



The Middlebrook-Brownsburg Corridor



A Survey of Cultural and Natural Resources







Valley Conservation Council

COVER PHOTOS (from top)

- a. Middlebrook late winter evening, looking northeast. Robert P. Brown III
- b. Adult male wild turkey, a game species dependent on extensive tracts of forest land such as those of Little North Mountain. *Bob Lea*
- c. Eidson Creek, Augusta County, near junction of Routes 708 and 710. Robert P. Brown III
- d. Jump Mountain and Maxwelton Farm from Route 602, Rockbridge County. *Robert P. Brown III*
- e. Middlebrook Road (Route 252) and Dutch Hollow Road (Route 726) intersection, between Newport and Brownsburg. *Robert P. Brown III*



About the Valley Conservation Council

Established in 1990, the Valley Conservation Council (VCC), a non-profit citizens' organization, promotes land use that sustains the farms, forests, open spaces, and cultural heritage of the Valley of Virginia. Its efforts focus primarily on private citizen involvement in voluntary land conservation measures and the establishment of sound land use policy throughout its 11-county service area, from Frederick in the north to Botetourt in the south.

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The Middlebrook-Brownsburg Corridor:

A Survey of Cultural and Natural Resources

Introduction

The Middlebrook-Brownsburg Corridor is a priceless example of the rural landscape of the Valley of Virginia. Winding its way through historic and pastoral southern Augusta and northern Rockbridge counties, Route 252 (alternately known as the Staunton-Lexington Turnpike and the Middlebrook-Brownsburg Turnpike) has served as an important corridor between Staunton and Lexington for more than 175 years. The villages and crossroads that grew up along Route 252 provided local markets and necessary services to farmers living in the surrounding countryside. Today, the descendants of many of those early farmers and newcomers live in the area, tending to one of the most beautiful and well-conserved farming regions of the Commonwealth.

Route 252 is more than a scenic road through the past. The families who live on the farms and in the communities along this byway face many of the same issues foremost in the minds of their more urbanized neighbors—how to plan for a future that includes population growth and increased demand on resources, yet allows for the conservation of the rural character and agricultural way of life that have defined this area since the mid 1700s.

Purpose of the Study

This study showcases and describes the many outstanding natural and cultural features of this unspoiled area. Its purpose is to both raise awareness of these resources among residents and government officials and to encourage locally initiated land conservation efforts. The goal is to provide information that can be used in making public and private land use decisions. It is hoped that the timing

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of this compilation will enable the region to protect its uniqueness as it faces development pressures.

The Project Area

The study area, referred to as the "Middlebrook-Brownsburg Corridor," lies in southern Augusta and northern Rockbridge counties. The general boundaries for the area include Arbor Hill on the north, Route 11 on the east, Rockbridge Baths on the south, and Little North Mountain on the west. Characterized by long parallel ridges and intervening valleys, the study area is part of the Valley of Virginia. The northernmost portion of the study area lies in the upper Shenandoah Valley, while the southern portion is in the James River basin. The major transportation route is the north-south Route 252 (the former Middlebrook-Brownsburg Turnpike).

The specific boundaries for the project area are determined by watersheds. Within the Middlebrook-Brownsburg Corridor is the watershed divide between the upper Shenandoah River and the upper James River basins. The three major watersheds in the project area are the upper Middle River in the Shenandoah basin and Hays Creek and upper Maury River in the James River basin. These watersheds are the basis on which much of the information for this report was gathered.

Study Components

This study is presented in three parts: I. Cultural Resources; II. Natural Resources; and III. Conservation Options.

- * Cultural Resources include archaeological sites, historic structures, and local history. Information sources include residents and scholars, architectural surveys of the two counties, local histories, and other library and government records.
- * Natural Resources include water, geology and soils, forests, and wildlife. Information was gathered from natural resource professionals from local, state, and federal agencies as well as from published materials.
- * The Conservation Options section describes a number of conservation tools that can be applied in the Middlebrook-Brownsburg Corridor, as well as current local land use policies.

Cultural Resources

LITTLE ARCHAEOLOGICAL OR HISTORICAL RESEARCH focusing on the Middlebrook-Brownsburg Corridor has been published. Written histories of Augusta and Rockbridge counties contain bits and pieces of information about Native American sites, European frontier settlements, and the establishment of several communities. Families with longstanding ties to the project area share a rich oral tradition, as well as personal documents and photographs, and their stories and remembrances have enriched this overview.

Native American Settlement

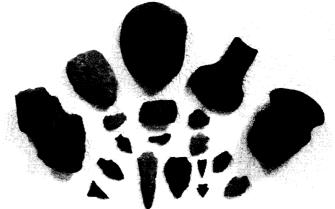
Numerous archaeological sites known to local residents are reminders of the first people to inhabit the Middlebrook-Brownsburg Corridor. Collections of spearheads from plowed fields

indicate the travel and trading patterns of the first people thousands of years ago: in addition to local materials, chert from eastern West Virginia was carried by native Americans through the saddles and gaps of Little North Mountain, and even rhyolite from the Maryland Blue Ridge appears in some collections.1

Only nine Native American sites are formally recorded with the Virginia Department of Historic Resources (VDHR) for the Middlebrook-Brownsburg Corridor.² Based on archaeological studies of other parts of the Ridge and Valley, predictive models for site locations

indicate that Native American settlement in the project area should be intensive in places, particularly along water courses and near springs and gaps. Although poorly known at present, these sites are our primary link to a people who lived in the upper James and Shenandoah valleys for approximately 12,000 years.

Archaeologists divide the era of Native American occupation prior to European contact into three cultural periods tied to the changing ecology of the region: PaleoIndian (ca. 9500-8000 B.C.); Archaic (ca. 8000-1500 B.C.); and



A small selection of prehistoric Native American artifacts from the Swoope

area. Spanning several thousand years, stone and clay artifacts such as these have been found on many farms in the Route 252 Corridor and mark the past settlements of Native cultures in the upper Valley.

ROBERT P. BROWN III

Woodland (ca. 1500 B.C.-A.D. 1500). These are identified by characteristics unique to the particular period, including spearhead shape and size, pottery decorations, tool types, and site locations.

PaleoIndian Period

The PaleoIndian period marks the initial immigration of people into North America. Sites from this period are rare, and to date, none have been documented in the Middlebrook-Brownsburg region. Affected by a climate much cooler than ours today, small bands of hunters and gatherers moved with seasons, probably settling at one place for no more than a few months.

Archaic Period

Most of the Native sites documented in the Middlebrook-Brownsburg region were inhabited for thousands of years, and five date to the Archaic period. In fact, three were first occupied around 8000 B.C. at the beginning of the period. Large scatters of debris (chips) from tool making have been located on small stream terraces, and these date to the end of the period.³

By the end of the ice age, the climate in the eastern United States became more seasonally diversified. Grasslands were invaded by forests, and the numbers of smaller mammals increased. During the early and middle portions of this period (around 7500–4000 B.C.), the boreal forests (fir, spruce, and pine) were replaced by deciduous forests (chestnut, oak, hickory). For Native peoples there was a shift from hunting to more generalized foraging.

Meandering rivers in the Shenandoah Valley created broad, open flood-plains which allowed for the growth of edible plants. Large base camps, home to several hundred people, were located on terraces overlooking rivers. Because of the development of food storage techniques, as well as more predictable food sources, Native Americans of the Late Archaic period developed a more sedentary lifestyle. Increases in population from 3000–1500 B.C. are believed by archaeologists to have led to the beginnings of social rank and territorialism; throughout the Shenandoah and James valleys, Native peoples began establishing group boundaries which would carry through to the time of European contact.

Woodland Period

The Woodland period, beginning at approximately 1500 B.C., marked the introduction of clay pottery and ended just before contact with early European explorers and settlers. By the end of the period, pottery composition and design were regionalized and could indicate tribal affiliations.

One of the most outstanding features of the Woodland period is the burial mound. Early in the period, mounds contained only a few burials, probably the remains of people of high rank. Later mounds were accretional, meaning that they began at ground level and burials were added periodically until the mound contained as many as 2,500 burials. One of the best known accretional mounds in western Virginia, the Valentine Mound, is located in the Middlebrook-Brownsburg region near the confluence of Hays and Walkers creeks. In 1901, Edward P. Valentine of the Valentine Museum in Richmond excavated this mound, identifying 80 human skulls, over 400 human skeletons, beads, pendants, pottery, and dog skeletons.⁴ As a consequence of these and later excavations and the cultivation of the mound, only a faint rise is now visible on the floodplain. More recent archaeological studies associated with the realignment of Route 602 resulted in the location of a probable village site associated with the mound, as well as several outlying campsites.⁵

The bow and arrow was introduced into the eastern United States during the middle of this period (A.D. 700), and the true 'arrowheads' (triangular points) are common in local artifact collections. Agricultural tools such as hoes and axes were made of greenstone, and grinding stones were widely used. By A.D. 1000, corn, beans, and squash were introduced into the region, and agriculture became a way of life, although hunting and gathering was not entirely abandoned.

The sedentary lifestyle resulted in the establishment of major settlements near rivers, surrounded by smaller hamlets along streams and springs. Woodland period sites are often located on levees or terraces above floodplains. By the end of the period, the central settlement was palisaded or encircled by a high fence of posts set closely together and chinked with brush. Cultivated fields were located outside the stockade, and harvested crops were kept inside in storage pits similar to root cellars. Village sites were periodically moved due to soil depletion and lack of game.

The Little Ice Age, which began around A.D. 1300, must have affected the ability of the Native peoples to grow the necessary corn to feed their growing populations. Late in the period, a cooling trend led to the expansion of grasslands and the reappearance of small herds of bison. By the end of the period groups of Iroquois from the Northeast were traveling to the Valley to hunt for meat, hides, and furs. Trade networks along the Appalachians connected indigenous peoples throughout the eastern United States, and when the Spanish settled the Southeast in the 16th century, and the English in the 17th century, their trade goods were moved along these routes. In addition to glass beads, copper, and other objects, these routes conducted diseases against which the Natives had no immunity. All of these factors led to a depopulation of the settled peoples of the Shenandoah Valley by the time of European settlement.⁶

Historic Resources

A total of 245 standing structures (houses, farming complexes, mills, churches, stores, and schools) and 11 cemeteries are on record with the Virginia Department of Historic Resources (VDHR) for the Middlebrook-Brownsburg study area. The bulk of the information comes from the work of architectural historians Ann McCleary and Pamela Simpson, who researched Augusta and Rockbridge counties, respectively, in the 1980s. Seven structures in the Route 252 Corridor are individually listed on the Virginia Landmarks Register and the National Register of Historic Places, as are two cemeteries. Four schoolhouses are included in a thematic nomination for Augusta County Public Schools. The village of Middlebrook, which reached the height of its prosperity in the 1880s, is designated as a historic district, the only one in rural Augusta County. Brownsburg in northern Rockbridge County has also been designated a historic district, as has the Wade's Mill Complex near Raphine. A list of nationally registered and surveyed historic properties is included in Appendix I.

The Frontier: Taking Up Land, 1730-1760

In 1701, the Colonial Virginia Council devised a policy whereby settlers would receive land in exchange for strengthening the British presence on the frontier. The Virginia colony envisioned the Shenandoah Valley as a buffer against attacks by dispossessed Native peoples, including those of the Iroquois Confederacy to the north, as well as refugees from the tribes that only 100 years earlier had populated the Piedmont.

Cultural Resources

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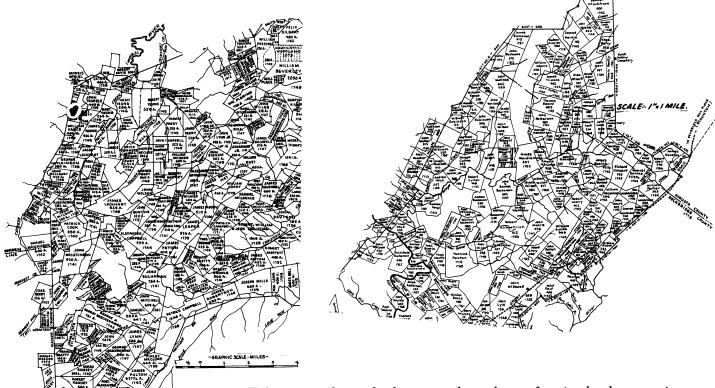
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Southernmost section of the 1954
Hildebrand Map of the Beverley
Patent, Including Original Grantees,
1738–1815 (left) and northernmost
section of the 1964 Hildebrand Map
Showing the 92,100 Acre Grant for
Benjamin Borden (right). The large
majority of family surnames are
Scots-Irish, and many are known in
the Middlebrook-Brownsburg
Corridor today. Facsimiles, Roanoke
Valley Historical Society, Roanoke.

Tidewater and out-of-colony speculators began forming land companies and petitioned the colonial government for land grants in the west. A few families were beginning to trickle into the upper Valley from the north. By 1732, John Lewis and several families had settled near present-day Staunton, but they did not possess a claim of title to their land. Colonial officials in the Tidewater, to gain revenue and assure allegiance of these settlers to the Virginia Colony, began to grant patents to reaffirm Crown control.

On August 12, 1736, Governor William Gooch granted a patent for 118,491 acres to a prominent Tidewater resident and land speculator, William Beverley. Known as Beverley Manor, the grant was located in what is now the center of Augusta County, from Middle River near Verona south to the present-day Rockbridge County line. Beverley was certified to sell land to future settlers as well as those who already occupied lands within the grant boundaries, and early records show that the Lewis family and their contemporaries received formal title by paying Beverley one English pound per forty acres. In his petition for the grant, Beverley wrote that he could people the upper Shenandoah ("Shenadore") with immigrants from Pennsylvania. Within ten years the grant was so heavily settled by the Scots-Irish from northern Ireland that it became known as the "Irish Tract."

In 1736 a land grant of 100,000 acres was offered to Benjamin Borden, a New Jersey land speculator. ¹⁰ Borden's grant encompassed much of present-day Rockbridge County and adjoined the Beverley Manor grant in Augusta County. Borden offered tracts of 100 acres to anyone who would build a cabin, with the opportunity to purchase more at fifty shillings per acre. Within three years, he claimed a patent of 92,000 acres.

Settlement had apparently begun in this area by 1733 when the Hays and Walker families settled along the creeks that bear their names today. When the Borden patent was formally issued in 1739, Hays Creek was used as a reference point in describing the tract, indicating that Borden dealt with earlier settlers when dividing the land. The John Walker family from Pennsylvania is reported to have settled near the base of Jump Mountain, and a home and mill were located along Walkers Creek Road (Route 602). As was the case with the Beverley Patent, most of the "squatters" on Borden's land had their land

surveyed, purchased the property, and received legal title. Ephraim McDowell and his son John were probably the first to build on Borden's grant, the latter receiving 1000 acres in exchange for surveying Borden's land. McDowell's tract was near Timber Ridge, on the west side of the "Indian Road." ¹¹

Augusta County was created from Orange County in 1738 and until 1770 included all the land west of the Blue Ridge to the "utmost limits of Virginia," well beyond the Ohio Valley. Rockbridge County was eventually formed from Augusta and Botetourt counties in 1777.

Sections of the road now known as Route 252 probably developed from bridle paths soon after European immigrants came to the area. No such road is depicted on Fry and Jefferson's 1775 "Map of the Most Inhabited Parts of Virginia," but by 1807, a road from Staunton to Lexington by way of the towns of Middlebrook and Brownsburg was depicted on the map of Virginia commissioned by James Madison.

The Great Migration

The search for land and religious freedom and, by the early 1740s, famine, sparked a wave of Scots-Irish migration that ultimately led many to the Valley of Virginia. Scots-Irish refers to those whose families migrated from Lowland Scotland to Northern Ireland (Ulster) after 1610 and then emigrated to America between 1717 and the time of the Revolutionary War. The large majority could not afford their passage and entered the country as indentured servants, or redemptioners. They sold their services in return for passage, receiving food, shelter, medical attention, and clothing for the period of indenture. The usual price was \$65, and the average period of indenture was about five years.

The Scots-Irish were dissenters from the Church of England, and their Presbyterianism soon became the primary denomination of the upper Valley. Its importance is reflected in the many early Presbyterian churches in the

Middlebrook-Brownsburg region. The North Mountain Meeting House was organized by 1740 in the headwaters of Folly Mills Creek. Bethel, located at the present-day intersection of Routes 693 and 701, became home to this congregation about 1779, and the North Mountain Meeting House fell into disuse. By 1748, Brown's Meeting House (later Hebron) was formed from the North Mountain congregation; it was located near present-day Swoope. ¹³

The earliest house of worship in Rockbridge County was Timber Grove Meeting House, located near Fairfield. In 1741, Presbyterian minister John Craig, who helped organize thirteen congregations in the upper Valley, baptized several children there. Within

five years, another log meeting house was built three miles south of the original building near present-day Timber Ridge Stone Church. It had split log seats and an earthen floor. In 1755, this was replaced with a stone structure; some of its walls are incorporated into the existing church. In 1746, the Court of Augusta recognized the log New Providence Meeting House as a house of worship. It was originally located near Greenville, but was moved to its present location in northern Rockbridge County sometime after 1754. The brick building near the intersection of Routes 726 and 252 is the fourth structure built by the congregation at this location. The Old Providence Stone Church,



New Providence Presbyterian Church, north of Brownsburg. The brick building near the intersection of Routes 726 and 252 is the fourth structure built by the congregation (organized in 1746) at this location,

marks Register and the National Register of Historic Places.

and is listed on the Virginia Land-

erected in 1793 at the intersection of Routes 620 and 613 northwest of Spottswood, is located at the site of the South Mountain Meeting House. The Old Providence congregation was part of the New Providence Meeting House until a rift occurred in 1789. The members who separated met there until 1859 when a new church was built. Afterwards, it was used as a school, residence, general store, and social hall. 15

Germans in the Middlebrook-Brownsburg Corridor

In addition to the Scots-Irish, small numbers of Germans who migrated from the Rhineland and Palatinate also settled in the upper Valley, as did a few English who traveled across the Blue Ridge and up the James River drainage. By 1769, families with German names (Hanger, Gabbert, Olinger) had purchased land on Eidson Creek. Enough German families came to the Dutch Hollow Branch area that this tributary to Walker Creek was named for them. By 1789, a sufficient German community was established so that a log Meeting House (used by Lutheran and Reformed congregations) was constructed near the present-day St. John's United Church of Christ in Middlebrook. The families of German heritage maintained their identity in their tight-knit settlements, such as the one located at Sugar Loaf Mountain. In

The Church of England in the Upper Valley

The official Church of England maintained a presence in Augusta County through the Revolutionary War period. The Virginia colony was laid off into Episcopal parishes, as much for administrative as religious purposes. Vestrymen were elected by qualified voters (freeholders), and played an important role in overseeing public morals, the care of the poor, and resolving boundary disputes between landowners.

While the church was in Staunton, the glebe, or farm to support the minister, was a 200-acre tract at the base of Little North Mountain near present-day Hebron. Farm buildings were constructed and a plot was laid off as a public burying ground. This cemetery, which contains some of the earliest European graves in the upper Valley, is listed on the Virginia Landmarks Register and the National Register of Historic Places. In 1762, the vestry authorized the purchase of 100 acres within ten miles of Staunton for the construction of a poor house. Located on Route 252 between present-day Arbor Hill and Middlebrook, this facility was opened in 1766 and was taken over by the county after the vestry was dissolved in 1780.18

Early Farms: Size and Land Use Patterns

Most of the farms within the Beverley and Borden patents averaged 300 acres. A few landholders amassed large parcels of 1000 acres or more, and much of their acreage was rented out to those who could not afford land of their own. The earliest tracts were centered around arable land on river bottom terraces; by 1760, all land along the major watercourses had been purchased.

The original Beverley and Borden settlements followed the classic "backcountry" pattern of tracts sharing common boundaries, dispersed farms, mixed grain-livestock farming, and regional self-sufficiency with a minimum of outside contact. ¹⁹ The initial communities often were separated by sparsely populated upland areas, and connected by a road system built around local exchanges of goods and services. Even the Great Wagon Road (Route 11) was narrow and rutted. The Augusta County court ordered freeholders to report to an overseer or surveyor for six days of labor each year to cut and maintain the public roads. In 1750, such a road was ordered by the Augusta court from John Hays' mill to Providence Meeting House. Today portions of that early road are

probably incorporated into Routes 731 (East Field Road) and 726 (Providence Road). In 1752, a road was ordered from Kennedy's Mill to John Houston's land; portions of this road are probably traveled on present-day Route 606, the Raphine Road. Hundreds of such orders are listed in the early Augusta records.²⁰

By 1750, a few wealthier families such as the Walkers, Hays, Youngs, and Trimbles, held numerous, widely dispersed tracts of land. As the land was improved, adult children took up nearby parcels and developed extended economic units with their parents. Marriages between families also allowed for the consolidation of property. The large landowners typically lived on one property, known as their "seat," leasing other lands to tenants or farmers who contracted to use the land in return for a portion of the crop grown. Once a renter, becoming a landowner was very difficult. Records show that few renters or former indentured servants ever acquired land.²¹

The primary money-making enterprise for early farmers involved livestock, especially cattle and horses. In the fall, herds of cattle were driven along the Great Wagon Road to sale at markets in Winchester and Pennsylvania. Later, local towns like Staunton and Lexington became the destination of these drives.

The type of agriculture practiced by the early European farmers was "infield/outfield," involving the fencing of small gardens and crops around the farmstead and leaving extensive open range across property boundaries for livestock. 22 Most herd owners registered a brand with the Augusta County Court. The amount of tilled acreage was small, and corn and flax were the first crops to be planted. Flax was important for its fibers, which were spun to make linen and linsey-woolsey, and its oil, which was used in making household products and medicines. Tobacco was also important to the early economy and functioned as a currency, demonstrated by the fact that the earliest taxes collected in the region were paid in this crop. It became a cash crop, primarily for Rockbridge County farmers, after the development of the North (Maury) River navigation in the late 18th century. Other cultivars included cotton, barley, hemp (which would become the number one cash crop by the time of the Revolution), oats, rye, wheat, hay, and cotton.

Early Commercial Crops and Industry

The first industry in the Route 252 Corridor was milling. Relying on a swift current or fall of water, mills were a natural addition to the Middlebrook-Brownsburg region, and they are mentioned in some of the earliest records. Used not only for grinding flour, mills ground pigments for paint, sawed wood, and fulled cloth. It was standard practice to have several different enterprises fueled by the same wheel.²³

Gristmills were the most important of the rural mills. Family farmers relied on the services of their local miller to grind their harvests of wheat, corn, and rye into the flour that was the mainstay of the diet throughout the year. Within the first two years of settlement, two mills were in operation in current-day Rockbridge County: Hays Mill and James Young's Mill on Whistle Creek (Route 669). By 1751, at least seven other farmers requested permission from the court to build gristmills. In Augusta County, the first mill was in operation by 1737 at Beverley's Mill Place, with three more following by 1746, including



The Clemmer-Hutchins Mill in Newport, rebuilt in 1923 after a fire. Originally built between 1850 and 1880, this grist mill on Moffatts Creek was one of many that served the farming community in the Corridor.



John Trimble's in the far northwestern corner of the Middlebrook-Brownsburg Corridor, south of Swoope. According to some accounts, Hays Creek Mill (on Route 724 west of 726) was operating at its present location by 1760, although the present structure was constructed in 1819. Enlarged in the 1870s, it served the community as a grist mill until 1957. It is listed on the Virginia Landmarks Register and the National Register of Historic Places. The Hays Creek Mill that stands today at the junction of Routes 724 and 726 is not the original Hays Creek Mill said to be the earliest in Rockbridge County. That mill, along with the original Hays family settlement, is probably located along East Field Road (Route 731). East Field Road (Route 731).

Another early household-based activity became an industry later in the century: the distillery. The Scots-Irish had a strong tradition of distilling whiskey, and corn, rye, and barley grown on their American farms provided a ready source of grain. In the early days of settlement, every farm had its own still and corn liquor was enjoyed at every social gathering. Whiskey was easily marketable, and in the days when the cost of transportation for surplus grains was prohibitive, converting these grains into whiskey lessened their bulk and increased the farmer's profit.

Frontier Architecture

Until the early 19th century, the most common house type in the Middlebrook-Brownsburg Corridor was the log cabin. The first structures were probably temporary, earthen floor, one-room shelters replaced by more substantial cabins within a few years. Such structures had roofs of split clapboard, weight poles, and split puncheon floors. The largest were 16 by 20 feet and two stories tall, with two rooms downstairs. Log construction was also used for farm buildings and barns. ²⁶

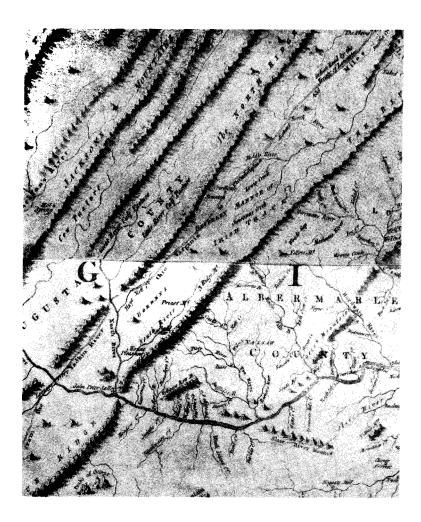
The Scots-Irish learned the building form from the Pennsylvania Germans. Logs were usually chinked with oak slabs covered with a daub of clay and lime. Notches were usually V-shaped in early cabins, with the dovetail and half-dovetail notching used on structures by the end of the 18th century. However, the Scots-Irish put their signature on this building form: the entire structure was often whitewashed, inside and out, perhaps to make the house resemble the whitewashed, stucco-covered stone buildings of Northern Ireland. Few, if any, of these early homes are believed to have survived into the present day, although portions of some may remain under later renovations.

