 2,000 to 5,000 feet above their valleys, their apparent height is more impressive than that of many a loftier summit in the West which forms only a protuberance on an elevated plateau. Nearly all of them are clad to their tops in dense forest and thick undergrowth. Here and there is a grassy "bald": a natural meadow curiously perched on the very top of a mountain. There are no bare, rocky summits rising above timberline, few jutting crags, no ribs and vertebrae of the earth exposed. Seldom does one see even a naked ledge of rock. The very cliffs are sheathed with trees and shrubs, so

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[11] Horace Kephart, Our Southern Highlanders (New York: MacMillan, 1929), pp. 50-54.

that one treading their edges has no fear of falling into an abyss.

Pinnacles or serrated ridges are rare. There are few commanding peaks. From almost any summit in Carolina one looks out upon a sea of flowing curves and dome-shaped eminences undulating, with no great disparity of height, unto the horizon. Almost everywhere the contours are similar: steep side, gradually rounding to the tops, smooth-surfaced to the eye because of the endless verdure. Every ridge is separated from its sisters by deep and narrow ravines. Not one of the thousand water courses shows a glint of its slashing stream, save where some far-off river may reveal, through a gap in the mountains, one single shimmering curve. In all this vast prospect, a keen eye, knowing where to look, may detect an occasional farmer's clearing, but to the stranger there is only mountain and forest, as far as the eye can reach.

Characteristic, too, is the dreamy blue haze, like that of Indian summer intensified, that ever hovers over the mountains, unless they be swathed in cloud, or, for a few minutes, after a sharp rainstorm has cleared the atmosphere. Both the Blue-Ridge and the Smoky Mountains owe their names to this tenuous mist. It softens all outlines, and lends a mirage-like effect of great distance to objects that are but a few miles off, while those further removed grow more and more intangible until finally the sky-line blends with the sky itself.

The foreground of such a landscape, in summer, is warm, soft, dreamy, caressing, habitable; beyond it are gentle and luring solitudes; the remote ranges are inexpressibly lonesome, isolated and mysterious; but everywhere the green forest mantle bespeaks a vital present; no-where does cold, bare granite stand as the sepulchre of an immemorial past.

And yet these very mountains of Carolina are among the ancients of the earth. They were old, very old, before the Alps and the Andes, the Rockies and the Himalayas were molded into their primal shapes. Upon them, in other ages, were born the first hardwoods of America--perhaps those of Europe, too--and upon them today the last great hardwood forests of our country stand in primeval majesty, mutely awaiting their imminent doom.

The richness of the Great Smoky forest has been the wonder and the admiration of everyone who has traversed it. As one climbs from the river to one of the main peaks, he passes successively through the same floral zones he would encounter in traveling from mid-Georgia to southern Canada.

Starting among sycamores, elms, gums, willows, persimmons, chinquapins, he soons enters a region of beech,

> birch, basswood, magnolia, cucumber, butternut, holly, sourwood, box elder, ash, maple, buckeye, poplar, hemlock, and a great number of other growths along the creeks and branches. On the lower slopes are many species of oaks, with hickory, hemlock, pitch pine, locust, dogwood, chestnut. In this region nearly all trees attain their fullest development. On north fronts of hills the oaks reach a diameter of five to six feet. In cool, rich coves, chestnut trees grow from six to nine feet across the stump; and tulip poplars up to ten or eleven feet, their straight trunks towering like gigantic columns, with scarcely a noticeable taper, seventy or eighty feet to the nearest limb.
>
> Ascending above the zone of 3,000 feet, white oak is replaced by the no less valuable "mountain oak." Beech, birch, buckeye and chestnut persist to 5,000 feet. Then, where the beeches dwindle until adult trees are only knee-high, there begins a sub-arctic zone of black spruce, balsam, striped maple, aspen and the "Peruvian" or red cherry.
>
> I have named only a few of the prevailing growths. Nowhere else in the temperate zone is there such a variety of merchantable timber as in western Carolina and the Tennessee front of the Unaka system. Above a hundred and twenty species of native trees grow in the Smoky forest itself. When Asa Grey visited the North Carolina mountains he identified in a thirty-mile trip a greater variety of indigenous trees than could be observed in crossing Europe from England to Turkey, or in a strip from Boston to the Rocky Mountain plateau. As John Muir has said, our forests, "however slighted by men, must have been a great delight to God; for they were the best He ever planted."[12]

The most urgent needs for wood by the pioneer entering this "great delight" were for shelter and warmth. To supply these needs, he initially attacked the forest armed only with a broad-ax. A building site was selected and trees there had to be cleared away in preparation for the new home and eventual farming. Selected trees

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[12] Ibid.

were used in constructing the dwelling and the others were rolled into huge piles and burned.[13]

After a tree had been marked for cutting, the pioneer decided where the cut would go so as to drop the tree safely and leave easy access for its later removal. Usually a notch was made in one side of the tree with an ax or a crosscut saw. The notch was to guide the fall of the tree in the desired direction. Then a cut was made directly opposite the notch until the tree fell.[14]

With the tree on the ground, the limbs were cut off and the tree was severed into manageable lengths. The transport of these logs proved to be the most difficult task for the pioneer. At first, the distance was rather short as the logs were to be used for construction of crude dwellings in the area where they were cut. Homes were built without using saws. All elements of the household—the log walls, the roofs, and the furniture--were shaped with the aid of an ax. Later settlers brought with them crosscut saws which made it possible to saw rough planks. The crosscut saw was a hand-operated saw with hooked teeth. It was five to seven and one-half feet long with a

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[13]Roy B. Clarkson, Tumult on the Mountains--Lumbering in West Virginia--1770-1920 (Parsons, West Virginia: McClain Printing Company, 1964), pp. 13-14, hereafter cited as Clarkson, Tumult.

[14]Interview with Eugene Monteith (former employee of W. C. Hennessee, Inc.), Cullowhee, North Carolina, October 23, 1980, hereafter cited as Interview with Eugene Monteith; Interview with Quince Heddon (circular sawmill operator, Norton Community, North Carolina), October 30, 1980, hereafter cited as Interview with Quince Heddon.

handle on each end. The distance involved in transportation grew as now the logs had to be transported to make effective use of a saw area or mill. If the terrain was clear enough, a team of draft horses, mules, or sometimes even oxen were hitched to a log. If the forest was dense or the terrain too steep for a team to maneuver, a single animal had to do the work of two.[15]

Since roads were virtually non-existent, the majority of logging was done close to wherever the log was going to be turned into lumber (or some other desired wood product) to keep the ever-growing transportation distance as short as possible. The simplest way for a log to be turned into lumber was to place it on a rack made of logs and, with one man standing on the log and one below, a crosscut saw was drawn back and forth to saw the log. This was slow and back-breaking work. About one hundred boardfeet of lumber a day was produced by two men using this method.[16]

An alternate method was to roll the log over a pit dug for that purpose. This allowed one man to work from the pit. The man on top of the log guided the saw along a chalkline and was generally the more skillful of the two. Despite the shortcoming of using crosscut saws in the two manners described, the needs of the local settlers for lumber were met.[17]

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[15]Interview with Eugene Monteith; Clarkson, Tumult, p. 14.

[16]Ibid.

[17]Clarkson, Tumult, pp. 19-22.

An increase in population and the growth of urban areas in eastern America forced the demand for lumber upward. In response mountain sawmills powered by water were built. Sometimes they were combined with an existing grist mill for convenience. These mills used a sash or gate saw. The name came from the wooden sashes or gates to which the saw was fastened. The saw moved a little over a foot up and down by a rod connected to the main shaft of the water wheel. The saw moved about eighty strokes a minute. The water running the mill was delivered to a "flutter wheel" by using a mill-race which was a trough made of wood that guided the water from the dam located in the stream above the mill to the wheel itself. The flow of water to the wheel was controlled by opening or closing a head-gate. The water-powered sawmill wasted more energy than it delivered to the saw. Still, it was a great improvement over the crosscut saw and it allowed two men to cut as much as five hundred boardfeet of lumber a day, with much less back-breaking labor involved.[18]

Eastern America continued to grow and the water-powered saw could not meet the new demand for lumber. A new type of sawmill was developed, one that was powered by a steam engine. It was called a circular sawmill because the saw blade was circular in shape. Almost overnight, the water-powered sawmill became obsolete.[19]

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[18]Interview with Eugene Monteith; Clarkson, Tumult, pp. 15-17.

[19]Interview with Eugene Monteith.

The origin of the circular saw can be traced back to eighteenth-century England, but it was not until the nineteenth century that the circular saw came into general use. The saw itself was a large circular blade several feet in diameter powered by a steam engine which cut the logs into boards.[20]

As time passed, the circular sawmill proved much more efficient and more portable than the sash sawmill; and, therefore, it became the more prevalent type used. Still, relatively few numbers of trees were cut. Only enough lumber was made to satisfy local needs, even though those needs had grown considerably. This situation was not to change until the late 1800s.

One reason behind this change was the completion of the Southern Railroad to Murphy, North Carolina, in the 1890s. The railroad revolutionized transportation in southwestern North Carolina. Before the railroad, people of the area had been dependent on a crude road network practically impassable during times of extended rain or deep snow. At best travel was difficult and slow due to the poorly maintained and steep roads. The railroad made available a relatively quick and dependable mode of transportation. Another reason was the search for new timber resources as those in New England had been depleted by the latter half of the nineteenth century. This prompted a rush to Appalachia for the purpose of commercial logging.

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[20]Clarkson, Tumult, pp. 19-22.

[21]Eller, Miners, Millhands and Mountaineers, pp. 157-159.

