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# The Natural and Cultural Landscape of Greene County, Virginia

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**The Natural and Cultural Landscape of  
Greene County, Virginia**

**by**

**Richard J. Neubauer**

**Final Project Submitted in Partial Fulfillment  
of the Requirements for the Degree of  
Master of Arts in Liberal Studies**

**Skidmore College  
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**Advisors: Gary McLouth, Ken Johnson**

The Natural and Cultural Landscape of  
Greene County, Virginia

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Abstract

One hundred and fifty five miles west of the Atlantic coast a sign welcomes travelers to Greene County, Virginia. The natural landscape of the region is defined by the transition between the flattish Piedmont plateau and natural wall to the west known as the Blue Ridge Mountains. The lushly forested mountain slopes and nutrient rich upland soils have long provided economic and cultural foundations, but indiscriminate land use now offers multiple threats to the rural heritage of the County. Overtimbered mountain slopes and multiple pollutants have threatened the immune systems of the forest, leaving them vulnerable to natural pests. Soils which once provided the foundation for an agrarian culture were often depleted, and now serve as the nutrients for expansive real estate development. The common threads that once helped to define the community are disappearing in the wake of rampant population growth. While a native community struggles to find its voice amongst an influx of new settlers, the natural resources of the region are diminishing.

This paper surveys the natural and human history of the region. It is the authors intent to identify that which threatens the natural and cultural landscape of Greene County. The paper also considers the success or failure of intervention strategies aimed at solving the identified problems, while recording the response of community members to such threats.

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MALS Final Project

8 September 1996

The Natural and Cultural Landscape of Greene County, Virginia  
Introduction to an Unnatural History

Near the close of the year 1606 a group of English investors formed the Virginia Company of London to head an expedition aimed at settling colonists in North America (Scott 13). Three ships carrying one hundred and four English citizens, including Captain John Smith, left London on December, 19. They reached their destination early in the spring of the following year at an island near the mouth of the Chesapeake Bay (Johnson 18). The James, York, Rappahannock, and Potomac Rivers divide the coast into a series of a peninsulas. Captain Smith, encouraged by the native Americans and utilizing reports from earlier explorers, guided a smaller exploration party up the Rappahannock. He described the land at the mouth of the River as a dense forest, thick with "fayre pyne trees" (Vaughan 28). Smith had to guide the explorers around the eastern most point of the Middlesex Peninsula before heading inland to proceed upstream. This region, where the water meets the land, is now known as Sting Ray Point.

It is here that present day U.S. Route 33 originates. The highway stretches westward across the Commonwealth of Virginia, across the central coastal plain, through the expansive Piedmont, over the Blue Ridge, across the Valley and Ridge, and further westward, past the line where West Virginia seceded from its neighbor to the east over matters regarding the Civil War.

One hundred and fifty five miles west of the coast, at the end of bilateral rows of Poplar, a sign along the highway announces "Welcome to Greene County: Gateway to the Blue Ridge". On an overcast day, the grey sky drops to the ground, and the uplifting of the land melts with the clouds offering only an endless horizon. But on a clear day, directly ahead, the expansive Blue Ridge Mountains erupt from the ground and the dense foliage defines the scenery in the colors of the season. Seventeen miles ahead lies Swift Run Gap, the natural passage between two of the region's tallest mountain peaks along the western border of Greene County. The most significant surface feature in the county, it is historically known as the natural passage between the mountains into the Shenandoah Valley. The natives used the passage (as did early trappers and fur traders), but it gained prominence in the fall of 1716, when then Governor Alexander Spotswood, led 62 persons through the region to explore "... the western frontier of a very new country" (Santos 6).

Spotswood was not the first. European explorers had searched for the western passage to the Indian Sea, available farmland, and wealth in minerals (Heatwole 30). Still others wanted simply to survey and possess the land (Isaac 19). What they found were lushly forested mountain slopes (Scott 107), hollows that provided natural protection from outside attack, and soils suitable for agricultural pursuit (Conners 86).

It took over 50 years for settlement to reach this area, and it was the landscape of the region that defined the early culture. Multiple plantations offered tobacco, grain products and hemp. The Blue Ridge Mountains offered ancient pastoral mountain views and dense forests. Its trees were used as lumber for houses and mills, shingles for roofs, firewood for heating, to feed the iron furnaces, and tanbark for making leather. Swift Run Gap continued to provide a passage for westward expansion. The people of the region chose to live in sparsely populated communities amongst the trees and fields as an expression of their individuality.

When Greene County was established in 1838, it inherited this rural landscape. It is the seventh smallest of the 95 established counties in Virginia (Salmon and Campbell), with just 97,000 acres across a varied terrain. The natural landscape and climate of this region offer a canvas upon which diverse flora may flourish. Combined with a thriving agricultural economy, the



county proudly defines itself by its rural heritage. It is all being threatened. All of it.

The author of a 1996 publication entitled Destination Greene, portrayed the county as being at the crossroads, "...a place people pass through on their way to the Valley, or Richmond, or Charlottesville" (2). Greene County and its present day inhabitants are also at a crossroads. Since 1990 the population of Greene has more than doubled, and the growth continues to reshape the landscape.

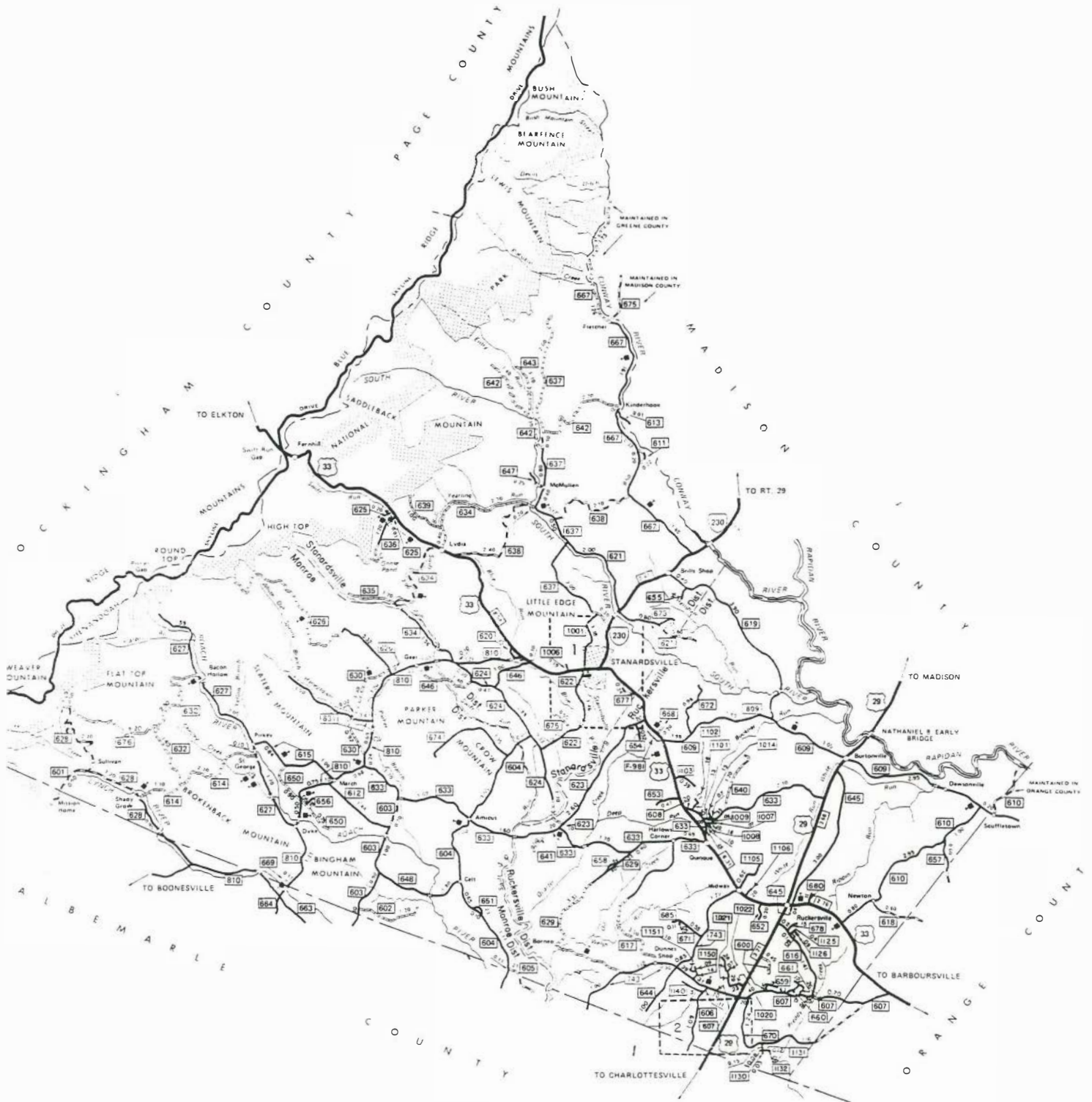
In a 1992 essay on the state of nature writing, Rick Bass referred to the genre as a literature of loss . "If the natural world goes, then so goes half of the fiction writers' and poets' domain, a crippling blow to the notion of literature, for stories can take place in only one of two places: inside, or outside" (75). This is a story set in the out of doors. A story that begins with the natural setting, for it is the defining feature of a county set alongside these majestic mountains. A story that moves through human history from a time when rich forests greeted the early settlers to being cut away in service of economic interests. It is the story of indiscriminate land use that threatens the present day visual and cultural landscape and of a water supply overtaxed by a growing population. It is the story of pests and fungus and airborne sulphates that threaten to

defoliate the forest community. It is the story of eroded soils that give way to heavy rains, threatening not only agricultural interests, but the very inhabitants of the region. Finally, it is the story of a community under siege. A native community which struggles to find its voice amongst the influx of new settlers. A community which finds itself wrestling to protect the very resources that had once so clearly defined its rural heritage.

## The Natural Landscape of Greene County, Virginia

Greene County, Virginia lies in the north central region of the Commonwealth, 143 miles west of Jamestown, 17 miles north of Charlottesville, and 90 miles south and west of our nation's capital. Virginia covers over 42,000 square miles, of which 2,365 square miles are water surface. With just 153 square miles Greene is the seventh smallest of the 95 counties in the state (Salmon and Campbell). The eastern two thirds of Greene County lie within the Inner Piedmont Plateau, while the western section is defined by the Blue Ridge physiographic province (Thomas and Crawford, 1). The varied terrain ranges from 410' above sea level to over 3,800'.

The Blue Ridge Mountain chain extends from southern Pennsylvania to northern Georgia, rising abruptly to form the western border of the county. In 1935 the Shenandoah National Park was established to preserve the natural and historic features of the mountain landscape. Nearly 75 miles long, the Park straddles the crest of the mountains encompassing nearly 200,000 acres and 60 peaks over 3,000'. Almost 15 percent of the total acreage of Greene County lay within the boundaries of the Park, including the entrance to Skyline Drive (along US 33 at Swift Run Gap). Ninety-five of the 2000 acres of the Appalachian Trail weave throughout the Park. The northern, southern, and eastern borders of the Greene County are met by Madison, Albemarle, and Orange counties respectively.