Native and Settler Interactions on the Frontier

While the settled Native populations of the upper Valley appear to have either left or been forced out of the Route 252 Corridor many years before the granting of the Beverley and Borden patents, early Augusta court records mention small parties of 15–20 Indians regularly stopping at Staunton. It was commonly believed that the Iroquois confederacy (Onondaga, Oneida, Seneca, Mohawk, Cayuga) claimed control of the region and would regularly send hunting parties south.²⁸

According to the records of Minister John Craig the Indians were "generally civil," but by 1740, some settlers had been murdered by them. However, so few primary documents from this period have survived that it is difficult to disentangle accounts and be assured of their accuracy.²⁹

By 1742 Augusta County had formed a militia of 12 companies of 50 men each. These militia, under the local command of Colonel James Patton, were meant to keep the peace throughout the region, both among the settlers and between them and the Natives. In 1744 the Governors of Virginia, New York,



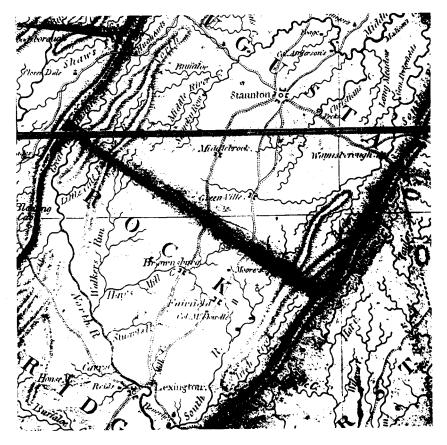
Section of the 1775 Fry and Jefferson Map of Virginia, showing the easternmost region of Augusta County. The Great Road from the Yadkin River thru Virginia to Philadelphia, also marked as the Indian Road by the Treaty of Lancaster, would later be known as the Valley Turnpike (Route 11). Of note in the Route 252 Corridor are: Courthouse Staunton, Middle River, The North Ridge, Beverley Mannor or Irish Track, Bordens, Hays Mill Cr, and the North River (Maury). Facsimile of original at the Library of Virginia, Richmond.

and Pennsylvania mediated the Treaty of Lancaster by which the Iroquois relinquished their claims to Virginia. 30

After relative peace between the Europeans and Natives for almost ten years after this treaty, the relationship broke down in the early 1750s when the "Great War for Empire" between France and England brought the conflict between those two powers to a head. The French and Indian War began in 1753 and lasted until 1764, stretching from the Canadian border to Georgia. The highly mobile Shawnee and other Algonquian-speaking tribes (Delaware, Mingo, Wyandot and Miami) were allies of the French, who challenged the English for control of the western frontier. The Shawnee conducted intermittent raids on Valley settlers from their villages between the Allegheny Mountains and the Ohio River Valley, attempting to destabilize the English presence in the region. Immigration into the Valley slowed during these years, and in some places, frontier settlers fled east of the Blue Ridge to the safer Piedmont or Carolinas.³¹

Block houses, or what came to be known as "forts," were built by settlers in the Beverley and Borden grants. Sometimes made of stone, these were not the true defensive forts ordered built by Governor Dinwiddie along the frontier; rather, they were built by the settlers as communal safe houses to be used during time of attack. The transformation of the Timber Ridge Meeting House to Stone Church in 1755 was probably in direct response to the hostilities.³²

It is difficult to determine the amount of disruption brought to the Route 252 Corridor by the French and Indian War. The few records still in existence demonstrate pulses of activity in the upper Valley. Many of the men who settled the Beverley and Borden grants are listed as members of the Augusta



Section of James Madison's 1807
Map of Virginia, showing southern
Augusta and northern Rockbridge
counties. This is the first widely
distributed map to show the stage
coach road between Staunton and
Lexington via Middlebrook and
Brownsburg. Of note is the emphasis
on the developing towns in the
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County Militia, and they received no pay for the time they spent away from their homes, families, and farms. The settlers appear to have been in a state of panic at some times; at others, their lives carried on as usual. Word of Braddock's defeat at Fort DuQuesne (near Pittsburgh) in 1755 brought "dreadful confusion" to Staunton, according to Minister John Craig, as did the 1756 attack on Fort Dinwiddie in Bath County.³³

While no such attacks were recorded within the Corridor proper, there was enough activity directly to the north near Buffalo Gap (with the murders of the Gardiner, Trimble, and Crawford families) and to the southwest at Kerrs Creek (two massacres), so that a general state of unease existed among the Beverley and Borden settlers until the war ended in 1764.³⁴ After peace was restored to the frontier, immigration to the region dramatically increased.

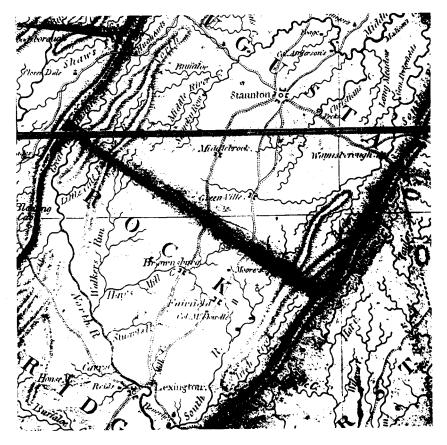
Era of Classic Grain and Livestock Agriculture, 1760–1860

By the late 1760s, rising flour prices offset transportation costs from the Valley to fall line port towns like Alexandria, Fredericksburg, and Richmond. Upper Valley farmers turned to grain production, especially wheat, to take advantage of the market. Rural settlements in the Valley began to expand as farming shifted from self-sufficiency and local exchange to a more commercial enterprise. Surplus grain production increased by 25% in the years following the French and Indian War. Along with this increase came the growth of milling operations throughout the Valley, and market towns like Staunton and Winchester became central places from which regional commerce was conducted. This marked the beginning of the town-country pattern of settlement and economic exchange, a revolution in trade and travel that greatly influenced the modern Valley.

The Revolutionary War Years in Augusta and Rockbridge

The decade after the end of the French and Indian War saw continued discussion of the rights of all freeholders on American soil, who felt they had little say in the development of regulations imposed on them by England. Several militia companies were raised during the American Revolution, and the surnames of many Beverley and Borden grant settlers appear on the registration lists. ³⁶ No Revolutionary War engagements occurred in the Valley.

The Augusta agricultural community played an important role in supplying the Continental army. By 1770, Augusta County farmers were producing more than 100,000 pounds of hemp per year, which replaced cattle and horses as the primary commodity in the region. Used for the manufacture of rope, twine, and cloth, hemp was encouraged as a crop, first by the colonial government, and later, by the state legislature. During the Revolutionary War, much of the crop from the upper Valley was sold to a rope factory on the James River.³⁷



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Until the time of the Revolution, large quantities of linen had been imported from Ireland, but that trade was interrupted by the war. During the first session of the legislature, an act was passed in support of the construction of a factory for making sail duck for Virginia's navy. Two Staunton men, Sampson Matthews and Alexander St. Clair, were appointed trustees of this enterprise, probably because of the potential for flax production in the upper Valley. Whether (or where) this operation developed is not known. However, by 1810, 5,000,000 yards of homespun linen were manufactured in Virginia, and the bulk of this came from the counties west of the Blue Ridge. From time to time, the Virginia legislature would call for quotas of clothing, wagons, and provisions for the soldiers. After the war ended, the Valley experienced a fairly rapid financial recovery, owing to the agricultural backbone of the economy.



The Development of the Staunton-Lexington Turnpike

To provide funds for much-needed roads, petitions for privately funded turn-pikes were presented to the Virginia General Assembly beginning in the 1770s. The turnpike was so named for its toll gate, a turnstile of two crossed bars turned on a vertical pole. Travelers were required to pay a gate keeper a sum based on the amount and kind of goods carried. The monies collected were to be used in maintaining the road, which was often a muddy, rutted trail.

The road now known as Route 252 had a relatively late official start during the Turnpike Era. The General Assembly voted on March 17, 1851 to incorporate the Middlebrook and Brownsburg Turnpike Company "for the purpose of constructing a turnpike road from Staunton in the County of Augusta, by the way of Middlebrook and Brownsburg, to Lexington in the County of Rockbridge." According to the Act of Incorporation, the road could cost no

more than \$400 per mile! Perhaps indicative of the road's use by local residents for agricultural purposes (moving crops and timber to mills and on to market), a provision was entered into the record: the toll company could not "charge toll on cattle moving over said road."

The Impact of Commercial Farming

The development of commercial farming operations significantly altered the character of life in the Valley. An increasing amount of acreage was cleared, profoundly changing the natural landscape. The old system of infield-outfield agriculture was replaced by a system of enclosed farming operations in which crop rotation played a key element. By the

1780s, Augusta and Rockbridge counties had become a "middlecountry" between the older society east of the Blue Ridge and the newly opened lands in Kentucky and Tennessee. ⁴¹ The upper Valley was the starting point for the original settlers' grandchildren, many of whom moved west beyond the Appalachians. This offset the practice of subdividing property through inheritance.

By the early 19th century, most upper Valley farmers were practicing mixed farming, with wheat and corn emerging as primary commercial crops. Homegrown items also were traded in local networks of barter. By 1850, Rockbridge County farmers were growing twice as much wheat (200,000 bushels) as needed for home consumption, and corn production had increased to 23 bushels per acre. According to the 1860 Agricultural Census, about one-half of the farms in Augusta County were 100–499 acres in size. Wheat, corn,



Halfway or Cold Spring and water trough on Route 252 near the Augusta/Rockbridge county line, looking south. Serving as a stop on the stagecoach line from Staunton to Lexington, its name comes from its location halfway between the two towns in the early 1800s.

Cultural Resources 17

BERT P. BROWN III



and oats were the primary crops produced on these farms; together they accounted for over one million bushels of grain. One crop that declined in importance was flax: in 1840, almost 25,000 pounds were produced, but by 1860, that number decreased by four-fifths. Maple sugar and molasses (syrup) were also produced in the two counties, with 1860 being the best year on record prior to the Civil War.

Livestock played an important role. The 1840 Agricultural Census of Augusta County indicates that swine, cattle, horses, and sheep were raised in large numbers (almost 84,000 animals). Over the course of the century, the number of livestock declined, with more acreage being devoted to grain production. However, as early as 1860 it is possible to see the impact of improved livestock breeding. For example, between 1840 and 1850, the number of sheep declined by almost 20%, but the amount of wool produced increased by 25%. Similarly, between 1840 and 1850, the number of dairy cattle increased only 4%, but the amount of butter produced increased by 39%.⁴⁴

The marketing requirements of cattle, wheat, and flour were many and demanded the services of supporting craftsmen like blacksmiths, coopers, wagoners, and wheelwrights. A network of farms, mills, storage warehouses, towns, and transportation routes developed. What most marked the agricultural history of the upper Valley in the hundred years before the Civil War was the large number of mills, a few of which are standing today. In 1835, 24 gristmills were in operation in Rockbridge County and Augusta County had 41.45 By 1860, the number of Augusta County businesses producing flour and meal increased to 62, and 22 sawmills were in business. 46 As a result of the increase in wheat production, a new kind of milling enterprise developed in the late 18th century: the merchant mill. These operations purchased grain from farmers, ground it, and marketed it under their own trade name. Perhaps the most well-known is the Kennedy-Wade Mill, on Route 606 near Raphine. Located on Otts Creek, this gristmill was built about 1800 by Andrew Kennedy and acquired by the Wade family in 1882. It is the only mill in Rockbridge County still in operation, and is listed on the Virginia Landmarks Register and the National Register of Historic Places. Today it is simply known as "Wade's Mill" and produces a variety of flours and meals. 47 Another such operation known as the "Old Merchant Mill" was in business by 1835 in Brownsburg. The Jacob Bowman Mill and Miller's House (Sugarloaf Mill and Miller's House), built in 1790 on the headwaters of Eidson Creek, is one of the very small number of Augusta County gristmills that survived the Civil War. It operated until 1949.48

After the Revolution, distilleries continued as a cottage industry in the upper Valley. By 1800, George Clemmer was manufacturing Clemmer Whiskey on his farm just off the turnpike south of Middlebrook.⁴⁹ Clemmer was one of many 19th century commercial distillers in Augusta County; fifteen other liquor manufacturers were operating in the county by 1884. Perhaps the best known was the Bumgardner Distillery southwest of Chestnut Ridge near Folly Mills.⁵⁰ Constructed in 1820 by M. J. Bumgardner, the distillery produced whiskey under that name, advertising its quality with the claim, "Wherever it goes it goes to stay." His sons took over the business and expanded it into the Bumgardner and McQuade Wholesale Liquor House in 1878.

Farming, Soil Depletion, and Early Conservation Measures

The early upland frontier approach to farming was well-suited to corn cultivation, as fields were still filled with girdled trees and stumps, and the corn plants could be easily planted and hoed among these. However, even in the fertile limestone soils of the Valley, corn crop yields declined after several years of

planting. Once commercial wheat farming became common, the problem of soil exhaustion increased. By the end of the 18th century, the amount of cleared land on a Valley farm increased from 10% of the farm's total acreage to 20–25%, and the practice of planting upland fields increased erosion.⁵¹

Unfortunately, the techniques of wheat cultivation in the years after the Revolutionary War exacerbated the problems farmers were experiencing with soil exhaustion and erosion. Wheat was typically sown (broadcast) over broken ground, increasing the use of plows and draft animals. Fields were typically

prepared in the summer for fall planting and left open to summer deluges.

Farmers recognized the need for conservation measures by the 1770s, a point that became more urgent with the decreasing availability of farmland. Tidewater tobacco planters began experimenting with crop rotation, planting clover, alfalfa, and other nitrogen-fixing legumes in fields exhausted by tobacco and corn. This technique grew in popularity in the Valley, as well, and by the 1830s, farmers in the Middlebrook-Brownsburg Corridor were practicing rotation and marling (liming).⁵² In addition, the iron plow allowed farmers to build up ridges in their fields to slow erosion.

The African-American Presence in the Upper Valley

It is believed that a small number of the more wealthy Scots-Irish settlers who came to the Beverley and Borden grants were slaveholders who brought African slaves with them when they settled. Augusta County records indicate that several freeholders listed slaves in their property inventories in 1750.⁵³ The study of the history of slavery and slave life in Augusta and Rockbridge counties is in its infancy. While it is relatively easy to follow the development of laws that governed slave life, the particular details of daily life are missing.

A 1756 report on the population and nativity of the Valley population notes 80 slaves in all of Augusta County, less than 5% of the total population.⁵⁴ A tax list compiled in 1787 indicates that freeholders living in the portion of the county from Staunton south to Rockbridge County and west into what are now Bath and Pendleton counties owned 450 slaves.⁵⁵ While the assessor counted only one or two slaves for most households, thirteen freeholders owned eight or more. By 1790, 10% of the population of Augusta County was enslaved.⁵⁶ The 1810 Census substantiates that ratio for Middlebrook. In 1850 30% of the taxable households in Augusta County owned slaves.⁵⁷ By the time of the Civil War, almost 21% of the population of Augusta, and almost 24% of Rockbridge, was comprised of slaves.⁵⁸

The ideal of small Valley farmers who relied on the labor of their family members and a diversified (as opposed to a one-crop) agricultural economy has been taken by historians as evidence for a poorly developed slavery system here. However, more recent research into the agricultural and social history of the Valley has shown that slaves were fundamental to the transition to commercial farming. The first major increase in the number of slaves was seen during

Gathering sheaves at the Augusta County Poor Farm, Route 695, south of Arbor Hill, early 1920s. While technological innovations like machinery transformed farming after the Civil War, much of the labor was still done by hand, continuing traditions from the earliest days of European settlement. Courtesy of Nancy Sorrells and Gertrude Hawkins.



Asbury United Methodist congregation, Brownsburg, 1938–39. This church, rebuilt after a ca. 1914 fire, is included in the Brownsburg Historic District. Courtesy of Mrs. Frances Porterfield.

the years of the hemp boom. In Rockbridge County, intensive tobacco cultivation was a factor in the increase of the number of slaves after 1780. By 1860, Rockbridge farmers were producing 400,000 pounds of tobacco a year, with most of it being sent down the North (Maury) River to Richmond on canal boats. The largest tobacco operations required about 60 slaves.⁵⁹

The majority of slaves worked on farms, local businesses, or the iron and canal industry that developed after the Revolutionary War, alternating tasks with the seasons. Records indicate that from 1833–36, Gibraltar Forge near Cedar Grove depended on slaves, many of whom were hired out from larger farms. Hired

out slaves also worked at the Cedar Grove mills in the 1840s and 1850s.⁶⁰

A recent study by the Virginia Department of Historic Resources points out that few landmarks of pre-Civil War African-American history have survived. Slaves contributed significantly to the construction of the substantial houses and outbuildings of their masters, many of which exist today. However, slave quarters were typically small log cabins, and two known quarters survive in the Middlebrook-Brownsburg Corridor, one of brick and one of frame, both dating to ca. 1840. Slave cabins typically housed a single family and were clustered together. A separate cemetery was sometimes maintained for black members, although burial in slave cemeteries on the farms where they lived was common.

A substantial number of "free" blacks lived in the upper Valley, and were recorded separately in a register kept by the court clerk. Between 1803 and 1865, 706 free blacks were registered in Augusta County and Staunton. ⁶² They supported themselves as wage laborers, although a few opened their own businesses.

With the end of the Civil War came emancipation for all slaves, and while there was a general migration out of the south to northern cities, some African-American families remained in the upper Valley. After 1865, there was a steady decline in the number of African-Americans living in Augusta and Rockbridge counties, a trend that continued until the 1960s. ⁶³

African-Americans who remained in the Middlebrook-Brownsburg area established churches and schools, as evidenced by the Oak Hill Baptist Church in Newport, Newport School House No. 2, Mount Edward Baptist Church (now Mt. Airy) in Middlebrook, and Middlebrook School House No. 22, all recorded on maps in 1885. Everal African-American settlements and businesses in the Middlebrook-Brownsburg Corridor were also established by this time, including the Smoky Row area north of Sugarloaf Mountain, the southwest end of Middlebrook, and the northeastern side of Newport. Shadrach Brown, a Middlebrook wagonmaker, was among a few ex-slaves skilled at a trade. In their "Notes on the History of Middlebrook," Mrs. Beulah Heizer and Mrs. Rusmisel remembered several families of ex-slaves who came to live in that town, including a midwife, Aunt Susan Black, and Samuel Blackburn who "bought his wife after he was free." Irwin Rosen, a lifelong resident of McKinley, recalls an African-American family living west of the village on the eastern slope of Little North Mountain. Every day, the father, Jake Anderson,

would walk across the mountain to Augusta Springs (Pond Gap), where he was employed at a tannery.

The Growth of Towns and Crossroads

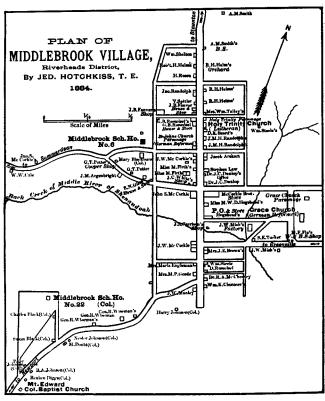
At the turn of the 19th century, while Staunton and Lexington were growing as the primary market centers of the upper Valley, towns like Middlebrook, Brownsburg, and Moffatts Creek (Newport) were also established to cater to the needs of the farming community. These villages became transportation and commercial hubs from which outside goods were sold and local goods traded and sold.

Arbor Hill. Named for the ca. 1820 home of William Young (Arbor Hill Farm on Route 695 west), the hamlet of Arbor Hill was established along the Middlebrook-Brownsburg Turnpike. The oldest standing structure in the area is Sleepy Hollow Farm (ca. 1780) on Route 695 east. Several additional homes were constructed in the area between 1820 and 1830. A post office was established in Arbor Hill in 1857. In 1882, Peyton referred to Arbor Hill as "a pretty little hamlet," noting the "mercantile establishment" (Palmer's Store in 1875 and Hundley's Store in 1884) along the turnpike, now at the intersection of Routes 252 and 695. Several churches were within easy travel distance, including Hebron Presbyterian Church and Bethlehem United Methodist Church (organized in 1852; present structure built in 1917) south of Swoope. Smoky Row Baptist Church, established in the early 1900s for the African-American community, is located on Route 709. Today, the Arbor Hill Church of the Brethren is found just north of Arbor Hill on Route 252. A post office was in operation at Arbor Hill in 1884, as was a wheelwright and blacksmith's

shop. According to some accounts, two turnpike tollbooths were located at Arbor Hill, each charging ten cents per wagon (and later, automobile) to pass north or south.

Middlebrook. In his Augusta County History, 1865-1980, Richard MacMaster referred to Middlebrook as an example of the rural trading centers that dotted the region in the 19th century.⁶⁷ Probably a crossroads since the 1750s, Middlebrook was one of three muster points in Augusta County. The village was organized in 1799 according to a town plat, which was drawn by property owners William and Nancy Scott. Middlebrook was a stop on the stage coach line from Staunton to Lexington, and one of the first businesses established was an ordinary (tavern), dating to ca. 1800. A mail stop was established at the same time, and a tannery was in operation by 1805. By 1810, the village had a population of 66. At this time, there were thirteen occupied and improved lots. Several brick and stone houses were built around log frames or cores between 1810 and 1830. By 1836, Middlebrook was one of six polling places in the county, and a post office was established by 1840, along with other businesses which supported the farming community and the stage line. In 1848, the Howardsville and Rockfish Turnpike

from Nelson County was extended to Greenville, and soon afterwards, to Middlebrook. A toll booth was established after the Middlebrook-Brownsburg Turnpike was incorporated in 1851, and the town grew quickly. In 1855, the town had 60 dwellings.⁶⁸



1884 map of Middlebrook, by Jedediah Hotchkiss, appearing in the 1885 Atlas of Augusta County. Courtesy of Augusta County Historical Society, Staunton.



Middlebrook, early 1900s, looking south. Claressy Spitler (adult) and M. V. Spitler (boy) stand in front of Jacob Arehart's store. Courtesy of Bill Brubeck.

On the eve of the Civil War, Middlebrook could boast a tan yard and leather-making establishment, two cabinet-maker shops, a hatter's shop, a wagon manufactory, a boot and shoe shop, a harness-maker's shop, and two of the largest mercantile stores in Augusta County. These stores supplied most necessities, and local craftsmen could make what the farmers needed. In 1882, it had a population of 274, and Peyton referred to it as "one of the most prosperous and enterprising villages in the county." Soon after the Civil War, a substantial African-American community was established at the west end of town. By 1884, Middlebrook was a "hive of industry," as would be noted by a correspondent to the Staunton *Spectator*. In addition to the businesses already listed in 1860 were two additional carriage/wagon makers, one additional store, two blacksmith shops, a sawmill, and two physicians, an undertaker, a tinner, and two builders. Five furniture and cabinet makers also manufactured coffins. The town influenced settlement in the surrounding countryside, with several businesses locating on the old road to Summerdean (Route 876).

The village continued to be an important center to the surrounding community well into the 20th century. Churches played a central role, with Mt. Tabor Lutheran Church, northeast of Middlebrook on Route 694, already established in 1785. The present building was constructed in 1886. St. John's German Reformed Church (now the site of St. John's Church of Christ) on Route 695 east of Middlebrook, was founded in 1780 and shared its building with Lutheran congregations until the time of the Civil War. Three churches were located in town in 1884: Holy Trinity Lutheran Church (established 1883), Grace German Reformed Church (established 1879), and Mt. Edward Baptist Church (established in the 1870s for the African-American community). The latter, known today as Mount Airy Baptist Church, maintains the only African-American cemetery in continuous use since the late 19th century in the Middlebrook area. Oak Hill Cemetery, with gravestones dating to the early 20th century, is located south of Middlebrook on Route 670, adjacent to Oak Hill Baptist Church.

In the 1890s, the citizens of Middlebrook organized a baseball team and the Middlebrook String Band. Another institution that sustained the community was the public high school, which included a community assembly room. Funds for the facility were raised by Middlebrook area residents, who also helped in the actual construction. The school was used for meetings by every kind of local group, including churches, and was used until the 1970s. 71

By the 1890s, some of Middlebrook's businesses were closing and families were moving away. Greenville had become the commercial center between Staunton and Lexington, and in the same *Spectator* article, the author wrote that small craftsmen were losing work to the factories, which could make goods cheaper than by hand.⁷² The general stores were losing business to mail-order companies, but Irwin Rosen remembers four such stores in operation in the 1920s. Mrs. Theodore Webb recalls that on coming to Middlebrook in 1937, she found it to be "a bustling town." Middlebrook is listed on the Virginia Landmarks Register and the National Register of Historic Places. It is recognized for its "19th century vernacular architecture" whose character and scale have been maintained as they "appeared during the height of its prosperity in the 1880s." In addition to the structures lining Route 252, approximately 55 archaeological sites are included in the historic district. Most of these are the foundations and remains of outbuildings and features associated with the town in the 19th century.

Summerdean. Another once-bustling village in the shadow of Little North Mountain is Summerdean, situated at the crossroads of two major trails providing access to the mountain, Routes 602 and 603. Route 602 runs along the base of Little North Mountain in the project area, and prior to the establishment of the Little North Wildlife Management Area, Route 603 connected Middlebrook (and the turnpike) with Augusta Springs by way of Pond Gap. Summerdean developed as a trade center and small market village by the mid-19th century. One of the many remaining questions about this settlement is the origin of its name.

The Summerdean Store and Post Office is one of the earliest brick store buildings in the county, dating from 1840–60, and prosperous farmers in the area built several large brick homes and a brick church. The post office was operating by 1857. The community became the focus of local industry by 1884. Businesses included a tannery, four mills, two blacksmiths' shops, and a wagon shop. A public school (Summerdean School House No. 4) was established in the 1870s.⁷⁴

Shemariah. Shemariah is located at the crossroads of Routes 602 and 677

between Summerdean and McKinley. This small community developed at the base of Little North Mountain where an old road from Estaline Furnace came across Miller Gap and intersected Route 602. Shemariah received its name from Shemariah Presbyterian Church, which was organized in 1833 from the Bethel congregation. "Shemariah" is derived from the Hebrew "Yah(weh) has guarded."⁷⁵ The structure that stands today was constructed between 1870 and 1890.

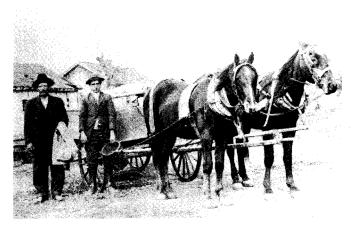
During its first years, the church established a private school "for the education of pious youth." By 1841, it was known as Shemariah Academy, and reading, philosophy, and music courses were offered. By 1866, the school had 29 pupils (21 female, 8 male), most of them enrolled as day students and drawn from the Summerdean

and Middlebrook areas. Tuition was \$18 a year for the primary grades and \$27 a year for the upper grades. By the 1870s, Shemariah School House No. 20 was established as a public facility west of the church. 76

McKinley. Known to locals as "Gravelly Hill," McKinley was officially named in 1896 after its newly opened post office and the current president. Located on Route 682, this small community contained a union church, built in 1842 by local



Hunt club in McKinley, early 1900s. Members included Tom Sensabaugh (right of dark horse) and Clarence Reed (gun upright). Courtesy of Alleen Arehart and Nancy Sorrells.



Preston Arehart and Fred Spitler in McKinley, preparing to cross over Little North Mountain to Craigsville on Troxel Gap Road (Route 682), early 1900s. Courtesy of Alleen Arehart and Nancy Sorrells.

Interior of Earhart Mercantile Company, Newport, with Walter Earhart at the center, 1920s. Courtesy of Hamrick Brothers. residents of different denominations and shared among them. Three congregations used the log structure: United Brethren, Lutheran, and Reformed. It burned in 1870, and by 1872, the Lutherans built St. Mark's (now Redeemer). On the site of the burned church, the United Brethrens built a frame church in 1873; this was replaced in 1903 and is now the McKinley United Methodist Church. A public school was established here in 1877 and operated until 1933.⁷⁷

McKinley was probably established as a settlement because of its location at the convergence of two trails through Little North Mountain: Waskey Gap Trail and Troxel Gap Trail. Both ended in the Estaline

Valley, connecting to what is now Route 601 along Smith Creek. As such, McKinley served as a stopover for locals traveling from Estaline to the Middlebrook-Brownsburg Turnpike.

The post office was operated out of Robert Arehart's store, a small establishment that carried cloth, notions, and groceries, according to Irvin Rosen, lifetime resident and clockmaker. Irvin's father, Finley, bought the store and ran it until 1908, when the post office closed. Two more stores were opened in the 1920s, providing the community with basic necessities and gasoline. A blacksmith, barber, and shoemaker maintained businesses in the community, and there were also saw mills and cider mills in the area. According to Mr. Rosen, the McKinley area was considered "chestnut land," as stands of these trees covered the hills of area, and stumps can still be seen here today.

Newport. The southernmost Augusta County community along Route 252, Newport was also known as "Moffatts Creek" for the stream around which it developed. Two prominent land forms, Newport Hill and Laurel Hill, mark the hamlet's eastern border. Located on the stage coach line between Staunton and Lexington, Newport may have become a stop because of Halfway Spring, a water source on the south end, still protected by a cement trough. The hamlet boasted a post office by 1855.⁷⁸ Early maps indicate that it was not planned as were Middlebrook and Brownsburg, and no toll booth operated there.

The oldest standing houses in Newport date from the Civil War era. Newport was a direct extension of the surrounding farm community, providing important services, but not offering the commerce or social life of the larger



villages. This is not to say that Newport wasn't a busy place: approximately 100 people called Newport home in the 1880s, and by 1884, two sawmills and a gristmill were located here, as well as a blacksmith shop, a tanyard, several small stores, and a post office. A public cattle scale, the only one on the Middlebrook-Brownsburg Turnpike in Augusta County, was also found here. 79 Several churches served the community, including Mt. Herman Lutheran Church (established 1850), Oak Hill Baptist Church (established in the 1870s), and St. Paul's German Reformed Church (established as New Bethany in 1845). The foundation remains of St. Paul's, as well as those of the nearby bridge, can still be seen at the base of

Laurel Hill, and are recorded as archaeological sites with the Virginia Department of Historic Resources. Newport Public School House No. 2 was operated for African-American students on Route 679 northwest of the settlement. In 1873, the Newport Public School House No. 1 was located west of town on Route 681, and is included in the "Public Schools in Augusta County, Virginia, 1870–1940" thematic nomination to the National Register of Historic Places. Sandys Store and Service Station was established in the late 19th century, and was one of the first gas stations in the area.