At first the commercial loggers were very selective and only the largest and most figured trees, such as walnut, red oak, and maple were chosen. Later, quantity became more important and, for that reason, mountain oak and yellow poplar became the major varieties harvested. The method of harvesting trees used by the commercial logger was much more specialized than that of the pioneer. A tree was marked for cutting by a timber cruiser, who usually had some academic training in forestry. The timber crew then followed the same basic procedure for felling the tree as did the pioneer, although sometimes they used an alternate method called "jumping off." In this method a cut was made in the direction the tree was to fall. It was made as deep as possible, much deeper than a notch would be. Then a cut was made on the back side, just a little above the saw curve, until the tree fell. This way prevented the tree from cracking at the base as it fell. It was also more dangerous as the tree did not always go in the desired direction as it jumped off the stump.[22]

With the tree on the ground, axemen swarmed over it, cutting off useless limbs and cutting the tree into the desired lengths for transport. The manner in which logs were "snaked" out of the woods was quite similar to that of the pioneer except for the fact that the logging itself was done on a much larger scale. The teams of horses were hooked to the log by means of a "J-grab" which was a metal bar that was driven into the log and secured to the horse's harness via a

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[22]Figured trees refer to trees in which the wood is patterned with swirls or lines. Interview with Eugene Monteith.

hook shaped like the letter J, on top of the bar. This hook allowed the log to break free of the team if control was lost going down the mountainside.[23]

How far the log was moved through the woods depended on the operation. On larger operations like that of the Blackwood Lumber Company, the logs were only taken as far as the nearest railroad spur where they were loaded on railroad cars and transported to the mill. The use of logging railroads was an expensive proposition; yet it opened previously inaccessible tracts of timber. Advances in railroad equipment made the use of logging railroads possible in this area.[24]

The normal rod locomotives could not climb steep slopes nor negotiate sharp curves, and as a result the first logging railroads in the country were very costly. Ephraim Shay, a midwestern lumberman, invented a secured locomotive. He used reducing gears rather than the normal side rods. This gave his locomotive maximum freedom of movement on rough, hilly and sharply curved track, by providing a more smoothly applied, higher traction-ratio with a minimum of locomotive weight. The Shay engine provided low speed and high stability, two features needed for mountain logging. The first Shay engines had upright boilers, but these were soon replaced by horizontal, off-set

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[23]Interview with Quince Heddon; Interview with Felix Hooper (former employee of the Blackwood Lumber Company), Caney Fork Community, North Carolina, November 6, 1980, hereafter cited as Interview with Felix Hooper.

[24]Interview with Quince Heddon; Interview with Felix Hooper.

boilers. The boilers generated steam to drive the three pistons located on one side of the engine. The drive shaft was geared to all the wheels of the engine which provided extremely good traction. Even though movement was still accomplished by "slick wheels" on "slick rails," now all the wheels of the engine had to spin before any one wheel could spin.[25]

The Shay engine was, to say the least, a great success. The Lima Locomotive Works located in Lima, Ohio, produced 2,761 Shays between 1880-1945. These engines ranged from small ten-ton locomotives to heavy 150-ton ones. Shay engines were used extensively in Appalachia; in particular, the Blackwood Lumber Company used several in Jackson County.[26]

Several years after the Shay entered production, another type of geared engine was developed. This one, known as the Climax, used two cylinders, one on either side of the boiler, with a gear linked to a central drive-shaft. Its balanced drive had some advantage over the one-sided drive of the Shay in terms of traction. The Climax engine was built in a variety of sizes from ten-ton to 100-ton versions at Corry, Pennsylvania, by the Climax Manufacturing Company. The Climax was not as successful as the Shay nationwide, but in Appalachia it became the mainstay of the short logging railroads.[27]

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[25]Clarkson, Tumult, pp. 55-61.

[26]Ibid., Interview with Felix Hooper; Interview with Eugene Monteith.

[27]Clarkson, Tumult, pp. 55-61.

These short spur lines were graded and constructed by hand. Many of the cross-ties used in Jackson County were hewn with an ax. Railroad construction was both slow and expensive. Once constructed, maintenance became a major problem. The operation of large amounts of equipment made it necessary for companies like Blackwood to erect and maintain extensive, well-equipped shop and foundry facilities. Using these, repairs of almost any type could be made.[28]

The major commercial carrier of the region, the Southern Railway, also participated in logging operations by transporting finished lumber to the North and West and by running special trains to pick up logs brought to the tracks by part-time loggers.[29]

In the early days of commercial logging, the Blue Ridge Lumber Company tried unsuccessfully to use the Tuckasegee River for transport. Driving logs down rivers was a New England technique. Logs were taken to landings along creeks and rivers. The logs were either stacked in an orderly fashion or just piled beside one another. During the summer "splash dams" were built on the smaller streams. After enough water gathered behind the dam, the logs were rolled in and the dam opened. The rushing water carried the logs downstream. Eventually the logs reached the mill and were caught by booms in the river.

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[28]Interview with Felix Hooper; Interview with Ransom Middleton (former employee of the Blackwood Lumber Company), Caney Fork Community, North Carolina, November 5, 1980, hereafter cited as Interview with Ransom Middleton.

[29]Tuckaseigee Democrat (Sylva), April 9, 1896.

Unfortunately, the logs would wedge against rocks or other objects in the river and the entire mass of logs would jam together. It was necessary for men to perform the dangerous job of clearing the jam by going out on the logs and prying loose the key logs to release the jam. When this was done, the jam would break violently, forcing the men to scramble as best they could over the moving logs to shore. The Tuckasegee proved too unpredictable at flood stage for this method to be of much use.[30]

Once the logs arrived at the mill, the process of producing lumber depended on whether the mill had a band saw or a circular saw. A band saw was a steel belt with teeth on one or both edges. It moved very quickly around an upper and lower pulley. The lower pulley was attached by belts to a steam engine which provided power for the saw. The logs were carried to the saw on a carriage run by steam. The band saw's early development can be traced back to the early 1800s, when a type of band saw was patented in England. A more efficient band saw was patented in France a few years later. Both developments influenced the American version which was first used successfully in 1869.[31]

The band saw did not become very important in the lumber industry until the late 1800s because the ends of the band saw sometimes came apart at high speed, causing serious injury to those in the area.

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[30]Interview with Felix Hooper; Tuckaseigee Democrat (Sylva), February 11, 1891.

[31]Clarkson, Tumult, pp. 19-22.

Eventually this problem was corrected, but many band saws used in the lumber industry came from France due to their good reputation for durability. The major advantage of a band saw over a circular saw is that a band saw can cut much larger logs faster.[32]

At most band sawmills the logs were dumped into a pond. This was done by rolling the logs off wagons or railroad cars or by floating them in from a river. The pond served as storage space, "washed the red off," and provided a means to move the logs easily into the mill.

The logs were taken from the pond up an inclined trough called the "jackslip." The "jackslip" had a heavy chain moving around it with cleats positioned at intervals to catch the logs. The "jackslip" extended well under the surface of the pond and logs were pushed or pulled by men with poles to the trough where they were caught by the cleats on the chain and carried up the incline into the mill.[33]

As the log entered the mill at the top of the "jackslip," it was measured by a scaler with a log scale. The scaler recorded the kind of timber, the estimated boardfeet of the log, and controlled the movement of the chain by means of a lever.[34] As the log entered the mill, it was parallel to the carriage. It was moved on to the carriage by a set of log flippers or "kickers" operated by the sawyer.

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[32]Ibid., pp. 23-38.

[33]Interview with Ransom Middleton.

[34]Ibid.

The carriage was similar in some ways to a flatbed railroad car--it was made of steel and moved on rails.[35]

The saw itself was made of high grade steel. Ranging from ten to sixteen inches wide, with fourteen inches being the most popular, the blade ranged from thirty to fifty feet. The blade itself was curved, thus keeping the band saw under some tension as it turned. Most of the tension required to keep the saw on its pulleys was provided through a gear arrangement which raised the upper pulley. Seven thousand pounds of tension were required for an eight inch blade while 12,500 pounds were required for a fifteen inch one. The saw traveled around two pulleys, each weighing 1,500 to 3,000 pounds. A belt driven by a steam engine was attached to the lower pulley. The saw acted as a belt and drove the upper one. The diameters of the pulleys ranged from five to eleven feet depending on the physical size of the mill. The size of the pulley dictated the nomenclature of the mill. For example, an eight foot band mill used pulleys eight feet in diameter.[36]

With the log on the carriage ready to be sawed, several movable supports on the carriage had to be set. These supports, known as "stops," determined the angle at which the log met the saw blade. The men who set these "stops" were called "doggers." A "head dogger," a "rear dogger," and a "block setter" usually made up the crew for a

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[35]Interview with Felix Hooper; Interview with Ransom Middleton; Sylva Herald and Ruralite, August 30, 1951.

[36]Clarkson, Tumult, pp. 25-27.

carriage. As the carriage moved towards the saw, the sawyer determined how he wanted to cut the log and signaled the carriage crew with a hand sign. The job called for extreme precision or an entire log could be wasted. This is why the sawyer was one of the most highly trained and paid men of the mill. The "head dogger" converted the hand sign into a fractional measurement which was set by means of the "stops." The initial cuts took what was left of the bark off and made the log surface flat. Gradually boards were sawed off and the log was mechanically turned, as needed, by large metal hooks called "kickers" which were located on the carriage. The boards went by another conveyor to be edged and cut to the desired length. Depending on their use, the boards were either sent on into the yard or planed smooth and then sent into the yard where they were stacked to dry. The better financed operations used a dry kiln to cure the lumber, using steam heat, to prevent warpage. Then the boards were shipped to market by railroad. "Culls" or rejected pieces of wood were removed by hand all during the process and usually wound up being used in the mill boilers as fuel. The amount of lumber cut by the band sawmill was determined by the actual physical size of the saw and by the log supply. Running from sunup to sundown, the band saws at Blackwood could produce over 90,000 boardfeet of lumber a day.[37]

If the logs were taken to a circular sawmill the process of milling was slightly different. By the use of "peevies" (long

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[37]Interview with Felix Hooper.

wooden-handled poles with metal hooks on the end) and skid poles, the log was maneuvered onto the carriage. The carriage moved the log into the circular saw and the sawyer cut the boards off. The carriage was much smaller than those used in a band saw operation. The boards were turned down onto a roller bed conveyor and either edged by a separate saw or stacked for later use. The log was turned and set by hand. Each time a board was sawed off the whole process began again. If the sawmill was small, the edger was usually omitted and the boards were temporarily stacked and then run back through the circular saw on the carriage. A good circular sawmill could produce 10,000 to 12,000 boardfeet of lumber a day and employed five to six men.[38]

In general, steam provided the power for both types of mills. At the present time, many circular sawmills use gasoline or diesel industrial-type engines as power sources. The rate of production essentially remains unchanged; however, maintenance and the time required to begin operation have been improved. Also, small tractors with boom attachments are used for moving logs around in the lumber yard. Today machines called log skidders pull the logs through the woods; and they are loaded by machine onto trucks especially equipped to hold logs, and taken to the mill. The pulpwood industry which uses trees undesirable for lumber to make wood fiber for paper and other associated products has taken advantage of this mechanization to expand at a tremendous pace.[39]

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[38]Interview with Quince Heddon; Clarkson, Tumult, pp. 19-22.

[39]Interview with Quince Heddon.