The climate of Greene county is defined by seasonal changes which are generally characterized as mild. The entire state usually escapes the rigorous cold of the northern states. The debilitating heat, more commonly found to the south, is not sustained in any duration. Mid-winter temperatures usually average around the freezing point, while summer days over 90 degrees are rare. The average relative humidity is about 55 percent. Spring and fall ease the transition between the extremes with mild days and cool nights that foster prolonged growing seasons and an abundance of seasonal colors amongst the foliage.

The bedrock of Greene County falls into the classification of late Precambrian (Heatwole 74), dating back more than five hundred and seventy million years. The Swift Run Formation is named for outcrops east of Swift Run Gap, in the woods above US 33 (Frye 113). The rocks along this roadway offer vast visual variety including outcrops from the Swift Run Formation (white and pink quartz, phyllite, and sandstone), Catoctin greenstone (with distinct columnar jointing), and into Peddlar granite (coarsely grained dark greenish-gray), (Frye 113) rising through the middle of the county to the 2365' summit and into the Shenandoah Valley. Swift Run Gap is the most significant surface feature along what is now known as the Spotswood Trail.

In the year 1716,

then Governor Alexander Spotswood set out to "explore what was then the western frontier of a very new country" (Santos, 6). The journey is well chronicled in history and did much to promote westward expansion of the young colony.

Most gaps are formed when water flows through bedrock causing fluvial erosion or when wind act on weakness in the bedrock (weathering). There is no accounting for the low elevation of Swift Run Gap (Frye 69) relative to the rest of the Blue Ridge. To the north of Swift Run Gap elevations range between 3000 and 3800'. The Elkton fault runs parallel to the western slope of the Blue Ridge, and is the only thrust fault to cross the mountains of Greene County. Conners (1988) reports that an example of the effect of faults on topography is offered by the gaps and hollows that separate adjacent terrain from the main Blue Ridge (24).

While the clay foundation at the foot of the mountains is not the most productive soil, it does take kindly to fertilizers (Johnson 12). Some clays from the region have been used in tile and brick manufacturing. A US Department of Agriculture report from 1983 identified 44 soils which cover the mountain slopes (Elioak clay loam, Catoctin-Rock outcrop complex) floodplains (Hatboro loam, Kinkora silt loam), and along the uplands of the Piedmont Plateau ( smoothed Udorthents, Comus fine sandy loam) .

Over the past 200 million years, the principle geologic

activity crafting the landscape has been erosion. While the harder rocks still stand to form the ridges, the softer layers such as limestone and sandstone have broken down to form the soils which support the agricultural uplands (Crandall 12). A 1983 published report indicated that agriculture was still the primary enterprise in the county; with an emphasis on corn production, vineyards, orchards, livestock, dairy products, and poultry products. (Greene County's Finest 1). In this way the geologic history of this region has defined the cultural and economic heritage of Greene County.

In addition to the array of soils, several mineral resources have added to past and present economic interest in the area. Reports of mineral resources and available land for agriculture contributed to early exploration of the region (Lambert 37) . The earliest settlement in the region focused on the native copper and copper sulfides. The Hightop mine operated until 1906 when an explosion destroyed the buildings and forced its closure (Calver 83). Unikite, composed of pink feldspar, and blue and gray quartz, is of interest to gem collectors. Soapstone from the Madison-Greene County border has been mined as paving stone. Sand and gravel from the region are mined by the locally owned and operated Luck Stone Quarry.

While agriculture and mining have played a significant role in the heritage of the county, so too have the forests. Over

several million years, deciduous forests of Oak, Hickory, and Chestnut have developed. A 1990 study under the direction of Dr. Valentine James noted that 60 percent of the county is forested (46). The Appalachian Highlands are dominated by Hickory-Oak. Additional species found commonly along the Mountain slopes are Eastern White Pine, Shortleaf Pine, American Beach, American Basswood, Sugar Maple, and Umbrella Magnolia. Eastern Hemlock covers the moist north facing slopes. "The woods teem with shrubs, too; prominent among them are the mountain laurel, azaleas, ninebark, viburnums, elderberry, and an assortment of blueberries" (Kearns 8). Oak-Hickory and Poplar dominate the Piedmont region of the county, and the American Sycamore are common along the floodplains.

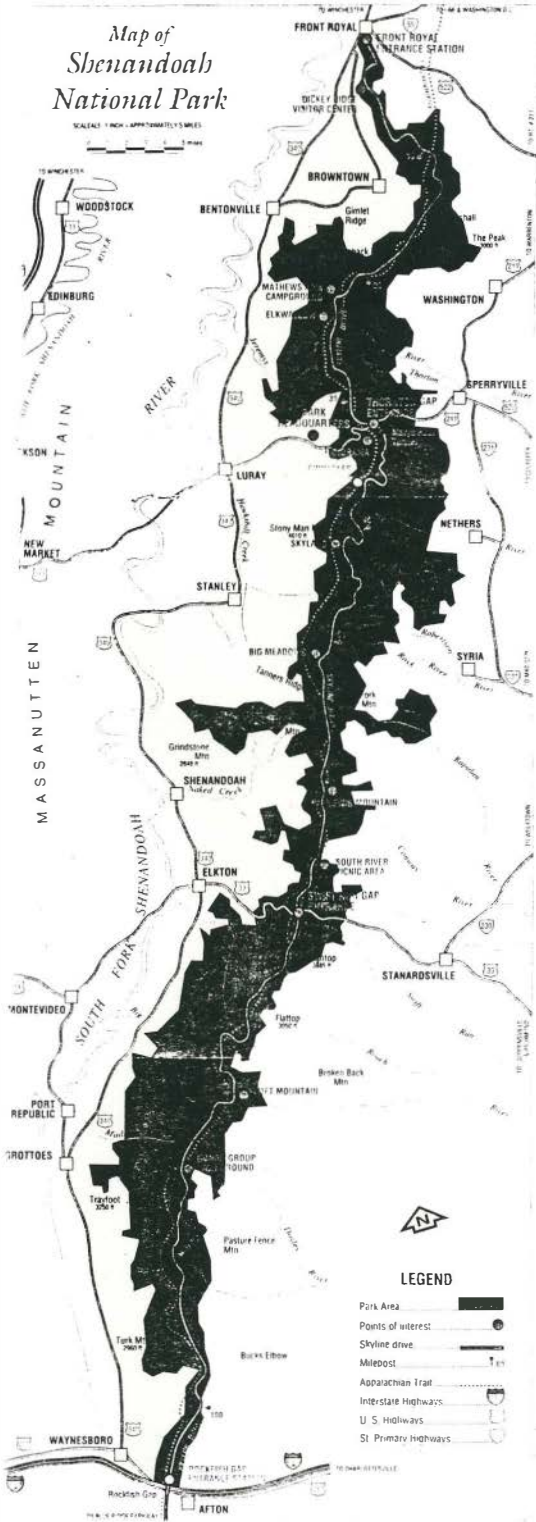
The entire western border of the county "...includes steep walled valleys with fast-flowing streams and heavily wooded slopes..." (Calver 8). U.S. Route 33 has been characterized as the drainage divide (Thomas and Crawford 1). The northern half of the county flows to the Rappahannock River, while the southern half drains toward the James River. Areas of high elevation to the north of the Swift Run Gap are drained by the South River, a tributary of the Rapidan, the Conway (or Middle) River which drains into the Rapidan River and the Rapidan itself (Calver 89). The Rapidan River effectively serves as the northern border of the county. The headwaters of several streams in this area are



characterized by waterfalls and narrow valleys (Conners 166).

Hightop Mountain (3,587') offers the highest peak in the southern district of the county. The summit protrudes from the main Blue Ridge, and offers a series of coarse textured drainage troughs. The spoon-shaped depressions gather runoff water. Swift Run originates within Hightop Mountain (at about 3,400'). The water flows eastward branching off four times (stream piracy) within a 1,900' descent. While most streams in the immediate area are youthful, Swift Run would be classified as mature (Thornbury 137) with sharp divides, equilibrium, and floodplains near the distal end (between Powell and Daniels Mountains (1,000')).

Flattop Mountain (3,300') is drained by the Roach and Lynch Rivers, which gently meander through the southwest corridor of the county. The valley here is broad and gently sloping. Evidence of mass wasting marks the bends in the flow, and the valley widths are several times the size of the meandering belts. The two rivers run to the north and south of Brokenback Mountain (1,750'), named for the large depression which covers nearly half the surface of its western slope. Both rivers eventually cross the county line and drain into the North Fork of the Rivanna River.



Fifteen of the total annual precipitation of just over 45" results in ground water infiltration (Calver 90). While the Rapidan River is currently the primary water source for the county, several springs and wells have historically served the needs of residents. Penetration is usually enhanced by the slow rate of precipitation and large amounts of vegetation. However, rock formations on the mountain slopes and the slower absorption rate of the reddish-brown clay have caused difficulties when heavy daily rainfalls are recorded.

In 1942 a 100 year flood damaged the county when 7" of rain fell in a 12 hour period. Until recently this flood was the most significant natural disaster the county had ever seen. On June 27, 1995, in what the U.S. Geological Survey termed a 500 year Flood (Hewlett, 1996), 11" of rain deluged the county in less than 6 hours. The Rapidan River measured nearly 10 times its average annual flow (Winegar 11). Water and landslides stripped the mountains, damaging or destroying 800 homes, 300 roads, 400 acres of cropland, and over 1000 miles of fencing. The Rapidan, down stream from its confluence with the Conway and South Rivers, washed away a section of U.S. Route 29, carrying fragments of the bridge several miles down river. In all, 6 bridges were washed away, leaving residents stranded, or in some cases altogether without homes. One child was carried over 6 miles by the raging waters, which sounded for some like the roar of a jet. The floodplains

are still strewn with the remains of the vegetation that once covered the mountainside and more than a year after the rains the scars on the mountains are still in evidence.

Thomas Johnson (1970) reports that the Powhatan, Mannahoack, and several smaller American Indian Tribes used the Swift Run Gap as a natural passage between Western Virginia and the Piedmont region long before the European explorers came. In the early 1700's the settled areas of Virginia were becoming more densely populated, forcing expansion from the coast inward. Governor Spotswood and his fellow explorers, had found the mountains to be within 100 miles of the settled territory. The historic journey promoted westward expansion, promising available land suitable for growing tobacco as well as an interest in the mineral wealth of the region. In 1838 a petition with 122 signatures was presented to then Senator Thomas Davis to establish a new county. Then, as now, it was the riches of the natural landscape that offered promise to Greene County, Virginia.

## The History of Greene County

No one would argue that the history of Virginia predates the 1607 settlement of Jamestown. Similarly Alexander Spotswood was not the first to set foot on the soils and lush forest floor of Greene County. But just how long ago does the human history of this region begin?