Brownsburg. The village of Brownsburg was officially recognized by the General Assembly 1793, when the first lots were divided from property belonging to Robert Wardlaw and Samuel McChesney.⁸¹ Although it would be

another 58 years before the Middlebrook-Brownsburg Turnpike was incorporated, the town was identified in 1793 as a stop on an established stage coach line. Coachmen would stop in Brownsburg and change horses there, given its midpoint location between Staunton and Lexington.

Brownsburg may have been named for the Reverend John Brown, first pastor of New Providence Presbyterian Church, and one of the first property owners in the town. By 1794, 24 lots had been sold and recorded in the Rockbridge County deed books, and a

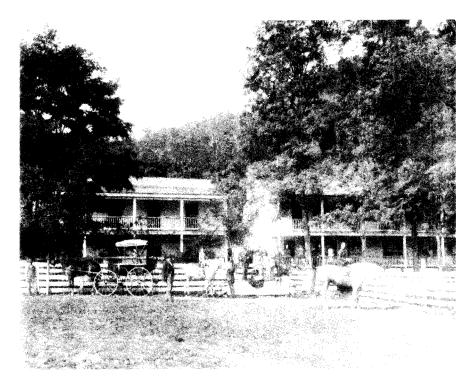
pattern of settlement was emerging. Architectural surveys indicate that several of the standing structures have log cores, and probably date to the 1820s.⁸²

The Diary of Henry Boswell Jones of Brownsburg offers insight into everyday life in the Brownsburg area from 1842–1871. A progressive farmer, Jones was involved in many businesses, including milling, contract hauling, storekeeping, and surveying. He was well-known throughout Rockbridge County, and was especially active in the development of transportation. He served as an officer and director of the North River Navigation Company, and was involved in surveying the Staunton-Lexington Turnpike, which he viewed as a convenient connection to the boat landings at Cedar Grove. He was a superintendent of the turnpike, and kept records of the tolls collected at Brownsburg.⁸³

Brownsburg became an important center of commerce during the early years of the 19th century. A private school was built in 1823 near the intersection of Main Street (Route 252) and Fairfield Road. In fact, the town had so grown by 1835 that it was home to twenty dwellings, three stores, two shoe factories, a tavern, a tanyard, a gristmill, a mercantile flour mill, three wheelwrights, two blacksmiths, two tailors, a hatter, a saddler, a cabinet maker, and a carpenter. At that time, 120 people lived there including three physicians. More families made their homes in town by 1840, when thirty dwellings were listed. In 1849, citizens organized to form a joint stock company that would fund the construction of a private high school for boys; by September 1850, the Brownsburg Academy (or "Presbyterial High School") opened as a "classical school." It operated until 1877, when the building was sold to the newly formed public school district in the area. **



Brownsburg at dusk, winter. Now over 200 years old, this village continues as the center of the farming community in northern Rockbridge County.



Hotel at Wilson's Springs, just west of Rockbridge Baths, early 1900s. Now a private residence, this resort was known for its sulphur waters and was a favorite picnic spot for locals. Courtesy of Royster Lyle.

As a market town, Brownsburg reached its heyday by the time of the Civil War. While businesses continued to flourish there until the 1880s, the fact that it was bypassed by the Valley Branch of the Baltimore and Ohio Railroad caused the town to lose its commercial importance. However, it continued to serve as a social hub for the community. Lifelong resident Ed Patterson remembers five stores in town when he was growing up in the 1930s, and says it was hard to find a place to park on Saturday night. Brownsburg has 42 major buildings included in a historic district recognized by the Virginia Landmarks Register in 1973 and the National Register of Historic Places in 1976. Most of the houses date from the first half of the 19th

century, with several dating from 1870–1910. The town celebrated its bicentennial in 1993.

Zack. Located on Walkers Creek Road (Route 602) just south of the Augusta/Rockbridge County line, this tiny village sits against Little North Mountain. It may have begun as a settlement around Kennedy's Mill, which operated from 1808–1949. The name "Zack" was appended to the community in the early 20th century, when a post office was opened there and named for President Zachary Taylor.

Two churches serve the community: Walkers Creek United Methodist and Immanuel Presbyterian. Walkers Creek was organized in 1850, and the building incorporates a log core. It was used as a school and a place of worship for several denominations. Immanuel Presbyterian was built in 1879; the present structure dates from 1904. At one time this crossroads also had a store, service station, and two-room schoolhouse.⁸⁷

Wilson's Springs and Rockbridge Baths. After the Revolutionary War, well-to-do residents from East Coast cities began engaging in recreational activities away from home, some of which were meant as a palliative for body and soul. Extended trips to the "medicinal" springs of western Virginia became very popular among this set. Local residents had known of these places for many years, and frequented them in the late summer months. Two such springs existed at the southern boundary of the Middlebrook-Brownsburg project area in Rockbridge County: Wilson's Springs and Rockbridge Baths.

Wilson's Springs, located on a small island in the Maury River at the mouth of Goshen Pass, was made accessible by a log footbridge. A house was already standing there in 1775 when the Daniel Strickler family purchased the property as a farm, and the area became known as Strickler's Springs. In 1843, William Wilson II bought the property from Strickler, and enlarged the house so that it also served as a hotel. The same Wilson family owned a store and boatyard in the area, which came to be known as Wilson's Springs. Local families would come in large numbers after the harvest, setting up camp around covered wagons or picnicking for the day. By the time of the Civil War, approximately thirty cabins had been built near the sulphur spring (six of

which are still standing), and Wilson's Springs was a social hub for the local community. During the war years, Confederate soldiers guarding Goshen Pass were quartered in the cabins. After the war, several families of Rockbridge County built summer homes near the cabins.

The 1880s through World War I marked the heyday of Wilson's Springs. The Wilson family built a bowling alley, and the hotel was enlarged so that it could house 70 guests. It is estimated that the cabins could hold 250 guests. In addition to taking the waters, activities included swimming, riding, and fishing. Unfortunately, when Route 39 was relocated, many of the cottages were destroyed. 89 Today the property remains in the Wilson family, and the hotel is now a private residence.

Rockbridge Baths, located one mile downriver from Wilson's Springs, was more known for its thermal springs (a constant temperature of 72 degrees F), magnesia waters, and algae poultices used to heal skin disorders.⁹⁰ In 1789 John Letcher, Sr. purchased the property where the springs are found, naming it Letcher's Spring. The Methodists established a "preaching point" on a farm to the west around 1800. In 1821, Bethesda Presbyterian Church was organized, and a building dedicated in 1843. (McElwee Chapel, near Oak Hill on Route 726, was established in 1905 by Bethesda as a preaching point.) By 1830, Lucinda Smith of Lexington opened a hotel across from the springs, enlarging the baths and enclosing them with planks. In 1834, the Ebenezer United Methodist Church was organized in the Rockbridge Baths area, and the structure that stands today near the intersection of Routes 39 and 732 was constructed in 1908. In the 1840s, the community coalesced when the Jordan family bought the property, opened a store and post office, and re-named it Jordan's Spring. Jordan and others formed the Rockbridge Baths Company in 1857, which oversaw the construction of a new hotel and changed the name again, this time to Rockbridge Baths. The post office also took this name, although Civil War-era maps still refer to the area as Jordan's Spring.

After the Civil War, Robert E. Lee, then president of Washington College and a resident of Lexington, would ride to the baths, sometimes accompanied by his wife. By this time, separate "spas" (bathhouses) were established for men and women, and it is believed that the latter still stands along Route 39. Baths, good meals, parties, billiards, bowling, boating, riding, and musical entertainment were enjoyed by the guests of the hotel.

In 1874, Dr. S.B. Morrison, a Confederate Army doctor, rented the hotel, operating it as a sanitarium. Both the hotel and the village flourished during the twenty-five years that marked the Morrison era. Reflecting the growth of the community, the congregation of Bethesda Presbyterian Church constructed a new building in 1876. The Anderson family opened a store in the 1870s and continued to operate it until the 1960s; today, Route 712 is named for them. In 1883, two gristmills were located in the area: Foutz Mill and Jordan Heirs Mill. The latter, known more recently as Mast Mill, operated until 1949 and stood until the 1960s, when it burned.⁹¹

After Morrison ended his association with the Baths in 1900, the hotel was sold several times. It was purchased by Virginia Military Institute in 1922 and was used as a summer school. Much of the hotel burned in 1926, and it was never reopened. The post office has remained in operation, and today, the Maury River Mercantile (old Anderson General Store) is located in the building that was once part of a dance hall for the resort. It is one of the oldest stores in the county in continuous use.⁹²

Jump Mountain. Jump Mountain, one of the landmarks of the Middlebrook-Brownsburg Corridor, has long been referenced in local histories. The name derives from a number of "lover's leap" stories, all sharing the same motif: a

distraught woman, learning of her lover's death, jumps to her own death from the prominent summit. The most popular rendition marks a Shawnee maiden as the main character. According to legend, she watched her beloved warrior die in battle in the Walker's Creek valley below, and jumped to follow him in death. Whatever the origin of the name, "Jump Mountain" does not appear on maps until 1860.

Jump Mountain Road (Route 724), which now terminates close to the summit, once continued westward into the Little Calfpasture River valley. A small, dispersed settlement developed where this road intersects Route 602 on the east side of Jump Mountain. Several early 19th century structures and important landmarks remain today, including Maxwelton (Stuart House), ca. 1815. Walkers Creek Cemetery, which includes several Walker family graves and those of their early neighbors, is located on this property. Walker Mill was in operation near the intersection of Routes 602 and 724 in 1860; by 1883, it was known as "Frances Mill." While never an organized community, a post office named for the mountain operated out of Gardner Reid's Store in 1915. Much of the Maxwelton Farm is now devoted to Camp Maxwelton, in operation since 1953.

Bustleburg. Bustleburg, now a small crossroads near the southern boundary of the Middlebrook-Brownsburg Corridor, is the most recently named community. Located at the intersection of Routes 252 and 712, Bustleburg was named by a well-known landowner, Ollie T. Wade, in 1928. Wade opened a general store at the intersection that year, and it served the community until the 1980s. A voting precinct since the 1950s, today Bustleburg is home to a recreation center established by the Wade family.⁹⁴

Fredericksburg. The southernmost named community in the Middlebrook-Brownsburg Corridor is Fredericksburg, located along Route 623 on the south side of the Maury River. A one-room schoolhouse served the children of this area from 1885 until the late 1920s. The name of this community is thought to refer to a local musician in the 1880s, Frederick Snider, a member of a local landholding family. 95

Located at the eastern base of Hog Back Mountain, Fredericksburg was a crossroads of mountain paths. Today, several jeep trails from Hog Back converge here, indicating that at one time there were overland paths from the Fredericksburg area westward, connecting at Cooper's Knob and continuing to Goshen. These may pre-date the Maury River Road (Route 39), marking the paths between mountain farmsteads and the Maury River valley. A large parcel of land near Fredericksburg, known as the "Maple Swamp" (Route 624) was owned by the Firebaughs, and is believed to be the location of the clay deposits used by this family of potters. 96

The North River Navigation, the Iron Industry, and Cedar Grove

Early 19th century community leaders began looking toward rivers as a means of cheap and fast transportation to get their crops to market. Although not considered commercially navigable today, just less than a hundred years ago, the Maury (North) River was a major route on which goods and people moved from southern Augusta and Rockbridge counties down the James River toward Richmond. For the better part of the 19th century, the Maury was a batteau and canal boat navigation, and many of the "improvements" from that time are recognizable today as the remains of locks, dams, and canals. Usually manned by a crew of three and a skillful steersman, the batteau was propelled by poles, and operated only when the river was high enough to allow safe passage over the rocks. Aside from taking advantage of freshets, regular batteau traffic depended on channels cut through the rock beds, as well as low dams that diverted water into the main channel.

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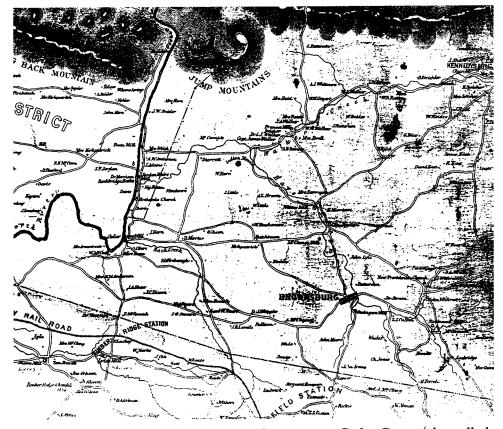
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Northern section of John
Charmichael's 1883 Map of the
County of Rockbridge, Virginia.
Based on the work of Col. William
Gilham, VMI, 1859, the map depicts
geographic landmarks, as well as
businesses, churches, and the names of
property owners. Facsimile of
original at Special Collections,
Leyburn Library, Washington and
Lee University, Lexington.

By 1801, the head of navigation on the river was Cedar Grove (also called Flumen), ten miles above Lexington at the foot of Goshen Pass rapids. Cedar Grove was the destination of wagons carrying loads of cast-iron bars, or "pigs" from the furnaces west of Goshen Pass, as well as wrought-iron from the forges of this area. In the beginning, the products of these operations were hauled by wagon over the Blue Ridge to Scottsville, where they were transported down the James River to Richmond. With iron ore deposits in the western flanks of the Blue Ridge and west of Little North Mountain, Rockbridge County became the center of an iron industry that literally fueled the growth of the region from the 1760s until a few years after the Civil War. At least 21 forges, foundries, and furnaces operated in the county, several in close proximity to the southern boundary of the Route 252 Corridor. The production of pig iron was also of considerable importance in Augusta County, where three furnaces and six forges were in operation by 1835. Given its quick development and potential for profit, the iron industry was the major force behind the development of the river navigation in Rockbridge County. Once in place, the canal system was used by local farmers to send flour, tobacco, wool, flax, and other products downriver, where they were sold at markets in Lexington, Lynchburg, and Richmond. Between 1801 and the completion of the James River and Kanawha Canal to Lexington in the 1850s, Cedar Grove was known as "the metropolis of Rockbridge." Today, this crossroads at the intersection of Routes 39 and 252 is little known, often left off current maps.

Cedar Grove grew up around the batteau traffic on the river and the industries necessary to support it. Several mills and warehouses were established in the Cedar Grove vicinity, including Randolph's Mill and Lindsay's Mill and Sawmill, both in operation by 1837. Near Rockbridge Baths and the conjunction of Hays Creek and the Maury River, several sawmills, iron forges, and gristmills were in operation by 1830. A post office was established in 1833 under the name "Cedar Grove Mills." Local farmers living in the Hays Creek and Upper Maury drainages came to rely on Cedar Grove as a market town.



Batteaux used on the upper reaches of the Maury were "disposable"; they were constructed for a one-way trip down the river and then sold as lumber at their destination. Some were poled upriver with goods from town markets, but such work was extremely difficult. According to the Virginia Canals and Navigations Society, several boatyards operated in the vicinity of Cedar Grove to keep up with the demand for batteaux. ⁹⁸ In addition to such places, the Society hypothesizes that there should be a few sunken batteaux on the Maury, preserved in a mudbank or island. Records indicate that batteaux and their cargo were lost from time to time; local lore has it that several loads (8–10 tons each) of pig iron were lost in the river when the batteaux carrying them broke up on the rocks near Copper's Bottom, now a well-known swimming hole.

In an 1839 court hearing, the ironmaster of Gibraltar Forge complained that the batteaux ran only six months out of the year, leaving him with unwanted stockpiles of iron. Rockbridge citizens renewed their call for the construction of a canal to Lexington, especially after the James River and Kanawha Company completed a canal from Richmond to Lynchburg by 1840. The canal to Lexington was realized in the 1850s, and was used extensively for over twenty years, carrying freight and passengers.

Freight costs were paid to the boat owner, and the canal was paid a toll for every canal boat or batteau. Passenger boats (packets) left Lexington for Richmond three times a week, traveling at an average speed of four miles per hour, helped along by horses on tow paths. During the decade prior to the Civil War, the canal was the commercial artery for Rockbridge County. Records indicate that in 1853, 150,000 bushels of corn and 60,000 gallons of whiskey made their way down the canal. In 1855, 18,879 barrels of flour, 7,500 bushels of wheat, and 2,226 tons of pig and bar iron were shipped on the fifteen-lock North River Canal.⁹⁹

With Lexington as the head of navigation on the canal, the "metropolis" of Cedar Grove continued to be a shipping point for southern Augusta/northern Rockbridge counties. In 1880, a gristmill, sawmill, blacksmith shop, stores, and post office were still in operation, but most of the canal-related businesses had moved to East Lexington. After this time, Cedar Grove disappeared almost as quickly as it developed. The canal remained important through the early 1880s, when it was eclipsed by the railroads.

The history of the Middlebrook-Brownsburg Turnpike (Route 252) is probably closely tied to that of the James River and Kanawha Canal and the North River Road (Route 39). Boye's 1825 map clearly indicates that Route 252 ran directly between Staunton and Lexington. Sections of the North River Road are depicted on this map, but the road did not extend as far east as it does today. However, by 1860, the North River Road became more pronounced on maps and intersected the turnpike at Cedar Grove. With the increased use of the North River Road by ironmasters west of Goshen Pass, and with the development of the Cedar Grove as head of navigation, the Middlebrook-Brownsburg Turnpike functioned as a main feeder route to the canal. It is also at this time that the turnpike was truncated at the present intersection of Routes 39 and 252, probably not long after the latter road was incorporated. After 1860, all maps of the area indicate that the North River Road was a main artery into Lexington and that Route 252 ended at its present location of Cedar Grove.

The Pottery Industry

The manufacture of pottery, especially for domestic, utilitarian uses, was practiced by Valley crafters during the 19th century. According to archaeolo-

gists Kurt Russ and John McDaniel, eight potters were in business in Rockbridge County between 1775 and 1880, and two of their potteries were located in the Middlebrook-Brownsburg Corridor. 100 The Rockbridge Pottery operated at Rockbridge Baths from 1832-1882, producing salt-glazed stonewares and lead-glazed earthenwares. This pottery, including an updraft kiln, a potter's shed, and a clay-processing area, was excavated in the 1980s. Records and artifacts indicate that churns, water coolers, storage jars, jugs, milk pans, and bowls were produced here, as well as reed-stem pipe bowls. The Firebaugh Pottery was located near Bustleburg along Back Creek (Cedar Grove Branch). An archaeological study of the Firebaugh property revealed what is believed to be the location of the pottery, marked by concentrations of pottery sherds, glazed bricks, reed-stem pipe bowls, and kiln-related artifacts. In addition to these establishments, a potter named J. L. Hallman ran a pottery southwest of Sugarloaf, near Mt. Tabor Church, in the 1880s, as did D. Grimm north of Middlebrook. By the 1890s, the pottery manufacturing industry in the upper Valley was no longer viable, as local wares could no longer be produced as cheaply as those from larger potteries outside the region.

Architecture of the Grain and Livestock Era

Of the approximately 245 structures in the Middlebrook-Brownsburg Corridor included in the VDHR survey, 167 were either started or completely constructed during the seventy years preceding the Civil War. All dwellings included in the survey are detailed in Appendix I. While this high number reflects, in part, the pre-20th century focus of the study, it also reflects the more substantial building materials and techniques of the era (combinations of stone, brick, frame, and log), as compared to those of the frontier era. In addition, the number serves as an indication of the financial capability of owners to make a more lasting mark on the landscape. By the time of the Revolutionary War, the distinct ethnic styles of frontier period architecture began to blend to form a vernacular American architecture. [10]

Common Late 18th/Early 19th-Century Building Styles. Four basic house types reflecting the three primary ethnic groups are represented in the upper Valley architecture of the late 18th and early 19th centuries: the Scots-Irish rectangular form; the German *flurkuchenhaus*; the English hall-parlor plan; and the Quaker plan. ¹⁰² The floor plan of these structures, and not the building material, is key to understanding the relationship between these early house types and the ethnicity of the builder. Many of these houses were originally constructed of log, but eventually were covered over and incorporated into later structures. Thus, they are a challenge to document, and are overshadowed in the architectural record by more substantial, larger forms.

The one-room Scots-Irish form, the basis for many of the early log cabins of the frontier period, was probably one of the most common housing forms in the upper Valley. Farmers of more modest means continued to build them well into the 19th century. Only fourteen examples of this plan (usually part of an enlarged structure) have been documented in the Middlebrook-Brownsburg Corridor.

The second type, characteristic of German influence, was the *Flurkuchenhaus*, the three-room house plan with a central chimney. More common in the lower Valley, only two examples of this house type survive in Augusta County. Both are in the Middlebrook-Brownsburg Corridor: Sleepy Hollow Farm (ca. 1780), near Arbor Hill; and the Lewis Shuey House (ca.1795) on Route 713 near Swoope. Both are of log construction, covered in weatherboards to project a more refined image. No surviving examples of this house type are known from Rockbridge County.



Log house, Silverbrook Farm, southeast of Middlebrook. Dating to the 1850–1890 era, the house is an example of the mid-19th century hall-and-parlor plan, a popular architectural form in the Corridor.

The third type, the two-room English hall-and-parlor plan, was a dominant folk form throughout the 19th century. With 52 standing examples, it is the second-most common house form in the Middlebrook-Brownsburg Corridor. The hall served the traditional function of as the outward, or public, room, while the inner parlor provided private space for the family. Only the parlor was heated by a single end chimney. Most examples are two rooms wide, one room deep, and a story and a half tall. Of the hall-and-parlor houses in the Corridor, 45 are log, six are brick, and one is frame.

The two-room plan also found another expression in the upper Valley: the two heated rooms/two

chimney form. A total of 21 of these houses are recorded for the Middlebrook-Brownsburg Corridor. Thirteen of these are brick, but this may be more a reflection of the preservation of masonry houses than the preference of building material. The brick Middlebrook Tavern (ca. 1825–1835) is a good example of this plan, as is the frame Mulberry Grove (ca. 1790), east of Brownsburg on Route 724.

The fourth type, the Quaker Plan, was a three-room plan of Scots-Irish and English heritage. The chimneys are on the end walls, and the one serving two rooms has diagonally-situated fireplaces. Only two examples survive in the Corridor: the Arehart House (ca. 1820–1840) west of Middlebrook on Route 682; and Elm Farm (ca. 1800), south of Wades Mill on Route 721.

Vernacular Architecture and the Georgian Influence. After the Revolutionary War, ethnic influences became less distinct as local builders incorporated new forms. English in origin, the Georgian style used symmetrical plans with a central passage and emphasized classical details learned from architectural building manuals, or pattern books. ¹⁰³ In the Middlebrook-Brownsburg Corridor, the Georgian influence is seen in the I-house and the double-pile plan (both three and four rooms). As opposed to the owner-built folk houses of the early years of settlement, these new forms

required greater effort, both in terms of design and execution.

Local expressions of the Georgian style are the Kennedy-Lunsford Farm (ca. 1796), southeast of Wade's Mill on Route 606 and the McFadden House (ca. 1793), a two-story brick structure included in the Kennedy-Wade's Mill Historic District on Route 606.

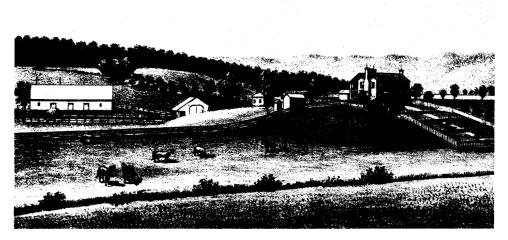
The I-House. By the turn of the 19th century, well-off landowners in the Middlebrook-Brownsburg Corridor began building two-story, brick structures with simple, but fine, interior and exterior detailing. Known as the "Valley of Virginia House," the I-house became the most common pre-20th century style in the

Middlebrook-Brownsburg Corridor. A total of 54 I-houses stand in the Middlebrook-Brownsburg Corridor today.

The letter "I" describes the shape and plan to the main body, as typical I-houses are two-rooms-wide by one-room-deep, and often exhibit a central hall and gable end chimneys. Some of the more substantial brick I-houses were



G.W. Brandenberg House, Summerdean area. Built ca. 1834–1836, this brick I-House is adorned with a two-tiered entry porch, a classical feature.



Lithograph of the George Mish Farm, northwest of Middlebrook on Route 876. The barn, which figures so prominently in the left side of the image, is now listed on the Virginia Landmarks Register and the National Register of Historic Places. It is the only pre-Civil War brick bank barn in Augusta County to have survived the barn burning campaigns of the Union forces. 1885 Atlas of Augusta County. Courtesy of Augusta Historical Society, Staunton.

decorated with porticos, molded brick cornices, and glazed bricks forming patterns in the walls, as well as detailed interior carving, painting, and marbleizing.¹⁰⁴

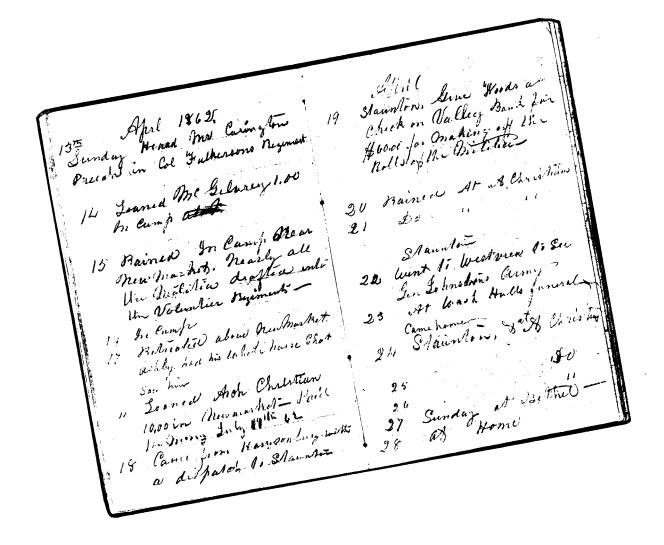
The earliest brick I-house in the Corridor, Locust Grove (ca. 1810–1830), was built along the coach road from Staunton to Lexington, and today stands just off Route 252, south of Middlebrook. Level Loop (ca. 1819), west of Brownsburg on Route 724, is another early brick I-House in the project area. Now a 145-acre farm, Level Loop is listed on the Virginia Landmarks Register and the National Register of Historic Places, and is noted for its carved mantel and other fine interior woodworking. Mid- to late 19th-century outbuildings survive, including a smokehouse with a small cupola. The George (Henry) Mish House (ca. 1830), on Route 876 near Middlebrook, is part of a significant farmstead where a good collection of farm and domestic buildings survive intact. The brick barn, constructed in 1849, is listed as the only upper Valley pre-Civil War bank barn to have survived the 1864 barn-burning campaigns by forces under Union General Sheridan. A total of fourteen brick and three frame pre-Civil War I-houses are listed for the Corridor in the VDHR surveys. The single stone pre-Civil War I-house is the McCutcheon-Dunlap House (ca. 1825–1850), near Summerdean on Route 603.

The popularity of the I-house continued, with 35 from the mid-19th century through 1910 standing today. As the style was adopted by town dwellers and less affluent farmers, brick was replaced by frame and log.

The Double-Pile House. The brick double-pile four-over-four house, two rooms deep and two rooms wide with a central hall, was an expensive house form for the upper Valley. 105 The largest house of its day, it appeared in the region during the first construction boom of substantial houses. The best known example in the Middlebrook-Brownsburg Corridor is Bethel Green (ca. 1854–1856), on Route 693 east between Arbor Hill and Middlebrook. Built for distiller and farmer James Bumgardner, it is embellished with Gothic-style porches and Italianate cornices, reflecting a mid-century interest in classical details. Eight additional houses of this plan are found in the Corridor, as well as two examples of a three-room variation (with central passage) and one Palladian house (single story/three part), Rosemont (ca. 1840–1850).