By far the most important development in logging machinery has been the chain saw. It is a saw which cuts through the log by means of a link chain which contains cutting teeth and is guided around a rigid blade. Power is supplied by a self-contained gasoline engine, by a compressed air motor, or by an electric motor built onto the saw. Its ancestor was a crosscut saw with a motor; it was called a "dragsaw." An early version of the chain saw appeared in the 1940s as a cumbersome two-man saw which weighed over one hundred pounds; it had a four to six foot blade. These behemoths were made by companies such as Maul, Simon, and McCulloch. They proved to be too heavy and awkward for work in the woods but did prove useful at the yard where movement of the saw could be minimized. Advances in metallurgy and design enabled chain saw makers to reduce the weight and bulk of the saws. This evolution produced a light-weight, effective piece of logging equipment. The most popular size used today is a seven horsepower gasoline-powered version with a twenty-four inch cutting bar. The chain saw has allowed production to increase while decreasing the amount of labor involved in felling and stripping a tree. One man now can do what it took a crew of axemen to do and in a shorter time.[40]

The techniques of logging and sawmilling have changed greatly since the first pioneer came to Jackson County, ax in hand. In terms of logging the ax was replaced by or used in combination with the

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[40]Albert E. Wackerman, Harvesting Timber Crops (New York: McGraw-Hill, 1949), pp. 166-169.

crosscut saw. Then the light, gasoline-powered one-man chain saw revolutionized the industry by increasing production. For example, one man could cut a cord of wood in three hours with each tree averaging seven inches in diameter, yielding five sticks per tree and twenty-one trees in the cord, a feat that would take several days with ax and crosscut saw. Taking the log to the sawmill has changed from using animals to short railroad spurs used in large commercial operations, to present use of motorized log skidders and trucks, making use of a vastly improved road net. In terms of sawmilling, the crosscut saw was replaced by the water-powered sash saw. Then came the steam-powered circular and band saws which allowed unheard of production levels to be reached. Currently gasoline and diesel-powered circular saws and a steam-powered band saw are in use in Jackson County.

These technological innovations, especially the development of the chain saw, resulted in important changes in the lives of Jackson County people. Age-old methods of felling trees and milling wood gave way to more modern ones. The chain saw allowed less skilled individuals to become loggers and offered greater potential income. Subsistence agriculture became less important as economic opportunities broadened. The lumbering industry has irrevocably changed the patterns of rural life.

CHAPTER II

EARLY COMMERCIAL LOGGING

As Jackson County was being settled, a certain amount of logging was inevitable. This was logging of the non-commercial type. Wood was needed for building dwellings, barns, fences, fires, and a multitude of other uses. The wood was cut from small, accessible tracts of timber and processed by hand or by sash or circular saw. The local demand for wood was more than amply satisfied.

Towards the end of the nineteenth century the situation began to change as the forests of the Northeast, which had been a principal source of timber since colonial days, were depleted. A new supply of timber was necessitated by an expanding national economy. Southern Appalachia, long ignored by mainstream America, was rapidly developed economically because of its enormous forest resource and its proximity to the East Coast. Using the logging railroad and the band saw, this development was carried on at a fast and furious pace, as if there were no tomorrow. Logging operations were expanded to such a degree that conservationists began to worry that soon there would be no wilderness left in Appalachia. Their voices of concern reached high government offices and found sympathetic ears. In 1902 a study on the southern Appalachian region was presented to Congress by the Department of Agriculture. It had been authorized by President

Theodore Roosevelt, who was himself a noted conservationist. The study advocated government ownership of extensive tracts of forest lands in Southern Appalachia as a means of preventing its destruction. President Roosevelt added, "Its conclusions point unmistakably in the judgement of the Secretary and in my own, to creation of a national forest reserve in certain parts of the Southern States."[41] The study was highly critical of the waste lumber companies in general were leaving, stating: "Logging operations have generally shown an inexcuseable slovenliness, as foreign to good lumbering as to practical forestry."[42] The report stated that, although the lumber industry was expanding rapidly and lumbermen were going further into the forests, the damaging effects were coming from irregular cutting patterns rather than the expansion. The wasteful methods of harvesting destroyed additional trees and seedlings and made forest fires even more dangerous as the tops and brush left by the lumbermen made the fire burn hotter. These factors were more destructive than the actual culling of marketable timber, although this culling was becoming very heavy in places. The report noted that all the best trees had already been cut for ten miles on either side of the Southern Railroad which passed through the area which included Jackson County.[43]

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[41] U. S. Congress, Senate, The Southern Appalachian Region: Message from the President, S. Doc. 84, 57th Congress, 1st Session, 1901, p. 3.

[42] Ibid., p. 63.

[43] Ibid.

One company which was representative of the expanding, large-scale logging operations discussed earlier was the Blue Ridge Lumber Company. The company was owned by two men from Maine: L. C. Cummings and C. P. Buffum; in time the mill came to be known as Buffum's Mill. It was capitalized for a maximum of sixty thousand dollars under its charter of incorporation granted by the state of North Carolina.[44]

In February, 1890, the Blue Ridge Company began building a dam across the Tuckasegee at Dillsboro. Its purpose was to provide water power for the planned sawmill, and the dam had a fourteen foot waterfall. The idea of having a water-powered band saw was unique in Jackson County, and its success may be judged by the fact that no other band sawmills which operated in the county used water power. A boom was also erected in the river to stop logs being floated down to the mill. This was a common method of moving logs in the New England area; however, the design of the boom did not take into account early spring flooding and the power of the Tuckasegee. The boom was broken in the spring of 1891, requiring an estimated eight to ten thousand dollars to effect repairs. Also, the practice of floating logs down the Tuckasegee met with disaster and tragedy. In the spring of 1892, floating logs struck a bridge on the Tuckasegee, on the Keowee Turnpike between the mouths of Cullowhee and Caney Fork creeks. For this,

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[44]North Carolina State Archives, Record of Incorporations: Jackson County, p. 454 (microfilm), hereafter cited as Record of Incorporations: Jackson County.

the Blue Ridge Lumber Company was fined three hundred dollars for damages by the county commissioners. The spring of 1893 found the logs of the Blue Ridge spread along the banks of the Tuckasegee by a flood. The next spring Joe Johnston, originally from Maine and a foreman at Blue Ridge, was drowned in Trout Creek, a tributary of the Tuckasegee, while attempting to reach shore after breaking up a log jam where the logs moved from the creek into the river. He fell into the water in front of the moving mass of logs; and the logs prevented him from surfacing in time.[45]

Once logs reached the mill, they were funneled into the mill's holding pond. The mill itself was a marvel for the 1890s. It consisted of an eight foot band saw, a Marinette No. 3, with a blade ten inches wide and forty-eight feet, ten inches in total length. The carriage was outfitted with a log roller and turner. Other equipment included a live roller conveyor belt and a gang edger made up of several circular saws working in unison. The sawmill could cut close to fifty thousand boardfeet of lumber in a day. A double dry-kiln with a boiler plant to operate it was built. It had a capacity of 100,000 boardfeet. In terms of labor, land acquisition, and social approval, community support had been sought by the Blue Ridge; and, when the sawmill's machinery was started for the first time and the first log was turned into lumber, the company and community took

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[45] Tuckaseigee Democrat (Sylva), July 29, 1891; ibid., July 22, 1891; ibid., May 21, 1890; ibid., February 3, 1892; ibid., March 7, 1894.

pride in that success.[46] Even a short verse by Sion Early was written to commemorate the occasion:

> The long looked for has come at last
> The Blue Ridge Lumber Co. is now in blast;
> The wheel runs like admiration
> And saws like----------all tarnation.[47]

Besides the river, the Blue Ridge used a "pole railroad" of some three miles up Barkers Creek to bring logs to the mill. Usually a "pole railroad" was built with poles six to eight inches in diameter that were buried crossways about three feet apart. If needed a "fender-pole" was added to serve as a type of guardrail to keep the logs from sliding off. Logs were then pulled over the tops of the poles by teams of horses which stepped between the poles. The tops of the poles were kept wet and the weight of the logs traveling over the poles pushed them into the ground. This kept the poles in place. The "pole railroad" was not exceptionally successful due to the high friction involved and the expense of preparation and maintenance. However, it did keep the front end of the logs being pulled from digging into the ground.[48] Crews of loggers were very selective, taking only the largest hardwoods they could find. Work in the woods held its own dangers. In 1892 an employee of the Blue Ridge was injured while loading logs onto the "pole railroad."[49]

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[46] Tuckaseigee Democrat (Sylva), July 29, 1891.

[47] Ibid., July 22, 1891.

[48] Ibid., July 29, 1891; Clarkson, Tumult, pp. 45-54.

[49] Tuckaseigee Democrat (Sylva), March 30, 1892.

The lumber cut at the mill was shipped on the Southern Railroad to the Richmond and Danville, then northward until it reached Baltimore and New York. During the mid-1890s, the Blue Ridge Lumber Company abandoned Dillsboro, leaving little reminder it had been there. It is, however, still possible to see signs left by the slash dams used by the Blue Ridge loggers on Caney Fork Creek. It is possible the depression of the 1890s affected prices of lumber so much that the Blue Ridge Lumber Company had to quit. Certainly the Tuckasegee River had proved uncooperative as regards northeastern logging techniques. In fact the company's dependence on unsuccessful techniques could have had some bearing on its demise. The company was undercapitalized to begin construction of the dams, sawmills, and logging railways necessary to have succeeded in Jackson County.[50]

Still, the Blue Ridge Lumber Company was the first commercial lumber company to operate in the county, and it was hoped by many of the residents that similar developments would follow. A furniture factory and a planing mill were projected to be built by the Blue Ridge at Dillsboro, but neither ever was. Other companies did follow though. In 1901 the W. T. Mason Lumber Company was organized, but it was a small organization that failed after a fire in October, 1913, destroyed the sawmill. A much larger company, the Balsam Mountain

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[50] Ibid., July 29, 1891. According to local legend, the 1893 flood scattered the logs as far as Tennessee. The Blue Ridge Lumber Company chartered a train and employed a crew to recover the logs. The work took all summer to complete and shortly afterward the Blue Ridge ceased operation.

Lumber Company, was also established in 1901 at Willets Station. The capital to finance this venture came from Philadelphia, Pennsylvania, and the company's operation was overseen by Walter L. Taylor and Robert P. Brown, both of that city. This company failed rather quickly, perhaps due to the long-distance communication between the owners and managers.