Michael Hoffman, archeologist at the University of Virginia, has studied 66 sites inside the Shenandoah National Park. He notes that the oldest spear point found dates back to about 5500 B.C. Along with the spear points were stone artifacts used as butchering tools, including scrapers and knives, as well as tools for working wood and bone such as axes and spokeshaves (Lambert 8). Based on Hoffman's studies, nearly all of the sites were located near streams, in hollows, or along the flattish uplands. The passes through the Blue Ridge, including Swift Run Gap, all show evidence of campsites used for short stays. Just south of Greene County, but within the boundary of the Shenandoah National Park, is an area that shows continued use from 200-1600 AD. Boulders deposited by flood waters were used as shelter for the transitional period between the hunter/gatherer to a lifestyle based on agriculture (Amiss 41).

Lambert notes that the Woodland Indians to the east were said to have utilized wild plant species for food and food flavoring, medicine, smoking, and beverages (17). Deer was an

important animal in the Woodland life way, providing food, clothing and tools (from antlers). Multiple Woodland burial grounds are scattered along the floodplain to the east of the Blue Ridge. Surrounding these sites is some of the first evidence of significant agriculture in the area, marking the period from 1000 BC to 900 AD.

Native Americans began disappearing from the region long before white settlement in Greene County (Johnson 17). John Swarton (1952) noted that between 1650 and 1700 the region was populated by Souix speaking groups, many of which were beginning to die out (the spread of diseases included small pox, measles, tuberculosis, and malaria), move out, or join smaller bands moving north. Darwin Lambert, in The Undying Past of the Shenandoah National Park, notes that it was possible to buy furs from the Shenandoah Valley in Europe well before the 1607 establishment of Jamestown. Fur traders worked with the Iroquois to make such arrangements. Lambert also points out that the first economic report from Jamestown to the King in 1628 failed to mention fur trade, but did note the hope of riches from the silver mines (25). The information was most likely passed from traders and trappers who had luck trading food and clothing for furs and silver products originating from within the Shenandoah National Park. While these reports no doubt help us link together the storied past of the region, it is the German and English immigrants who are credited with the first written documents from

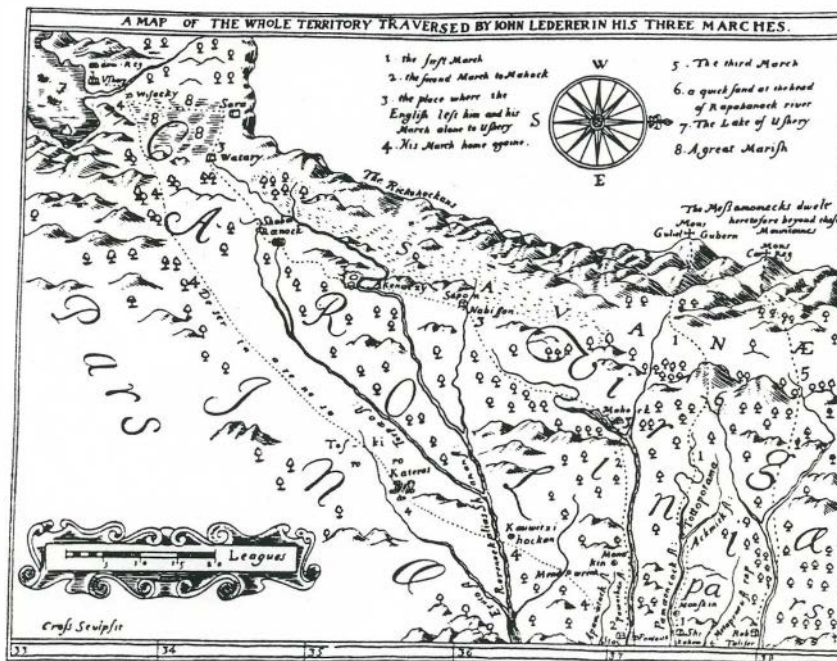
the region presently known as Greene County Virginia.

In his A History of Orange County Virginia (1907), W.W. Scott chronicles the early establishing of Jamestown. He notes that after a period of disease and famine, the harvest of 1622 eventually rewarded the colonial settlers with an abundance of grain, fruits, vegetables, and tobacco, and an increase in cattle production (16). Scott also reports difficulties in relations between settlers and the natives of the region, resulting in a great massacre that took the lives of hundreds of men, women, and children, and drove off great portions of the cattle (17). After this event, English leaders were slow to explore new territories. When a young German named John Lederer showed interest in exploration, then Governor William Berkeley encouraged him (Dodson 86)

John Lederer left the coastal region of Virginia in the spring of 1669 with a small party, composed primarily of guides, to explore the western territory (Johnson 18). Scholars have had great difficulties retracing the exact steps of the journey, for he used few topographic descriptions. It is generally accepted that at some point within his travels, Lederer described the view from Hightop Mountain (Connors 169).

"....I climbed up the Rocks, which were so incumbered with bushes and bramble, that the ascent proved very difficult....The height of this Mountain was very extraordinary: for notwithstanding I set out with the first appearance of light, it

was late in the evening before I gained the top " (qtd in Lambert 27). (Map below from Lederer notes transcribed in from Lambert 28).



Heatwole gives Lederer credit for providing the first written account of travels through the Blue Ridge, but notes vague details which are laden with accounts of abundant foliage and wildlife (30). Lederer provides repeated descriptions of deer, acorns, and chestnuts (Winthrop). Much to Governor Berkeley's dismay, the journeys of John Lederer did little to promote westward expansion. It is suggested (Lambert 30) that Cadwallader Jones, a plantation owner known to have traded with



the Natives, was with Lederer in the spring of 1669. During the period of 1677 and 1686, he provided several maps to the Governor which accurately charted six rivers, including the Rapidan and South Rivers. Lederer himself became upset at the general disbelief regarding his reports. He moved north, venturing to Maryland and Pennsylvania before returning to Germany to finish his reports. Johnson notes (18) that copies of Lederer's journal were available (English translation) from London book sellers by 1692.

In the year 1710, then Governor Alexander Spotswood commissioned a small group of German immigrants (known as rangers) to explore the western territory. Spotswood spent the next six years marketing the region to Europeans, promoting fur trade and mining, reorganizing (Native American) Indian relations, and protecting the outlying settlements from (Native American) Indian attack. (Dodson) In June of 1716, the Governor informed his council that the rangers (first invited to the colony because of their mining expertise) had found a passage over the mountains to the west. In August of that same year, Governor Spotswood set out from Germanna, led by Native Americans (probably from the Saponi tribe) to "explore what was then the western frontier of a very new country" (Santos 6). His exploration party (totalling 62 persons), known as the Knights of the Golden Horseshoe, traveled along what is now U.S.

Route 33, through the area now known as Greene County, to reach the passage of Swift Run Gap.

"We called the highest Mountain Mount George (Hightop), and the one we crossed over, Mount Spotswood (Saddleback)."

(From the journals of John Fontaine as qtd in Scott 111)

(Map below as reproduced in Lambert 31)



Spotswood's expedition westward started at Germanna, near present-day Fredericksburg. It was long supposed he crossed Swift Run Gap in the park-land, but recent studies suggest he may have crossed at Milam Gap. Both routes are shown here, based on opinions of leading investigators. (From *Journal of John Fontaine*, ed. Edward Porter Alexander, with permission from the publisher, The Colonial Williamsburg Foundation)

The passage led through the Blue Ridge Mountains and into the "Great Valley" of Virginia. In payment for their work, the rangers received a land grant and settled to the north of the region in an area now known as Germanna. Spotswood returned to the capital promoting fertile ground, potential gold, and majestic views (Dodson 239).

From 1719, additional German immigrants were imported to the colonies for their agricultural and mining expertise. Effectively, these immigrants traded their labor for the acquisition of land grants. Amongst them were the original members of the Church of the Brethren from the regions of Marienborn and Schwarzenau. Germany, in 1700, was a land that recognized only three churches: The Roman Catholic, Lutheran, and the Reformed. By their very gathering, the Brethren were in violation of the law. While most of those in flight from persecution chose Pennsylvania, a land known for its religious tolerance, others headed to Virginia, an area known for its inexpensive land (Durnbaugh 4). By 1724 Early German settlers had gained their land rights (after good faith service) in tracks of 75 to 400 acres (granted by Spotswood) along the northern border of Greene and southern border of Madison, with additional settlements noted slightly to the west of the present day Greene County line (Lambert 52). By now, Governor Spotswood had considerable land holdings in the area.

In the early 1700's, primary land use in the settled areas of Virginia was dedicated to cotton and tobacco. Both required extensive amounts of land, and both robbed the soils of their nutrients. In response, owners needed to acquire more land for their crops. Land was being claimed quickly as established

farmers seeking expansion battled members of a growing population for available land. At that time, north-central Virginia was made up largely of three counties, all of whom housed their county seats to the east. In colonial times, it was not uncommon for the parish to be established prior to the recognition of a county. Such were the events that led to the establishment of the parish of St. Mark. The Parish included the entire area presently known as Germanna, Orange, and Greene Counties.

Bernard Bailyn (1986), in his book The Peopling of British North America notes that by 1733 the land rush was gaining momentum, forcing a visit from Lord Fairfax to straighten out land agreements. Most of the disputes had centered around the Rappahannock River's large southern tributary known as the Rapidan River. Agents of Fairfax had told him the land was "...wonderfully fertile" (34). Spotswood and the colonial rulers had been offering land grants from holdings belonging to Fairfax. It was surveys of the entire Rappahannock by William Byrd, a representative of Virginia, that settled the dispute. The map charted the entire river, including tributaries and streams, many of which lay within the boundaries of present day Greene County. What resulted was continued growth of settlement in the newly explored territories (Scott 8).

Lambert reports that follow up surveys required Sir Thomas Lewis to ascend Swift Run Gap in 1746 to identify all of the

regional headwaters for the purposes of establishing plantations. Five years later, Adam Mueller notes that the property surrounding Swift Run Gap provided rich and fertile (limestone) soil (Lambert 54). Mueller then became one of the regions first permanent residents.

In his book, Transformation of Virginia: 1740-1790, Rhys Isaac (1982) sets out to provide a better understanding of the people who lived in colonial Virginia during the period of 1740 to 1790. The text analyzes the daily social and political activities of those who inhabited the region during the period of time leading up to and including the Revolutionary War. Isaac suggests that the leaders in the colonies began to question the rulers of England, no longer passively accepting dominance from across the Ocean. Landowners and patriots pulled together to boycott goods provided from the mother country. The war itself never reached this area, but it has been suggested that the hills and valleys provided hiding places for troops to gather and plan (Johnson 39).

Significant changes occurred for the area resulting from the Revolution. The Virginia legislature enacted laws that forbade land holdings for those who were not Virginia citizens. Land previously owned by Lord Fairfax was purchased by James Barbour of Orange County. In two big surveys, Barbour claimed all of the land now known as the Shenandoah National Park, including acreage which presently makes up all of Greene County. Investors began to

buy large tracts on the trail to the Shenandoah Valley that led through Swift Run Gap. Wagon trains carried produce east and returned with imported or manufactured goods. By the mid 1780's the General Assembly authorized funds to expand and repair the roadway through the Gap, and soon after the turn of the century, a turnpike was installed to pay for additional road expansion (Reeder and Reeder 18).