After the Civil War, the double-pile four-room house was built in smaller numbers. One of the five examples is the A. J. Miller House, or Miller-Hemp (ca. 1884), southeast of Middlebrook on Route 693, which contains the well-preserved work of the 19th century rural itinerant painter, Green Berry Jones. Jones painted large landscapes and hunting scenes and vignettes in the central hallway.

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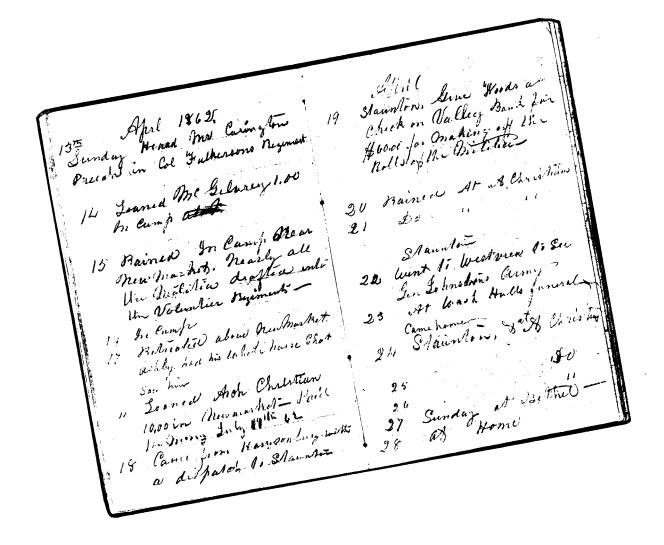
Pages from the 1862 diary of William Scott Sproul of Middle-brook. A member of the 93rd Regiment, Col. Sproul was stationed in the Valley during the spring of 1862, moving between New Market, Staunton, Port Republic, and Rockfish Gap. As with many Valley farmers, he came home on furlough from time to time to take care of farm business. Courtesy of Alex Sproul, Middlebrook.

The side passage plan became popular among more wealthy farmers during the second housing boom in the 1820s and 1830s. Usually brick or log in construction, it is exclusively a pre-Civil War form. ¹⁰⁶ Only ten stand within the project area, the best known being the brick Charles Berry House (ca. 1800–1820), north of Newport on Route 252. Two frame and two log sidepassage examples also remain.

The Civil War Years in the Route 252 Corridor

As soon as Virginia seceded from the Union in April 1861, eight infantry companies from Augusta County organized for a march to Harpers Ferry. One, under the command of Captain Williams, left from Middlebrook. Several companies from Rockbridge County joined them, including the Rockbridge Guards from Brownsburg, forming the Fifth and Twenty-Fifth Virginia Regiments. The Second Dragoons of Brownsburg went on to join the Fourteenth Virginia Cavalry. 107

The Staunton-Lexington Turnpike was the focus of military action for a brief period during June 1864. After defeating Confederate forces at the Battle of Piedmont near New Hope, almost 12,000 Federal troops under General David Hunter entered Staunton on June 6th, burning the railroad for three miles on each side, the depot, and various mills. After the defeat at Piedmont, Confederate General John McCausland and 1,400 cavalry fell back to Goshen. They followed the Virginia Central Railroad to Staunton, camping at Bell's Valley along the way, and arrived at Buffalo Gap on June 6th. They skirted



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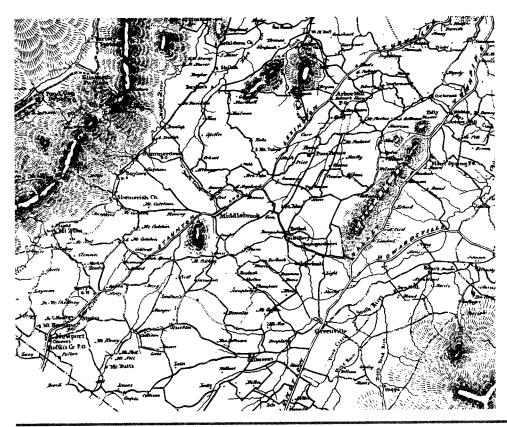
Staunton and took the Middlebrook Road to Brownsburg. According to local lore, a band accompanying McCausland presented a short concert for the residents of the town before moving north again to Arbor Hill. 108

Joined by forces under generals Crook and Averill, Hunter's command moved on to Lexington, shelling and burning the buildings at Virginia Military Institute, the residence of Governor Letcher, and the library of Washington College on June 10th. Between June 6th and 10th, skirmishes between Confederate and Union troops took place, many along the turnpike between Middlebrook and Brownsburg. "Hit and run" fighting took place between Walkers Creek and Hays Creek. There were reports of "puddles of blood" on the Middlebrook Road, as well as casualties. Camps of soldiers from both sides sprang up throughout the area, and several families who live along Route 252 today tell stories of their ancestors caring for the sick and wounded.

Although General Hunter was ultimately defeated, freeing the Valley of Federal troops, the Confederate victory was short-lived. By August, General Grant replaced Hunter with General Philip Sheridan as commander of Federal forces in the Valley, ordering him to destroy the "bread basket of the Confederacy." As Sheridan reported in October 1864 prior to the Battle of Cedar Creek in Frederick County, "The whole country, from the Blue Ridge to North Mountain, has been made entirely untenable for a rebel army. I have destroyed over 2,000 barns filled with wheat, hay, and farming implements; over 70 mills filled with flour and grain; have driven in front of the army four herds of stock; have killed and issued to the troops no less than 3,000 sheep; and a large number of horses have been obtained." 109

Setting the Modern Pattern: 1865-Present

After the war, agriculture tended toward specialization due to the greater commercialization in the farm economy. Wage labor became important to the farm economy. Farm prices fell significantly in the early 1870s, marking the



Southern section of Jedediah Hotchkiss' 1875 Map of Augusta County, Virginia. Prepared in December 1865 on order of the Federal government, the map provides a view of the upper Valley after the Civil War's end. Note the small number of mills standing at this time; most had been burned during the war. The Staunton and Lexington Turnpike is shown as generally following the path of modern Route 252. Facsimile, Department of Sociology and Anthropology, James Madison University, Harrisonburg.

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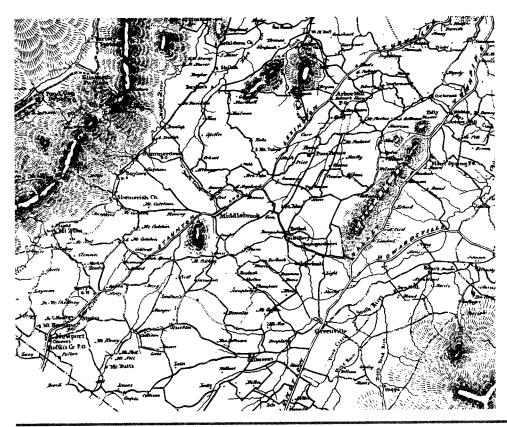
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beginning of an agricultural depression that would last for a generation. The local grain economy was undermined by a market flooded with cheaper wheat from the Midwest and prairie lands. While wheat and corn remained staples from 1870–1930 (with Augusta County leading Virginia in wheat production almost every year), it was difficult for small farming operations to turn a profit.¹¹⁰

The Modernization of Farming

Those who could invested in machinery and fertilizers to increase their yields. In 1875, A. J. Miller of Middlebrook offered a testimonial for Zell's Celebrated Ammoniated Super Bone Phosphate in a local paper. 111 Farmers formed organizations devoted to sharing information on new farming techniques. The Rockbridge Agricultural and Mechanical Society had its roots prior to the Civil War. 112 In Augusta County, agricultural clubs sprang up in many communities during the 1870s, and the Grange, or Patrons of Husbandry, a nationwide organization devoted to voicing the plight of farmers, was active in the county during the 1880s. Its members were especially concerned with the lack of regulation over railroads and the exorbitant prices being charged to haul freight. Granges were organized in Newport, Summerdean, and Arbor Hill, the latter being one of the few still active in the state after 1880. 113

By the mid-1890s, the combine-harvester was introduced, reducing the amount of labor needed to harvest wheat by 80%. During this decade, gasoline and diesel-powered tractors replaced steam-powered tractors. In August 1895, J.W. Mish of Middlebrook advertised to hire out his new traction engine bailing machine and hay press to local farmers. Silos also appeared on the landscape during this period. 114 By 1885, twenty-five mills were again in operation in the Middlebrook-Brownsburg region.

Before the 1880s, fruit production was largely confined to home orchards, with small surpluses being sold at market. Between 1883 and 1890, the first commercial orchards were planted, and the Middlebrook-Brownsburg Corridor was central to this new endeavor. 115 Well-known orchards included the William McComb Orchard near Arbor Hill, the Fulcher Orchard and the Imperial Orchard on Middlebrook Road, the Bowman Orchard near Sugar Loaf, the Martin Orchard at Newport, and the Sproul Orchard south of Middlebrook. The Fulcher Orchard reportedly shipped carloads of apples to London for the 1891 winter market. Around 1898, large commercial orchards were planted. In 1907, the Augusta County Fruit Growers Association was established to assist with marketing, with the Arbor Hill-Middlebrook orchardists leading the way. In 1919, three-quarters of a million trees were planted and almost 850,000 bushels harvested at an average of \$1.46 per bushel. Irvin Rosen recalls wagons of apples lining up along Route 682, waiting for the cider presses at McKinley in the 1920s. Common apple varieties included Gano, Black, Ben, Twig, Stayman, Winesap, King David, Rome Beauty, Yellow Transparent, York Imperial, Lowry, Grimes Golden, Jonathan, Ben Davis, and Albemarle Pippin.

The number of farms in Augusta and Rockbridge counties increased steadily through the last quarter of the 19th century. However, the average farm size decreased from 226 to 111 acres, indicating that farmers were subdividing their property. A 1929 study reporting this trend, "An Economic and Social Survey of Augusta County," claimed that the average farm of that decade was too small to operate efficiently, and that a farmer could make more money by hiring out his labor. 116

In the early decades of the 20th century, the percentage of farms operated by tenants increased as did the percentage of mortgaged farms. By 1920, onefifth of the farmers in August County had encumbered their property, probably



reflecting the need to modernize and invest in machinery, improve buildings, and purchase fertilizers to increase production. Indeed, in 1920, the value of farm machinery was greater in Augusta than in any other county in the state.¹¹⁷

The World War I years were marked by increased demand for food, resulting in increases in farm production and soaring farm prices. However, the decreased demand and overproduction that followed the war also had the effect of lowering the price of wheat, so that by the early 1920s, upper Valley farmers were losing anywhere from \$3.50 to \$10 on every acre harvested. By 1930, one out of every three Augusta County farmers who had been in business in



Zack Franklin (left) and James Brown (right), butchering hogs on the Hamilton Wade farm, south of New Providence Church, 1948–50. Courtesy of Daniel Franklin.

1920 had given up. 118 In the same decade, the number of mortgaged farms increased to one-half. The upper Valley farming community experienced an economic depression almost a decade before the Great Depression threatened the well-being of the country.

As wheat production declined during the 1920s and 1930s, dairying increased. In 1930, Augusta County ranked first in Virginia in dairy cattle. Livestock operations, in general, came to make up 50% of the farm economy by 1940. The number of mortgaged farms had dropped to one-third, but 42% of Augusta County farmers were working at off-farm jobs, and considered themselves to be part-time farmers. Significantly, 61% of the farm households in the county were not producing for the commercial market, but for themselves. The average farm size dropped to 98 acres in 1939, and on the eve of World War II, 60% of all the farms in the county were 30 acres or less. However, most of the farms at this time were owner-operated. 119

The impact of World War II on the economy of the Upper Valley was positive, as demand for food increased and farm prices rose. By 1945, Augusta County farmers were concentrating their efforts on beef and dairy cattle, poultry, and to a lesser extent, fruit. 120 By the 1950s, small grain production had declined in importance in both Augusta and Rockbridge counties. Agricultural land was primarily devoted to pasture, hay, small grain, and corn, with pasture acreage surpassing the total of all other crops combined. Beef cattle and sheep were the most important elements of the agricultural economy in Rockbridge, which had turned from small grain production to livestock between the 1920s and 1940s. Between 1949 and 1954, the contribution of poultry and poultry products to farm income increased by almost 50%. A 1959 Virginia Tech study of land use in Rockbridge County showed a trend similar to the one documented in Augusta in the 1940s: 70% of the farms in Rockbridge County were described as "small, part time," with an average size of 50 acres or less. 121 While the number of these part-time farms was increasing, the size of the remaining full-time farms was increasing. As in Augusta, part-time Rockbridge farms were producing for home consumption. The "very good to excellent" farms (those which were most economically successful) accounted for almost one-third of the farm land acreage in the county, and many were located near Brownsburg.

Between 1960 and the present, the number of farmers has continued to decrease in both Augusta and Rockbridge counties, as has the number of farms.

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Livestock (poultry, dairy cattle, sheep, and beef cattle) is now the focus of the farm economy here.

Analysis of the 1992 Agricultural Census provides information on 184 farms that are included in the zip codes of the Middlebrook-Brownsburg Corridor: Middlebrook, Newport, Brownsburg, and Rockbridge Baths. Almost all (95%) were owner-operated and 168 (91%) reported commercial sales of livestock, poultry, and their products. The large majority of farms 159 (86%) in these zip codes focus their activities on the beef industry. 122

Of the 184 farms in the sample, 85 operators (46%) considered farming to be their principal occupation. While over half of the operators in the corridor considered themselves to be "part-time farmers," almost all the farms were owner-operated and involved in commercial production. The trend toward livestock as the focus of commercial production has continued since midcentury. Buffalo Springs Herb Farm near Raphine on Route 606 is an example of a relatively new kind of agricultural endeavor in the corridor; only two farms in the sample are identified as commercial greenhouse/nursery growers. By 1992, only two farms marketed fruit, and in contrast to the previous 200 years, only one farm marketed wheat.

Post-Civil War Architecture

The studies of local architecture carried out by VDHR in the 1980s do not include much information on late-19th- and 20th-century forms, but they clearly show that many residents of the Middlebrook-Brownsburg Corridor enlarged their early- to mid-19th-century homes after the Civil War. In the Revival and eclectic traditions of the Victorian era, it became popular to add stylish details to earlier, plain houses. The well-known "gingerbread" decoration dates to this time. Much of the new house construction that occurred was based on earlier vernacular designs. Of the structures in the Corridor surveyed by VDHR in the 1980s, approximately 48 were started in the years following the Civil War. Of these, only one represents a departure from earlier plans: the H. M. Clemmer House (ca. 1900) at Arbor Hill. Built by the Eustler Brothers of Grottoes, this frame house is a good example of the Queen Anne style popular during the Victorian period. 124

Public Schools

Several small, church-run private schools and many "common," locally funded schools existed in Augusta and Rockbridge counties prior to the Civil War. One of the changes brought about during Reconstruction was the mandate for a well-organized system of separate, free schools for both black and white students. By 1871, 88 such schools were in operation in Augusta County and 86 had been established in Rockbridge County. 125 In Augusta, many of the schools were one or two-room log structures, presumably still in use from the pre-Civil War era. They provided elementary-level instruction. In Rockbridge, where there were fewer schools before the war, the free system was implemented in new, frame structures. By 1885, 15 free schools were located between Arbor Hill and Newport, and by 1887 the Brownsburg Academy was sold to Rockbridge County to become Brownsburg High School, which operated until 1935. By the 1890s, the county systems began the process of consolidation, developing larger, graded schools in more centralized locations; children who lived too far to walk were transported on school wagons.

A thematic nomination to the Virginia Landmarks Register and the National Register for Historic Places for the Augusta County Public Schools recognizes the importance of free schools to the rural county, and includes five schools in the Middlebrook-Brownsburg Corridor: the Glebe Schoolhouse, Walkers Creek (McCutchen's) Schoolhouse, Moffetts Creek Schoolhouse, Middlebrook Grade School, and Middlebrook High School. 126

Railroads and the Demise of the Turnpike

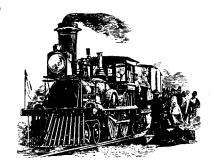
While no rail lines ran directly through the Route 252 Corridor, both the Virginia Central Railroad (later acquired by the Chesapeake and Ohio Railroad) and the Valley Railroad (the Valley Branch of the Baltimore and Ohio Railroad) skirted the northern and eastern boundaries, respectively. 127 The Virginia Central was built across the Blue Ridge to Staunton by 1854, and track was laid to Swoope and into northwest Rockbridge County by 1856. The CSX Corporation still runs freight on this line today. The Valley Railroad, organized after the Civil War when local businessmen attempted to raise the capital necessary to extend the line from Harrisonburg to Salem, was influential in the history of the region during the latter quarter of the 19th century. By 1874, the line to Staunton was completed, with Lexington seeing service by 1883. According to some accounts, the 36-mile line from Staunton to Lexington cost \$1,250,000 to complete, and the railroad was never finished to Salem. 128 It became an isolated operation, carrying passengers between the county seats, boarding them at whistlestops and small towns. It operated until 1942 when the B & O gave up its Staunton-Lexington service and removed its tracks.

During the decades of its operation, the railroad was the impetus for the development of several small communities, including Decatur, Fairfield Station, Mountain View, Raphine, Davis, and Timber Ridge Village. Decatur (located on Route 712 in northeast Rockbridge County) was originally named Aqua when the B & O constructed a watering tank there. The first train stopped at Aqua station on November 1, 1883, and in the following years the community grew up around a post office, school, store, and chapel connected with Timber Ridge Presbyterian Church. Today, portions of the old railroad bed are still visible in the vicinity of Davis, Fairfield, Decatur, Timber Ridge, and East Lexington. 129

In 1891, the General Assembly approved the incorporation of the Middlebrook-Newport Railway and Electric Company. Organized by a group from the Middlebrook area and led by W. M. Sproul, the company was authorized to sell \$10,000 of capital stock. Plans included the extension of a line from Staunton to Newport through Middlebrook, with a later expansion to Rockbridge Baths. As with so many local railroad companies that sprang up in the 1890s, the MNR was never realized.

Storekeepers in small towns like Middlebrook and Brownsburg relied on railroads to maintain a large and varied stock, which they ordered from Baltimore, New York, Philadelphia, and Richmond. Aside from the railroad, the newly invented telephone allowed rural residents to maintain regular contact with their neighbors and urban counterparts. The Middlebrook Telephone Company, headquartered in that town and established in 1895, was the first company to offer connections between Staunton and other communities in the county. ¹³¹

By the 1880s, Staunton had truly developed into the central community for most of Augusta County. The Middlebrook Road was a major corridor connecting the residents in the southwestern section of the county and the commission merchants of Staunton. Most of Staunton's blacksmiths, carpenters and builders, wholesale tobacco dealers, wood and coal yards, and wool dealers were located along the Middlebrook Road on the outskirts of town. Large warehouses were also located in this section, and farmers from Arbor Hill, Summerdean, and Middlebrook would bring their flour, grain, and produce here for shipment on the railroad. 132



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The bulk of public funding for internal improvements in Virginia was given to the railroads in the post-Civil War years. An 1874 amendment to the Virginia Constitution prohibited the state government from further investing in turnpike company stock. This was a blow to the turnpike companies, which had come to rely on the state for road maintenance funds. Forced to rely on private monies instead, many of the turnpike companies went out of business and the roads deteriorated. By 1882, the Staunton-Lexington Turnpike was in poor shape and a meeting was held in Middlebrook that year to discuss its condition. 133

With the development of the "horseless carriage" in the 1890s, the Federal government turned its attention to the country's road system. "Good Roads" societies were organized throughout the eastern United States, and Augusta and Rockbridge counties were no exception. In 1891, the Augusta County Alliance, a group of 500 farmers and businessmen, successfully lobbied the county for a road tax, and in the summer of 1892, the Middlebrook Road was macadamized to the Rockbridge County line for a cost of \$6,000.134 Convicts living at road camps did the work, a practice that continued well into the 20th century. By 1896 the "Middlebrook Road" was again reported to be the most neglected in the county. The Middlebrook and Newport Farmers' Association led the county in endorsing a "Good Roads Bill" that was introduced into the General Assembly in that year. 135 After almost two decades, paving of the Middlebrook Road finally began in 1913. However, the Rockbridge County section of the road was not paved until the 1940s. Ed Patterson of Brownsburg remembers his father keeping a team of horses at the ready to pull automobiles out of the muddy ruts that plagued travelers in that area.

Between 1928 and 1935, the Staunton-Lexington Turnpike became known as "Route 252." This designation of a road number was part of the standard road identification program in Virginia, and was necessary for alleviating the confusion of the growing number of drivers. 136



Shenandoah and James Rivers watershed divide near McKinley, southwest Augusta County, 2100 feet above sea level. If the barn in the foreground were moved 60 feet farther north (left), the roof would shed rain into both watersheds.

Natural Resources

Water Resources

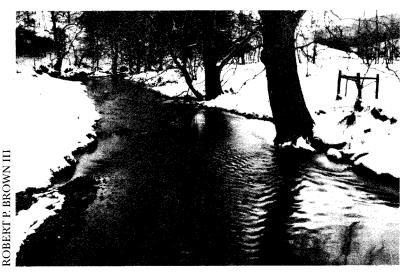
Water resources often dictated the settlement and land use practices that led to those communities we know today. In the Middlebrook-Brownsburg region, the names of villages and roads are often the names of springs and streams or businesses dependent on them: Middlebrook (named for the small stream that runs near the center of the village), Cale Spring Road, Wades Mill, Pond Gap, Stillhouse Hollow, Jordan's Spring (now Rockbridge Baths).

Until recently, the water requirements of farms and homes were met by springs, streams, hand-dug wells, and cisterns; clean, easily obtained water was a prime consideration in selecting a home site. The early water-powered industries of the Corridor, including the large number of grist and sawmills, were situated to take advantage of the swift water and stream gradients. In the past, springs were the focus of medicinal and recreational activities—'taking the waters' was a 19th-century pastime, and Augusta and Rockbridge counties were popular destinations.

Surface Water Resources

Surface water defines the watershed, or drainage basin—the area of land that drains water and sediment, that catches rainfall and snow melt, and directs it to a stream or river. The Route 252 project area is divided into three watersheds: Upper Middle River (in the Shenandoah-Potomac Basin), and Hays Creek and Upper Maury River (in the James Basin). Until 1945, when it was renamed in honor of Commodore Matthew Fontaine Maury, this river was known as "the North Fork of the James," or simply as "the North River." According to the USDA Natural Resources Conservation Service (1995), the Upper Middle River watershed drains almost 40,000 acres (33 stream miles), the Hays Creek watershed drains 51,000 acres (90 stream miles), and the Upper Maury River watershed drains 20,000 acres (46 stream miles). Each is fed by perennial and

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Walkers Creek, from the Route 602 bridge, looking downstream toward Zack (northern Rockbridge County). This shallow stream is characteristic of drainages in the limestone region of the Corridor.

intermittent streams, creeks, and springs, and all of these are affected by land use practices. The Middlebrook-Brownsburg Corridor is "upstream" in relation to neighboring areas to the east and south, allowing local citizens a measure of control over the quality of their water resources.

The character of these watersheds is shaped, in part, by the bedrock where the streams originate and over which they flow. Generally speaking, stream valleys in sandstone and shale areas are "V" shaped, meaning that these exhibit steep slopes and narrow channel ways with little or no bottomland. The westernmost tributaries to Middle River and Walkers Creek, flowing from Little North

Mountain, are good examples of such streams. The more-resistant, fractured bedrock, in conjunction with steep slopes, results in significant runoff during periods of precipitation.⁴

The majority of the Middlebrook-Brownsburg Corridor is underlain by limestone, and the streams in this region are typically few in number; surface water here quickly percolates into the ground rather than running off and eroding hollows. Stream valleys in this low-to-moderate topographic relief zone are "U" shaped; the low, rolling Valley floor offers little resistance to the constant movement of water, and stream meandering is highly visible. Hays Creek and Moffatts Creek are good examples of this stream type. Substantial deposits of alluvium can cover the valley floor or floodplains, and intensive agricultural practices are common.⁵

Due to the higher elevation and topographic features of Augusta and Rockbridge counties, surface water originates within the region, making it a headwaters area. One characteristic of a headwaters region is the low-order stream—a stream that flows a short distance at higher elevations and has few or no tributaries. While the water quality of low-order streams is generally good, the quantity, or regular flow levels, of such streams is reduced. First-order streams join to form second-order streams, flowing across the Route 252 Corridor in dendritic patterns, so that on a map, they look like branches on a tree. Within the project area, second-order streams of note include Moffatts Creek, Walkers Creek, Goose Creek, Otts Creek, and Cedar Grove Branch. From the uplands to the valley floor, these connect landowners in a community whose changing boundaries are determined not by local or state governments, but by nature and past and present land use practices.

The divide between the Shenandoah and James basins is located west of Middlebrook, near the village of McKinley. Here, at elevations of 2,000 feet, the low-order tributaries of Middle River are separated from those of Moffatts Creek and Walker Creek by Dividing Ridge, an outlying flank of Little North Mountain. From the village of McKinley, one can look to the northeast and view a landscape ultimately drained by the Potomac, while three-quarters of a mile to the southwest, creeks and springs converge to form the upper James drainage. These drainages, beginning within one-half mile from each other, and then separated from each other by hundreds of miles in the Piedmont and Coastal Plain, ultimately flow into the Chesapeake Bay.

Springs are abundant in the Middlebrook-Brownsburg area, and are typical of karst regions. Karst is a type of topography that forms over carbonate rocks like limestone. These are more precisely known as "gravity springs;" they

result from water collected in a permeable rock layer which moves downward through the rocks until it reaches an impervious layer and is directed to an outlet.8 Most of the springs in the study region are small and prone to low flow in the heat of summer, but several are notable for their constant, high flow. Gibbs Falls Spring near Wades Mill discharges 648 gallons per minute.9 McNutt Spring near Brownsburg has a flow of 225 gallons per minute. Almost every farmhouse older than 100 years has associated with it a spring providing drinking water. In addition, several springs, such as Cale (Cockran) Spring near Summerdean, support trout hatcheries today. Hundreds of springs have been ponded for agricultural purposes.

One of the most famous springs in the project area is located at Rockbridge Baths, near the intersection of Routes 39 and 252. The small community was originally known as Jordan's Spring, but took on its presentday name when the Rockbridge Baths Company incorporated in 1857 and built a hotel. Operated as a resort until after the Civil War, Rockbridge Baths became a sanitarium between 1874 and 1900. Medicinal qualities were attributed to two pools fed by numerous springs, and thousands took advantage of the 'baths,' which remained at a constant temperature of 72 degrees.10

Recreational activities such as fishing on the smaller tributaries, and canoeing and fishing on the larger streams are important uses of the surface

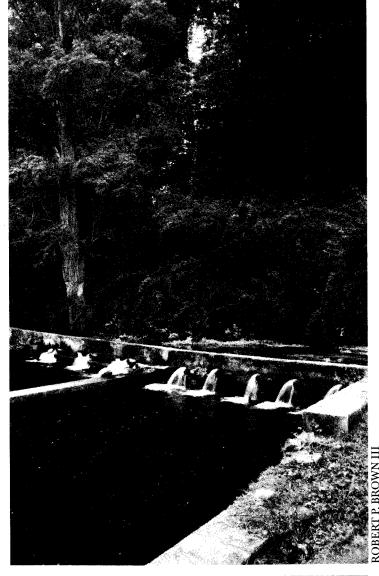
water resources of the Middlebrook-Brownsburg Corridor. The Maury River, both upstream and downstream of its confluence with Hays Creek, has been proposed for Scenic River designation by the Virginia Department of Conservation and Recreation. Such a designation, made possible by the 1968 Wild and Scenic Rivers Act, is reserved for rivers that are relatively undeveloped, free-flowing, and have good water quality.11

Surface Water Quality

The water quality of the headwater streams in the sandstone bedrock regions is usually high; the rough sandstone acts as a purifier and the rapid flow maintains high levels of oxygen in the water. In contrast, the water quality of the streams in the limestone bedrock region of the study area is more easily compromised by nonpoint pollution and sediment loads resulting from cropland erosion, overgrazing, logging, and development.