A pattern had been set, and it was repeated by several other firms. The Buchanan and Dunn Lumber Company, located near Cashiers, was sold by its trustees in 1910 because of financial difficulties; and the Dover Lumber Company gave up the same year because of difficulties in obtaining a right-of-way from local land owners for its narrow gauge railroad, a necessity for the company's operation. Even C. J. Harris, the owner of the successful kaolin clay mine and other businesses in Jackson County, announced dissolution of his Gilliland Locust Pin Company which made pins to hold insulators for telegraph and light poles. Reasons for the failures of these lumber companies are varied. Many were due to mismanagement or ignorance of environmental factors. Under-capitalization proved a problem for some, as logging railroads were needed to penetrate the mountain coves and their cost was quite often underestimated. Also, the machinery was terribly expensive. The mills manufactured by Frick, Corley and Wheeling were costly, contributing to a large overhead. One of the greatest problems facing the commercial mill resulted from fluctuating demand and prices on the United States and world markets in

lumber. Unpredictable prices can be seen as the major cause of failure of lumber companies in Jackson County.[51]

One timber-related industry that did experience success during this early period was that of tanning leather. Charles J. Harris came to Jackson County in 1888 and bought the Carolina Clay Company.[52] He prospered in the mining, cleaning, and shipping of ceramic clay. Harris helped start many businesses in the area including the Gilliland Locust Pin Company, the Blue Ridge Pin Company, the Harris Clay Company, the Jackson County Bank, the Sylva Supply Company, and the Sylva Electric Company. In 1901 he ventured into tanning by opening the Harris-Reese Tannery which later operated under a variety of names. Around 1916 the Armour Leather Company of Wilmington, Delaware, purchased the tannery. The tanning process used the tannic acid obtained from chestnut bark chips to tan leather. The process was so successful that the Mead Paper Corporation of Ohio continued to use it

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[51]Interview with Eugene Monteith; Tuckaseigee Democrat (Sylva), June 24, 1906; ibid., July 2, 1909; ibid., September 10, 1909; ibid., September 2, 1910; ibid., December 2, 1910; ibid., June 6, 1913; ibid., August 9, 1912; ibid., January 16, 1914.

[52]Charles J. Harris was born in Putnam, Connecticut. He attended Yale and Brown's School of Law, St. Louis, Missouri. After arriving in Jackson County, he purchased his brother's and nephew's interests in a small clay company. He ran the mine at Hog Rock for forty years while engaging in a variety of other businesses. This information came from a hospital dedication speech located in the Vertical file, under Jackson County at Special Collections, Western Carolina University, Cullowhee, North Carolina.

into the 1950s, long after they had merged with Armour Leather and taken over the Sylva facility.[53]

In the time from the 1890s to the early 1900s, logging and sawmilling in Jackson County took a new direction. The industry emphasized high-volume production of lumber for faraway northern markets and used state-of-the-art technology in order to accomplish this in the shortest possible time. For example, in 1910 the county's estimated annual production of lumber reached four million boardfeet and sold for $27.50 per thousand. Jackson County had begun the era of greater exploitation of its timber resources.[54]

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[53] Jackson County Journal (Sylva), July 20, 1939. Mead has several spellings. One older variation is Meade. This writer will use the current spelling which is Mead.

[54] Jackson County Journal (Sylva), July 14, 1911.

CHAPTER III

THE EXPANSION PERIOD

For most of southern Appalachia, the boom time in logging came around the turn of the century; but for Jackson County it was later. The reasons for this situation are many, but the most important ones were that uncertain lumber prices and the cost of transportation in the area did not warrant large-scale development. Eventually the price of lumber went up; and, in 1920, a large organization was chartered by the state for the purpose of producing lumber. In time this firm would lay railroad tracks far into the mountain coves and use logging machinery to harvest and process timber. The name of this organization was the Blackwood Lumber Company. The company was chartered in Virginia for the purpose of cutting a large tract of timber there. It was a subsidiary of the Keyes-Walker Lumber Company which operated the Norwood mill on Forney's Creek in Swain County and owned large tracts of agricultural land in Pamlico County in the eastern part of the state. The home offices of Keyes-Walker were located in Philadelphia, Pennsylvania. Blackwood was authorized to do business in North Carolina by Secretary of State J. Bryan Grimes on November 29, 1920. The company's charter listed James E. Walker of Roanoke, Virginia, as president and Joseph Keyes of Washington, D.C., C. W. Pierce of Graham, Virginia, and V. R. Rieley and N. W. Davison, both of Sylva,

as major stockholders. It was authorized 1,000,000 dollars in capital and had already issued 700,000 dollars in shares of stock.[55]

Blackwood purchased 40,575 acres of timber land from the Jackson Lumber Company, land that had been part of the Highland Forest which had originally been owned by the Vanderbilt family. Financed in New York and Pennsylvania, the Jackson Lumber Company had bought the original 60,000 acre Highland Forest in 1909 for 400,000 dollars, probably for speculative purposes as the principal business office for the company was located in Asheville. The Blackwood timber boundary began at Scott's Creek and continued to the Canada section, taking in the Cullowhee and Caney Fork townships. The virgin timber within the boundary was made up of poplar, oak, chestnut, basswood, and spruce, of which the chestnut was the most desirable because of its popularity and high profit margin at the time.[56]

Blackwood began operations in Jackson County under a subsidiary's name, that of the Tuckaseigee and Southeastern Railway Company. The reason for this was rather simple. At this time there were no good roads in the county. The only dependable system of transportation was the railroad. In order even to begin construction of a sawmill, a railroad spur first had to be built to the site so that materials

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[55]Interview with Eugene Monteith; Record of Incorporations: Jackson County, pp. 154-155.

[56]Jackson County Journal (Sylva), July 23, 1920. Wood harvesters found chestnut a desirable wood due to its popularity with the public.

for the mill could be brought in. This was the purpose in organizing the Tuckaseigee and Southeastern. It was chartered as a commercial carrier, meaning that it could carry both people and freight and charge money for it. The T and SE had an authorized capital of 300,000 dollars, of which at the time of incorporation on August 6, 1920, 35,000 dollars had been issued in the form of 100 dollar shares. The charter listed the same officers as did the charter for the Blackwood Lumber Company. One notable power granted to the T and SE was the right to appropriate land and rights by condemnation under Chapter 35 of the North Carolina Laws. This right, known as eminent domain, was granted the T and SE. It practically guaranteed a hundred foot wide right-of-way along the T and SE's route which was to be from a junction with the Southern Railway at Sylva up the Tuckasegee to the river's forks and then on to Transylvania County to join the Southern Railway near Lake Toxaway. This was a total distance of thirty-five miles through the mountains.[57]

An agreement was made between the Southern Railway Company and the Blackwood Lumber Company to supply materials for the construction of the T and SE. It included 158,400 feet of fifty pound relay rail and 6,000 angle bars, all of which was enough for roughly 15 miles of track. The T and SE was responsible for building the railroad bed, cutting and placing the crossties, and laying the track--all of which

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[57] Jackson County Journal (Sylva), July 23, 1920; Record of Incorporations: Jackson County, p. 212.

had to be done by hand. Eventually the portion of track between Sylva and East LaPorte, near the forks of the Tuckasegee, was completed. The length of the road was twelve and one-half miles. No attempt was ever made to complete the railroad on to Lake Toxaway as specified in the charter. The most likely reason was that the Blackwood interests wanted to exploit the area around East LaPorte first. Later, when that timber had been cut out, Blackwood was financially incapable of finishing the railroad. The part that was finished was not without controversy.

Even with the power of eminent domain to use as a threat, the T and SE frequently found itself in court fighting for rights-of-way or being sued for using them. Ransom Middleton's grandfather, a resident of the Caney Fork community, secured the services of a lawyer from Asheville after representatives of the T and SE failed to interest him in selling some of his land to them. After a court fight, the T and SE wound up paying more for the land than they had originally offered, but they did secure the land they needed. It appears the majority of the county's residents favored the mill and its associated railroad for its promise of bringing economic development and prosperity. Generally, even the minority of residents whose land was needed for the T and SE made peace with the railroad. In fact, Ransom Middleton worked for Blackwood for over twenty-three years as did other folks in the area.[58]

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[58]Interview with Ransom Middleton; Jackson County, Register of Deeds, Book 78, p. 498.

In 1922 the T and SE began service, using a Packard truck equipped with flange wheels and a streetcar-like body as a passenger carrier and a ninety-ton Shay steam engine for moving freight. The Packard had a capacity of thirty passengers, and it was cleaner in the sense that it did not throw coal cinders and smoke over its passengers as did locomotives. Four trips were made between East LaPorte and Sylva daily, two in the morning and two in the afternoon, with stops at Dicks Gap, Cullowhee, and Webster. The schedule allowed connections with the Southern's trains passing through Sylva on their way to Asheville or Murphy. The T and SE was a boon to students at Cullowhee Normal and Industrial School by greatly increasing their mobility. It also allowed many people from more isolated areas of the county to attend high school at Cullowhee. They probably would not have been able to do so otherwise. In fact, a special monthly rate was offered school children by the T and SE. This action benefited the railroad more in public goodwill than it did economically.[59]

With the railroad built, Blackwood began construction of the lumber mill, shipping in machinery and material as needed. A double band sawmill was set up with a combined capacity capable of producing over ninety thousand boardfeet of lumber a day. It contained a nine-foot band saw on the right-hand side of the mill and a seven-foot band saw on the left-hand side of the mill. Each saw had its own carriage

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[59] Jackson County Journal (Sylva), February 25, 1922; ibid., April 8, 1921; ibid., May 5, 1922; ibid., June 16, 1922; ibid., June 26, 1923.

and associated crews to run them. Blackwood had the most modern equipment available and made great use of labor-saving machinery. Steam-powered "kickers" were used to turn a log on the carriage as it was being sawed. Conveyors made of chains and powered by steam moved logs up the "jackslip" from a holding pond into the mill itself and from the saw to the edger. Then it moved the sawed lumber into the yard where it was graded and stacked.[60]

The first lumber cut by the mill was used to construct other buildings. Eventually a commissary, offices, a railway office and depot, a boarding house, post office, storage buildings, a church, and a school were erected. Approximately seventy-five buildings made up the nucleus of Blackwood, North Carolina, as the mill village itself was initially called. At first as many as a hundred men worked in the mill, with another hundred working in crews in the woods cutting logs for the mill; thirty carpenters worked on new buildings which included employee housing. Roughly fifty more worked to extend a narrow-gauge railroad up into the mountains.[61]

The company town built by Blackwood does not quite fit the model described by some Appalachian historians. Dr. Ronald D Eller in his Miners, Millhands and Mountaineers: The Industrialization of the Appalachian South, 1880-1930 gives the following description of a nearby company town:

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[60]Interview with Felix Hooper; Interview with Ransom Middleton.

[61]Sylva Herald and Ruralite, August 30, 1951.