Another change resulting from the revolution was the separation of the Church and court house. No longer were crimes against the peace considered to be committed against the King and his Church, rather they were committed against the good of the Commonwealth. New spiritual leadership was provided by the Baptists and Brethren through a system that encompassed the daily lives of people, bringing them together for planting, harvest, education, festivals, and worship. At that time, north-central Virginia was made up of three counties, all of whom housed their county seats to the east. The travel required for business transactions took increasingly longer periods of time as settlers moved west. Rapid growth continued, and with the village of Stanardsville firmly established, petitions began to circulate for the formation of a new county. In 1838, unrest had become such that the General Assembly reviewed the maps and guided the proposal through to the birth of a county. Robert Stanard donated land for the building of a county court house, the site of which

became the focal point for the management of the county (Parrott 10). The county was named in honor of Nathaniel Greene, of Revolutionary War fame, who led the Continental Army on December 24, 1776 when the forces of George Washington stunned the British in Trenton (Worrall 203).

Within ten years the old English plantation system had begun to weaken, and available land was claimed by new settlers for the purpose of grazing cattle along what is now Skyline Drive. Of the over 4,000 persons accounted for in the 1850 census, the majority lived between the centrally located county seat and the natural wall to the west known as the Blue Ridge Mountains. Settlers along the Blue Ridge used the land to make their living. Residents raised fruit, vegetables, flax, and some livestock to meet their needs. Nearly everyone had a smokehouse and root cellar. Remnants of cabins found later included spinning wheels for flax and wool, and a variety of skins (animal) used for clothing. Of the 494 dwellings included in the census, 301 of them were farms (Morris 23). At that time, nearly 40 percent of the population of the county was comprised slaves (listed as laborers on the survey).

In the War Between the States, Swift Run Gap was the crossing and Stanardsville the gathering area, for the famous Valley Campaign engineered by Confederate General Thomas

"Stonewall" Jackson (Johnson 51). The mountains provided a natural barrier and served as lookout areas from which to deploy troops east and west. In 1862 Jackson and his armies distracted the Federal troops from movement toward Richmond, but Union armies led by General Philip Sheridan left their mark on the land. His troops succeeded in driving off cattle, as well as burning over 2000 barns, 120 mills, and countless bridges and fields in the three county area that surrounded Swift Run Gap (Lambert 103) .

Shortly after the war, the land and the people recovered. The region rebounded with apple orchards, mills, tanbarking, and industry including lumber and mining operations (Connors 87). The 1866 county map (Michie and Hotchkiss) notes the majority of the new development to the south and west of Stanardsville. It is along these patterns that Greene County grew at a slow, but steady rate into the 1900's.

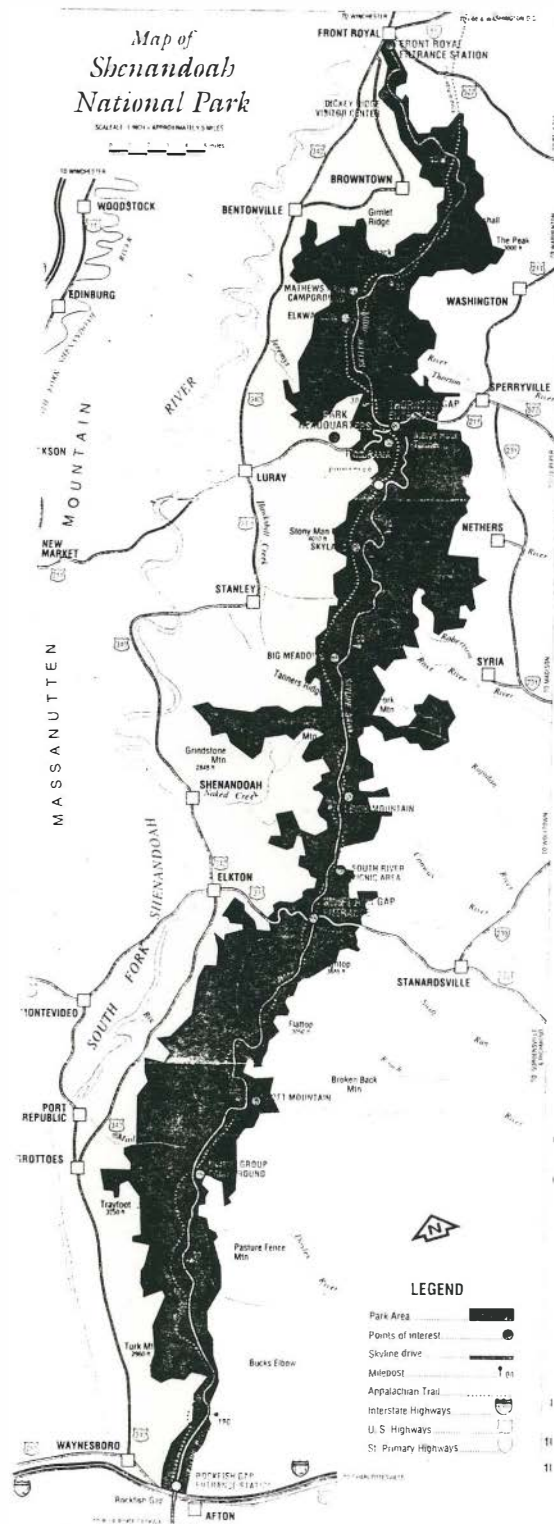


## The Deforestation of Greene County

### The Land as Economy:

For four centuries this country has been the starting place for new lives, new freedoms, new fortunes. This historic role has not been fulfilled without damage to the landscape. For thousands of years the native people of this region felled trees and cleared fields, but they did not hold the means to destroy the land, nor did they dare claim to possess it. And so the lush forests that greeted the first settlers were virtually untouched.

Early settlers along the Blue Ridge used the land to make their living. As populations grew, so too did the size of the settlements. This necessitated the clearing of land for large scale production of wheat and flax, as well as tobacco. "You can read plantation names from geographic features all over the Park" (Lambert 70). The early families and plantations of Greene County are memorialized by features (from south to north) such as Simmons Gap, Powell Gap, Bacon Hollow, Smith Roach Gap, Conway River, Kirtley Mountain, and Bootens Gap. Most of these plantations run alongside the rich flood plains of nearby rivers and streams. The largest plantation, owned by the Kirtley family in 1851, bordering present day Greene and Madison counties, and was estimated to be 6000 acres.



(Reproduction of National Park Service Map, 1994)

Each of these early settlements required massive clearing of forested land, but farmers and homesteaders were not the only inhabitants of the county.

Those who lived within the forest built the first roads by hand. Barely passable by a single team, they linked plantations with the passageways east and west of the Blue Ridge. Landowners utilized stones on the lower side of sloped roads to keep them from washing away, but frequent repairs were necessary. Traffic was significant, and in 1809 a turnpike was installed along the primary east-west passage at Swift Run Gap to collect tolls necessary for road repairs. Additional developments were made in 1849, in a private and state supported venture, creating a scar upon the visual landscape that could be seen for many miles (Porter, 1996).

To make one ton of iron required limestone, ore, and about 180 bushels of charcoal. Gaining the charcoal required feeding 300 cords of wood into a blast furnace (Sweet, 1996). Greene County was home to one furnace, and three others lay within the neighboring counties. It took 8000 acres of timber to feed a charcoal blast furnace. The forest was heavily and repeatedly cut until the "Iron Millers" lost control of their land as a result of the Civil War (Lambert 82). By then, the Hightop Mine (copper minerals and native copper) was in operation. While not having the same immediate impact on the forest, accessibility to the

mine required the additional clearing of land for road access to and from the site (Calver 82).

By the time of the Civil War soil fertility was dwindling almost everywhere. Modern erosion control measures were not yet available, and many plantation owners were abandoning slavery on economic and moral grounds (Deter 7). As plantations moved out, subsistence farmers and lumbermen moved in. For the remainder of the century the economy of Greene County was driven by the American Chestnut.

In the early 1800's, 4 of every 5 trees to the south and west of Swift Run Gap was an American Chestnut (Sweet 1996). In the early spring, trees were felled, their bark stripped and ground for the process of tanning. The tanneries found on the plantations used local skins and served the immediate community (Lambert 161). But as the plantations system dwindled, demand for tannin and sumac continued and by later part of the century industrial tanneries met the increasing demands from customers in the Shenandoah Valley, coastal settlements, and even Europe. Greene County, with an abundance of timber resources was instrumental in meeting the needs of such industries. While bark was exported to the tanneries, millers cut and sold logs for cabins, and rails for fences. Wood was also used for roof shingles, furniture, and as webbing for baskets and chairs (Heatwole 35). While these activities account for the commercial interest in the Chestnut, homesteaders found more personal uses.

In 1900, a bushel of chestnuts could bring as much as twelve dollars. "When we got Daddy's home place (Grandfather George Herman Shifflett) near Swift Run Gap, we ran past the house, down into the hollow where we would collect nuts to eat with our lunch". (Later) we would gather chestnuts by the bushel and sell them for school shoes" (Shifflett, 1996). At the Shifflett homestead just to the north of Swift Run Gap, chestnuts were the only cash producing commodity. The garden produced enough to feed the family in season and the excess was canned for the long seasons to come. Pigs, chickens, and "at least one cow" rounded out the entire needs of the family in "good times and bad" (Porter, 1996). But chestnuts could be sold at either of the two general stores in the Gap or transported further east, where they would bring more money.

Gailen Morris has lived in Greene County his entire life. "We built the pig pens around the mighty Chestnut to fatten them before we went to market. We took chestnuts and dried apples to the country stores where we would trade and sell them." Gailen was 7 when he began attending the Church of the Brethren Industrial School. He paid his tuition with chestnuts. "The teachers would sometimes use chestnuts to teach addition". All that ended with the blight. "That was in the 1920's, so it hit us later than some other parts of the country." (Morris, 1996).

The lifestyle of the 1800's took its toll on nature. Period photographs and sketches of Swift Run Gap reveal open pasture land and stripped hillsides (Conners 64, Reeder and Reeder 21, Porter 10-12). Soon naked pastures became a common site. Overuse of the resources left the previously rich forests that lined the mountainside to offer little more than sparse covering. The fading landscape was only to be punctuated by the arrival of *Endothia parasitica*, a tiny fungus that took what remained of the most valuable tree, the American Chestnut (Little 218). The dust sized spores of the fungus were easily spread by insects and the wind, attacking the openings of the tree's bark. The splitting and reddening of the bark caused its shedding, leaving the tree exposed to the elements.

By the early 1930's, the Chestnut was eliminated from the landscape of Greene County. The near-virgin visual landscape inherited by the European settlers was marred with eroded pasture lands, naked branches or enormous tree stumps, and roadways to abandoned mines. In his book The End of Nature (1989), Bill McKibbin summarizes that people value pristine wilderness, although apparently not enough to change their lifestyle (56). This new county, the starting place of new freedoms and new fortunes, was forever changed by the life way of its first inhabitants.