The Virginia Department of Environmental Quality (DEQ) maintains water-quality stations at three locations in the Route 252 Corridor: near Trimbles Mill on the upper Middle River; and near Rockbridge Baths and on Cedar Grove Branch in the Upper Maury drainage. Most of the streams in the Middlebrook-Brownsburg Corridor are considered by to be fully supportive of swimming and fishing, as outlined by the provisions of the 1972 Clean Water Act. The Upper Maury River watershed within the project area generally evidences high water quality, with swimming and fishing goals being fully supported. Some tributary streams in this drainage have been designated for trout

Cale Spring and trout raceways, near Route 603 in Summerdean. Discharging between 1400-2000 gallons per minute, this prolific, well-known spring has also been called Cockran Spring or Black Spring.



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fishing. The Hays Creek watershed, which drains the most intensively cultivated agricultural land in the project area, however, was found to be only partially supportive of the swimming and fishing goals. Once classified by DEQ as a Class V stream (put and take trout waters), Hays Creek from Brownsburg to its confluence with the Maury River is no longer stocked due to degraded water quality. 12

The Headwaters Soil and Water Conservation District, the Natural Bridge Soil and Water Conservation District, various state and local agencies, and landowners in the region have made the Hays Creek watershed a priority for strategies designed to improve the water quality of this drainage. The Best Management Practices program in the Hays Creek watershed is an example of the kind of work necessary to reduce nutrients and sediment in runoff. The commitment of landowners in this watershed, as well as that of government agencies at all levels, provides a model for the protection and conservation of water resources throughout the Route 252 region and the Valley. 13

Groundwater Resources

Groundwater resources in the study area are directly associated with the karst topography of the limestone bedrock. Here, the entrenched valleys below uplands are underlain by soluble, jointed bedrock that allows for the movement of groundwater through an underground system of conduits. In karst terrain, water is transferred from input (recharge) points to springs; rainfall is a type of recharge, as is surface water flow into natural openings in the ground such as caves and sinkholes.¹⁴

One of the primary features of karst terrain is the sinkhole, a depression that typically varies from 10–30 feet in depth, but can range from a slight basin to a vertical sided opening over 100 feet deep. A sinkhole may or may not have actual surface openings, and is sometimes covered with a thin lens of soil. These features form through a process known as "subsidence," which refers to both a gradual sinking or a sudden collapse. Such natural events are the result of a combination of factors, including the lowering of the water table. In some cases, sinkholes are filled in by landowners who wish to reclaim their land after a collapse. However, the weight of the fill, as well as ponded water that cannot infiltrate the fill, may lead to even greater subsidence. ¹⁵

Sinkholes are common in the Valley, and while the Route 252 Corridor does not exhibit an abundance of these features, farmers living in the area are more than familiar with them. Alex Sproul of Locust Grove Farm near Middlebrook remembers a story from his family's past concerning such an event. In the 1920s, his grandfather was plowing a field with a team of horses when a sinkhole opened up; it was so large that he, the plow, and the horses fell into the opening. After he climbed out, he found it necessary to get the assistance of neighbors to pull the horses (unhurt) out. To this day, the family refers to this area as "Sinkhole Field."

Sinkholes function as input points where surface water enters the groundwater system. In fact, in a few sections of the study area, especially south of Brownsburg, surface drainage is considered "closed" because it flows directly into a sinkhole instead of draining into a stream. In addition, the abundant springs of the Great Valley in Augusta and Rockbridge counties are directly related to sinkholes that dot the karst topography. Small, gravity-fed springs and seeps result from water that moves down through the rocks until coming to an outlet, or discharge point. ¹⁶ The process of discharge also includes water withdrawn from the aquifer through private wells.

Wetlands

Wetlands are a valuable natural resource that lie somewhere between dry terrestrial habitats and actual standing water. They are currently defined by Section 404 of the Clean Water Act as "areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support the prevalence of vegetation typically adapted for life in saturated soil conditions."17 Many of the wetlands in the project area exist in small, isolated patches located along streams and within valleys, predominately in and around floodplain areas, ponds, and springs. Wetlands



Alex Sproul in Sinkhole Field on the back section of Locust Grove Farm, south of Middlebrook. Common in karst topography, sinkholes direct surface water to groundwater

reservoirs.

and riparian areas such as these support a higher diversity and abundance of wildlife species than other farmland habitats. Within the Hays Creek watershed, total wetland acreage is estimated at 30 acres (.06%), the largest being only one acre in extent. According to the Natural Resources Conservation Service, 1,357 acres of hydric soils (1.22%) have been identified in the Middlebrook-Brownsburg Corridor.¹⁸

Wetlands are among the richest and most biologically productive habitats on Earth. For some plant and animal species, wetlands are the only habitat in which they can survive. Freshwater wetlands in the Shenandoah Valley provide habitat for at least twenty-five globally and state-ranked rare plant and animal species. For other wildlife, wetlands are a temporary residence rich in food. Migratory birds use these habitats for breeding, nesting, and feeding.

Wetlands reduce floodwater peaks by storing water and slowly releasing it. By reducing water velocity, wetlands reduce the potential of erosion. They recharge groundwater supplies and extend streamflow during periods of drought or low rainfall. They also improve water quality by filtering and biologically treating chemical and organic runoff.²⁰

While the precise definition of and regulations surrounding wetlands have changed in the past few years, one thing is clear: wetland acreage has decreased at an alarming rate in the Eastern United States. It is estimated that in America today, less than half of documented wetlands are still intact; this loss is greatest for the densely populated East. In the past, wetlands were often regarded as useless parcels of land. Early farmers discovered that draining these areas resulted in access to extremely fertile soil. Historically, marshy and boggy areas have been subject to infilling and draining for agricultural use. Since the 1970s, the conversion of wetlands to agricultural uses has slowed dramatically, but commercial and residential development conversion has increased. Today, legislation such as the Clean Water Act charges federal and state agencies with overseeing the conservation of wetlands.

Floodplains

Many of the streams in the Middlebrook-Brownsburg Corridor are subject to sudden-onset (flash) flooding during periods of heavy precipitation or quick thawing. Such events demonstrate the importance of floodplains—land subject to periodic flooding—which reduce the height and speed of flood waters. In

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particular, floodplain vegetation slows flood water and allows some of it to be absorbed by the soil. It also can provide substantial wildlife habitat.²³

One hundred-year floodplains are mapped for the main channels of Walkers Creek, Hays Creek, Moffatts Creek, and upper Middle River. In recent years, the Federal Emergency Management Agency has evaluated the flood potential of all water courses draining more than one square mile in Augusta and Rockbridge counties. In addition to this information, landowners have available to them studies by the Natural Resources Conservation Service and the Army Corps of Engineers which assist in determining the flood potential of a property.²⁴

The fertile soils of floodplains make them important to agriculture, and the majority of prime farmland in the Middlebrook-Brownsburg Corridor is adjacent to the higher-order watercourses. However, the relative flatness of floodplains has also made them the focus of settlement and road building.

Water Resources: Availability

Only the towns of Middlebrook and Brownsburg maintain public water systems. Drawn from two wells, the water for Brownsburg is overseen by the Brownsburg Community Water Corporation; Middlebrook's water system, drawn from a single well, is maintained by the Augusta County Service Authority. The remainder of households, farms, and businesses use individual or communal wells.²⁵

In the shale and sandstone region on the western boundary of the Corridor, small supplies of water are available from fracture planes in the bedrock. Shallow wells here tend to go dry during periods of prolonged drought. Iron content is usually high, as is evident from the bright orange-colored water precipitates from small springs in this area.

The cavities in the limestone bedrock underlying the bulk of the Middlebrook-Brownsburg Corridor provide reliable sources of groundwater, and the majority of landowners get their drinking water wells drilled deep into these reserves. However, the distribution of water in this region is uneven, at best, and the unpredictable nature of the cavities often makes drilling difficult. Residents are also familiar with the "hard water" of this area—water rich in minerals dissolved from limestone—that serves as a constant reminder of the interconnectedness of the cavities. In karst regions, a well is a major investment for any property owner, underscoring the need to maintain high water quality.²⁶

Geology and Soils

With its sandstone ridges to the west and limestone valleys east of State Route 602, the Middlebrook-Brownsburg Corridor is a microcosm of the larger Ridge and Valley physiographic province. Its scenic topography, which can be described as gently undulating to steeply sloping uplands, has developed over hundreds of millions of years. Indeed, a drive along Route 252 can produce a sense of timelessness, but the landscape continues to change—from the dynamic floodplains of Middle River to the incremental weathering of Little North Mountain.

Geologic Structure

During the Paleozoic Era (600–225 million years ago), the sedimentary rocks of the Shenandoah Valley were subjected to pressures which resulted in folding and thrust faulting, in some instances at steep angles to the horizontal position in which they were originally deposited.²⁷ A thrust fault is a fracture zone along

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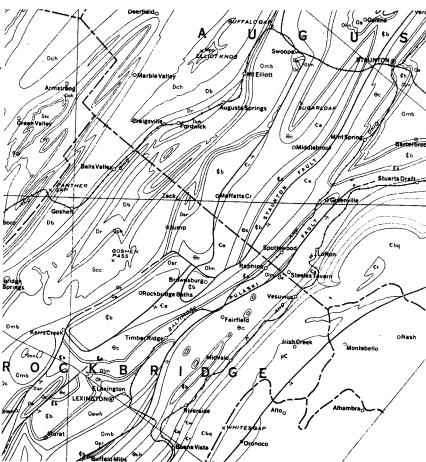
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which one mass of rock has been thrust over another due to compressive forces in the earth's crust. From west to east, the Route 252 Corridor is shaped in places by three such structures: Zack Fault, Little North Mountain Fault, and Staunton-Pulaski Fault. None of the faults are active today, and there appears to be little threat of movement (nor has there been for millions of years). In addition, two other structural features influence the lay of the land: the Long Glade Syncline and the Middlebrook Anticline. These are folds, also resulting from pressures in the crust. Generally, they differ in the shape of the fold; an anticline is arch-shaped, while a syncline is a down warp.28 Together, faulting, folding, and weathering have resulted in extremely complex geology along the Route 252 Corridor. The following description is a beginning point R for understanding how these structures between Middlebrook and Brownsburg have not only shaped land surface, drainage patterns, and water quality, but also provided access to mineral resources important to the local economy.



To the west, where elevations reach 2,600 feet above sea level, the long, narrow ridges of Little North Mountain and Jump Mountain are formed by sandstones and conglomerates of the Clinton and Clinch Formations. ²⁹ These light-gray-to-white siliceous rocks are interbedded with thin layers of shale in which marine fossils are found. In the past, hematite from the Clinton Formation was mined locally as iron ore, but the low grade of ore made it impractical for extensive mining operations. In addition, large quantities of silica are present in the Clinch Formation along the eastern front of Little North Mountain. The Martinsburg Formation is exposed in the eastern flanks of Little North Mountain; here, thin layers of shale are interbedded with medium-grained sandstone and limestone.

Less resistant carbonate rocks (limestones and dolomites) and shales erode more rapidly, and form lowlands and valleys paralleling the sandstone ridges, as evidenced by the small stream valleys in the Corridor where elevations average 1,200 feet above sea level. The Martinsburg Formation at the lower elevations of Little North Mountain is bounded on the east by the Zack Fault, which begins in the south near the confluence of Hays Creek and Walkers Creek. From there, the fault trends northward along Route 602 and Walkers Creek into southern Augusta County. The Edinburg and Lincolnshire formations, represented by dark and medium gray limestones, are thrust over the Martinsburg shale at the fault. In historic times, the Lincolnshire was quarried in several locations near Staunton; it was used in the manufacture of agricultural limestone and other products. Native Americans used its bedded black chert as a common tool-making material.

Moving eastward from Little North Mountain, much of the Hays Creek watershed is underlain by limestones and dolomites of the Beekmantown Formation. The fine-grained dolomite is medium-to-dark gray in color, and

Butts' 1933 Geologic Map of the Appalachian Valley in Virginia demonstrates the complexity of the structural geology of the Route 252 Corridor. The abbreviations identify the various formations known at the time, and show the general division between the sandstones and shales of Little North Mountain (db, dr, doh, scc) and the limestones of the Valley floor (the formations east of the area from Zack to Swoope). A 1993 map, available from the Virginia Division of Mineral Resources, offers an even more detailed picture of this area.

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weathered outcrops exhibit grooved, crisscross patterns. Light brown chert is common in this formation; it weathers out in nodules and can be collected in the upper reaches of Dutch Hollow Branch. As with the chert from the more western limestone formations near Little North Mountain, the Beekmantown cherts were extensively used by Native Americans in the region.

South of Cockran Spring, the Beekmantown is bounded on the east by the Little North Mountain Fault, which has several branches. The main fault extends along the entire length of Little North Mountain, from Rockbridge to Frederick counties, where it separates the Valley proper from the ridges to the west. Locally, portions of Moffatts Creek and Route 252 follow an arm of the fault, as does Pisgah Branch. For much of the Route 252 Corridor the fault is poorly exposed; however, it is highly visible near Cale (Cockran) Spring. Near McClung Mill and Brownsburg, the fault structure becomes very complex, with no less than four formations in close proximity (Elbrook, Beekmantown, New Market, and Conococheague). All of these carbonate formations are finegrained and vary in color from medium-to-dark gray or blue-gray. Due to its predictable fracture pattern, the famed "bluestone" of the New Market Formation is the major quarry rock in the upper Valley; no doubt the small outcrops in the Route 252 Corridor were used by landowners for stone masonry. From Roundtop Hill northward to Cockran Spring, the Rome Formation abuts the fault line on the east. It is characterized by a distinctive red and green shale interbedded with sandstone and limestone. Earlier in this century, a geologist (Watson, 1909) noted a large limonite deposit in this formation near Moffatts Creek.³⁰ This brown iron ore was mined in other parts of Augusta and Rockbridge counties where the outcrops were sufficient to support such an operation.

Several significant geological structures have shaped the topography and drainage of the eastern portion of the Route 252 Corridor. The first, the Long Glade Syncline, is located in the Sugarloaf vicinity. Folding of the Beekmantown Formation, and subsequent erosion, produced large conical hills of angular chert; Sugarloaf and adjoining hills with elevations of ca. 2,000 feet above sea level were the result of this process. Pisgah Hill, Big Hill, White Hill, and Roundtop Hill, all southwest of Newport and located in the Beekmantown zone, were similarly formed. The dolomite of this formation outcrops along Route 252 from Brownsburg to Bustleburg. The eastern and western flanks of Sugarloaf are marked by the Chepultepec Formation, a fine-grained blue-black limestone with interbedded chert; this formation was quarried near Hebron and Staunton during historic times. The headwaters of Eidson Creek flow eastward from Sugarloaf into a valley of Conococheague limestone.

Northward from Middlebrook to Arbor Hill and beyond is the Middlebrook Anticline. Primarily of folded Conococheague Limestone, this anticline runs parallel to, and ultimately intersects, a narrow exposure of the Chepultepec Formation. Southeast of Middlebrook, bauxite was mined from this formation from 1941–46 at the Allen and Harris mines by the Republic Mining Company. The Allen Mine, located off State Road 670, is now filled with water. An abandoned crushed stone quarry in the Conococheague Formation is visible from Route 252 just north of Arbor Hill.³¹

The Staunton-Pulaski Fault, a structure running roughly parallel to Route 252, marks the eastern boundary of the study Corridor. Here, the older Elbrook Formation is thrust over the younger Beekmantown Formation. Faulting created zones of crushed rock (breccia), which weather more readily than surrounding rock; this is well-exposed southeast of Arbor Hill along State Road 697. White veins of calcite are highly visible in breccia, and crystal fragments are often found along the fault line. In northern Rockbridge County, the

displacement of rock along the fault line is marked by Gibbs Falls.

Soils

As with the geology, the soils of the region are complex and varied, and this complexity is reflected in the different types of vegetation and land uses they support. Deep, well-aeriated soils that retain sufficient water, are not too acidic, and contain a high percentage of nitrogen and organic matter (such as those derived from the limestones present in the area) are most suitable for agriculture and were some of the first to be farmed by Native Americans and settled by

ROBERT P. BR

the Scots Irish.³² Shallow, acidic mountain and footslope soils derived from the Clinton, Clinch, and Martinsburg formations are much less fertile than those of the valley bottom, and have remained in forests. Soils with a high clay content, such as those derived from the Rome Formation shales, drain poorly and usually are unsuitable for septic systems.³³

Generally, there are four types of soils within the project area: valley carbonate soils, floodplain (alluvial) soils, footslope (colluvial) soils, and mountain soils. 34

- * The *valley carbonates*, the most common soils, are derived from limestones and dolomites, and are usually well-drained, although they range in depth depending on slope. They are typically high in silt and clay content.
- * The *alluvial soils* are found along streams, floodplains, and low terraces, and are usually deep and well-drained. They are comprised of materials washed from the sloped areas, and are deposited as silty and sandy loams by streams in times of flooding.
- * Footslope, or colluvial, soils are located at the bases of slopes adjacent to sandstone and shale ridges. They can be deep and well-drained, although they are often sandy and acidic and contain gravels, cobbles, and boulders.
- * The *mountain soils* are derived from acidic sandstones and shales and are shallow and rocky.

The soils of both Augusta and Rockbridge counties have been surveyed by the Natural Resources Conservation Service; these updated reports are readily available to the public, and are important tools for any landowner. They contain detailed maps and descriptions of the different soils in the county, as well as charts describing the best uses for and limitations of each soil type.

Soil scientists use a system for identifying soils on the basis of such factors as particle size, mineral composition, organic matter content, and degree of acidity. Farmers are familiar with the concept of the "soil association"—a distinctive pattern of soils across a large area. A common association in the Middlebrook-Brownsburg Corridor is the Frederick-Bolton-Lodi, a deep, well-drained soil found on limestone uplands. Another useful concept is that of the "soil series," a specific soil (within an association) having similar characteristics and landscape position in the soil profile, and developed from a particular type

Limestone outcrops of the Elbrook Formation, Silverbrook pasture, south of Middlebrook. The presence of such outcrops has shaped land use in the Route 252 Corridor, favoring pasture and livestock grazing.

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Contour crop strips help reduce soil erosion on a Rockbridge County farm near Brownsburg. Courtesy of Natural Bridge Soil and Water Conservation District.

of parent material. The Frederick-Lodi series, common in the Moffatts Creek drainage, is a good example of an important series in the study area. Although soils of the same series differ very little in texture, slope, and other characteristics, these differences are the basis for the division of soil series into "phases." South and west of Middlebrook, large pasturelands are located on the Frederick-Lodi silt-loam, 15–25% slope phase.³⁵

The Natural Resources Conservation Service also uses a soil classification system that divides soils into capability classes,

based on their capacity for supporting crops and the risk of damage when they are used. The highest producing agricultural soils are called "prime farmland soils"; these are of national importance. Such soils, best suited to continuous agricultural use, are scattered throughout the Middlebrook-Brownsburg Corridor. Several different soil series found in the limestone and dolomite regions are classified as "prime," including the Frederick-Lodi and Sequoia-Berks silt loams, and all share the common characteristics of being well-drained and having gentle to no slope. Other "prime" farmland soils are located on floodplains and terraces or on knolls or narrow ridge tops. Such land is not common in the Corridor; for example, in the 49,000-acre Hays Creek watershed, only 2500 acres, or 5% of the acreage, is classified as "prime farmland." The USDA defines this category by its potential for cultivation, particularly for food, feed, forage, fiber, and oilseed crops. Typically, prime farmland has been intensively cultivated since Euroamerican settlement, and many of the farms in operation today trace their history back to early patents located on this type of land.

"County Important Land," a designation made at the local level, is found in areas that are not steep or stony and are well-drained and watered.³⁷ It is more common than "prime" farmland in the Corridor. In the Hays Creek watershed, 15,500 acres of county important land have been defined, accounting for almost 32% of the total acreage.³⁸ "County important land" is moderately productive, characterized as appropriate for farming and other agricultural uses, and is located in the limestone-dolomite areas. Typical soils include the Frederick-Lodi-Rock outcrop map units, which extend a shallow depth to bedrock and are susceptible to erosion. These more steeply sloped limestone uplands (7–15% slope), which constitute the bulk of the Route 252 Corridor, are maintained as pasture, grasslands, and woodland; small orchards are also planted on some of this acreage.

Together with "prime farmland," "county important land" is a major factor in the agricultural economy of the Middlebrook-Brownsburg Corridor. Historically, farming operations here focused on dairying, beef cattle, sheep, and poultry, as well as the production of wheat, corn, barley, rye, and oats. Hay and forage production has taken up considerable acreage, and in the late-19th through mid-20th centuries, orchard fruit played a large role in the agricultural economy.

The footslope and mountain soils derived from shale and sandstone offer little potential for agriculture and most remain wooded. The western border of the Corridor, the Little North Mountain area, evidences two main soil series:

Hazleton and Monongahela, both of which are derived from residuum from sandstone and shale. Both soil series are typically located in mountainous uplands where farming is limited due to steep slopes (up to 75%) and boulders. Historically, small-scale timbering operations in these areas have played a role in the local economy, and some pasture land in upland flats has been maintained. Land here is considered to be of poor quality for development due to thin, unstable soils and poor drainage.³⁹

Forests

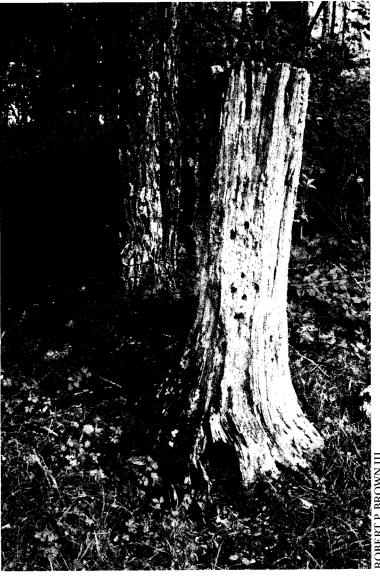
As with other natural resources, the Middlebrook-Brownsburg Corridor reflects the extent and diversity of forest resources in northwestern Virginia. Currently, 58% of Augusta and Rockbridge counties are wooded; studies of the Hays Creek watershed in the project area indicate a 40% forest cover. 40 From the heavily wooded slopes and ridges of Little North Mountain to the patches of woods in stream valleys, forests have played a major role in the history and land use of the Route 252 region.

Over the years, climatic changes, introduced plant and animal species, and human activity have altered the composition of the wooded lands in the

Route 252 Corridor. For example, the American chestnut, the mainstay of western Virginia forests since approximately 8,000 years ago, and important for its wood, bark, and mast, has been extinct as a canopy species since the 1930s when the chestnut blight overtook the region.41 However, one constant remains: the forest resources of western Virginia have played an important role in the area as we know it today, and will continue to be an integral element in the local economy and overall quality of other natural resources. In addition to contributing to the natural beauty of the landscape and being a harvestable resource, forests offer other important benefits: groundwater recharge areas, water quality protection, diverse habitats for a variety of wildlife, recreational opportunities, and visual buffers.42

Perhaps the most difficult problem with which forest managers must contend is the statewide trend of woodland home developments.43 The demand for wooded building sites has led to the loss of private, commercial forestland. The Route 252 Corridor is not immune to this phenomenon. As people move into the woods, the habitat for most forms of wildlife is degraded and the hazard of wildfires increases. Statewide, the conversion of forest to other land uses has resulted in the net loss of 35,000 acres of commercial forest annually for the fifteen years from 1977 to 1992.44 Conservation measures such as forestal districts (discussed in the final section of this report) can assist landowners in protecting their forestland from development pressure.

American chestnut stump on Route 893 near McKinley. Prior to the chestnut blight in the early part of this century, the forest in this area was predominantly chestnut.



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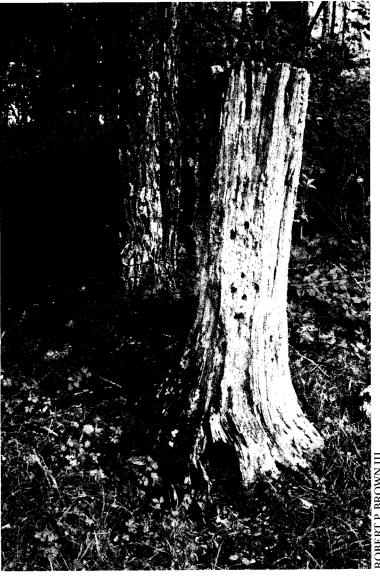
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Forest Composition

The project area is characterized by the oak-hickory forest type in which white oak, chestnut oak, black oak, scarlet oak, and hickory dominate. Other species of note are northern red oak, yellow poplar, red maple, and black locust. Occasionally forming nearly pure stands are pitch pine, white pine, shortleaf pine, and Virginia pine. Eastern red cedar is common on idle



Broadleaf deciduous forest on Laurel Hill, south end of Newport. The diversity of tree species within a region depends on soil type, soil moisture, topography and past management practices.

farmland. Sycamore, ash, and black walnut are common along streams and on moist soils.⁴⁵

The majority of the forest in the Route 252 Corridor is privately owned. In the valley floor, these holdings are relatively small parcels on land that is too steep, rocky, or infertile to farm. Arable land near streams has typically been cleared for cultivation and pasture, and streamside forest is rare. The east face of Little North Mountain is almost entirely forested, as alternative land uses are largely impractical. The Virginia

Department of Game and Inland Fisheries owns and manages the crest of Little North Mountain along the entire western edge of the project boundary for approximately twenty miles from Buffalo Gap in the north to the Maury River in the south. The largest continuous stand of forestland in the project area is located here, and this represents the only publicly owned forestland in the Route 252 Corridor.

Forests and the Local Economy

Forest resources have been important to the human occupants of the Middlebrook-Brownsburg region since the time of Native American settlement. Archaeological evidence from the Shenandoah Valley indicates that the Native peoples relied on the mast and wildlife of the forest for a major portion of their diet. Their seasonal use of forest resources was an integral part of a lifestyle thousands of years old. Later, they altered small sections of the forest, particularly through the use of fire hunts that drove game into confined areas, and through prescribed burns that maintained agricultural fields. In their writings, early European explorers and settlers remarked on open areas scattered throughout the forest, particularly along the Valley floor, referring to these as the "Old Fields."