> One of the largest of these towns was constructed at Sunburst in Haywood County, North Carolina by the Champion Fiber Company. At the height of the timber boom, Sunburst housed more than two thousand people and maintained a commissary, a club house, boarding houses, and a church which doubled as a school, a dance hall, and a skating rink. Other towns such as those at Runion, Smokemont, Ravensford, Townsend and Crestmont, typically housed from 300 to 1,000 individuals and provided proportionately less in the way of social facilities. Timber towns resembled other company towns of this period, except for their shorter life expectancy. Houses were generally small and of board and batten type construction with no indoor plumbing or sanitary facilities. Companies were usually reluctant to invest more than a minimal amount of money in communities which were expected to survive only as long as it took to extract the surrounding timber. Residents of these towns had little voice in community affairs and were at the mercy of the company to maintain the health and safety of the community.[62]

Blackwood offered many of the same facilities as Sunburst, and photographs of the area show the employee housing to be of board and batten construction. However, residents of the Blackwood camp had electric lighting, a common water system, and indoor plumbing long before the rest of the county had such amenities. This tends to conflict with Eller's theme of the lumber companies' exploitation of their workers, specifically by spending as little as possible on the company town. Certainly the high degree of paternalism exhibited by the Blackwood Lumber Company was a factor not only in the company town but also in the surrounding area. Blackwood's employees purchased staple goods through a company commissary which was a common enough practice, but so did many of the local residents who did not work for the lumber company. In the area of medical care, Blackwood again showed unusual

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[62] Eller, Miners, Millhands and Mountaineers, pp. 192-193.

concern for its employees by providing a competent physician, Doctor W. H. Woody. He lived at Cullowhee and responded to a myriad of problems ranging from childbirth to pneumonia, making frequent house-calls in the Blackwood community.[63]

Along with the company town, Blackwood built a narrow gauge railroad which connected with T and SE at East LaPorte and proceeded up Caney Fork Creek and many of its tributaries. This subsidiary was known as the Caney Fork Logging Railway Company. The company was capitalized for 25,000 dollars and was authorized to operate on land owned by the Blackwood Lumber Company in the Caney Fork and Canada Townships for a distance of fifteen miles. Using a narrow gauge railroad to transport logs to the mill was the most efficient way at the time and signified an attitude towards logging that emphasized quantity over quality.[64] The objective was to realize the maximum profit in the shortest possible time as railroads were certainly not cheap.[65]

Figures for Blackwood's Caney Fork Railroad are not available; however, Champion Fibre Company built several logging railroads in

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[63] Jackson County Journal (Sylva), July 23, 1920; Interview with Felix Hooper; Interview with Ransom Middleton.

[64] Although Blackwood's attitude towards production was exploitative, its attitude towards its workers was paternalistic.

[65] Railroads were used as a tool to reach into the forests. When the land was cut over, the rails were removed and either used again somewhere else or sold for scrap. Unfortunately, many lumber companies underestimated the costs of construction and maintenance of logging railroads.

Swain County which has similar terrain and obstacles. Costs there ran from $11,364 to $13,588 per mile for construction and $700 per mile for maintenance per year after the railroad was built.[66] Even though a logging railroad was quite expensive it was, nevertheless, the best way at the time to get back into the mountains and Blackwood made extensive use of it, operating an eighty-ton Shay engine and an eighty-ton Climax for bringing the logs down to the mill. At times the Shay would have twenty-four to twenty-eight cars of logs behind it for a rough total of ninety thousand board-feet of lumber when milled. It was not uncommon for the weight of the logs to overcome even the low-geared engines and push the train down the mountain at dangerous speeds. Sometimes the crew would jump from the engine and let it stop where it would. At other times they would stay with it at peril of life and limb. A Shay was lost one winter along Mull Creek when a combination of ice on the tracks and a heavy load caused it to derail while rounding the curve. In this particular instance the crew jumped from the train without serious injury. The logs and railroad cars were recovered; the engine was left behind until it too was eventually recovered for scrap metal. Even without the dangers inherent in operating a logging railroad, railroading was still a dangerous, often fatal profession. In September, 1926, Robert Crisp, a brakeman for one of Blackwood's logging trains,

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[66]Champion Fibre Company to the North Carolina Park Commission, CF II-13, Great Smoky Mountains National Park Archives, Gatlinburg, Tennessee.

was caught between two railroad cars and killed while attempting to couple them. The Jackson County Journal records Crisp's survivors as a wife and four small children. The following year, in March, Claud Barnes was killed while working as a flagman at a switch on the Caney Fork Logging Railway. His foot became caught between the tracks at the switch, making it impossible for him to move from the train's path. Accidents such as these were regrettably common during this time.[67]

Running a logging operation on such uneven terrain was difficult. Horses were used to move the logs from where they were cut to the railroad. These animals were Belgians and Percherons weighing sixteen hundred to twenty-four hundred pounds each. They were linked to the logs by means of a "J-grab" which allowed the team of horses to move out of the way if the logs started rolling or overtaking the horses. Unfortunately the "J-grab" did not always work, and horses were often hurt or killed. Many of the horses that pulled company delivery wagons in town were logging horses which had been injured but not disabled.[68]

As full production was reached, Blackwood was a whirlwird of activity, turning out millions of boardfeet of lumber. The finished lumber was shipped from Jackson County to the North where it was sold by the Keyes-Walker Lumber Company of Philadelphia, Pennsylvania. It

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[67]Ibid.; Interview with Eugene Monteith; Sylva Herald and Ruralite, August 30, 1951; Jackson County Journal (Sylva), September 22, 1926; Jackson County Journal (Sylva), March 30, 1927.

[68]Interview with Felix Hooper; Interview with Quince Heddon.

was hoped by county residents that Blackwood and the T and SE would spur other industrial developments; and, specifically, concerning the reopening of the Cullowhee Copper Mine, The Jackson County Journal stated: "It is understood here that the Cullowhee Copper people contemplate active operations on their property as soon as the railroad facilities will permit."[69] On the T and SE's route, the Journal speculated hopefully:

> The railroad from Sylva transverses a rich farming section and goes close to the Cullowhee Copper mines, the operation of which has been held up for years because of inadequate transportation facilities, and it is openly predicted that the mines will be worked again as soon as the road reaches in striking distance.[70]

The copper mine reopened from 1929 to 1932, but production was low. The mine closed again, perhaps due to the effects of the Great Depression. More likely, however, the competition from copper mines in Arizona was too great.

Blackwood was unique in the fact that it was the only company town in Jackson County. The company not only provided employment, but it also provided social activities for its employees and people in the surrounding communities. There was a semi-professional baseball team which played for the company against teams from other lumber companies. Dances and picnics were held, allowing the unmarried men at the mill to meet eligible women from nearby Cullowhee Normal School.[71]

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[69] Jackson County Journal (Sylva), January 29, 1921.

[70] Ibid., July 23, 1920.

[71] Ibid., March 23, 1927; Interview with Ransom Middleton.

The wages paid by Blackwood were considered good, with the lower paying jobs still yielding sixty to sixty-five dollars a month. As one former employee put it, "That was twenty dollars more a month than the local schoolteacher made, so for a boy of sixteen that wasn't bad."[72] Many of the employees purchased cars and other consumer goods which were considered luxuries at the time. Small businesses located in the East LaPorte and Cullowhee areas sought Blackwood employees' business. One such establishment was the Cash Drug Company at East LaPorte.[73]

The Depression of 1929 put a great deal of strain on the Blackwood Lumber Company. During the early 1930s hundreds of thousands of board-feet of finished lumber were piled in the yard. Crews in the woods were cut back; but, due to the technical skill of the men in the mill, a special effort was made to keep them on. This was done by operating each saw a week at a time, a practice which gave all the mill workers at least some work. In time, the rest of the men who worked in the woods were laid off as the Depression worsened. Sales started picking back up in 1933 as the effects of President Franklin D. Roosevelt's "New Deal" were felt. Unfortunately the Depression was only the start of Blackwood's problems. Just when demand was beginning to increase, the supply of available timber on Blackwood land became inadequate due to

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[72]Transcript of Interview with Felix Hooper, p. 17, Mountain Heritage Center, Western Carolina University, Cullowhee, North Carolina.

[73]Jackson County Journal (Sylva), November 17, 1922.

years of undisciplined cutting. Production dropped drastically shortly after rehired crews went back to work. Various remedies to correct the situation were tried; one was buying logs already cut by people in the area. In lumbering operations this practice is usually regarded as a symptom of over-cutting, a mere stopgap measure to keep the mill running. Another such measure was an attempt made in February, 1935, to sell the entire boundary to the U. S. Forest Service, with the objective that it become part of the Nantahala National Forest. The negotiations progressed fairly far; the government purchased an option on the land and made plans for improvements, including the building of "all weather" roads, reforestation, and the establishment of several Civilian Conservation Corps camps. Blackwood Lumber Company officially submitted a proposal to sell which was refused by the government. This ended the possibility of public ownership at that time.[74]

Cost-cutting measures were taken once again, and the Caney Fork Logging Railway Company was dissolved in March, 1935. The tracks were pulled up and sold for scrap. In 1940, with war in Europe already a reality and the prospect for the lumber market improved, the president of Blackwood, Joseph Keyes, died. This left the management of the company to his wife, Mrs. Elizabeth Marshall Keyes, as Joseph E. Walker had died some years before. Mrs. Keyes proved unsuccessful as manager and after several years conditions had continued

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[74]Interview with Felix Hooper; Jackson County Journal (Sylva), February 21, 1935. The U. S. Forest Service considered Blackwood's offer too expensive at the time.

to deteriorate to the point where the mill was sold to the Platnip brothers of West Virginia for scrap. In July, 1945, during the dismantling process, an acetylene torch ignited some of the accumulated sawdust in the mill. Fire spread quickly, feeding on sawdust and the dry, seasoned timbers of the mill building itself. The Sylva Fire Department was called and its men arrived a half hour later. They prevented the fire from spreading to other structures in the area, but the mill was a total loss. In 1946 the timber boundary was sold to the Mead Paper Corporation of Ohio. Thus the Blackwood Lumber Company ended operation twenty-four years after it had begun.[75]

Shortly after Blackwood was founded, several other wood-oriented industries made their start in Jackson County. Builders Supply and Lumber Company was founded in December, 1920, by C. J. Harris and E. L. McKee with an authorized capital of thirty thousand dollars. The Carolina Pole Company was incorporated in January, 1921, with J. H. Powell and C. W. Denning as major stockholders. A modestly financed company, it dealt with supplying telephone and electric poles to growing utilities, specifically Western Electric. The company erected a pole treating plant at Sylva with frontage on the T and SE Railroad. The plant treated the poles by immersing them in vats of creosote to prevent decay. Chestnut was the preferred wood for poles and specimens reported to be as long as seventy-three feet

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[75] Jackson County Journal (Sylva), April 4, 1935; Interview with Felix Hooper; Sylva Herald and Ruralite, July 18, 1945.

were produced. Such lengths were uncommon as poles usually ranged from between twenty-five to forty-five feet in length. The Carolina Pole Company bought their logs from the surrounding area and employed around sixty men at their plant and in the yard. Production was roughly three railroad cars of poles per day. In 1925 the company was sold to Harry F. Buchanan.[76]

Other companies operated in Jackson County at the time. They included the Gennett Lumber Company of Asheville which bought ten thousand acres on Wolf Mountain in 1934. The Morris-Taylor Lumber Company bought land formerly owned by the Whitewater River Lumber Company located in Cashiers and in Transylvania County, North Carolina, as well as some in South Carolina and Georgia. This company planned to use circular saws to cut the timber in the woods and then send the rough-cut lumber to a concentration yard, planing mill, and dry kiln complex located at West Union, South Carolina. The land was resold in 1938 to the Carr Lumber Company of Pisgah Forest. Interestingly enough, Joseph Keyes, president of Blackwood Lumber Company at this time, was also vice-president of the Carr Lumber Company. In cooperation with the Champion Paper and Fibre Company of Canton, the Carr Lumber Company in 1942 purchased land located in Jackson County which was reputed to be the last stand of virgin timber under private ownership in western

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[76] Jackson County Journal (Sylva), April 15, 1921; ibid., October 26, 1923.