Intervention for Preservation:

The social reform movement of the 1960s increased awareness of the tragic effects of social problems such as poverty and racial discrimination on the world as a whole.. Social action groups utilized strategies to affect change by personalizing issues (appealing to common values). This action mobilized forces in the most effected areas, thereby producing a level of discomfort for those who lived in areas removed from the immediate problem. The purpose of social action is to achieve a more equitable distribution of resources (Heller 355), or to distribute the resources between the haves and have-nots. The more recent strategy employed by social activists linked to the environmental movement is to highlight the interconnectedness of environmental concerns. In other words, both the haves and have-nots will eventually be without. Regardless of which strategy is employed, all would agree that persons need to be aware of the problem before any strategy for change can be effective.

People often choose to protect the things they value. For some, it may begin with a burning issue effecting their personal or community property. Others become involved because their way of life is threatened. The early settlers in Greene County fell into two categories: Many realized that the depletion of resources profoundly effected their way of life. Typically these

individuals owned businesses that drew from the natural resources of the region. They were well educated and often chose to move further west in efforts to possess new lands. The second group of persons who inhabited the mountains of Greene County at the turn of the century were those who were either born into or chose social isolation (Reeder and Reeder, 1978). Rugged terrain, roads in disrepair, language barriers, illiteracy, and restricted experiences with persons from outside of their immediate localities also contributed to isolation. Often these persons were subsistence farmers or former laborers who had claimed abandoned properties. They continued to work a less productive land, focusing on survival rather than the gracious living of the past. Their "backward" ways were out of step or outdated with the trends of the 20th century (Reeder and Reeder 17). Life in the mountains wasn't getting any easier. Local industry was gone and the resources of timber and fertile soil were depleted, yet the mountain people felt they were living a good life (Reeder and Reeder, 1978).

It was not the inhabitants of Greene County, but the Congress of the United States of America who recognized the need for intervention. Beginning in the 1920's, a strong interest in preserving natural resources, creating recreational lands, and a dedicated effort to develop a system of National Parks imposed federal policy on Greene County. It was Stephen Mather, the first director of the National Park Service, who took the initial



steps toward preservation in the region. His concern that the National Parks in the west would take resources away from the population center in the east, set the stage for the Shenandoah National Park (Lambert 194). Mather published a report in 1923 identifying the need for a park, and by 1924 the Southern Appalachian National Park Committee was formed. Enthusiasm swelled before inhabitants of the region were even notified of the plans. Choice areas that highlighted waterfalls and scenic vistas were shown to Government representatives, while a resort owner from the Shenandoah Valley assisted the effort by publishing an article that claimed the area to be untouched by axes and free of impoverishment. About this time, Dr. Roy Lyman Sexton, a representative of the Potomac Appalachian Trail Club, was surveying the area. He took his own concerns to the Congress. Sexton noted inadequate nutrition amongst residents of the region, and recognized the practice of marriage between relatives. What resulted was an array of newspaper articles and books that highlighted the dire living conditions of the mountain folk (Lambert 185).

In May of 1926, authorized by an act of Congress, the Shenandoah National Park was established. The action was seen as a gesture of good will, as it would promote tourism in the region, stimulate the economy by employing local workers, and offer government (state and federal) relief in a poverty-stricken

area. More over the efforts spoke directly to the federal ideal of preserving the natural and historic features and scenery of the area. Virginia was assigned the task of acquiring land for the Park. Most of the Nation's parks were created by reclassifying what was already government property. The entire area identified for the Shenandoah National Park was privately owned. Congress had not appropriated any funds for land acquisition.

Harry Flood Byrd, then Governor of Virginia, had been rejuvenated by the national attention paid his state. He appropriated funds (Johnson 54) over a five year period, and appealed to residents of the state and nation to assist. The campaign targeted the entire country, boasting a "National Park near the Nation's Capital" (SNP Archives). President Herbert Hoover purchased a camp at the genesis of the Rapidan River, immediately donating the property and promoting the Park as a national cause (Connors 92). In 1930, Congress redirected drought relief funds for the development of Skyline Drive, a 105 mile scenic roadway across the peaks of the Blue Ridge Mountains (Crandall 45). One problem remained: By definition, a National Park does not include provisions for people living within its boundaries (Heatwole 6).

Two thousand and three hundred people lived within the proposed Park land, including 62 families (287 people) in Greene

County. The county also had 4 churches and 2 schools within the boundaries. Johnson (1976) reports that people settled this dispute in multiple ways. A few persons took cash payouts for their land and left the region. Most of the inhabitants needed help adjusting to a new way of life. They were provided homesteads outside the park by the Federal Relocation Commission. A small group of people was determined to be incapable of fending for themselves and were made wards of the state (55). All of the inhabitants fought the move.

It was the position of the government that the preservation of natural resources and creation of recreational lands would be good for the region. What the people valued was their homes. Nine years filled with law suits and title clearings had elapsed, resulting in agreements reached in the majority of the cases. Legislation was passed that gave the Commonwealth of Virginia the right to condemn the remaining land for federal use (Crandall 44). The embattled owners had lost. Harold Runkle, one of the displaced family members put it this way: "What they have is our land. We have not got anything" (Runkle, 1995). While the Park dedicated the land for protection, it inherited a badly bruised landscape. In a case where social action was taken to the level of Government intervention the question was, would taken landscape revert to its natural splendor ?

## Continued Threats:

In 1935, after years of planning the Shenandoah National Park became a reality. Nearly 200,000 acres stretched over seventy miles across the peaks of the Blue Ridge Mountains. If the goal of Congress was to promote recreational use, it had done so. Nearly 2 million visitors a year drive through the center of the Park on Skyline Drive. One of four entrances to the Park at Swift Run Gap lies along the western border of Greene County (at the intersection of U.S. Route 33). The Appalachian Trail crosses Skyline Drive 46 times along the path between Georgia and Maine. If the goal of congress was to preserve the natural scenic beauty of the region, the outcome is inconclusive. One would question the decision to pave a roadway across the peaks of a mountain range, for the creation itself detracts from the splendor of things deemed natural. Also, the Shenandoah National Park was created along a series of badly bruised mountain slopes. It lacked the undisturbed quality of similar lands protected to the west. The park was in effect a recycled park, made up of cut-over timberland, second-rate pasture (Heatwole 7), and the projection for natural succession.

The final total ceded from Greene County was 14,619 acres, over fifteen percent of its' entire acreage (Johnson 9). Much of the acreage was primarily scrub forest and brush (Connors 64). A few of the rugged north facing slopes harbored older trees in the

most difficult to reach places (Shifflett, 1996). The land recovered. Thistles and brambles moved into open fields. Locust and Pine followed close behind. By 1976 when the President signed the Wilderness Act, park rangers were proudly announcing the succession of open fields into a second growth forest. Wildlife followed the return of the trees; first birds, then small mammals, and finally deer and an occasional bear. Hemlock covered the moist areas of the park, while White Pine and Short Leaf Pine pines filled in the dryer slopes. Chestnut Oak and the Sugar Maples had also begun to recover. But while the land within the region of the Park was protected from humans via the government initiatives, new problems arrived for the entire County.

In his book, The Dying of Trees (1995), Charles Little outlines how an entire range of human maladies causing ozone depletion and acid rain, in conjunction with indiscriminate behaviors such as clear-cutting, have taken their toll on the immune system of trees. With depleted defenses, whole species of trees are under attack by natural predators, causing the decline of the American Forest. In the winter of 1984, the Gypsy Moth Caterpillar was discovered in the Shenandoah National Park. By 1986, studies indicated their infestation had claimed as many as 27,000 acres a year in the Commonwealth of Virginia (Condon, 1995). North of Swift Run Gap, defoliated trees have become a

common site. Oak and Hickory are laden with Gypsy Moth infestation. The dark brown caterpillars are highlighted with red and blue dots. They emerge between June and July and develop wings through August. Throughout this entire period, the females lay their eggs.

More recently, strands of white wax containing the eggs of the Woolly Adelgid have lined branches and needles of Hemlock trees throughout the Park. Officials indicate that one in four trees are deeply infested by the Hemlock Woolly Adelgid, and that over eighty-five percent of the Hemlock in the region is at risk. The insect sucks the sap from the base of young needles, feeding from late fall through early summer. Once infested, a tree seldom lasts longer than four years.

The Sugar Maple, a tree more closely affiliated with the state of Vermont and Canadian provinces to the North offers a new set of problems to Greene County. While not unique to the region, the effects of acid rain have heavily damaged the Maple, once thought to be the most durable of trees (Little 166). Sulphate particles, most often associated with the combustion of coal at electricity generating plants, and nitrogen combine with atmospheric moisture to form an acidic substance. The acids may then be carried long distances by the wind, finally falling to the ground as rain or snow. The toxic particles are deposited on the trees and further enter the roots through water sources.

Conners notes that "In many parts of the Appalachian Mountains, trees, especially spruce and fir, are dying, and lakes and streams are becoming so acidic that frogs, crayfish, salamanders, fish, and other animals are unable to survive" (99-100). In addition to acid rain, Ozone, produced during chemical changes induced by sunlight on polluted air, offers a highly corrosive agent that damages the waxy cuticles on leaves. The primary emission source causing air pollution in Greene County can be traced to the automobile, an agent attracted in high numbers to scenic Skyline Drive.

The elimination of said trees would cause defoliation similar to that of the Chestnut blight. Left unaddressed, trees would be replaced by wild flowers and pioneering species which would again effect the quality of wildlife in the park. Secondary elements may also include excessive erosion along slopes and siltation in streams. The combination of these forces may once again threaten the visual splendor that offers the county its rural character.

While the creation of the Shenandoah National Park offered a positively charged protective mechanism to the landscape of the county, it alone cannot address the challenges of the future. The economically driven reign of the timber and mining industries is over, but it permanently altered the mountain slopes. Threats remain.

Dedicated efforts to address the Gypsy Moth have proven successful, and Conservation Department officials indicate that their influence on the forest is on a downward spiral (Sweet, 1996). Efforts to eliminate the Hemlock Woolly Adelgid have been less successful, their growth patterns have proved resistant to pesticides and natural inhibitors.

The problems of air and water quality reinforce the interdependence of the human and natural worlds. But the real challenge once again returns to the landowner. The park controls only a portion of the forested landscape of the county. Owners of land that borders the park may be less willing to leave land idle or take the necessary measures toward conservation. They patiently await further natural succession while monitoring ever increasing real estate prices. The park protects only a portion of Greene County from human influence on the landscape.



## Agriculture in Greene County

## The Land as Economy:

In the early 1700's primary land use in the settled areas of Virginia was dedicated to cotton and tobacco. Both required extensive amounts of land and both robbed the soils of their nutrients. In response, owners needed to acquire more land for their crops. Soon after Governor Alexander Spotswood made his historic journey over the Blue Ridge, plantations claimed the mountainous landscape. Well before the establishment of the Greene County, Adam Mueller, one of the first settlers in the region, noted that the rich and fertile soils were well suited for agricultural pursuit (Lambert 54). Over the years these soils have supported a thriving agricultural based economy, further defining the rural heritage of this county. Rural areas have never been static, but the erosion of previously nutrient rich soils, the reduction of available farmland, and the advent of real estate development along the boundaries of the Shenandoah National Park may forever threaten the landscape of Greene County, Virginia.