While portions of eastern Virginia were cleared of forest by 1750, Europeans moving across the Blue Ridge found the upper Valley to be covered with stands of mature timber. As the population grew, the settlers who came to the Middlebrook-Brownsburg area needed upland fields for cropland. Land clearing was undertaken by girdling (killing the tree by cutting a circle around the bark into the wood), burning, and cutting with axe and saw. While vast tracts of forest remained, it is estimated that by 1800,

one-quarter of the forest in the upper Valley was cut. Settlement resulted in a variegated landscape, with open bottomlands, a mosaic of cleared farm lands, and wood lots between streams.⁴⁷

By the middle of the 19th century, the forests of the Middlebrook-Brownsburg region contributed to the local economy through commercial enterprises. Rockbridge County, the center of western Virginia's iron industry, saw the development of no fewer than twenty iron furnaces and forges by 1850, two of which were located just west of Cedar Grove, near the southern terminus of Route 252. Lebanon Valley Forge and Gibraltar Forge were both in operation by 1825, and required tremendous amounts of timber for their operation.48 By the late 19th century, sawmills were established in Arbor Hill, Middlebrook, and Newport; trees were cut for lumber and firewood. The lumber industry offered employment for local labor during the winter months, supplementing the farm economy by allowing seasonal farm workers the option of remaining in the area. Portable sawmills with circular saws were moved from place to place as timber tracts were offered for sale, and "tanbarkers" removed the bark from oak chestnut and chestnut trees to supply the extract operations of the leather industry. Even after the chestnut blight decimated living stands, the bark of the dead trees was used for in Rockbridge County extract plants until the supply ran out in 1959.49

By 1931, the USDA reported that the upper end of North Mountain was cut over "years ago" to supply charcoal to the iron furnace industry and cordwood for the Chesapeake and Ohio Railway. At the time of the report, the region was in second-growth stands of young hardwood timber. This pattern was also noted for most of the forested areas in Augusta and Rockbridge Counties.⁵⁰

Today, the naturally renewable and resilient forest continues to contribute to the local and state economy and to the quality of life in the region. Current economic figures available from the Virginia Department of Forestry (VDOF) are on a county-wide area, and do not match the Middlebrook-Brownsburg Corridor. However, the value of standing timber sold by landowners in Rockbridge County in 1994 was \$3,612,816, and in Augusta County, \$1,420,093. According to VDOF records, there are 12 commercial sawmills, 36 logging businesses, and two commercial lumber drying businesses located in the two counties. Taylor and Boody Organ Builders, located at Hebron on Route 703, use fine hardwoods harvested locally in the manufacture of European-style mechanical organs. Numerous wood workers are involved in commercial firewood cutting and in part-time custom sawmilling. Forestal recreational areas, such as the Little North Mountain Wildlife Management Area, attract hunters, fishermen, hikers, and campers, many of whom purchase supplies from the small stores along Route 252.

Management Considerations

Although forests may seem to be a stable component of the rural landscape, they are constantly changing as trees grow, die, and are assaulted by numerous insect and weather problems. Periodic outbreaks of the southern pine bark beetle reduce the percentage of southern yellow pine. The most serious recorded outbreak of this forest pest occurred in the early 1990s. The gypsy moth larvae feed on the foliage of hardwood trees, with oaks being preferred. Moderate to heavy defoliation due to the gypsy moth occurred in a record 200,991 acres of forest in Augusta County in 1995. Near total collapse of the gypsy moth population occurred later in the same season due to naturally existing pathogens, making defoliation in 1996 inconsequential. Presently, a subsidized

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spray program to treat forests with gypsy moth problems is available to landowners. Populations of these insects follow "boom and bust" cycles. The best long-term defense against pest problems is maintaining the health of a stand through appropriate forest management. The VDOF offers forest management advice and technical assistance to private forestland owners free of charge. ⁵²

Other concerns of forest managers in the Route 252 Corridor include livestock grazing in forested lands and poor harvesting practices. Livestock can destroy tree saplings and seedlings, prevent natural regeneration, and cause soil compaction and erosion that decreases soil productivity and tree growth. Erosion undermines the possibility of sustained forest productivity due to the long-term loss of organic matter, topsoil, and moisture-holding capacity. Poor logging practices can also lead to excessive erosion. By law, landowners and loggers are required to protect streams from excessive sedimentation resulting from their forestry operations. All too often landowners sell only their largest and most valuable trees in an attempt to preserve forest cover. This type of harvest leaves behind many undesirable trees due to logging damage, disease, poor quality, or species. Such a sale results in a degraded forest and will have a profound long-term effect on both the quality and composition of the forest. In part, remedies for these concerns lie with the educational efforts of the VDOF and cost-sharing programs that encourage landowners to fence woodlands, plant trees, and stabilize eroding logging roads.53

Wildlife and Sensitive Ecosystems

Perhaps to underscore the bounty of the Shenandoah Valley and its potential for settlement, early European chroniclers wrote extensively of its wildlife. Frequent animal sightings are still part of everyday life in rural areas, and many of the species listed in the 1740s (deer, bear, fox, rabbit, skunk, opossum) can be found today. However, several species endemic to the region and mentioned in early histories have not been encountered in the wild for over two hundred years. Among these are elk, buffalo, mountain lion, and passenger pigeon. According to tradition, Benjamin Borden was awarded his land grant by Governor Gooch because he carried a buffalo calf from Augusta County to present to the Governor, who was charmed by the animal. While the image of Borden traveling with a buffalo calf from near Staunton to the Tidewater may have no basis in truth, it is an important symbol of how the settlers saw the frontier—as filled with the promise of abundance.⁵⁴

Today, hunting and fishing continue to be important, and landowners and visitors alike return to preferred fishing holes and camps. Town-dwellers co-exist with squirrels, rabbits, and birds, and raccoons and opossums sometimes make nocturnal visits to trash cans. In the spring, summer, and fall, we enjoy an incredible variety of wildflowers and other plants, and enthusiasts hike across the countryside to view these. Seen along roadsides, the more common Queen Anne's lace, daisy, and chicory bring color and variety to our country drives, while the exotic pink lady's slipper is a surprise when we come across it in the moist woods. These animals and plants are reminders of the beauty, changing seasons, and the ecological diversity of the Valley.

The Ecosystem and Wildlife Habitat

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The Ecosystem and Wildlife Habitat

The living elements of a region serve as indicators of the overall health of an ecosystem, the complex web linking living organisms, inorganic materials (like

bedrock) and climate. By its very nature, an ecosystem seeks to balance relationships between all its elements. These are highly dynamic relationships in which the interaction of organisms with each other and the environment (both natural and cultural) are so tied together that a change in one can lead to a change in all the others.⁵⁵ Consider, for example, the impact of the loss of the American chestnut, a major species in Appalachian forests for thousands of years. In many places, chestnut formed 40–60% of the canopy. A mature chestnut stood up to 130 feet tall, 5 feet in diameter, and could produce hundreds of pounds of nuts in a season. Local residents used the wood for valuable lumber, the bark for tannin, the nuts as a commercial crop, and the leaves for home medicines. When the chestnut blight reached epidemic proportions in the mid-1920s and removed this once-abundant species from the canopy in less than a generation, some human communities in western Virginia lost a major element of their economy. In addition, the animal species that once fed on the nuts of the tree—black bear, bobwhite, wild turkey, white-tailed deer, as well as humans—lost a major food source. The absence of the tall hardwood species from the forest canopy allowed the seedlings of other tree species, like oaks and

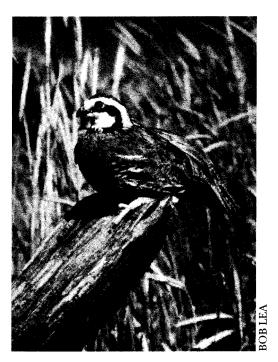
hickories, to fill the gaps, setting the stage for new habitats. A corns replaced chestnuts as the major food for wildlife. 56

This simplified example demonstrates the dramatic impact of the loss of an important species in an ecosystem. However, even long-term, small changes can drastically affect the health of a biological community of plants and animals. As recently as 1910, Morton's *History of Rockbridge County* noted that the mountains sheltered only a "few" white-tailed deer, as they had been practically hunted out of existence. However, the deer population is much greater in Virginia today than when European colonists first arrived. This is due to several factors: the loss of natural predators, game management practices, and increased habitat as a result of the creation of edge, or open, areas. Edge areas are important to some species of wildlife, as they mark the boundary between two adjoining habitats (for example, forest and field). Thus, they contain components of both and attract a larger number of species than would a single habitat. Bob-white quail and white-tailed deer benefit from edge areas, but forest interior species, such as the wood thrush, do not. 58

By definition, the ecosystem undergoes continuous changes, depending on the particular rainfall of a season, temperature extremes, and a host of other natural factors, and animal and plant populations continually respond. Animals have specific requirements: food and water, cover from weather and predators, space in which to gather food and attract mates, and safe corridors that allow movement between habitats. Landscape modification accelerates ecosystem change, sometimes to the point of the loss of established habitats. As human population growth places development pressures on rural areas, ecosystems and their habitats are being altered. While most of the land within the Route 252 Corridor has been subjected to human alteration in one form or another (the creation of pastures from forest, for example, or reforestation with white pine), the rural nature of the region has helped conserve habitat for the region's plants and animals so that many populations continue to thrive.

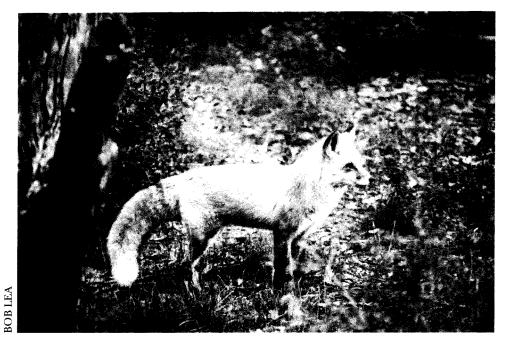
Species of the Corridor

The terrestrial wildlife habitat in the project area can be characterized as rolling farmland with small woodlots, abundant surface waters, and some areas of extensive forest land on the western boundary associated with Little



Bobwhite quail, a game species found in the Route 252 Corridor.

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Red fox, a species regularly seen in the Corridor, in its preferred habitat of forest and open land.

North Mountain. Typical game species associated with this type of habitat include white-tailed deer, wild turkey, squirrel (gray and fox), rabbit, opossum, raccoon, ruffed grouse, and bobwhite quail. Ruffed grouse, which prefer more extensively forested habitats, occur in low numbers. Bobwhite quail, once plentiful in the Shenandoah Valley, are also found in low numbers (probably due in part to more efficient farming techniques which leave less "wasteland," as well as the conversion from small grain farming to pasture or hay land). Black bears will travel

through this area, but prefer extensive tracts of forest land.⁵⁹

Non-game animals frequently seen in the Route 252 Corridor include striped skunk, woodchuck, red and gray fox, and chipmunk. The beaver, which was reintroduced in 1932 after being trapped to the point of extermination, has re-established itself in tributary drainages. Muskrat and migratory game birds such as ducks, woodcock, and geese, are found near streams, ponds, and river bottoms. Various songbird and predatory bird species, as well as reptiles, amphibians, and insects, inhabit the study area. ⁶⁰ Numerous warmwater fish species are reported for Walkers Creek and Moffatts Creek by the Department of Game and Inland Fisheries; these include several species of dace, chub, darter, and sucker. Small numbers of bluegill, madtom, and smallmouth bass have also been reported. Hays Creek and Walkers Creek were stocked with brown trout as recently as the 1970s, but this practice ceased due to an increase in sedimentation and a rise in stream temperature due to the loss of stream vegetation. Today, small populations of wild brown trout are found in tributaries of these watercourses. ⁶¹

Management Considerations

In agricultural areas, small game face the problem of lack of reproductive and winter cover, which has been replaced by heavy sod. Techniques like fallow fielding and crop rotation allow for the creation of small game habitat, as do the strip disking of old field pastures or abandoned fields. A limiting factor for many wildlife populations in the project area is the grazing of both pastureland and woodlands and the elimination of hedgerows and fencerows, which act as wildlife cover and travel corridors. According to the Virginia Department of Forestry (VDOF), hedgerow habitat should be at least 30–45 feet wide to provide travel corridors and resting areas for small game. Riparian zones provide travel corridors between habitat types, and provide protection for aquatic organisms. VDOF recommends a 100-foot buffer for streams to protect these zones. 62

Development often results in a patchwork of habitats, especially when forest homesites are selected. Species dependent on large, unbroken tracts of land (for example, some species of migratory birds) may decline as habitats are

segmented into smaller tracts. Considering wildlife habitat when choosing a homesite can make a great deal of difference, not only to the animals, but for the future enjoyment of the area.

Some of the more productive wildlife habitat can be found on steep ground that is not farmed or on idle or reverting farmland. "Cavity trees," otherwise known as "wolf trees" because of their historical association with denning wolves, provide nesting, foraging, and winter cover for many species. Key habitat areas also include old house sites where fruit trees, grape arbors, and shrubs provide a rich diet for wildlife. Old orchards, spring seeps (especially important in the mountains where they provide a water source in the winter), caves, and rock outcroppings are heavily used by various types of wildlife. 63

Sensitive Ecosystems

Many human residents are unaware that, in addition to providing a home for these more commonly encountered animals, the Route 252 Corridor also contains sensitive ecosystems supporting rare or uncommon plant and animal species. Sensitive ecosystems in and adjacent to the corridor include sinkhole ponds, springs, spring-fed wetlands, streams, sinkholes, caves, forested stream valleys, and large forested blocks. In their natural state, these areas provide needed resources for the maintenance of rare ecosystems, as well as habitat for rare plant and animal species. Current lists of rare plant and animal species and sensitive ecosystems indicate that Augusta County has more of these resources

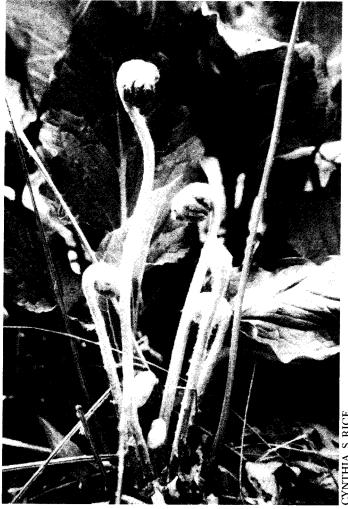
than any other county or city in Virginia, mainly due to its diverse mix of ecosystems.

According to the Virginia Department of Conservation and Recreation's Natural Heritage Program, the Route 252 project area has not been well-studied with regard to the location of sensitive ecosystems and rare species. However, several such areas have been identified by the Natural Heritage Program in the Folly Mill Creek and Walkers Creek drainages. Most are associated with established wetlands. Rare plant species seen in the last two years include sand grape, freshwater cordgrass, vetchling, buckbean, smooth loosestrife, queen-of-the-prairie, pussy willow, prairie sedge, shinning ladies'-tresses, large-leaved grass-of-parnassus, knotted rush, small-headed rush, inland sedge, and marsh speedwell. Rare plants reported from the area but not seen in recent years include

Rare fish in the project area include slimy sculpin and pearl dace. The federally endangered James River spinymussel was collected prior to 1967 from the Maury River. The only known state threatened vertebrate within the project area is a bird species, the loggerhead shrike, which has been reported in a few locations within the Route 252 Corridor. What is most significant about all the rare plant and animal species is that they have been ranked by the Natural Heritage Program as extremely rare and critically imperiled, or very rare and imperiled within Virginia. The extremely rare species are characterized by five or few

Gray's lily (1908) and small skullcap (1975).

Wood fern fiddleheads, unrolling as new fronds. Common to wetlands and damp forests, these plants are well known to locals.



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populations or occurrences in Virginia, or some factor(s) making it especially vulnerable to extirpation in Virginia; the very rare species are characterized by five to twenty populations or occurrences, or some factor(s) making it vulnerable to extirpation in Virginia.

For further information, landowners can consult the Virginia Department of Conservation and Recreation; it maintains the Virginia Natural Heritage Program, which is charged with the identification, protection, and stewardship of the state's biological diversity (see Appendix II).

Conservation Options for Landowners and the Community

MOST OF THE MIDDLEBROOK-BROWNSBURG CORRIDOR is in productive farm and forest uses. Spectacular natural, cultural, and scenic resources abound. Efforts that deter land uses that compete with farming and forestry also keep intact the area's pristine landscapes, historic resources, and ecological values. Maintaining the Corridor's natural resource-based economy and preventing incompatible suburban-style development are mutually dependent goals. As development spreads throughout the Interstate 81 corridor, the future of remaining rural landscapes will depend increasingly on sustaining an agricultural economy.

Through this study, the Valley Conservation Council seeks to showcase the historic sites, farm and forest industries, and natural resources that define the rural landscape of the Middlebrook-Brownsburg Corridor. The study was undertaken to remind residents of the unique qualities that surround them, qualities that will disappear—as they have in nearby Valley communities—unless steps are taken to maintain them. This Conservation Options section describes concrete steps that private landowners and their elected officials can take to sustain the natural, cultural, and scenic integrity of their community.

Voluntary Private Land Protection Measures

Private landowner participation is essential to any long-term effort to keep the natural and cultural integrity of the Middlebrook-Brownsburg Corridor for the future. The most effective voluntary protection tools landowners can use include agricultural and forestal districts and conservation easements. Landowners also can choose to donate land to the Valley Conservation Council or another land trust.



Robert Christian of Scottian Farm, feeding cattle. Agricultural and forestal districts provide one method for farmers to maintain the long-term availability and viability of farm land.

Agricultural and Forestal Districts

Virginia's Agricultural and Forestal District Act authorizes local voluntary agreements between landowners and local governments to protect prime agricultural areas from incompatible development. In essence, the act invites communities to relieve pressures which encourage owners to convert farms to other uses.

By voluntarily establishing an agricultural and forestal district ("ag district"), property owners agree not to convert their farm and forest land to more intense commercial, industrial, or residential uses for a period of between

four and ten years. In return, local governments and the Commonwealth agree not to take actions or make infrastructure investments that will place increased pressure on landowners to convert land in the district to more intense land uses. Twenty-five Virginia counties, including Augusta, now use ag district ordinances to protect more than 650,000 acres of land.¹

Landowner Benefits

Districts offer rural landowners stronger protection from development pressure than zoning. They restrict the powers of the local, state, and, to some extent, the federal governments. From the landowner's point of view, ag districts provide the following benefits:

Land Use Taxation—Qualified land in an ag district is eligible for use-value, or "land use," taxation, whether or not the local government has a county-wide use-value program. Rockbridge and Augusta counties now permit use-value assessment for all land eligible under Virginia law. However, if either county withdraws use-value assessment in the future, qualifying land within ag districts will continue to receive the tax benefit.

Nuisance Ordinances—Localities cannot enforce laws within a district that restrict farming and forestry unreasonably. Laws to limit customary farming practices, such as manure spreading, noisy farm machinery, or prescribed burning, cannot be enforced in ag districts. Health and safety restrictions that prevent water pollution or regulate traffic on public roads, however, can be enforced in a district.²

Land Use Regulations—The ag district ordinance takes precedence over other local land use regulations, including zoning and subdivision ordinances. For instance, residential or commercial setbacks for intensive agricultural operations would not apply in an ag district.³

In addition, impact on an ag district must be considered in local land use decisions."⁴ For instance, the density of residential development on an adjacent parcel can be limited if it might negatively impact forestry or farming in a district.⁵ Zoning changes can be denied because of their impact on the district.⁶

State Regulations—State agencies must consider the impact of their actions on farming and forestry in ag districts. For instance, if deer or other game, which is managed by the state, destroy crops in a district, game management policies must be modified to reduce the impact on the district. Likewise, highway improvements that increase pressure on district landowners to convert their land to residential uses are discouraged.

Condemnation of Land—District landowners have greater protection from acquisition of land by state and local government agencies and public

service corporations, including utility companies. The local government can sometimes block the condemnation of land in such cases.

Community Benefits

Ag districts also benefit the larger community and local taxpayers, and promote efficient local government. Ag districts for example protect scenic resources and natural areas, promote efficient development patterns, and ensure equitable tax policies.

Basic Criteria

Land must meet a few basic criteria to be included in an ag district.⁷

- * Landowners must ask their local government to create the district. Enrollment is completely voluntary.
- * A district must have a core of at least 200 acres in one or more contiguous parcels.
- * Parcels may be included in a district if their closest boundary is within one mile of the boundary of the core, or if they are adjacent to a parcel that is in the district.
- * An owner can enroll part of his/her land in a district without including all of it.

There is no minimum acreage for each landowner, no minimum number of landowners (one parcel can be a district), and no maximum size for districts. They can also cross city and county boundaries if approved by all local governments having jurisdiction over them. Generally, the more land in a district, the greater protection it provides for property owners.

Steps to Forming a District

Districts are voluntary. Districts are initiated by landowners and approved by ordinance by the local governing body.

- 1. Local government adopts ordinance.
- 2. Landowners petition for formation of a specific district.
- 3. Land can be added to a district at any time through the same process.

Conditions for Participation in a District

State law prohibits conditions which bar new dwellings for farm and forestry employees, or for family members. Other conditions can be created in the local ordinance by mutual agreement of the applicants and the local governing body. The conditions or restrictions placed on districts vary from locality to locality and between districts within a locality. Conditions placed on existing districts in Virginia include the following:

- * limitations on the subdivision of land except for transfer to immediate family members;
- * prohibitions on subdivision except into parcels larger than 21 acres;
- * bans on the construction of new non-agricultural or non-forestal buildings;
- * limitations on new land uses to those permitted by right in the agricultural zoning districts;
- * requirements that agricultural and forestal best management practices, like nutrient management plans for croplands, be used; and
- * stipulations that lands along highways within distances varying from 25 feet to 100 feet from the center line be excluded from the district.

"It is the policy of the Commonwealth to conserve and protect... agricultural and forestal lands for the production of foods and other agricultural and forestal products (and) natural and ecological resources which provide essential open spaces for clean air sheds, watershed protection, wildlife habitat, as well as for aesthetic purposes."

—The Agricultural and Forestal Districts Act

Removing Land From Districts

Land can be removed from a district by right when the district comes up for renewal and by right when a landowner dies. Landowners can ask that land be removed from a district at any time after its creation, but the board can reject the application.

Review of a District

The ordinance creating a district defines a period of between four and ten years before it can be reviewed or abolished. No review is required but if the locality decides one is not needed, it must set a new review period. If the board reviews a district it notifies the affected landowners, the planning commission, and hold public hearings. During the review, the board may vote to terminate the district, modify its boundaries, change the conditions applying to the district, or continue the district in its current composition.

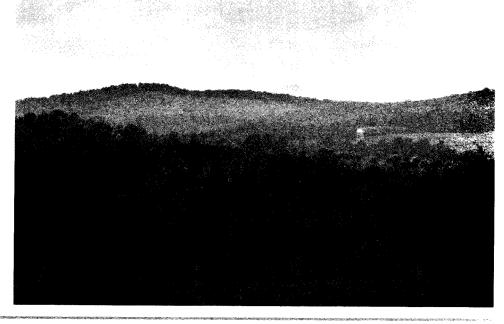
To terminate the district the board passes a resolution dissolving it. If no action is taken, the district remains in effect. When the term of the district (four to ten years) expires, the local government can (but is not required to) renew its status.

Conservation Easements

Conservation easements protect millions of acres of farmland and open space throughout the United States. Individuals permanently protect their land with conservation easement while maintaining ownership. They still live on their land, and can sell it or pass it on to their heirs. In fact, conservation easements can also reduce estate taxes that otherwise rob families of their legacy, taxes that force families to sell farms. Presently, conservation easements have been placed on six properties in the Corridor. Two of these are historic and four are open space easements.

What are Conservation Easements?

Easements are written legal documents, just like other deeds, in which landowners retain ownership of their property yet convey certain specified rights to an easement holder. Easement holders are nonprofit, charitable land trusts, and public entities. Easements are written specifically to meet the property owner's



"With an easement you don't give up anything you would reasonably want to do. If you want to preserve the beauty of this area for your children, this is the way to do it. There are not many things that you can do that will still make a difference not just a year from now, but in 100 years, but this really does."

—Augusta County Easement Donor

Alfoxden, a 303-acre farm near Newport. Placed under conservation easement, the farm includes a rich forest and pasture land, diverse wildlife habitat, and a portion of an historic trail. Jump Mountain, another easement property, can be seen in the distance. Courtesy of Virginia Outdoors Foundation. wishes for the future use of the land. The easement holder is responsible for seeing that these wishes are upheld by future owners of the land. Most conservation easements restrict uses that destroy natural, scenic, or historic areas while allowing traditional use such as farming and forestry.

A conservation easement does not grant the public access to a property unless its owner specifically agrees in the easement document to grant such access. The land remains private property and is protected from trespass just like any other private property.⁹

How a Conservation Easement Works

Most landowners hold a "fee simple" interest or "dominant estate" in their property. This interest is often compared to a bundle of sticks. Each stick represents a specific right associated with the property. Such rights include, among others, the right to farm, to hunt, to extract minerals, to cut timber, to subdivide, and to do anything else with a property that is not prohibited by law. Any one of these rights can be legally separated from the "dominant estate" through an easement and transferred to other parties in a "less than fee" or "partial interest." ¹⁰

Easements are often granted to utility companies so power and telephone lines can cross a property or to neighbors so they can gain access to an adjacent parcel. When such transfers involve a landowner's development rights they are called conservation easements.

For example a landowner can forego the right to subdivide property beyond a specified number of parcels. When granting specific development rights away, a property owner retains title to the land along with the rewards and responsibilities of ownership.

Placing an easement on land does not mean it cannot be developed at all. The owner states the types of development he wants to prohibit. The property can still be sold, rented, bequeathed, or otherwise transferred, but the conservation easement is recorded with the deed and passed on to future holders of the land. If prohibited by the easement, the land can never be subdivided or converted to more intensive uses.

Landowner Benefits

Permanent Protection—Easements allow owners to ensure their property remains largely undeveloped, as a farm, a woodlot, or a natural area, permanently. The holder of the easement is there to ensure those wishes are met after grantor's ownership comes to an end.

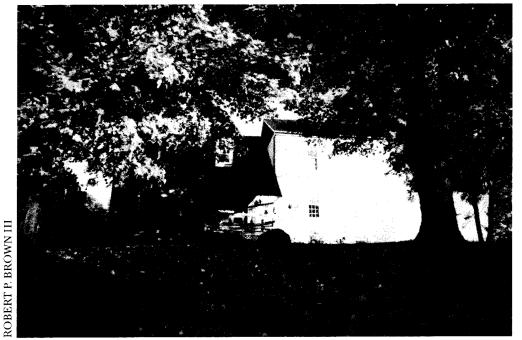
Continued Private Ownership—Land protected by a conservation easement is still private property. Most easements do not change the way private land is used.

Each Easement is Unique—Conservation easements meet the specific desires of landowners and fit the property they protect. An easement for a small property, such as a family camp, might be quite different from one designed for a large, working farm, for instance. Some owners allow new construction or subdivisions. Others reserve the right to divide and sell some parcels for financial reasons or to construct one or more new homes for their children.

Lower Taxes—Conservation easements provide financial benefits to landowners who protect their land. Easements reduce state and federal income taxes, estate taxes, and capital gains taxes. In jurisdictions with no land use taxes, easements also cut property taxes. The tax advantages of easements can make it possible for another generation to keep a family farm. Easements can make conservation goals affordable.

Conservation Easements: An Example of Creative Flexibility

The case of Jump Mountain in Rockbridge County demonstrates how conservation easements can make land acquisitions possible that might not otherwise be considered. When a 1,300acre parcel on the mountain, which overlooked their homes, went on the market, a neighboring family purchased the land. They developed a conservation plan that also made their protection goals economically feasible. A conservation easement was placed on 1,000 acres of the more visible, higher elevation land. The sale of several large parcels clustered at the foot of the mountain made the purchase affordable. The land was so attractive that lots sold by word of mouth. Through this creative development design, the owners ensured the natural qualities of the mountain for the long-term.



Sleepy Hollow, an early-19th century home near Brownsburg. Through an historic easement, its owners are ensuring that the historic features of the property will be protected.

Types of Conservation Easements

Conservation easements target a variety of resources to provide various public benefits. To qualify for federal tax advantages, easements must be permanent and provide a public benefit by protecting an identifiable resource. Easements are often called historic preservation easements, scenic easements, or riparian easements depending on the resource they target, but they are all conservation easements and all offer landowners the same basic options and

benefits. Some ways are tailored to target specific resources are listed below.

Agricultural or Open Space easements protect farm land. They can set aside agricultural resources while allowing compatible development on other, less productive lands.

Historic Preservation easements protect architectural features of historic structures. They often require the owner to get approval from the easement holder before altering buildings.

Riparian easements focus on streams, rivers, and their floodplains, setting aside only the "riparian" areas of a property. Often the only right granted in the easement is the right to destroy vegetation that protects the stream bank.

Scenic easements can be tailored to protect the views along an historic road or the vistas the public sees from an historic site, such as a Civil War battlefield.

Public Recreation easements can create recreational opportunities by protecting the land traversed by a biking or pedestrian trail and providing public access.

Wildlife Habitat can be protected under an easement if it represents a high quality native ecosystem or land form, provides habitat to a rare, threatened, or endangered species, or contributes to the ecological viability of a public park or conservation area.