North Carolina.[77] After Keyes' death, Carr Lumber Company and Champion seemed to lose interest in Jackson County. The Carr Lumber Company concentrated on its operation in Brevard while Champion focused its efforts in the Canton area. Champion did have an experimental tree farm for a few years at Willets Station in Jackson County. The land was then sold to its current owner, the U. S. Forest Service.

In summary, the successful merger of a band sawmill with a logging railroad was accomplished by the Blackwood Lumber Company in the 1920s. Blackwood represented the technologically advanced lumber company with a paternalistic, yet short-term outlook--paternalistic in the sense that Blackwood put forth quite a bit of effort for its employees in terms of social and economic development, short-term in the sense that it did not project itself to be a permanent part of the community. James E. Walker, president of Blackwood, said:

> We feel that our present holdings will run this plant for fully twenty years, and since there are no other large mills in the same locality, no doubt more timber will be later acquired, sufficient to keep the plant going for an additional eight to ten years.[78]

Still, Blackwood did not quite fit the stereotypical lumber company, as Walker added:

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[77] Jackson County Journal (Sylva), March 22, 1934; ibid., June 2, 1936; Sylva Herald and Ruralite, January 1, 1942.

[78] Jackson County Journal (Sylva), July 21, 1922.

> We feel that we can class this Company as being "Home Folks." Contrary to most large companies, the officers of the company are nearly always present, can be seen at any time, and are more than ready to assist in any development looking to the future welfare of the locality.[79]

Blackwood's exploitative as well as concerned outlook towards logging was not shared by many others in the industry.

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[79] Ibid.

CHAPTER IV

THE MODERN ERA

During the 1940s, two names came to the forefront in the wood industry in Jackson County. They were the W. C. Hennessee Lumber Company and the Mead Paper Corporation. The W. C. Hennessee Lumber Company of Addie started as a small, family owned circular sawmill and developed into a large, modern band saw operation. The Mead Paper Corporation plant, at Sylva, began as an extract plant and expanded several times to make boxing and carton paper. It was one of several small plants across the South operated by Mead. This operation provides a contrast between a sawmill owned by an Appalachian family and a paper mill owned by a northern corporation, both of which were crucial to Jackson County's economic development in the 1950s and 1960s. Another factor all too often neglected in the timber industry was the collective impact of the circular sawmills in the area. The operation of a circulaw sawmill today will be examined by looking at one owned by Quince Heddon of the Norton Community, near Glenville.[80]

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[80]Interview with Woody Clifton Hennessee (former owner of the W. C. Hennessee Lumber Company, Inc.), Sylva, North Carolina, October 28, 1980, hereafter cited as Interview with W. C. Hennessee; Interview with Robert Vodak (former chief forester of the Mead Corporation), Sylva, North Carolina, September 22, 1982, hereafter cited as Interview with Robert Vodak; Interview with Quince Heddon.

The story of the W. C. Hennessee Lumber Company closely parallels that of Woody Clifton Hennessee himself. Originally from Van Buren County, Tennessee, he came to Jackson County in 1934. At the time he was working for the Rock River Coal and Lumber Company, which was owned primarily by the Macy and Colgate families of New York. The company was engaged in the production of lumber, cooperage materials, and conducted mining concerns in several southern states. Originally Hennessee worked in the lumber part of the business, but he was later switched to the part involved with manufacturing staves for oil barrels and liquor and beer kegs. Prohibition caused the demand for liquor and beer containers to drop drastically. Later the Depression of the late 1920s and early 1930s put tremendous financial pressure on the Rock River Coal and Lumber Company as its markets for lumber and mineral products collapsed. These problems caused the company to fail in the early 1930s.[81]

The management group involved with the manufacture of cooperage materials for the Rock River Coal and Lumber Company got together and formed the partnership of Simmons and Welch. With the repeal of Prohibition, the demand for container materials increased greatly and Hennessee was sent south from Tennessee by Simmons and Welch to find new areas capable of supplying raw materials. Alabama was considered and found to be unsuitable. Rumors of the quality of the wood and the craftsmanship of those who cut it in north Georgia and western North

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[81]Interview with W. C. Hennessee.

Carolina reached Hennessee. For him, these rumors proved true. Initially he set up a mill in Blairsville, Georgia, and another in Clayton, Georgia. Later other mills were established in western North Carolina, one at Murphy in Cherokee County and one in the Shooting Creek section of Clay County.[82]

In 1942, with World War II raging, the Simmons and Welch partnership ended with the death of George N. Welch. The heirs of the Welch portion of the company suggested to Hennessee that he go into partnership with them when Simmons decided against continuing business without Welch. Hennessee agreed and soon a circular sawmill on Cope Creek in Jackson County was established. Another mill at Ela, near Bryson City, was purchased and moved to the forks of the Tuckasegee in Jackson County. This arrangement proved unsatisfactory to Hennessee who bought out the Welch interests and formed his own company, the W. C. Hennessee Lumber Company, Incorporated, in 1946. It was capitalized for one hundred thousand dollars and listed family members as majority stockholders.[83]

The major thrust was still the production of white oak staves; and, although Jackson County had seen much larger and better financed organizations, at this time Hennessee was the largest county firm involved in timber production. In 1948 Hennessee built a dry kiln at Addie that was capable of holding fifty thousand boardfeet of lumber.

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[82]Ibid., Interview with Eugene Monteith.

[83]Interview with W. C. Hennessee; Record of Incorporations: Jackson County, pp. 169-172.

Addie served as a concentration yard where lumber from several circular sawmills was brought to be dried and shipped on the Southern Railroad. A large circular saw which had been in service at Tuckasegee was moved to Addie in 1955. By 1956 the mill was operational and was producing seventy thousand feet of lumber per week. The mill had thirty employees and a weekly payroll of one thousand five hundred dollars. The mill was updated and improved several times subsequently. In the late 1950s the mill was changed to a band sawmill to increase efficiency and production.[84]

Hennessee usually bought the land he cut on so as to manage his supply of timber and for investment purposes. The W. C. Hennessee Land Company was organized in 1966 to perform the function of managing the land holdings. Another subsidiary of the lumber company was Jack Hennessee, Incorporated, whose primary purpose was to purchase and operate trucks to haul logs to the mill and to take the finished lumber to its destination.[85]

The early 1970s were a time when pollution became a major concern nationwide. In an attempt to deal with this concern locally, Hennessee installed devices known as "precipitators" on the boiler smokestacks at Addie. Their purpose was to remove large particles of ash from the emissions of the smokestacks. They were the first of their kind installed in western North Carolina. The move helped Hennessee avoid

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[84]Interview with W. C. Hennessee.

[85]Ibid.; Record of Incorporations: Jackson County, p. 503.

conflict with the national and local environmental groups and government agencies such as the Environmental Protection Agency.[86]

Then, on November 15, 1974, the sawmill at Addie burned, resulting in over five hundred thousand dollars in damages. Fortunately the Sylva Fire Department arrived in time to save the dry kiln and the planing mill; but the band saw, log carriage, conveyors, chippers, and the saw filing and grinding equipment were destroyed. At the time it was estimated that between six to twelve months would be required to rebuild the new mill. In actuality it took over fifteen months. All during the time of rebuilding, Hennessee maintained his office staff and the skilled personnel in the mill (such as the sawyers, filers, mill foremen, the yard foremen, and the kiln operators). The skilled positions among the logging crews and the forestry staff were kept on the payroll also. This expenditure was quite a burden to maintain when no production was possible.[87]

After the mill was reopened in 1976, two ten-hour shifts were run a day. About 120 people worked at the mill and the yard, while 100 to 200, mostly contract loggers, worked in the woods supplying logs for the mill. Their hours of labor were dependent on market demand. Most of the lumber produced went north to Cincinnati, Ohio, while some was shipped to the central part of North Carolina where it

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[86]Interview with W. C. Hennessee; Sylva Herald and Ruralite, August 4, 1973.

[87]Interview with W. C. Hennessee; Sylva Herald and Ruralite, November 16, 1974.

was used in furniture. The new mill sawed between fourteen million and fifteen million boardfeet per year from Hennessee's own timber and sawed an additional four million to five million boardfeet from timber from other sources. This resulted in production of a maximum of around twenty million boardfeet of lumber per year.[88]

Hennessee was the largest chestnut producer in the world for two reasons. First, not much chestnut lumber was produced at all due to the chestnut blight which was caused by a tree disease carried in some Japanese chestnut trees planted in Central Park, New York City, in the early 1900s. The disease spread throughout New England, the Middle states, and the South, its spores carried by the wind and birds. It reached Guilford County, North Carolina, in 1913, had moved west to McDowell County, North Carolina, by 1923, and entered Jackson County in the 1930s. The blight killed the tree in two to four years by disrupting the food conducting tissue of the inner bark. After the tree died, the fungus lived in the root system until new sprouts emerge from the chestnut roots; they too were attacked by the blight. Evolutionary changes may eventually overcome the chestnut blight; but, according to most informed sources, the chestnut will never be the dominant variety again, its place having been taken by the fast growing yellow poplar and other varieties such as oak, hickory, and maple.

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[88]Interview with W. C. Hennessee; Interview with Eugene Monteith.

Still, Hennessee was able to find those few trees unaffected by the blight and process them.[89]

Second, Hennessee searched the woods for usable chestnut stumps and heartwood of the dead trees. The remains usually had been inhabited by wood-boring worms so that when cut into lumber, the worm tunnels left pleasing patterns in the wood. Wormy chestnut became a prize. (An excellent example of this type of wood can be seen at the Mountain Heritage Center at Western Carolina University; it was donated by W. C. Hennessee.[90])

By the 1960s the W. C. Hennessee Lumber Company was the largest single-mill hardwood producer east of the Mississippi. Much of its success was due to W. C. Hennessee's family-oriented approach to business management. He used his own family members in important management positions and hired the relatives of his workers where possible. Hennessee has had a son-in-law as mill manager, a brother-in-law and a son as secretary-treasurer, and a grandson as yard manager. In several instances Hennessee had three generations of a family working for him, including the father, son, and grandson.