Benjamin Brown came to the area during the early land rush. Between 1740 and 1758 he claimed nearly six thousand acres, part of which lay in present day Greene County. In his book, The Undying Past of Shenandoah National Park (1989), Darwin Lambert reprints an interview with Brown's grandson (62-63). Brown notes that the primary crops on the plantation were beets, carrots, potatoes, parsnips, tomatoes, asparagus, and tobacco. Wool and

flax were available to spin and weave, and cattle grazed in many fields. Tanners, cobblers, millers, and blacksmiths were hired or trained, making the plantation an almost all inclusive community. After the death of Benjamin Brown in 1800, the plantation was divided amongst his eight sons.

While Brown certainly held a significant piece of property, it was tobacco that dominated most of the remaining fertile soils. The Kirtley family owned nearly 6000 acres bordering on present day Greene and Madison counties. By 1765 a road was built through Swift Run Gap, offering accessibility and the creation of several smaller plantations owned by the Bacon, Powell, Cowherd, Shirley, and Conway families (Reeder and Reeder, 20). But even before the Civil War the plantation system was threatened. Soils were depleted, and slavery was being abandoned on financial and moral grounds. In addition, the area that has come to be Greene County offered few transportation opportunities. Without a navigable waterway or railroad, roadways were the only choices. Competition on the eastern seaboard was fierce, and by the time growers from the Blue Ridge territories could get their goods to market, they were often forced to take a lesser price (Johnson 33). By the mid 1800s the plantation system and the large scale growth of tobacco in this region had begun to give way to other lifeways.

Soon after the establishment of Greene County in 1838, the United States Government surveyed all 494 dwellings for the purpose of establishing a census. Over 60% (301) of all dwellings were listed as farms (Morris 23). While plantation owners had moved west and north, their land was purchased by new breeds of subsistence farmers and cattlemen. Greene County was a fairly good grain county, including wheat, corn, barley, and rye, but again the marketing of such products was limited by the lack of a railroad or major waterway. Homesteads were designed to be nearly as self-sufficient as the plantations. Farmers raised smaller fields of crops to meet their own needs, cabins included spinning wheels and looms, and nearly everyone had their own smokehouse and root cellar. A grist mill like the one owned by the Lams at Swift Run Gap often served several homesteaders, trading services for excess grain, chestnuts, or livestock. The pastures often held sheep for wool, beef and dairy cattle, and poultry. At one point poultry was a staple, but larger industries eventually pushed smaller family farmers out of business (Collins 24).

In chronicling the history of Greene, author Thomas Johnson (1976) dedicates one fifth of his book to 55 families that made significant contributions to the rural heritage of the county. Thirty of these families owned farms. Of these, half sold their land either to pursue opportunities elsewhere, to support

new businesses including general stores or churches, or to pay the bills accrued by a failing farm. Three of the 30 families still own and work their farms. The other 12 lost or sold their land to the state allowing the creation of the Shenandoah National Park. The park was created in 1935 to protect and preserve (and restore) the natural splendor of the Blue Ridge Mountains. Sixty-two Greene County families, most of whom owned and operated farms or related businesses, were displaced from the park land, creating settlements outside of, but along the borders of the park (79 - 104). The final amount ceded from Greene County was 14,619 acres, reducing the available land for use in the county by 15 %. While the intent of the park was to protect and restore the wilderness areas, there were additional effects on the agrarian culture.

Farming was not merely a job for people, it was their culture. Churches were centrally located so that events could be held around planting and harvesting seasons (Frye 69). In the early 1900s Greene County did not have a public high school. The needs were met by the Blue Ridge School, founded by the Anglican Church in 1909, and the Church of the Brethren Industrial School, founded in 1923 (Sappington 374). Lesson plans in both schools focused on farm work and shop work, cooking, canning, rug weaving, and sewing. Instruction in reading, writing, and

mathematics was incorporated in each of these tasks (Preston 1996, and Johnson 29). Apple butter festivals brought people together for celebration and rest, and the very nature of bartering excess crops for goods crafted a sense of community.

The next significant effect on the land came with the advent of real estate development along the boundaries of the Park. By the late 1960s and early 1970s, with the flora of the park replaced by second growth, prospectors returned, this time in business suits. The marketing of acreage along the borders of the Park packaged inexpensive land with the beauty of nature and the protecting boundary of state land. While the county welcomed the growth, many residents shunned the first major population explosion since the open frontier. Soon the landscape could offer no more available land along the park boundaries, and B.K. Hanes, the leader of the real estate rush left town. If the Shenandoah National Park could be considered the primary policy shaping land use in the early 1900s, it was Hanes and his Dogwood Valley and Wildwood projects that have shaped the region ever since.

Reeling from the easy access to influence by outside sources, the County Planner and Board of Supervisors surveyed the damage. Farmers were willing to sell land that had been in their families for years (Shifflett, 1996). It was now necessary (for the first time in 30 years) to expand the school system.

Resources were becoming stressed (Johnson 70). On March 2, 1974, the General Assembly of Virginia mandated that all counties propose a zoning ordinance. The proposal was adopted the following year as part of Greene County's first comprehensive plan.

Intervention for Preservation:










Zoning is a process where a county divides the territory under its jurisdiction into districts for use (General Assembly 1-486). Greene County dedicated its land as follows: 41% Conservation, 43.25 % Agriculture, 11% Floodplain. The remaining land was dedicated to business and industrial use as well as the county's only incorporated village of Stanardsville. The Conservation district was defined as any land predominantly "characterized by rugged terrain and poorly drained soils, as well as certain ecologically sensitive areas unsuited to intensive forms of development" (6). The agricultural districts were designed to protect farming in the County and were dedicated to "those areas where the soil and topographical characteristics are most favorable for farming" (13).

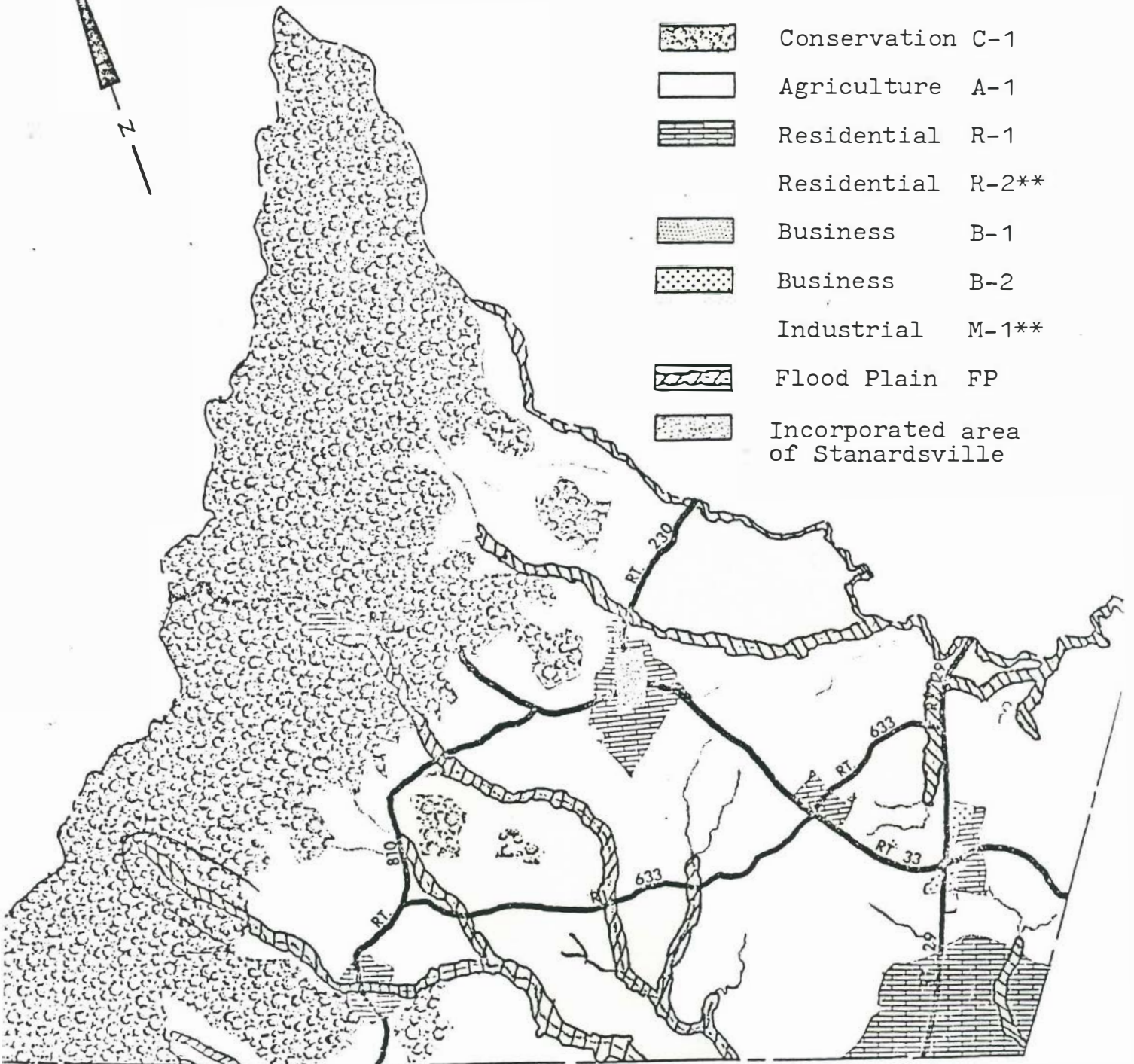
On the surface, county officials appeared to offer a planning effort which would support the agricultural heritage of the county while protecting slopes of the Blue Ridge Mountains. The final language of the ordinance was approved on February 22 and enacted on March 1, 1975.

PROPOSED GENERALIZED ZONING MAP \*  
GREENE COUNTY, VIRGINIA

Public Hearing, Feb. 22, 1975



-  Conservation C-1
-  Agriculture A-1
-  Residential R-1
-  Residential R-2\*\*
-  Business B-1
-  Business B-2
-  Industrial M-1\*\*
-  Flood Plain FP
-  Incorporated area of Stanardsville



Continued Threats:

Within two years the comprehensive plan was inadequate. Developers quickly acquired land east of Stanardsville with access to U.S. Route 29. They had anticipated the growth of the city of Charlottesville (to the south), and built to serve an ever increasingly mobile population. Over five hundred houses were built along the Piedmont region of the county in an area zoned Agriculture. U.S. Route 29 is dedicated as a memorial highway for the 29th Cavalry Division (Civil War). It services the Piedmont of Central Virginia as the main route south to Charlottesville and North to Washington, DC via Northern Virginia. Along a nearly five mile stretch, the width of the county here, cul de sacs became a common sight. An additional six hundred home sites were approved along roads running parallel to U.S. 29 (Sweet, 1996).