The Use of Conservation Easements

No two parcels of land are exactly the same. Likewise, no two landowners share identical situations or goals for their land. The beauty of conservation easements is that each one is unique, written to fit the land it protects and the circumstances of the property owners. Several established with the assistance of the Valley Conservation Council are described below. They demonstrate the flexibility easements provide owners in maintaining the special character of their land.

Gifts of Land

For significant natural or historic properties, such as those harboring rare species or plant communities, donation to the VCC or other land trusts may be





the most simple and secure mechanism to ensure the long-term health of the land. Gifts of land can bring significant tax advantages to the donor while allowing them to reach their conservation objectives.

The Use of Land Donations

Whatever the owner's long-term intention, it is important they make those intentions clear and document them with the advice of their own legal counsel and financial advisers. Owners sometimes give property to a land trust because they feel the trust is the best management entity to hold and care for the land over the long term. Other land is given to organizations with the understanding it will be resold. Ways that land donations can help owners meet their objectives are outlined below.

Tax Benefits of Land and Easements Donations

Conservation easements enable owners to preserve the special natural, historic, and agricultural values of their property in its current condition. For most people, meeting these personal conservation objectives is the primary motivation for entering into an easement. In achieving the objectives of an individual landowner, however, easements provide benefits to the public by conserving water, open lands, forests, and other significant historic and natural resources.

Because of these public benefits, the state and federal tax codes offer incentives for landowners who give easements to qualified private land trusts and public agencies. Before entering into a land transfer of any kind, landowners should consult an attorney. If a donor intends to capitalize on tax advantages, the services of a tax professional and a certified land appraiser will also be needed.

Local Government Actions

A number of planning tools allow Rockbridge and Augusta counties to facilitate voluntary private landowner protection and to maintain and enhance the Middlebrook-Brownsburg Corridor's historic, scenic, and economic values. Four of these tools, the comprehensive planning process, zoning ordinance, historic overlay districts, and scenic byways, are described below.

The continuity in land use so characteristic of the Route 252 Corridor is demonstrated in these aerial photographs of the Walkers Creek drainage, taken over a half-century apart in 1937 (left) and 1993 (right). Route 602 runs from the northeast (top right) to the southwest (bottom left) of the picture. Courtesy of United States Department of Agriculture, Soil Conservation Service and Augusta County Department of Community Development.





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Exclusive agricultural zoning is used to conserve Augusta County farmland, such as this property near Middlebrook. Courtesy of David and Betty Bates Temkin.



The Comprehensive Plan

Participation in the county comprehensive planning process is a key way citizens can affect local government decisions which impact the lands and communities of the Middlebrook-Brownsburg Corridor. Each Virginia locality has a comprehensive plan to identify the resources of the community and existing land uses. The plan guides future development and land use while providing a basis for the county zoning ordinance and land use decisions of the county government. Zoning changes and permits can be rejected if they conflict with the goals and objectives identified in the plan.

Comprehensive plan updates should occur at least every five years, under the Code of Virginia. However, citizens can propose amendments to their comprehensive plan at any time. Residents of the Corridor can participate in the planning process by calling on their elected officials to uphold the positive provisions of their plans at any time. Outlines of each county's comprehensive plan provisions regarding the Corridor are provided below.

The Augusta County Comprehensive Plan (Adopted 1994)

Planning Policy Areas. The Augusta County plan divides land into "Planning Policy Areas," which provide a framework for the implementation of zoning and subdivision regulations and future investments in infrastructure including schools and water and sewer lines. Land in the Corridor falls into two of these policy areas, the Agricultural Conservation Area and the Rural Conservation Area, described below.

Agricultural Conservation Area—About 90 percent of the Augusta portion of the Middlebrook-Brownsburg Corridor is in an Agricultural Conservation Area. Very little additional residential development is called for in the Corridor under the plan.¹¹ The area "is expected to remain in agricultural and forestal uses for the long term, thus preserving the viability of the county's agricultural industry and the essential character of its rural landscape, with minimal increases in land use conflicts."¹²

Rural Conservation Area—About 10 percent of the Corridor is in a Rural Conservation Area where slightly more residential development is planned, but

in ways that will "maintain the long-term viability of the rural landscape, with minimal increases in land use conflicts between residential and agricultural uses." ¹³

Zoning Districts. Subsequent to the completion of the plan in 1994, the county revised its zoning ordinance. Land in the rural and agricultural policy areas was placed in either the Exclusive Agricultural or General Agricultural zoning districts, which are described below. Most of the land in the August portion of the Corridor area is zoned either Exclusive or General Agricultural.

Exclusive Agriculture (XA) District—This zoning district is "intended to protect and stabilize agriculture as an ongoing economic activity by permitting only those uses which are either agricultural in nature or act in its direct support." To accomplish this purpose, "only those residential uses required to support agriculture" are permitted by right in the XA district while "intensive agricultural areas are encouraged to locate" there.

General Agricultural (GA) District—This zoning district also is intended "to conserve, protect, and encourage the development, improvement, and preservation of agricultural land" and to prevent "the encroachment of incompatible land use," but the regulation of non-farm uses is less restrictive than in the XA district. Notably, while "non-farm residents should recognize they are located in an agricultural environment where the right to farm has been established as public policy," new single-family dwellings not required by agriculture and religious institutions are permitted by right in the GA district.

Other Protection Strategies. In addition to the planning policy areas and zoning districts, the Augusta County Comprehensive Plan describes several protection strategies which are available for the conservation of the Corridor's historic, natural, and scenic resources. These tools are outlined below.

Cluster Development—The plan encourages new residential development which occurs in the Corridor to follow cluster patterns which preserve 80 to 90 percent of the parent tract in permanent open space with conservation easements.¹⁴

Conservation Easements and Ag Districts—The plan also commits the county to the study of the development of a conservation easement program to serve the Corridor and other agricultural conservation areas. It also states the county's intention to encourage the formation of agricultural and forestal districts in the Corridor.

Environmentally Sensitive Areas—The plan identifies the floodplain of the Middle River, whose upper reaches are in the Corridor, as an Environmentally Sensitive Area defined as "critical to the physical and economic well-being of local citizens and . . . fragile and vulnerable to damage of degradation from development." The plan notes county policies should conserve these areas to "help maintain the long-term viability and functional benefits of the county's natural systems." ¹⁶

Historic Resources—The plan outlines policies to "preserve the county's significant historic and pre-historic sites and structures (and) guide new development so that it is compatible with the County's historic and scenic character." Specific protection tools endorsed in the plan include Historic Overlay Districts and conservation easements for historic land and structures.¹⁷

The Rockbridge County Comprehensive Plan (Adopted 1996)

The Rockbridge County plan¹⁸ establishes a series of goals and objectives regarding various resources based upon the needs and desires of county residents as identified during the planning process. The plan also lists strategies that will be used to achieve the goals and objectives for each resource. The

goals, objectives, and strategies which relate to the future protection and development of the Corridor are outlined below.

Historic Resources. The plan lists several strategies which are to be implemented to "identify, protect, and preserve important historic and prehistoric sites . . . which portray the county's rich heritage," including:

completion of an inventory of historic and prehistoric sites in the county; cooperation with private landowners in the application for listing of suitable sites on the national and state historic registers; and the identification of historic resources which should receive increased protection by being included in the existing Historic Overlay District category of the zoning ordinance.

Natural Resources. A goal of the plan is to "protect and preserve the scenic beauty and environmental quality of the county." The plan lists several strategies which are to be implemented to "ensure that mining, silviculture, and development projects are designed so as to minimize the impact on the natural environment and view sheds" including:

maintaining the protected status of Goshen Pass on the southwestern edge of the Corridor;

identifying fragile and scenic areas to be protected;

encouraging cluster development and development below ridge lines where possible;

preserving the scenic quality of road corridors;

implementation of an agricultural and forestal district ordinance.

Agricultural Resources. The plan includes strategies aimed at "ensur[ing] large areas of the county are maintained as open space" and the "preservation of rural character and view sheds" to meet the future needs of the agricultural and wood products industries, provide for recreation, and maintain water supplies and the overall quality of life. Among the strategies recommended to "encourage long-range farmland and forest conservation" are:

the continuation of use-value taxation of farm and forest lands; the formation of agricultural and forestal districts; encouraging the creation of private conservation easements; studying the creation of a system of transferable development rights; the designation and preservation of "critical environmental areas"; and encouraging the use of forest management practices recommended by the Virginia Department of Forestry.

Zoning Districts. In addition to the strategies listed above, the comprehensive plan relies on the county zoning ordinance to achieve the goals and objectives outlined in the plan. The two zoning districts which include most of the land in the Corridor are described below.

Agricultural and Limited Uses (A-1) District—About 10 percent of the land in the Rockbridge portion of the Corridor is in the A-1 zoning district which includes areas "located on steep mountain soils which present severe limitations to occupancy." This district is intended to facilitate existing agricultural and forestry operations and conserve water and other natural resources while reducing soil erosion, flooding, and fires. The uses permitted by right in the A-1 district are somewhat more restrictive than those allowed by right in the A-2 district.

Agricultural and General Uses (A-2) District—About 90 percent of the land on the Rockbridge side of the Corridor is in the A-2 zoning district which "contains the most productive agricultural and forest lands" in the county. This zoning district is designed to "provide for the orderly expansion of urban development" while protecting agricultural and forestry operations and water resources. Some uses permitted by right in the A-2 district are barred or require special use permits in the A-1 district including multi-family dwellings, schools, churches, cemeteries, and golf courses.



Historic Overlay Districts

Counties can encourage new development to be compatible with the Corridor's historic and scenic character by using Historic Overlay Districts in their zoning ordinances. The Rockbridge County zoning ordinance already provides for Historic Overlay Districts but has not created any districts. The Augusta County Comprehensive Plan calls for the creation of such an enabling clause in its zoning ordinance. Historic Overlay Districts enhance community awareness and understanding of historic resources and of the potential these resources have to benefit the area's culture, economy, and tourism industry. They also enable counties to consider the historic significance of a property when reviewing building permits, subdivision applications, and zoning variances or zoning permits.

Instead of designating specific areas to be included in Historic Overlay Districts, counties can define rules for districts and encourage landowners to voluntarily submit proposals for lands to be included. The owners of sites and places of special significance can also qualify for income tax advantages by nominating their properties for inclusion in the Virginia and federal registers of historic places.

Virginia Byway Designation

To recognize the high scenic quality of roads in the Corridor, citizens can seek Virginia Byway designation for roads. Byway designation gives "official recognition to the outstanding qualities of designated roads and . . . encourages local governments to adopt land use measures to protect these resources for the enjoyment of future generations." Byway designation places no land use restrictions or controls upon a designated byway corridor," according to the Virginia Department of Conservation and Recreation's Guide for Virginia Byway Management. Through the program, the Virginia Department of Transportation (VDOT) marks designated byways with appropriate signs. Designation also allows the VDOT to acquire, from willing donors or sellers, land and interest in land, such as conservation easements, which is important to the integrity of a byway. 19 The Augusta County Comprehensive Plan calls for qualified roads in the county to be so designated.20 The Rockbridge County Comprehensive Plan states "the scenic quality of the county's road corridors should be preserved through available programs and legislation" but does not specifically call for byway designation.

Appendix I: Architectural Resources of the Route 252 Corridor

Virginia Department of Historic Resources Survey

Key: * Virginia Landmarks Register / + National Register of Historic Places / ~ Historic Easement

Property Name * + ~	Material(s)/Structure Plan	Date	Location
Anderson (Maury) Gen. Store	Frame 1-room	1870	Rockbridge/Route 39
Anderson Farm	Frame Mid-19th Century I-House	1860?	Rockbridge/Route 731
Arbor Hill	Brick Double Pile 4-room Central Passage	1820-1840	Augusta/Route 695 West
Arbor Hill Schoolhouse	Frame 2-room/Public	1885-1900	Augusta/Route 252/Arbor Hill
Arbor Hill Slave Quarter	Frame 1-room Plan	Mid-19th Century	Augusta/Route 695 West
Arehart House	Log Rectangular 3-room Plan	1820-1840	Augusta/Route 679
Arehart, Jacob Tavern*+	Log Pre-Civil War Hall-and-Parlor Plan	1820-1860	Augusta/Middlebrook
Arehart, V. G. Store	Frame	1917-1918	Augusta/Route 682
Arehart-Buchanan House	Log Mid-19th Century Hall-and-Parlor Plan	1850-1870	Augusta/Route 602
Arehart-Rosen House	Log Mid-19th Century Hall-and-Parlor Plan	1850-1870	Augusta/Route 682
Argenbright-Arehart House*+	Log Mid-19th Century I-House/Enclosed Stair	1840-1860	Augusta/Middlebroook
Argenbright-Craig House	Brick Double Pile 4-room Asymmetrical Plan	1820-1840	Augusta/Route 695 West
Augusta Co. Poor House Cem.		19th Century	Augusta/Route 695 South
Augusta County Poor House	Brick Mid-19th Century I-House	1850-1880	Augusta/Route 695 South
Bailey, D. H. House	Log Pre-Civil War Hall-and-Parlor Plan	1820-1860	Augusta/Route 695 South
Bare House	Brick I-House	ن	Rockbridge/Route 729
Baylor Tenant House	V-Notched Log 1-room Rectangular Plan	Late 19th Century	Augusta/Route 677
Baylor, John House	Brick 2-room Plan/2 heated rooms	1840-1850	Augusta/Route 841
Baylor, John Mill	Stone	1840s	Augusta/Route 841
Baylor-Kniple House	Log 2-room Plan/ Log Mid-19th Century I-House	1840-1860	Augusta/Route 841
Baylor-Rowe House	Log Pre-Civil War Hall-and-Parlor Plan	1830-1860	Augusta/Route 712
Beard Place	Brick Mid-19th Century Hall-and-Parlor Plan	Mid-19th Century	Rockbridge/Route 252/New Providence
Beard, D. E. House*+	Log Mid-19th Century Hall-and-Parlor Plan	1850-1870	Augusta/Middlebrook
Beard, John S. House	Brick Pre-Civil War I-House	1845-1860	Augusta/Route 620 West
Beard-Tolley House	Log Pre-Civil War Hall-and-Parlor Plan	1820-1850	Augusta/Newport
and the second			

Key: * Virginia Landmarks Register / + National Register of Historic Places / ~ Historic Easement

D	material(s)/otructure Plan	Date	Location
Beckner House	Brick Early 19th Century Hall-and-Parlor/I-House	1830/Late 19th Cen.	Rockbridge/Route 729
Bellevue	Brick Early 19th Cen. Double Pile Central Passage		Rockbridge/Route 731
Berry, Charles House	Brick Pre-Civil War Side Passage Plan	1800-1820	Augusta/Route 252/North of Newport
Berry, John R. House	Brick 2-room Plan/2 heated rooms	1842	
Berry-Crist House	Brick Mid-19th Century I-House	1840-1860	Augusta/Route 726 North
Berrymor Farm	Brick Mid-19th Century I-House	1840-1860	Augusta/Route 693 East
Bethel Green*+	Brick Double Pile 4-room Central Passage Plan	1854-1856	Augusta/Route 701
Bethel Presbyterian Ch. Cem.		1820-Present	Augusta/Route 693 East
Bethel Presbyterian Church	Brick	1889-1892	
Bethesda Presbyterian Church	Brick 1-room Greek Revival/Romanesque	1867/1908-1909	Rockbridge/Route 39
Bobbitt House	Brick Mid-19th Century I-House	Mid-19th Century	Rockbridge/Route 724 West
Bosworth House*+	Log Mid-19th Century I-House	Mid-19th Century	Rockbridge/Brownsburg
Bowman, Jacob House	Brick/Stone Hall-and-Parlor Plan	1830-1840	Augusta/Route 695 West
Bowman, Jacob Mill	Brick	1830-1840	Augusta/Route 695 West
Bowman-Payne House	Brick Pre-Civil War I-House	1830-1850	Augusta/Route 678
Boxwood Pride	Frame Mid-19th Century 3-room Plan	1850-1890	Rockbridge/Route 602
Brandenberg, G. W. House	Brick Pre-Civil War I-House	1834-1836	Augusta/Route 602
Briarwood House	Brick Pre-Civil War I-House	1835	Rockbridge/Route 620 South
Brown House	Brick Mid-Late 19th Century I-House	1848/1895	Rockbridge/Route 252/N. of Brownsburg
Brown, J. Farm (Dunlap House)	Frame Mid-19th Century I-House	1856	
Brownlee House	Frame Mid-19th Century I-House	1860	Rockbridge/Route 732
Buchanan Place	Log Hall-and-Parlor Plan	Late 18th/Early 19th C.	Rockbridge/Route 726 South
Buchanan, Gertie House	Frame Mid-19th Century Hall-and-Parlor Plan	1860	Rockbridge/Route 717
Buchanan-McCutchen House	Frame/Log Post-Civil War I-House	1880-1900	Augusta/Route 602
Cale, W. W. House	Log Pre-Civil War Hall-and-Parlor Plan	1820-1860	Augusta/Route 876
Cale-Clemmer House	Brick Pre-Civil War I-House	1837	Augusta/Route 602
Cale-Clemmer Slave Quarter	Brick 2-room Plan	1820s	Augusta/Route 677
Callison, James H. House	Log/Frame Pre-Civil War I-House	1830-1855	Augusta/Route 675
Carson House and Store*+	Brick Mid-19th Century 2-room Plan	Mid-19th Century	Rockbridge/Brownsburg
Carson-Walton Tenant House	Log Mid-19th Century Hall-and-Parlor Plan	1850-1880	Augusta/Route 620 West
Cedars, The	Frame Mid-Late 19th Century Side Passage Plan	1859-1880	Augusta/Route 252/South of Newport

Key: * Virginia Landmarks Register / + National Register of Historic Places / ~ Historic Easement

Property Name * + ~	Material(s)/Structure Plan	Date	Location
Chamberlin House	Log Post-Civil War I-House	1860-1880	Rockbridge/Route 623
Clemmer, H. M. House	Frame Eustler Brothers House	1900	Augusta/Arbor Hill
Clemmer, W. K. House	Brick Double Pile 4-room Central Passage Plan	1860-1870	Augusta/Route 677
Clemmer-Hutchins House	Log 1-room/Exactly Square	1905	Augusta/Newport
Clemmer-Hutchins Mill		1850-1880	Augusta/Newport
Cochrane-Cale House	Brick Pre-Civil War I-House	1830-1840	Augusta/Route 603
Cochrane-Cale Tenant House	Log 2-room Plan/Exactly Square	Late 19th Century	Augusta/Route_603
Cox-Brown House	Log 1-room Plan/Log Post-Civil War I-House	Mid-Late 19th Century	Augusta/Route 613
Craney House*+	Log 1-room Plan	19th Century	Rockbridge/Brownsburg
Crist House	Brick Pre-Civil War Double Pile Side Passage Plan	1822	Augusta/Route 726 North
Davis House	Brick Mid-19th Century I-House	1850-1870	Augusta/Route 602
Davis House	Frame Pre-Civil War I-House	Early 19th Century	Rockbridge/Route 39
Davis Tenant House	Log 2-room Plan with Central Flue	1880-1910	Augusta/Route 602
Dudley House	Log 2-room Plan	Late 19th/Early 20th C.	
Dull-Hanger House #2	Log Post-Civil War Hall-and-Parlor Plan	1870-1890	Augusta/Route 696
Dunlap, W. R. House	Brick Non-Standard Early-Mid 19th Century Plan	1840-1870	Augusta/Route 876
Dunlap-Sweet House*+	Frame/Log Post-Civil War I-House	1870-1890	Augusta/Middlebrook
Eddy Place (North Mtn. Farm)		1860-1880	Augusta/Route 252/South of Arbor Hill
Ellinger, Hattie House	Log Mid-19th Century Hall-and-Parlor Plan	1850-1880	Augusta/Summerdean
Ellinger, Press House	Log 1-room Rectangular Plan	1860-1880	Augusta/Summerdean
Elm Farm	Stone 3-room Plan; Brick Addition	1800/1830	Rockbridge/Route 721
Engleman-Clemmer Hse/Shop*+	Engleman-Clemmer Hse/Shop*+ Log 1-room Rectangular Plan; Frame Addition	1830-50/1884-1900	Augusta/Middlebrook
Evans-Wright House	V-Notched Log 2-room Plan	Mid-19th Century	Augusta/Route 710 North
Fauber, George House	Brick 1-room Plan/Frame Post-Civil War I-House	1820-40/1870-84	Augusta/Route 695 East
Fauver, William House	Log Pre-Civil War Hall and Parlor Plan	1840-1860	Augusta/Route 693 East
Fauver-Rosen Hse/Store*+	Frame Post-Civil War I-House	1860-1880	Augusta/Middlebrook
Fix, Mathias House	Log 2-room Plan	1830-1860	Augusta/Summerdean
Fixx House*+	Brick Early 19th Century Side Passage Plan	1830	Rockbridge/Brownsburg
Flowing Springs Farm	Brick Pre-Civil War I-House	1820-1840	Augusta/Route 700
Fulton, William House	Brick Post-Civil War I-House	1865-1880	Augusta/Route 620 East
Gable House (The Gables)	Log Side Passage Plan	Mid-Late 19th Century	Rockbridge/Route 732

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Property Name * + ~	Material(s)/Structure Plan	Date	Location
Garrison, J. S. Tenant House	Log Mid-19th Century Hall-and-Parlor House	1860-1890	Augusta/Route 670
Gibson Brothers Farm	Brick Mid-19th Century I-House	1840-1860	Augusta/Route 613
Glebe Burying Ground*+		Mid-Late 18th Century	Augusta/Route 876
Glebe Farm	Brick Double Pile 4-room/3 bay Plan	1913	Augusta/Route 841
Glebe Schoolhouse*+	Brick 1-room/Private and Public	Mid-19th Century	Augusta/Route 841
Glover House	Brick Mid-19th Century I-House	1830-1860	Augusta/Route 695 South
Goode, M. P. House*+	Log Non-Standard Early-Mid 19th Century Plan	1820-1850	Augusta/Middlebrook
Greaver, David House	Brick Pre-Civil War I-House	1820-1850	Augusta/Route 693 West
Greenwood	Log/Frame Pre-Civil War I-House	1820-1840	Augusta/West of Route 252/Newport
Greenwood Tenant House	Brick 2-room Plan	1830-1850	Augusta/Route 252/North of Newport
Greiner Store	Frame Mid-19th Century I-House	1857-1880	Rockbridge/Route 717/Decatur
Grim, David House	Brick Mid-19th Century I-House	1840-1860	Augusta/Route 701
Griner, H. J. House	Log Mid-19th Century Hall-and-Parlor Plan	1850-1880	Augusta/Route 695 South
Hall-Slusser House	Brick Pre-Civil War I-House	1830-1840	Rockbridge/Route 252/New Providence
Hallman-Watkins House	Brick Mid-19th Century I-House	1850-1870	Augusta/Route 711
Harris, John House	Brick Mid-19th Century I-House	1854	Augusta/Route 620 East
Hays Creek Mill*+	Frame 1-room	1800-1850	Rockbridge/Route 724 West
Heffelfinger House and Store*+	Brick 1story	1900	Rockbridge/Brownsburg
Helms-Jones House*+	Log Pre-Civil War Hall-and-Partor Plan	1830-1860	Augusta/Middlebrook
Helms-Smith House*+	Log Mid-19th Century Hall-and-Parlor Plan	1850-1870	Augusta/Middlebrook
Hogshead-Rusmisel House*+	Log Pre-Civil War Hall-and-Parlor Plan	1820-1860	Augusta/Middlebrook
Holy Trinity Lutheran Church*+	Brick	1884	Augusta/Middlebrook
Holy Trinity Parsonage*+	Frame/Log Post-Civil War I-House	1860-1880	Augusta/Middlebrook
Hutchens House	Brick Double Pile 4-room/Central Passage	1860-1880	Augusta/Route 252/Newport
Hyde-Clemmer House*+	Log/Frame Mid-19th Century I-House	1840-1870	Augusta/Middlebrook
Immanuel Presbyterian Church	Frame 1-room Plan w/Foyer	1879	Rockbridge/Route 602/Zack
Kayton House	Log Mid-19th Century 2-room Plan	Mid-19th Century	Rockbridge/Route 623
Keiso House	Log Pre-Civil War I-House	1830-1850	Rockbridge/Route 724 West
Kennedy-Lunsford Farm*+	Stone Hall-and-Parlor Plan (?)/I-House	1796/Early 19th Cen.	Rockbridge/Route 606
Kennedy-Wade Mill*+	Stone/Frame w/ Board and Batten	Early 19th Cen./1873	Rockbridge/Route 606
Level Loop*+~	Brick Early 19th Century I-House	1820-1840	Rockbridge/Route 724 West

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riopeity italiie + ~	material(s) Structure Figure	Date	LOCALIOII
Locust Grove	Brick Pre-Civil War I-House	1810-1830	Augusta/Route 677
Lotts, Jacob House	Log Mid-19th Century Hall-and-Parlor Plan	1850-1880	Augusta/Route 604
Lotts, John House	Log Mid-19th Century Hall-and-Parlor Plan	1850-1880	Augusta/Route 604
Lucas-Zimmerman House	Log Mid-19th Century 2-room Plan	Mid-19th Century	Rockbridge/Route 725
Martin, Don House	Brick Double Pile/4-room/Central Passage Plan	1850-1880	Augusta/Route 682
Martin, Thomas House	Brick Double Pile/4-room/Assymetrical Plan	1810-1830	Augusta/Route 678
Mast House	Brick Early 19th Century Hall-and-Parlor Plan	1820-1840	Rockbridge/Route 732
Maxwelton (Stuart House)	Brick Pre-Civil War I-House w/2 story Porticos	1815	Rockbridge/Route 602
McChesney House & Store*+	Brick Early 19th Century Side Passage Plan	1820-1830	Rockbridge/Brownsburg
McChesney-Craig House	Log 1-room Plan; Log/Frame I-House	1840/1871	Augusta/Route 681
McClung-Smith House	Log Mid-19th Century Hall-and-Parlor Plan	1865	Rockbridge/Route 719
McClure, Findlay House	Brick Early 19th Century Double Pile Central Pass.	Early 19th Century	Rockbridge/Route 724 East
McComb, J. K. House	Brick Pre-Civil War I-House	1830-1850	Augusta/Route 674
McCorkle, John S. Store *+	Stuccoed Concrete	1879	Augusta/Middlebrook
McCorkle-Brown House	Brick Dbl. Pile 3-room Central Passage/I-House	1830-1860	Augusta/Route 876
McCormick-Bare House	Brick Early 19th Century 2-room Plan	1830	Rockbridge/Route 252/Cedar Grove
McCray House	Brick Post-Civil War I-House	1860-1880	Augusta/North of Route 252/Newport
McCrosky Place	Log Early 19th Century Double Pile Central Pass.	1800	Rockbridge/Route 726 South
McCutchen Schoolhouse*+	Log 1-room/Public and Private	1860-1890	Augusta/Route 602
McCutchen, Addison House	Brick Mid-19th Century I-House	1850-1870	Augusta/Route 602
McCutchen, James B. House	Frame/Log Post-Civil War I-House	1880-1900	Augusta/Route 602
McCutchen, James M. Jr. House	Log Mid-19th Century Hall-and-Parlor Plan	1840-1870	Augusta/Route 693 West
McCutchen-Dunlap House	Stone Pre-Civil War I-House	1825-1850	Augusta/Route 603
McCutchen-Meek House	V-Notched Log 1-room Rectangular Plan	1800-1820	Augusta/Route 676
McFaddin House*+	Brick Bank-Sited/Early 2-room Plan	1793	Rockbridge/Route 606
McKemy Schoolhouse	Frame 1-room/Public	1878	Augusta/Route 726 North
McKinley Schoolhouse	Frame 2-room/Public	1902-1903	Augusta/Route 682
Middlebrook Cemetery*+		1851-1934	Augusta/Middlebrook
Middlebrook School No 2*+	Brick/Consolidated	1922	Augusta/Middlebrook
Middlebrook School No. 1*+	Brick/Consolidated	1916	Augusta/Middlebrook
Middlebrook Tavern*+	Brick 2-room Plan	1825-1835	Augusta/Middlebrook