In 1980 Hennessee merged his company with Hammermill, Incorporated, a Pennsylvania-based paper company. Hammermill bought several sawmills in the South, like Hennessee's, in order to gain entry into the hardwood production

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[89] Jackson County Journal (Sylva), August 24, 1923; Interview with W. C. Hennessee.

[90] Western Horizon (Alumni magazine of Western Carolina University, Cullowhee, North Carolina), May, 1983; Interview with W. C. Hennessee.

phase of the wood industry. Specifically, Hammermill bought a mill at Robbinsville, North Carolina, whose owners had two others in Tennessee--one at Montery and another at Pulaski--and one at Pickens, South Carolina, in addition to the W. C. Hennessee Lumber Company. A former employee of Hennessee said of Hammermill's aspirations, "Looks like they are trying to control the lumber, the Southern Appalachian lumber all to themselves. There's not another big mill in operation outside of that, in this section at all."[91] As for the mill at Addie, Hammermill has maintained most of Hennessee's employees in their respective positions, although there has been some change in management, away from the Hennessee family. This was due to the corporation bringing in its own men for the high-level management positions.

If the transition from family-owned business to part of a multi-million dollar corporation went smoothly, the actual functioning of the lumber company has not been blessed with the same luck. Since the W. C. Hennessee Lumber Company is now corporate-owned, it is ineligible to bid on many U. S. Forest Service tracts which had been a major source of timber. This policy was adopted to protect small Appalachian mills exactly like Hennessee's. Another problem is the pending 118,000 dollar lawsuit against Habersham Industries, Incorporated, for alleged faulty insulation which allowed the dry kiln to

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[91]Transcript of interview with Eugene Monteith, p. 36, Mountain Heritage Center, Western Carolina University, Cullowhee, North Carolina, hereafter cited as Transcript of interview with Eugene Monteith.

catch fire and be completely destroyed in the 1981 fire.[92] The Mead Corp. stands in contrast to the family-owned business of W. C. Hennessee.

The Mead Paper Corporation entered the timber industry in Jackson County as Mead Paper Company when it merged with the Armour Leather Company in 1927. At that time a tannery and an extract plant were in operation; Mead proceeded to add a paper mill. Originally the tannery was owned by C. J. Harris. It was called the Harris-Reese Tannery and was established in 1901. Over the years the tannery did business under several names including: the C. J. Harris Tannery, the Sylva Tanning Company, and the Armour Leather Company.[93]

In 1916 the Armour Leather Company built a plant which used the tannic acid extracted from chestnut wood to tan leather. This plant supplied the acid to fourteen other tanneries operated by the Armour Leather Company throughout the country. The tannery at Sylva could process three hundred hides daily, converting the hide into so-called "belting leather." The extract plant produced two hundred barrels of tannic acid daily, requiring up to forty-five thousand cords of chestnut wood in a year. The tanning-extract operation employed about 350 men in 1922. Later a process was developed to use the chestnut chips to make corrugated paper. Formerly the chips had been burned

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[92] Sylva Herald and Ruralite, August 18, 1983; Interview with W. C. Hennessee.

[93] Jackson County Journal (Sylva), July 20, 1939; Interview with Robert Vodak.

as waste material after the acid had been extracted from them. The Sylva Paperboard Company, a product of the Mead-Armour merger, was organized in 1928 to take advantage of this new process and manufacture the paper at Sylva.[94]

The new plant built in 1928 made both boxing and carton paper. The first shipment, thirty tons of paper, went to the Fairfield Paper Company in New York. The products sold well and many advance orders were received, reputedly "enough [to] keep the mill running for twelve months without a stop."[95] Certainly the plant was busy, and in 1929 additional construction expanded the plant's storage capability. Plans were laid for doubling the plant's capacity. In 1932, some three months after it was begun, a settling basin was completed near the plant. Its purpose was to assure a clean water supply for the paper mill since the mill's former water source, Scott's Creek, became muddy after heavy rains. The plant ran two twelve-hour shifts and ran twenty-four hours a day. At least one reason why the Sylva Paperboard Company appeared immune to the Depression was the beer industry which used the corrugated paper in packaging beer. After beer was legalized in 1933, the plant had a twenty-five percent increase in business. The busy schedule was altered slightly in the same year to comply with President Franklin D. Roosevelt's National

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[94] Jackson County Journal (Sylva), July 20, 1939; Interview with Robert Vodak; Jackson County Journal (Sylva), March 3, 1922.

[95] Jackson County Journal (Sylva), July 12, 1928.

Recovery Administration's plan for limiting hours. A forty hour week was initiated; this change created about forty more jobs at the mill and raised the payroll five hundred dollars a week to roughly two thousand dollars a week.[96]

In the late 1930s the mill slowed a bit in production, but this drop was more than compensated for by the demand for paper caused by World War II. A renovation program was begun in the 1950s and continued into the 1960s. This emphasis on updating the Sylva plant came as a result of a corporate management decision that such a move would be "cost-effective." Similar programs were undertaken at several of Mead's mills. However, the most interesting aspect of the Mead operation was its land management program.[97]

This program began when Mead purchased the old Blackwood Lumber Co. boundary in 1945, acquiring a tract of around 37,000 acres. Unlike Blackwood, Mead used the most modern techniques in managing its forests. The company had a plan of "continuous Forest Inventory" in which the boundary was divided into twelve districts. Each individual tree was measured and marked with a number. This data was then entered into a computer program designed to calculate growth and cubic feet. The entire inventory was redone every five years to keep the data current. The program was based on cutting at most one-third of the available timber and leaving two-thirds to grow. The maximum possible growth

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[96]Ibid., December 15, 1927; ibid., August 24, 1933; ibid., May 11, 1933.

[97]Also notable is the fact that Mead was unionized which made for higher than average wages for its employee. Interview with Robert Vodak.

was projected to be reached in 1987. There was a planned fifty year rotation for Mead's pulpwood forests. During the almost thirty years Mead owned the boundary, this forest management program was followed.[98]

In each of the twelve districts there was a maintained logging road which provided relatively easy access to the entire area. Fire protection was a cooperative effort between the N. C. Forest Service and Mead. Logging was done by contract on a very minor scale. In fact, the Mead Corporation purchased as much as seventy-five percent of its pulpwood from other lands. This practice provided a great deal of work for many of the area's "small" loggers.[99]

The paper mill which had been renovated in the 1950s and further improved in the 1960s was in trouble by the early 1970s. A chip processor installed in the later 1960s emitted ammonia and sulfur fumes and other pollutants. The pollutants became a source of controversy in the early 1970s as conservation organizations and the government became more and more concerned about the environment and with the quality of life itself. The Environmental Protection Agency insisted that Mead improve the quality of the air by reducing the amount of pollutants it released into the environment. At the same time the corporation management of the company had begun to rethink its management strategy. It was decided to shut down several of their smaller plants located throughout the South and to build a new one in Alabama.

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[98] Ibid.

[99] Ibid.

The new plant was to have more production capacity than all the smaller plants combined. Most certainly the threat of having to modify the existing plants, including the one in Sylva, to meet the Environmental Protection Agency's requirement had a major influence on the matter.

In 1974 Mead ceased operation at Sylva. Most of the mill's equipment was sold off or removed by Mead. The Mead Tract was sold in 1955 to Carolina Ritco, Incorporated, a corporation held by the N. R. Field family of Miami, Florida. This tract and an adjoining piece of land known as the Bonus Defeat tract, about 39,080 acres together, were purchased by the U.S. Forest Service in 1980 for 333 dollars an acre for a total price of 13,025,100 dollars. The Bonus Defeat tract was owned by Congressman (11th District-Democrat) Jamie Clarke's family and got its name, according to legend, from an old hunting dog named Bonus who met his fate by running off a sheer four hundred foot cliff while chasing a deer.[100]

The old Mead plant was purchased by the Dixie Container Corporation and recently reopened as the Jackson Paper Manufacturing Company. Using a combination of old and new machinery, the plant recycles cardboard into corrugating medium which is used elsewhere to make more cardboard. The plant's boiler is fired by bark and sawdust, an estimated three hundred tons a day. A "scrubber" system on the smokestack, similar to that installed by Hennessee, helps control emissions by reburning ash, which might otherwise escape into the atmosphere, a

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[100]Ibid., Interview with W. C. Hennessee.

second time. The Jackson Paper Company employs eighty-six people; and, although it does not deal directly with logging or sawmilling, it does consume and produce wood-related materials.[101]

The "small" independent logger has played an important part in the logging history of Jackson County. The pioneer could be considered as the first independent logger. Taking advantage of the improving technology including crosscut saws, sash saws, and circular saws, the independent logger increased his impact in Jackson County. He ordinarily cut from tracts of land too small or too difficult to get to for companies such as the Blue Ridge Lumber Company, the Blackwood Lumber Company, and even the Hennessees. Using both small, portable circular saws and small permanent mills, the independent logger and sawyer made a substantial impact on the history of logging in Jackson County.[102]

In the midst of space-age technology and huge corporations involved in logging and sawmills, more traditional methods on a smaller scale can still be employed successfully. Such is the case of Quince Heddon of Norton Community, located in the southern part of Jackson County. Originally from Scroll, a small hamlet in Macon County, Heddon's family moved to Cashiers in 1927. The family had been involved in logging for some time. Quince's father, George, worked

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[101]Interview with W. C. Hennessee; Sylva Herald and Ruralite, March 24, 1983.

[102]Interview with Quince Heddon; Interview with Eugene Monteith.

for a time as a logger for several of Roosevelt's public works projects. Learning the techniques of logging from his father, Quince Heddon worked for Zickgraf Hardwood Company of Franklin, North Carolina, building logging roads. He used horses to move logs in the woods and witnessed a great deal of technological change as horses were replaced by skidders, steam-powered circular saws by gasoline or diesel-powered ones, and logs moved with mechanical loaders instead of by hand. Most of these innovations had been around for many years but had only been used by the larger commercial operations due to their high cost. Improved technology lowered the price and the vast increase in efficiency allowed by the changes mentioned made their use imperative by the independent as well as the commercial logger. Such was the case with the chain saw.[103]

Quince Heddon began running a circular sawmill of his own in the 1950s. The mill, with a fifty-six inch cut, was a conglomeration of equipment of various manufacture with the majority being made by the R. Hold Company. Heddon learned to be a sawyer by experience and has acquired a good reputation in that area. At one time he sold lumber wholesale but is moving to the "custom-cutting" market. Now he cuts smaller tracts on contract and saws the logs into lumber in dimensions specified by the customer; or, preferably, he has the customer bring the logs to his mill where he cuts them to the required specifications.[104]

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[103]Interview with Quince Heddon. [104]Ibid.