Between 1974 and 1991, seventy-one subdivisions had claimed the land (Greene County Map, 1991). Developments were built before regulations could focus on drain fields, waterlines, and coordinated efforts for service provisions. Houses that were to back up to a small lake now offer the run off from their yards to several neighbors below. A landfill that was intended to be removed from the region now backs up to homes built as recently as 1994.



Government control in the form of zoning had been disassembled by developers who paid limited fines (allowing them to rezone), and by those creating their own growth areas irrespective of the comprehensive plan. Two problems are sighted.

When the Planning Committee went to the state capitol of Richmond to present their plan, they were informed that their zoning ordinance did not prevent any form of land use. The definitions were too vague. County officials were told their plan "had no teeth at all" (Sweet, 1996).

The second threat to the zoning ordinance comes in the form of land use taxation. Permitted by the County Supervisor, the plan does not assess property based on fair market value, but on actual use of land. Therefore a reduced rate of taxation, set by a local commission, exists for property owners who either leave their land idle, or use it for agricultural purposes. The rates have not been readjusted since 1970 (Hachey, 1996). If a property owner chooses to sell this land for an alternate purpose, they are penalized by a fine of 5 years roll back taxes (based now on the fair market value). While this plan was intended to promote the conservation of agricultural lands, the end result was quite different from the plan.

Since 1990, real estate prices have become competitive with surrounding counties. The price of an acre of farmland rose from \$898 an acre in 1982, to \$2036 per acre in 1992 (Kiracofe 1). A 1996 sign along County Road 743 displays the results of rezoning,

proudly announcing "Will Build to Suit: 2 acres, \$27,500". The fine of roll back taxes is quickly absorbed into development costs and no longer serves as a deterrent. Most developers gladly absorb the back taxes as a cost of doing business, while others fight the weakened zoning laws in court, and win.

A past member of the Planning Commission, who chose not to be identified, characterized the struggle this way, " It's an evil situation. It's up to the people on local committees and people in local government to make difficult decisions, but everyone wants to get reelected. I look at this word stewardship, to improve the land. I mean people think of a lifetime as a long time. We're here just a drop in the bucket. If we change the whole county, where it is grasslands and woods, if we turn it into housing, its never going to revert. We know we are growing too fast. We can't afford it. When zoning first started our population was 5,000 or whatever it was. This was a small geographic County that wasn't excited about this stuff. But nobody has a handle on it now " (Name Withheld, 1996).

The first census of Greene County was completed in 1850. Officials recorded 4,400 residents (Morris 23). One hundred and twenty years later the total census had only risen to 5,248 (Johnson 12). In that same time period the number of farms decreased from 301 to 183 (Johnson 47). By 1990 the census of the county had reached over 12,500 inhabitants (Deutch A3). When

county officials met to redesign the comprehensive plan, a subdivision ordinance was added. The ordinance called for enforcement of stricter standards. Roadways would have to meet State specifications, lots in subdivisions over 100 acres would need to be a minimum of five acres, and for the first time in the history of the county, builders would be required to get Board approval for development to convert other zoned areas to residential property (Hachey, 1996).

I called Ron Hachey, Planning Director, to gain information on the process of converting previously zoned properties. He returned my call by leaving a message on my machine which indicated the process, and ended with "Making the change will not be a problem, but it will take you some time" (Hachey, 1996). When I finally set up an interview with Mr. Hachey he indicated that it was not the intent of the Board to stop persons from doing as they chose, only to ensure that the action was acceptable to the neighbors, and that it conformed to the regulations. It was his impression that the expense required for planning in accordance with the regulations was a deterrent to further large scale development.

While the new development sites may require additional planning, they continue to consume the landscape. In addition, the older developments such as Twin Lakes, Dogwood Valley, Wildwood Valley, and Foxwood are grandfathered, immune to the

newer regulations. Hachey stated that "this would include over 100 previously development areas, and about 100 more". He clarified the statement by citing a little known clause that predates the first zoning ordinance of 1975. "Any landowner that had previously applied for sub-division status on their land would be allowed to utilize it for any purpose until such a sale occurred." Because these applications were made prior to any zoning ordinance was enacted, landowners are not subject to abide by subsequent regulations.

On May 23, 1995 the language of the previous zoning ordinance was updated. Some adjustments were made to redistrict or redefine existing properties. According to a 6/96 interview (Hachey, 1996), the amount of land dedicated to conservation and floodplain districts has been reduced from 52% to 34%. Residential and business properties reportedly make up less than 6% of Greene County. The size of the agricultural district was technically increased from 41% to over 60%, but a farm is now defined as any property from which an income of \$1000 is produced (Kiracofe 1). Frank Sweet, County Cooperative Extension Agent noted that, "... our best agricultural upland soils are the best developable soils. They have the best potential for a drain field, they have the best potential for wells, they have the best potential for lots of things." Sweet and his colleagues at the

Thomas Jefferson Planning District recently completed an extensive soil survey of the entire county. The district offers a descriptive analysis of water availability, soil types, and information regarding wells, potential for recharge, aquifers, and the effects of topography on drainage patterns. It was completed to offer a guideline for planners and developers, but only recently (1995) was this 1991 survey accepted into the comprehensive plan. Sweet indicated that "We still have far too many sub-divisions on land zoned as Agricultural" (1996).

A 1990 Planning Commission study indicates that if all of the approved sub-divisions were completely developed, the maximum number of homes in Greene County would reach 40,000. Hachey believes that this number will more accurately reflect the total population, while others (Deutch A3) believe the analysis would support a population of 70,000. At the current rate of growth, the build out would be completed in less than ten years, not only threatening, but eliminating the agricultural industry in Greene County. In 1992, less than 20 commercial farms remained in the county, while hundreds of others have succumbed to the advent of real estate development (Kirakofe 17). The creation of subdivisions bordering the Shenandoah National Park late in the 1960s, created a land rush reminiscent of the 1716 journey of Alexander Spotswood to the region. The park protects only a portion of the county from human influence on the landscape. The

remaining soils, which previously supported agricultural interests, now offer the foundation to an endless stream of cul de sacs which completely change the character of Greene County, Virginia.

Personal Responses to the Changing Landscape

The Community Response:

The term conservation is usually associated with the safe keeping or preservation of something valuable. In the book Saving America's Countryside (1992), the authors encourage community members to manage natural resources, retain farmland, preserve historic places, and to protect scenic vistas (2). This introduction to the concept of rural conservation assumes two things. First, that the community actually values the rural landscape; and second, that the community is functional enough to take the necessary actions toward preservation. The Rural character of Greene County, Virginia has long been defined by the lushly forested Blue Ridge Mountains and the nutrient rich upland soils. The questions remain, do the citizens of Greene County value this spectacular natural landscape and are they willing to protect it?

Beginning in the 1920s, a strong interest in preserving natural resources, creating recreational lands, and a dedicated effort to develop a system of National Parks imposed federal policy on Greene County. In 1926, Congress proposed 251,000 acres along the Blue Ridge be dedicated to create the Shenandoah National Park. Sixty-two Greene County families were displaced from the homes and the only lifeway they knew. The badly bruised landscape took years to revert to its natural splendor. The

people were angered. What they valued were their homes.

In the early 1970s it was the Commonwealth of Virginia that imposed policy on Greene County. For the second time, landowners were told what they could and could not do with their property. The proposal of a zoning ordinance divided land into parcels for which it was best suited. This mandate affected all of the citizens who, irrespective of government interference, continued to use the land as they saw fit. The badly bruised landscape may never recover, but what the people valued were their individual rights.

It is values that provide the common threads necessary for founding a sense of community. Research indicates that with an increase in population, residents are more likely to avoid affiliation with strangers (Heller et al 159). The result often fractures a once shared sense of values. Social problems, like those that threaten the rural heritage of Greene County, present value dilemmas. The question is, do the citizens of Greene County value their natural environment ?

Shortly after moving to Virginia, I met Judy Ellis (name changed upon request). Ms. Ellis, a third generation resident of Greene County, is frequently honest regarding her distaste for persons who live here, but were not born here. I had just become aware of a water supply crisis in Greene County. The county has identified the potential for 70,000 residents and an



increase in business properties, while the Rapidan Service Authority can currently supply water to less than half that number. Ms. Ellis responded with the comment, "I got water in my well. Don't you have water in your well?." The Service Authority offers a similar, yet a slightly more politically correct answer, noting that the current needs of the population can be met by the existing facility. Most social intervention strategists would agree that it is difficult to preserve a natural resource if persons are unwilling to admit to, or are unaware of the problem. It would be different if this were an isolated incident, but faced with the loss of thousands of acres of trees to Gypsy Moth infestation, a local Conservation Officer noted that he was "confident that some newer species would take over (replace) the Oaks".

Betty Arbagast grew up alongside U.S. Route 33, when it was lined with farms. She recalls childhood chores which included gardening, feeding pigs, and tending to the orchard. "What's happening now is terrible. They are just cutting down and plowing under all of the trees. When the other counties began to be developed, you could always count on a lovely drive through Greene if only to remind you of the splendor of trees" (Arbagast, 1996).

When Ruth Porter began to trace her family lineage, it turned out that both sets of grandparents had farmed land near Swift Run

Gap. She herself was raised on a farm just outside the boundaries of the Shenandoah National Park, a story that she has captured in the Shifflett Family History. Both women now live in other counties, having made the choice to sell their family farms. Essayist Wendell Berry notes "At present our society is almost entirely nomadic, without the comfort or the discipline of such (regional) memories, and it is moving about on the face of this continent with a mindless destructiveness, of substance and meaning and of value" (68).

Six times I have hiked the Appalachian Trail as it winds through the territory of Greene County. Each time I have recorded my observations, making note of the trees, rocks, and wildlife. Each time I have been stunned by the eye sore of rampant development immediately outside of the Park's boundaries. Three of the most recent trail guides for the region (Heatwole, 1995, Conners, 1988, Golightly, 1986) also report "eye sores" along the trails here. At a recent meeting of Conservation Department officials it was reported that Greene County had more development near park land than any of the bordering counties (Sweet, 1996). It has also struck me that the creation of a 105 mile paved road across mountain peaks is an odd way to preserve the scenic beauty of a region.

The citizens of Greene County have done a good deal to preserve a number of historic sites in the region. The Lafayette

Hotel, built in 1840, is currently being restored, and the Golden Horseshoe Inn, having hosted Stonewall Jackson weeks before his death, remains intact. Several cemeteries continue to be maintained by county workers and family members, while Civil War reenactments draw large crowds. History is also preserved through monthly meetings of the "Daughters of the Shenandoah", a local group with a mission to preserve the stories, crafts, and culture of the families who had been displaced from the region now known as the Shenandoah National Park.

The actions and words of the local residents would lead one to believe that they do not value the natural splendor of their land. The only actions toward the preservation of the forested mountain slopes or agricultural upland soils have come in the form of government mandates, a social change strategy that has not endeared the citizens of the county to outside agencies. Accounts of local history by Johnson (1976), Reeder and Reeder (1978), Conners (1988), and Lambert (1989) all report widespread distrust of outsiders and outside interference. As we near the turn of the century, it has become evident that the reaction of the native community members to the newest settlers has been one of withdrawal from, rather than increased affiliation with their new neighbors (Shifflett, 1996 and Ellis, 1996).