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Property Name * + ~	Material(s)/Structure Plan	Date	Location
Miller Log House	Log Post-Civil War Hall-and-Parlor Plan	Late 19th Century	Augusta/Route 252 South of Middlebrook
Miller. A. J. House*+	Brick Double Pile 4-room Central Passage Plan	1884	Augusta/Route 693 West
Miller-Shuev House	Brick Pre-Civil War I-House	1830-1850	Augusta/Route 712
Miller-Spitler House	Log Pre-Civil War Hall-and-Parlor Plan	1840-1860	Augusta/Route 876
Miller-Stephenson House	Brick Pre-Civil War I-House	1830-1850	Augusta/Route 602
Mish, Bob House	Concrete Brick/Plaster I-House	1890-1910	Augusta/Route 603
Mish, George (Henry) Barn*+	Brick Forebay Bank Barn	1849	Augusta/Route 876
Mish, George (Henry) House	Brick Pre-Civil War I-House	1830	Augusta/Route 876
Mish, George Tenant House	Log Post-Civil War Hall-and-Parlor Plan	Late 19th Century	Augusta/Route 700
Mish, J. W. Tenant House	Log Pre-Civil War Hall-and-Parlor Plan	1800-1850	Augusta/Route 670
Miss Pet's House*+	Frame (?) I-House with Frame Addition	٤	Rockbridge/Brownsburg
Moffett's Creek Schoolhouse*+	Frame 1-room/2-room/Public	1880-1910	Augusta/Route 681
Monte Vista	Brick Pre-Civil War I-House	1830-1850	Augusta/Route 713
Mountain View	Frame Mid-19th Century I-House	1850-1880	Rockbridge/Route 732
Mt. Airy Baptist Ch. Cem.*+	Previously known as "Mount Edwards"	20th Century	Augusta/Middlebrook
Mt. Airy Baptist Church*+	Previously Known as "Mount Edwards"	1886	Augusta/Middlebrook
Mt. Herman Lutheran Cemetery		1857-20th Century	Augusta/Newport
Mt. Tabor Lutheran Cemetery		1830-Present	Augusta/Route 694 West
Mt. Tabor Lutheran Church	Brick	1886	Augusta/Route 694 West
Mulberry Grove*	Frame 2-room Plan/Brick Dbl. Pile/Central Pass.	1790/1815-1825	Rockbridge/Route 724 East
New Providence Cemetery*+		1770-present	Rockbridge/Routes 252 and 726
New Providence Church*+	Brick Greek Revival	1859	Rockbridge/Routes 252 and 726
Newcomber (Anderson House)	Log Mid-19th Century Hall-and-Parlor Plan	1850-1870	Rockbridge/Route 732
Norcross House	Log Mid-Late 19th Century 1-room Plan	1865 or later	Rockbridge/Route 717
Nye House*+	Brick Early 19th Century Hall-and-Parlor Plan	1820-1830	Rockbridge/Brownsburg
Oak Hall	Brick Double Pile 4-room Central Passage Plan	1856-1870	Augusta/West of Route 252/Middlebrook
Oak Hill Cemetery		Late 19th-20th Century	Augusta/Route 252/North of Newport
Oak Hill Church	Frame	1860s-1880s	Augusta/Route 252/North of Newport
Oakbourne	Brick Mid-19th Century I-House	1840-1860	Rockbridge/Route 252/Brownsburg
Oakland Cemetery		1898-1930	Augusta/Route 670
Old Bethesda Manse	Frame Late 19th Century I-House	Late 19th Century	Rockbridge/Route 39

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perty Name	Material(s)/Structure Plan	Date	Location
Ott, Enos House	Brick Post-Civil War I-House	1865-1880	Augusta/Route 620 East
Palmer, Charles House	Log Pre-Civil War Hall-and-Parlor Plan	1820-1860	677
Peck, A. E. House	Log Pre-Civil War Hall-and-Parlor Plan	1850-1860	
Pool-Rowe House	Log Pre-Civil War Hall-and-Parlor Plan	1820-1860	876
Price, Jacob House	Brick 2-room Plan	1820-1850	Augusta/Route 252/South of Arbor Hill
Randolph-Buchanan House*+	Log Pre-Civil War Hall-and-Parlor Plan	1830-1860	Augusta/Middlebrook
Reed House	Brick Pre-Civil War I-House	1827	Rockbridge/Route 731
Rennie House (Still Meadow)	Brick Mid-19th Century I-House	1850-1870	Augusta/Route 602
Riley-Buchanan House	Log Mid-19th Century Hall-and-Parlor Plan	1850-1870	Augusta/Route 602
Robertson House	Log 1-room/Relatively Square	1850-1880	Augusta/Route 620 East
Rock Castle (McNutt House)	Log 1-room; Brick Late 19th Cen. Side Passage	1830-50/1870-90	Augusta/Route 726 North
Rosemont	Log Rectangle/Brick 3 Part Palladian Plan	1810/1840-50	Augusta/Route 693 East
Rosen-Hemp House	Frame/Log Post-Civil War I-House	1900-1915	Augusta/Route 693 East
nd Store*+	Brick 2-room Plan	1830/1890s	broo
Rusmisel, D. House*+	Log Pre-Civil War Side Passage Plan	1830-1850	Augusta/Middlebrook
ation	Frame	Late 19th Century	Augusta/Newport
Sensabaugh, Arthur House	Brick Mid-19th Century I-House	1850-1870	Augusta/Route 602
Sensabaugh, D. W. House	Brick 2-room Plan/2 Heated Rooms	1820-1840	Augusta/Route 602
Sheets-Wright House	Log Non-Standard Early-Mid 19th Century Plan	1820-1850	
onse*+	Log Mid-19th Century Hall-and-Parlor Plan	1850-1870	Augusta/Middlebrook
	Brick	1833/1870-1890	Augusta/Route 602
Shemariah Church Cemetery		Mid-19th-20th Century	Augusta/Route 602
	Log Mid-Late 19th Century/2 sections	Mid-Late 19th Century	Rockbridge/Route 602
Shibley House	Frame Irregular/Complex Plan	1881	Augusta/Newport
Shoultz House*+	Log Mid-Late 19th Century 2-room Plan	Mid-Late 19th Century	Rockbridge/Brownsburg
Shuey, John Jacob House	Brick Mid-19th Century I-House	1860-1880	Augusta/Route 713
Shuey, Lewis House*+	Log Flurkuchenhaus	1795-1810	Augusta/Route 713
Silver Lee	Log Mid-19th Century Hall-and-Parlor Plan	1850	Rockbridge/Route 724 East
	Brick 2-room Plan	1835; rebuilt 1924	Augusta/Route 678
t House	Bri ck 2-room Plan	1850-1890	Augusta/Route 678
Sleepy Hollow*+~	Stone 1 1/2 story Side Passage/Brick Wing	Early 19th Century	Rockbridge/Brownsburg

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Property Name * + ~	Material(s)/Structure Plan	Date	Location
Smiley's Mill	"Old Merchant Mill" burned; rebuilt as frame	1835/1923-25	Augusta/Route 252/South of Newport
Smiley-Duffy House	Log Mid-19th Cen. Hall-and-Parlor, Brick I-House	Mid-19th Cen/1860-80	Augusta/Northwest of Route 252/Newport
Snow Spring Farm	Log 1-room Nearly Square/Frame I-House	1840-60/1900-12	Augusta/Route 679
Snyder-Miller House	Log 2-room Plan	1840-1860	Augusta/Route 711
St. John's Ch. of Christ Cem.		1809-Present	Augusta/Route 695 South
St. John's Church of Christ	19th Cen. Log; 1912 Brick destroyed in 1978	1979 Brick	Augusta/Route 695 South
Steele-Armaroad Hse/Store*+	Log/Frame Mid-19th Century I-House	1830-1850	Augusta/Middlebrook
Steele-Coyner House	Brick Double Pile 4-room Central Passage Plan	1870	Augusta/East of Route 252/Newport
Stephenson House	Log Post-Civil War Hall-and-Parlor Plan	Mid-19th Century	Augusta/Newport
Sterrett House	Brick Late 19th Century Double Pile Central Pass.	1870	Rockbridge/Route 712
Stonyfoot-Davis Farm	Log/Frame Early 19th C. Hall/Parlor; I-House add.	Early-Mid 19th Century	Rockbridge/Route 724 West
Stuart Place	Brick Early 19th Century 2 room Plan	1820-1840	Rockbridge/Route 727
Sugar Loaf Farm	Brick 2-room Plan; mid-19th Century I-House	1830-50/1850-80	Augusta/Route 695 West
Summerdean Store and P. O.	Brick	1840-1860	Augusta/Summerdean
Swartzel, Ira House	Brick Double Pile 3-room Central Passage Plan	1830-1850	Augusta/Route 693 East
Swartzel-Fifer House	Log Mid-19th Century Hall-and-Parlor Plan	1850-1880	Augusta/Route 693
Swisher Log House	Log Mid-19th Century Hall-and-Parlor Plan	Mid-19th Century	Rockbridge/Route 729
Swope House*+	Brick Early 19th Century Side Passage Plan	1820-1840	Rockbridge/Brownsburg
Swope Log House	Log Early 19th Century Hall-and-Parlor Plan	Early 19th Century	Rockbridge/Route 710
Thompson House	Log Mid-19th Centurty Hall-and-Parlor Plan	1850-1870	Augusta/Newport
Thompson, William House	Brick Pre-Civil War I-House	1820-1840	Augusta/Route 713
Thompson-Lightner House	Log 1-room Rectangular Plan	1820-1850	Augusta/Route 838
Thompson-McClure House	Log Mid-19th Century Hall-and-Parlor Plan	1840-1860	Augusta/Newport
Truss Bridge #6005	Roanoke Iron and Bridge Company/Single Span	1922	Rockbridge/Route 602 (Hays Creek)
Truss Bridge #6006	Pratt Pony Truss	Early 20th Century	Rockbridge/Route 731 (Hays Creek)
Waddell House	Frame Pre-Civil War Side Passage Plan	1820-1850	Augusta/Route 693 South
Wade House*+	Brick Early 19th Century 2-room Plan	1820-1830	Rockbridge/Brownsburg
Wade, Charles House*	Frame Early 20th Century I-House	1913	Rockbridge/Route 606
Wade, Jim House	V-Notched Log 2 room Plan with Central Flue	1880-1900	Augusta/Route 682
Walker's Creek U. Meth. Church	Frame 1-room Rectangular Plan	1904	Rockbridge/Route 602/Zack
Walker, Zachariah House	Brick Pre-Civil War I-House	1830	Rockbridge/Route 731

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Property Name * + ~	Material(s)/Structure Plan	Date	Location
Walkerlands	Frame Mid-19th Century Double Pile Central Pass	Late 1850s	Bockbridge/Boute 724 Woot
Ward House*+	Log Mid-19th Century Hall-and-Parlor Plan	Mid-19th Century	Bockhridge/Brownshird
Watts House	Brick Early 19th Century Hall-and-Parlor Plan	1830-1840	Rockhridge/Boute 726 South
White Hall*+	Frame Early 19th Century Hall-and-Parlor Plan	1832-1839	Rockbridge/Brownshira
White-Hamilton House	Log/Frame Mid-19th Century I-House	1850-1880	Audusta/Route 876
Williams, Col. H. J. House	Brick Mid-Late 19th Century Side Passage Plan	1865-1880	Augusta/Route 674
Willow Bank	Brick Late 19th Cen. Double Pile Central Passage	1870	Rockbridge/Route 731
Willson Farm	Brick Double Plle Central Passage Plan	1820-1840	Rockbridge/Route 717
Wilson-Hanger House	Log 1-room/Relatively Square Plan	1820-1850	Augusta/South of Boute 693 Fact
Windy Glen	Log I-House	19th Century	Rockhridge/Boute 39
Wiseman, Jim House	Log Post-Civil War Hall-and-Parlor Plan	1870-1890	Augusta/Boute 838
Wright, Cornelia A. House	Brick Pre-Civil War I-House	1830-1850	Augusta/Boute 709
Zack Gas Station	Frame 1 story	1930-1940	Rockbridge/Route 602/Zack

Appendix II: Natural and Historic Resource Agencies and Organizations

Augusta County Department of Community
Development
P.O. Box 590
Verona, VA 24482
(540)245-5700

Augusta Historical Society P. O. Box 686 Staunton, VA 24402

Central Shenandoah Planning District Commission P.O. Box 1950 Staunton, VA 24402 (540)885-5174

Division of Mineral Resources Virginia Department of Mines, Minerals, and Energy P.O. Box 3667 Charlottesville, VA 22903 (804)293-5121

Division of Natural Heritage Virginia Department of Conservation and Recreation 1500 East Main Street, Suite 312 Richmond, VA 23219 (804)786-7951 hhtp://www.state.va.us/~dcr/vaher.html

Natural Resources Conservation Service (Augusta County) P.O. Drawer 14 Verona, VA 24482 (540)248-4328

Natural Resources Conservation Service (Rockbridge County) 30 East Preston Street Lexington, VA 24450 (540)463-7125

Rockbridge County Planning Office 150 South Main Street Lexington, VA 24450 (540)464-9662

Rockbridge Historical Society 101 East Washington Street Lexington, VA 24450 (540)464-1058

Valley Conservation Council P.O. Box 2335 Staunton, VA 24402 (540)886-3541 Virginia Department of Environmental Quality Valley Regional Office 4411 Early Road P.O. Box 1129 Harrisonburg, VA 22801 (540)574-7800 http://www.deq.state.va.us

Virginia Department of Forestry 728 Richmond Road Staunton, VA 24401 (540)332-7770 http://www.state.va.us/~dof/dof.htm

Virginia Department of Game and Inland Fisheries—Region 4 P.O. Box 996 Verona, VA 24482 (804)367-8341 http://www.state.va.us/~dgif/index.htm

Virginia Department of Historic Resources http://www.state.va.us/dhr/dhrwebpg.htm Augusta County residents contact:
Winchester Regional Office
104 North Braddock Street
Winchester, VA 22601
(540)722-3427
Rockbridge County residents contact:
Roanoke Regional Office
1030 Penmar Avenue SE
Roanoke, VA 24013
(540)857-7585

Virginia Division of Soil and Water Conservation Rt. 4, Box 99-J Staunton, VA 24401 (540)332-9991

Virginia Outdoors Foundation Richmond Office: 203 Governor Street, Suite 420 Richmond, VA 23219 (804)225-2147 Central/Western Virginia Office: 1010 Harris Street, Suite 4 Charlottesville, VA 22903 (804)293-3423

Cultural Resources

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University Press of Virginia, 1977, p. 6.

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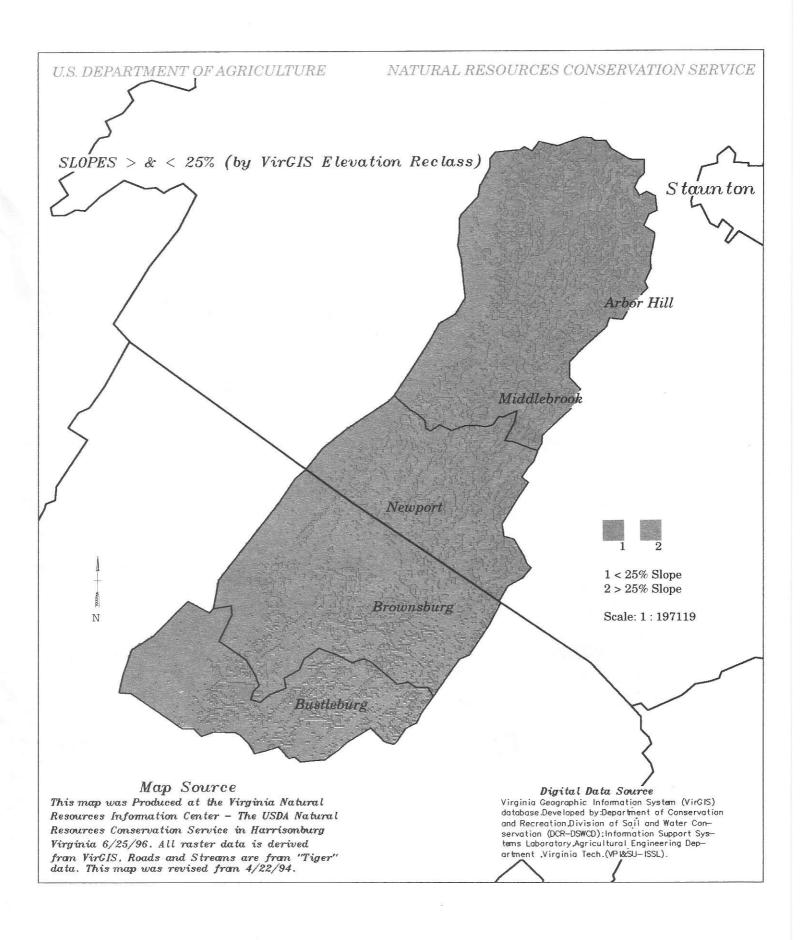
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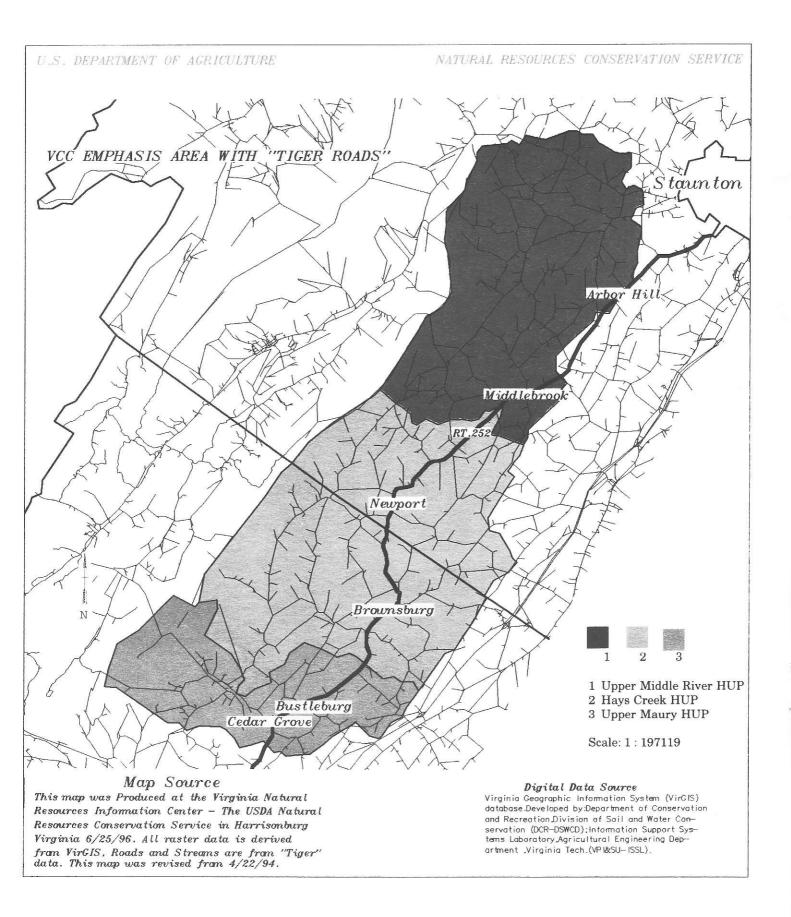
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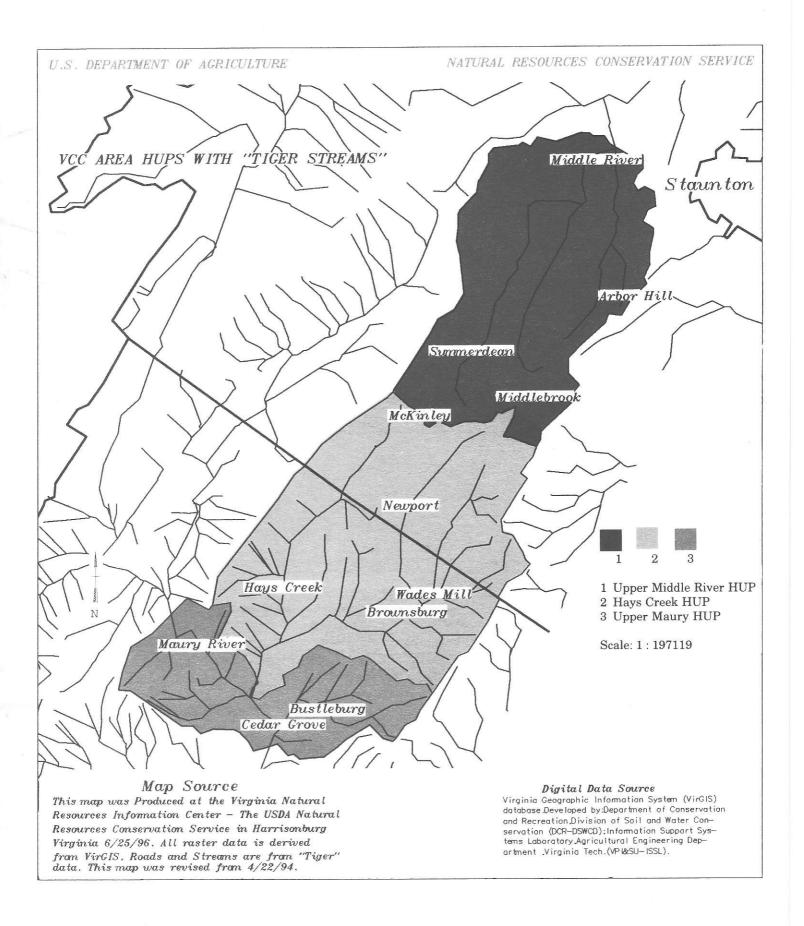
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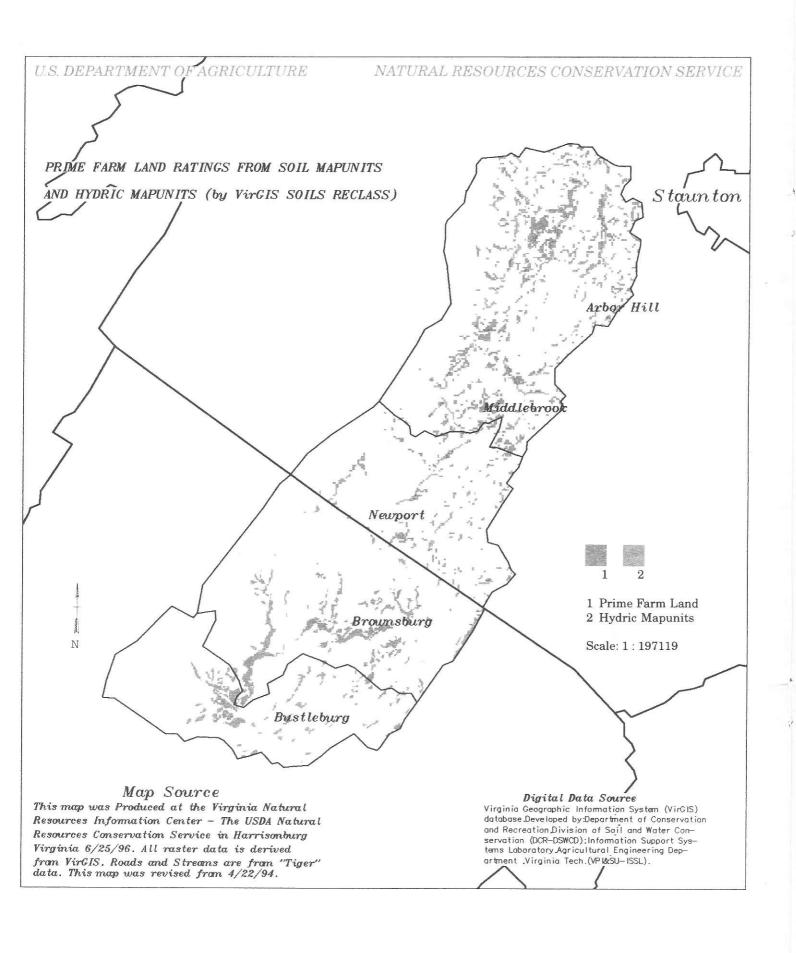
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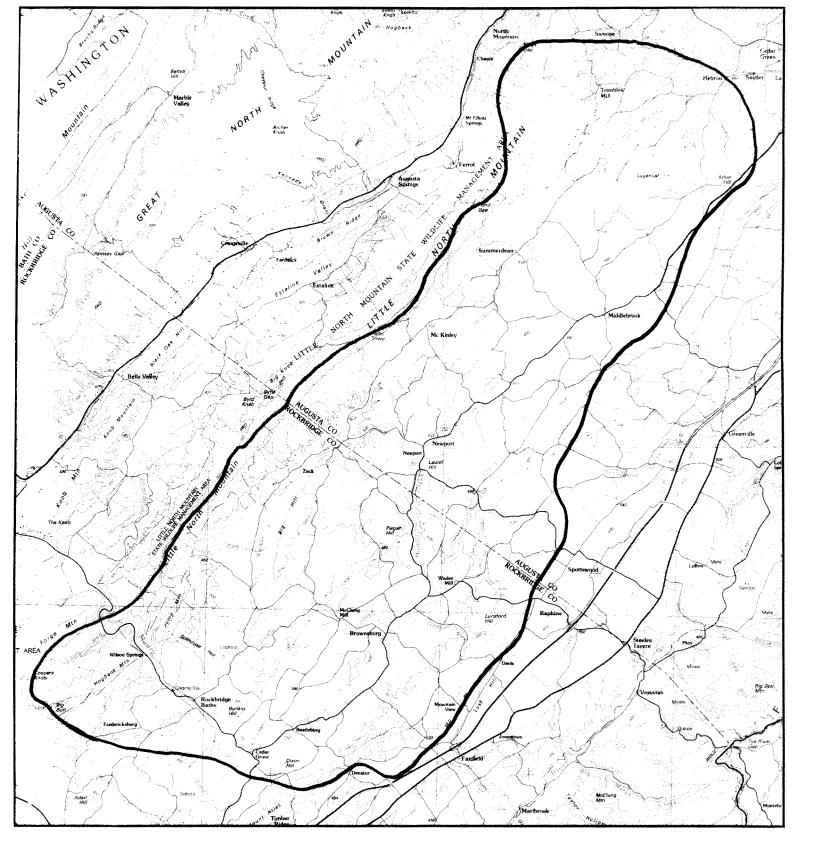
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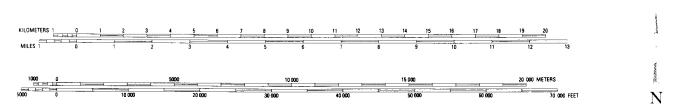


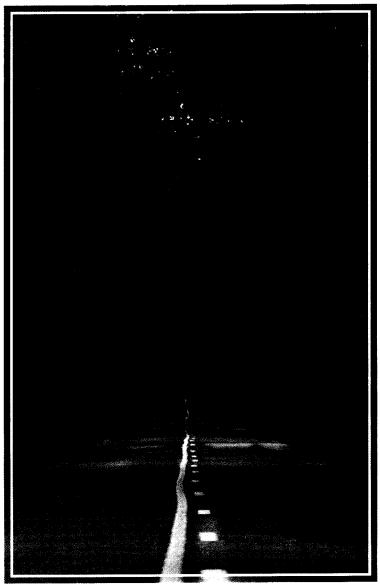






Valley Conservation Council Route 252 Project Area Source: U.S.G.S. Staunton 1:100,000 Topographic Map, 1986; Buena Vista 1:100,000 Topographic Map, 1986





ROBERT P. BROWN III

Avenue of trees on Route 252 south of Brownsburg, planted on the Cunningham Farm in the Early 1900s.