In order to maintain an inventory, Heddon visits local landowners, estimates the board footage they own, and buys the timber uncut or "on the stump." Employing family members and others in the community, Heddon cuts the timber and skids it out. Using trucks, he brings it to the mill where it is off-loaded by tractors equipped with a front-end loader and stacked, until Heddon is ready to saw it into lumber.[105] Heddon employs four men at the mill and can turn out four to five thousand boardfeet of lumber a day. He usually cuts second and third growth timber and has gained some local notoriety by being able to procure white pine lumber when no one else is able to.[106]

Quince Heddon makes his living from his circular sawmill as do others; however, there are many people who operate mills part-time. Originally they were farmers adding to their incomes. Today most are wage-earners who run their mills on weekends. Circular saw operators when taken as a whole have a considerable influence economically and environmentally. Economically, they helped supply local needs generally related to materials for home construction. Also, they provided jobs for people in the area and income for the local landowners, buying tracts of timber too small for commercial firms to deal with and just buying the timber, whereas the commercial firms prefer to buy the land if at all possible. Environmentally, they have gained a less than desirable name. By and large, they cut without regard

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[105] Ibid.

[106] Ibid., Interview with Eugene Monteith.

to the future of the land being cut, with little or no regard for reforestation or the effects on the area watershed.[107]

The larger commercial firms and their employees looked at the circular saw operators with disdain, calling them "fist and skull" outfits or "peckerwood" sawmills. One employee of Hennessee said, "they didn't make an awful lot of lumber and didn't sell an awful lot of lumber . . . didn't have any tracts of land of their own to log off of, just bought here, maybe a load from one man and a load from another man to keep going."[108]

Besides not being able to control their log supply, another reason why circular saw men have not always been held in high regard by the larger commercial firms was the result of competition. Circular saw men would work for large companies at one time or another and some found the demands of production unpleasant. Such a situation occurred when Eugene Monteith, working for W. C. Hennessee Lumber Company, sought to replace a sawyer for a short time.

> . . . I'd lost a sawyer . . . and I went to see this old feller that lived just across the hill from the mill, went to see him to see if he'd saw a few days for me 'til I could get a regular sawyer. He said, "Well now," said, "I can't saw for you. I can't satisfy you," said, "I get up about eight or nine o'clock and start my mill up and if I saw two or three thousand feet a day that's about all I care about and you'd want me to cut you ten or twelve thousand feet a day." I said, "Well, I appreciate you telling me the truth." He just wasn't going to get out

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[107]Interview with Quince Heddon; Interview with Eugene Monteith; Interview with W. C. Hennessee.

[108]Transcript of interview with Eugene Monteith, p. 9.

> early . . . , but when he cut a board it was right, no question about it. When he cut a board it was right.[109]

All relations between circular saw men and the large commercial firms were not bad. Often exchanges of needed equipment were made and many times circular saw men were close friends with the men who ran the larger lumber companies. More often than not it was competition which put circular saw men and commercial firms on opposite sides of the fence.[110]

Recently the future of circular saws in Jackson County has brightened for two reasons. First, a circular sawmill needs less timber to operate successfully than does a large commercial firm and the areas in Jackson County available for logging are small. Secondly, the U. S. Forest Service, which owns quite a lot of land in Jackson County and in surrounding counties, allows only small independent loggers to bid on tracts owned by the government, which definitely benefits the circular saw operator. The government practice assures the circular sawmill will remain an important part of the logging and sawmilling industry in Jackson County.[111]

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[109] Ibid., p. 29.

[110] Interview with Eugene Monteith.

[111] Ibid.; Raymond S. Ferell and Gordon S. Sanford, Economic Development Strategies for a Rural Six-County Area in Western North Carolina: Final Report (Cullowhee: Center for Improving Mountain Living, Western Carolina University, 1979), pp. 1-5.

CONCLUSION

The turn of the century was a time of change for Jackson County with regards to the lumber industry. A shift occurred from supplying the needs of local people to several attempts at commercial lumbering. The Blue Ridge Lumber Company and others like it symbolized the new breed of lumber company that had come to exploit Appalachia's timber resources. In the case of the Blue Ridge, it employed much outside labor, with most of the skilled positions filled by men from Maine, and used the river as means of transporting the logs to the mill. It had been hoped that other industry would follow the Blue Ridge, including a furniture factory at Dillsboro. The aspirations of the local community were raised, but no new industries developed. Although other lumber companies followed, they only lasted a few years and had little impact on the county. The operations of the Blue Ridge Lumber Company did leave some environmental scars in the Caney Fork area caused by the use of slash dams; but, since the Blue Ridge operated only a few years, the amount of lumber cut was relatively small and its physical impact on the county relatively small.

The hope for expanded industrial development rose again when the Blackwood Lumber Company came to the county in the 1920s. With part of the Tuckaseigee and Southeastern Railroad completed, it was

thought that the Cullowhee Copper Company would reopen and perhaps other businesses would start. Some industry did come in on the "coattails" of Blackwood. Examples include the Cash Drug Store at East LaPorte and a car dealership at Cullowhee. Blackwood brought quite a bit of development to the county but little relating to logging was lasting. Most of the lumber cut by Blackwood went north to Philadelphia and with it went the profits also. But a case could be made that without the outside capital used to finance the Blackwood operation there would not have been a Blackwood Lumber Company; there was just not enough money available locally. After Keyes replaced Walker as president, the Great Depression struck and this economic slowdown coupled with the efficient methods of logging used and poor management practices eventually ruined the Blackwood Lumber Company. Still, Blackwood was representative of the exploitative type of lumbering which dominated the early twentieth century, and it was susceptible to the fluctuations of the national economy. Just as Blackwood was susceptible to market conditions, local labor was susceptible to the company's inability to sell its lumber. Many were unable to understand their layoffs and the end of the wages on which they had come to depend. The company town experience and the use of a logging railroad were unique to Blackwood within the boundaries of the county. This helped accelerate a change in occupations from self-sufficient farmers to wage earners, a process which had originated in the era of the Blue Ridge Lumber Company.

W. C. Hennessee was an example of a successful Appalachian entrepreneur. His mill became the largest producer of chestnut

lumber in the world, and he had a reputation for honesty in business dealings. Hennessee was very concerned about the people of this area as demonstrated by his support of the university and by his maintaining his payrolls while the mill was being rebuilt. His company was the major employer of people in the timber industry in the county during recent years. Local merchants stated they could tell when Hennessee paid his employees by the way their sales increased. The decision to merge with Hammermill came when, as Hennessee put it, "the return on my investment didn't justify the risks anymore."[112] The merger created some unforeseen problems, one of which is that since the lumber company is owned by a large corporation, it has been barred from bidding on contracts to cut U. S. Forest Service land, at one time an important source of timber for the mill. Also, the effects of management decisions made elsewhere rather than in the county are certain to produce some unpopular decisions, as was the case with the Mead Corporation.[113]

As a corporate citizen Mead was somewhat ambivalent towards Sylva and the area. Mead encouraged its employees to become involved in community life and supported that stand through donations to community organizations. The company gave time off for employees to participate in community activities, and each year an open house was held at the plant. On the other hand, Mead knowingly polluted. Still, their timber management program was rated as first quality by

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[112]Interview with W. C. Hennessee. [113]Ibid.

all those associated with it, and certainly it was conservation-oriented--a rarity in a profit-oriented lumbering business.[114]

Mead was certainly unique in the fact that it had a strong union, a union which in fact set wages for both the plant workers and loggers in the woods. Certainly the wages paid were high in comparison to those paid in the rest of the county. This benefited the local economy. In fact, the county has sorely missed Mead's contribution through lost tax revenue and lost employment opportunities.[115]

More lost opportunities for Jackson County citizens are possible as severe restrictions have been placed on the timber industry as a whole. The future of the timber industry is jeopardized by the U. S. Forest Service policies and government ownership of land as well as by well intentioned conservationist groups such as the Sierra Club. The U. S. Forest Service and conservation groups have advocated placing thousands of acres in "wilderness" areas where no logging will be permitted. This comes at a time when wood and wood products are in great demand and becoming more expensive daily. The future is of great concern to the timber industry nationally and locally.[116]

In summary, the timber industry has contributed to the richness of Jackson County's history. It has provided employment and most of

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[114]Interview with Robert Vodak; Sylva Herald and Ruralite, July 28, 1983.

[115]Interview with Robert Vodak.

[116]Kahn, "The Forest Service and Appalachia"; Gaventa, "Property, Coal and Theft"; Interview with W. C. Hennessee.

the industrial development in the area. This in turn has led to more road construction, better schools, and other social services, which would not have been available without the timber industry's presence. Through reforestation most of the county is again covered with timber; and, although the varieties and size may be different from years ago, the production capacity is undiminished and may even be greater than it was in the past.

After applying Eller's chronology, it can easily be said industrial development in Jackson County with regards to the timber industry did adhere to the chronology in the most general ways. It is true that in the late 1800s to mid-1900s, Appalachia went through a tumultuous change from self-sufficient farmers to wage-earners dependent on outside money as well as outside economic and political events. In fact, beginning as early as 1909, Carolina loggers went to the West Coast forests of Oregon and Washington in search of better jobs. Today they still do, and some also venture into Alaska and Canada to ply their trade.

So what is the fate of the timber industry in the county? The Hennessee mill will continue to run until businessmen in Pennsylvania find it no longer profitable. The Jackson Paper Company is facing renewed opposition from environmentalists, but the jobs provided by the company are vital to the local economy. Also, the City of Sylva has guaranteed a portion of the loan creating Jackson Paper. So for these reasons, there is little danger of its closing, short of a major nationwide economic crisis.

Perhaps the most interesting change in lumbering recently has been a move back to using circular sawmills. Partially because of the lower cost involved in operation and partially because of U. S. Forest Service policies, a reduced timber supply favors smaller mills. In the past few years there has been a significant increase in the number of circular sawmills in the county, both full-time and part-time operations. The trend is likely to continue not only in Jackson County but also in the rest of Southern Appalachia.

Overall it can be said that the timber industry in Jackson County has been the vehicle for change. With the coming of commercial logging, Jackson County citizens became more dependent on wages; and, because of that, more susceptible to outside influences, especially those economic in nature. For other areas of Appalachia it was coal mining or cotton mills which changed Appalachian economic life. All had their associated virtues and evils.

However, it must be said that in the opinion of this writer, in this county the timber industry has been a positive influence and will continue to be in the foreseeable future.

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