Change can either come from government mandate or grass roots participation. To this point the only grass roots

participation from local residents has been to preserve the historical sites of the region. Poor planning for the preservation of natural resources and decline of acreage dedicated for farm use continue to threaten the rural heritage of Greene County, while the scenic vistas offer only compromises. The value dilemmas continue to present themselves. As for the sense of community, one local resident noted, "It becomes two different counties, two distinct cultures. The people who live in the sub-divisions on the other side of the Corner Store, they work in Charlottesville, they commute. They have no knowledge of the rest of the world in Greene County."

The Politics of Water, The Principles of Apathy:

In the sole publication on the history of Greene County, Thomas Johnson noted that a growing county needs plenty of water, of which Green County has an ample supply. He lauded the newly formed Rapidan Service Authority as a resource that would assure "adequate water for personal and household demands" (104). Twenty years later, Frank Sweet, of the Culpeper District Water and Soil Conservation Department, identified water supply as the most significant threat to the future of Greene County (1996).

The Rapidan Service Authority (RSA) was formed in the late 1960s to "meet the needs of a growing region" (Greene County Services Directory 8). Shortly after its formation, Johnson projected that a uniform water supply could attract industry to the area (104). State Geologist James Calver noted, "The presence or lack of a sufficient quantity of good-quality water determines, to a large measure, the population and economic trend of the region" (89).

To meet their needs for water, early settlers utilized the resource of runs, or tiny streams that originate along the Blue Ridge Mountains. Early growth along Swift Run Gap followed the direction of Swift Run, as did similar settlement to the north (Rapidan, South, and Middle Rivers) and the south (Roach and Lynch Rivers). Still, prior to the RSA, early residential development efforts required drilling wells.

With the population increasing, and the redistribution of real estate away from the mountains, the county recognized the need for the development of a water resource that could serve the county seat of Stanardsville, as well as projected growth areas. But the early population projections of the RSA, like those of all county service organizations, understated the demands of the future. The rapid growth, while not yet outdistancing the available services, required extensions on already taxed water pipes. In an interview focusing on threats to the ecology of the county, Frank Sweet (1996) reiterated the problem: "...How many lines can you add on the Rapidan Service Authority (RSA) when there storage hasn't increased? How far does a support line have to go?"

The Greene County Board of Supervisors has chosen not to address the water issue in the current six year plan, a plan ending which extends into the new century, when the census could for the first time, reveal more residents than the RSA is capable of serving. This is an area where little, if any government influence has been exerted. The Rapidan River, the primary watershed in the county, is subject to its own threats. Flooding in the summer of 1995 caused extensive damage to the water treatment plant, and nearly all of the available treated water was depleted before repairs were made. Eight bridges cross the River between its source and the plant, leaving the opportunity for an environmental threat in the form of a fuel spill.

Sweet and his colleagues have suggested the formation of a reservoir. The suggestion has in no way been acted on, nor has it even prompted cursory discussion. An additional suggestion raised by Sweet at a town meeting called for a gravity feed water supply originating in the pristine Blue Ridge Mountains. While Sweet occupies one seat on the Board of Supervisors, the Rapidan Service Authority offers two members. They quickly vetoed the idea, indicating that the existing station will meet the needs of the County well into the next century.

Sweet also came against criticism from Virginian's for Wilderness, a local environmental group. In their quarterly newsletter, they called the suggestion "irresponsible and short sighted" (4). They offered the letter to the editors of the Greene County Record, who refused to print it. One thing is known by consumers: If a water main break occurs anywhere east of the centrally located plant, service to the entire eastern quadrant is interrupted. This concern is compounded by a review of the detailed comprehensive plan for the County. The plan called for the rezoning of the eastern region, near the crossroads of US 29 and US 33, as the primary residential and business growth areas.

Water management begins with soil management, as the fate of precipitation largely depends of what type of soil it falls upon. Historically, abused croplands and overtimbered forests have contrasted soil conservation efforts. More recently the fate of

the county's soil has met with natural disasters that have eroded the stream banks and stripped the mountain slopes. Falling rain on the slopes of the Blue Ridge is often intercepted by vegetation and soil, however if the clay and stony loam soils that define the mountains are saturated, heavy rains can rapidly induce flooding along local streams. Infiltration is additionally limited by an insurgence of paved roads and parking lots that attempt to meet the needs of a more nomadic community membership.

In his book, Rivers of Empire (1985), Donald Worster explores the challenges of those who inhabit the arid West, focusing on their need to control the limited resource of water for the purposes of personal and agricultural use. Worster reviews the pitfalls of both local accommodation and regulatory (government) approaches to the problem. In concluding his text, he offers a renewed call for a land ethic, where those who dwell in the arid west might learn to accommodate their lifestyles (work and leisure) to a routine less dependent on water. In contrast, few Greene County residents would even admit to the potential threat of a limited water supply, and their belief is reinforced by the inactivity of local government.

Population growth in Greene County will bring demands for more water. Without further growth water resources may not be threatened, but people have learned that they can make a profit



off this land. Personal conservation seems to have little effect on the political decision making process. It only reinforces perceptions held by members of the RSA who believe that there is enough water to go around. Those perceptions may be enough for prospective real estate developers who actually use the terms population growth and progress in the same sentence.

Children in the Meadow:

Acorns pop hard when they leave, harder when they land, like hail against the metal awning. The mulberries are firm, the first to offer violet and reds. Yellow poplar are just that. We are walking through a tunnel formed by the roadside offerings. Two miles from the county line, the thick foliage opens to fields on the left and right. On an overcast day, the grey sky drops to the ground, and the uplifting of the land melts with the clouds offering only an endless horizon. But this is a crystal clear day; and to the left, the Blue Ridge erupts from the ground. Together we count eight peaks. To our right are three hundred acres owned by Dan Harlow. For the time being the acreage comprises a working farm. But last month, Dan sold his land to a developer. Within three weeks the Planning Commission had approved 160 home sites.

The first census of Greene County was completed in 1850. Officials recorded 4,400 residents. One hundred and twenty years later the total census had only risen to 5,248. The first county map completed in 1866 lists three families settled along this stretch of road. One hundred and twenty years later, only eight houses were added.

I've asked for and received permission to collect some samples from the land, and to explore the meadow. I collect three wildflowers for later identification in Peterson's Guide. More than anything else, the meadow is overgrown with unidentifiable grasses. I sketch what I can while Laura runs up and down a nearby slope, arms extended, ready for lift off. When I reach her, she is resting against the beating heart of the earth.

By 1990 the census of the County had reached over 12,500. The road was filled with cul de sacs and totaled over one hundred dwellings (with more approved). Reporters have announced an expected population of 70,000 soon after the turn of the century. We are part of the problem. We too, bought a piece of property from someone who, like Dan Harlow, was banking on personal land holdings to finance a comfortable retirement. We came here to be "out in the country", but the rural flavor of the county is being threatened by real estate development trends. I wish they wouldn't build houses here.

Stratocumulus clouds drift apart. I try to explain where the color of the sky comes from. Less dust equals more blue. The reddish color comes from the setting sun. The complex clouds in the distance show us that winds are passing over the Blue Ridge Mountains. All this is of little interest to Laura. She names the

cloud formations, but all I see are Rorschach ink blots. I close my eyes and think too much. She breaks the silence and asks me who will paint the sky tomorrow night. I begin to formulate an educated response, but stop myself with an honest answer, "I don't know." I wish they wouldn't build houses here. I wish they wouldn't build them anywhere.

The Natural and Cultural Landscape of Greene County, Virginia  
A Literature of Loss, A Call to Action

The recorded history of Greene County can be considered a literature of loss. Gone are the lushly forested mountain slopes that once greeted early settlers. They have been replaced by a scattering asphalt that runs in all directions through a second growth (or third) covering. Vanishing are the farmlands that defined the agrarian culture. The depleted soils now serve as the nutrients for expansive real estate development.

The rural heritage that once so clearly defined Greene County, was endowed with natural resources. Historically, the predominant tree of the region was the American Chestnut. It provided tannin for curing leather, large quantities of nuts used to feed livestock and to trade for goods, and lumber for cabins and furniture. In addition to the Chestnut, the forest carpet offered, and the sawmills and furnaces took, Pine, Yellow Poplar, Oak, Hemlock, and other species. The nutrient rich upland soils offered tobacco, grain products, squash, beans, corn, and wild fruits amongst others. The waterways of the county offered rich floodplains, irrigation, and water for use in the home. These resources are now severely compromised, if they exist at all.

Overpopulation "is a relationship between the size of the population and a region's level of resources" (Rubenstein 74). The ability of Greene County to support a growing population is determined by the available natural resources and the ability of humans to manage those resources. Historically, the use of resources by the citizens of Greene County has been characterized by overuse. While a build out analysis suggests that 70,000 persons could live in the county, it is clear that dwindling resources cannot support such numbers.

In, The End of Nature (1989), author Bill McKibbin suggests that we think of nature and human society as separate entities (61). Greene County is at a crossroads. Indiscriminate land use is threatening the natural and cultural landscape. Resources are overtaxed by a growing population. The other direction calls for a community which includes the human and natural world together in harmony, a concept known as conservation.

The land ethic, first proposed by conservationist Aldo Leopold in 1949, suggests that the individual is "a member of a community of interdependent parts" (203). The boundaries of this community may include but are not limited to the soils, waters, plants, and animals (204). But the term conservation is usually associated with the preservation of something valuable, and to some degree it has been established that the forests and farmlands of Greene County were not valued by native community

members. Perhaps the answers can be found amongst the influx of new settlers.

In 1970, the population of Greene County was slightly over 5,000 persons (Johnson 12). By 1990, the population had risen to over 12,000 and is now estimated to be over 20,000 (Collins 34). While these levels of growth are clearly not in the best interest of the County, they do offer conservationists a glimmer of hope. Most of the new residents have relocated from other counties and states, bringing with them their own sense of values. While conflicting values may not immediately offer a broad sense of community, they could do so on a more regional level. Most of the new settlers live on one to five acre lots in planned communities, the cul de sacs that line U.S. Route 29. These planned communities offer opportunities for neighborhood affiliation, out of which may spring a shared sense of values, and new hope for community action.

While the present rate of population growth may be alarming, by now the native community must be in the minority. Native community members adamantly fought government interference in the form of the Shenandoah National Park and the restrictive zoning ordinances. Natural succession provided for a second growth forest. Community succession, by definition, culminates in the establishment of a biologically stable ecosystem (Heller et al 122). Could this be possible? What kind of choices will a more integrated community make?

Barry Lopez once said that writing about nature could include subjects such as polar bears and sunsets, but also should focus on "...the complex biological, social, economic, and ethical relationships among these things" (89). He suggested that, in striving toward justice, nature writing could be a literature of hope (90). The landscape of Greene County has been forever changed. History is just that. The future of the land literally rests in the hands of its present landowners. Most stories have endings, but there can be no real ending to a story set in the natural world.



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