

D-55

Historic Woodlot Restoration



West Woods
ANTIETAM
National Battlefield
Sharpsburg, Maryland
December 1994



United States Department of the Interior

NATIONAL PARK SERVICE
DSC-EASTERN TEAM
FALLS CHURCH BRANCH
6245 LEESBURG PIKE, 4TH FLOOR
FALLS CHURCH, VIRGINIA 22044



IN REPLY REFER TO:

Dear Colleague:

It is my pleasure to furnish you with a copy of *Historic Woodlot Restoration: West Woods Antietam National Battlefield*, written by Maureen De Lay Joseph. This volume presents a landscape history, historical analysis and reforestation guidelines for the West Woods vicinity. The purpose of this report was to compile and document significant cultural landscape characteristics for the West Woods vicinity and prepare recommendations based on an evaluation of significant cultural landscape features.

Any questions concerning this report should be referred to me at the above address.

Sincerely,

Maureen Joseph

Enclosures

bcc:

Mjoseph:02195:anti:finis2.let

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INTRODUCTION

As a direct result of the 1992 revised General Management Plan, Antietam National Battlefield recognized the need to reestablish historic woodlots within the vicinity of Sharpsburg, Maryland. These woodlots played an important role in the battle serving as screens for strategic military movements, as landmarks for both Union and Confederate armies, and more importantly as sources of cover. Major skirmishes took place along the edge of the woodlots where many lives were lost. Without the historic woodlots, the historic scene is incomplete and the spatial quality and character are no longer understood. This makes it difficult to relate to the visitor the importance of this landscape feature for the battle of Antietam. The primary goal is to recreate the historic scene at the time of the battle.

The goal of this report is to determine the character and boundaries of the West Woods, an historic woodlot. Once determined, the National Park Service will restore and maintain the woodlot utilizing the same management principles that were used in the 1860s. Historic documentation and existing conditions surveys of historic woodlots in the Sharpsburg vicinity are the basis for the restoration and species selection.

This report represents the combined efforts of the Natural Resource Division, Antietam National Battlefield, and the Professional Services Division, National Capital Region. Some information provided relates to other significant woodlots at Antietam, but this report does not intend to present specific recommendations for the East and North woods. To continue the efforts of the reestablishment of particular historic woodlots, research is recommended in the future for the East and North woods and any other significant woodlots within Antietam National Battlefield boundaries that played an integral role during the battle.

LANDSCAPE HISTORY

1750-1861

Farming Community of Sharpsburg

Within the present boundaries of Washington County Maryland immigrants safely settled the area after the close of the French and Indian war in 1740. Among the early settlers, Joseph Chapline invested the greatest in land near Sharpsburg. Chapline was the town founder who laid out the town lots for Sharpsburg in 1763 on a grant called "Joe's Lott." The soils within the Hagerstown Valley turned out to be very fertile for agricultural crops and pasture lands.¹ Antietam Creek flowed through the valley supplying the fertile alluvial soils. Old growth forests covered the ridges and valleys, and were slowly cleared for pasture and agricultural use. "Here in this region there are very fruitful fields for grain and pasture; they produce Turkish corn almost without any manure."² Another early account of the landscape provided by Wm. Eddes in 1772 states:

*In the back settlements, where the inhabitants are thinly scattered, the face of the country, . . . exhibited in many places a dreary appearance. Lands, to a very considerable extent, are taken up by persons who, looking to futurity for greater advantages, are content to clear gradually some portions of their domains for immediate subsistence. Not having the means to fell and carry their lumber away . . . they make a deep incision with an axe entirely round each trunk . . . which occasions the leaves almost instantly to wither; and before the total decay of the tree, Indian corn may be cultivated . . . amidst the immense trunks that fill the dreary forest.*³

The wood from the cleared forest plots was primarily used for construction material for dwellings, barns, fences, and furniture, and for fuel wood. Within the Hagerstown Valley, the Lords of Proprietary granted large tracts of land to wealthy patrons from as early as 1732. These large tracts were subdivided into smaller parcels of land and sold to a chiefly German immigrant population. Prominent names such as Grove, Mumma, and Meyers purchased the land in the early nineteenth century that included the area that encompassed the woodlot, currently known as the West Woods.

¹ The fertile valley would be known as Hagerstown Valley by the late 1700s, named after the county seat Hagerstown (originally called Elizabeth Town). The Hagerstown Valley was easily cleared when compared to other lands within Washington County. The forest was not as dense and was the first settled valley in Washington County because of the ease of clearing the land.

² Extract from a life of Rev. Michael Schlatter in 1748 cited in Thomas J.C. Williams, *A History of Washington County Maryland. From the Earliest Settlements to the Present Time*, (Baltimore: Regional Publishing Company, 1968), 29.

³ Account of a journey by Wm. Eddes, Commissioner of the Land Office at Annapolis, taken from his letters, Sept. 7th, 1772, Williams, *History of Washington County*, 26.

Through the years, the best sections of land were cleared for field crops. The least desirable land, rocky and shallow soils, was left in old growth forest.

A grant called the "Addition to Loss & Gain" was owned first by Joseph Chapline in 1773. This grant encompassed the majority of the historic West, North, and East woods. Joseph Chapline eventually transferred the grant to his son James. Apparently James leased out part of the tract. As early as the 1760s, the northern portion of the property was leased to Christopher Cruse (also spelled Cruss).⁴ A farmstead developed by a spring at this time. By the 1780s, John Meyers acquired the lease for the farmstead.⁵ On the southern portion of the grant, Jonas Hogmire purchased two separate parcels from James Chapline, in 1796 and 1797. John Meyers then purchased this property in 1799. Meyers still leased the northern portion of the grant. In 1812 he purchased the northern portion of the "Addition to Loss & Gain" from John Buchanan, a trustee for James Chapline. The deed mentioned buildings and an orchard when John Meyers purchased the tract. As early as 1811, a road bisected the Meyers property, later to be known as the Hagerstown and Sharpsburg Turnpike, dividing the farm complex. As with other tracts of land, the most fertile land was cleared first and plots of forest were left. To the west of the "Addition to Loss & Gain," Col. Edward Sprigg claimed title to a grant called "Resurvey on the Addition to Piles Delight" in 1750. Philip Grove purchased 225 acres of this tract of land in 1814. Within the deed there are indications that there are buildings located on this tract.⁶ When Grove bought the property, probably the buildings were located in the middle of the parcel. A farm lane bordered the property on the south. To the south of the "Addition to Loss and Gain" and east of "Resurvey on the Addition to Piles Delight," was the property of John Reynolds that included "Anderson's Delight," "Part of John's Chance," and "Abstone's [Alstone's or Absence] Forest." In 1811, the 182 1/4 acre property was eventually sold to Jacob Mumma. Jacob conveyed all this property to his son Samuel in 1831. The Hagerstown and Sharpsburg Turnpike also bisected the Mumma property on the western portion of the tract. The construction of this road left a small section of land on the western portion of the property separated from the rest of the estate. On the eastern portion of Mumma property, the previous owners constructed a farmstead.

By the 1840s, the best cultivated lands were cleared of old growth forest. Small parcels of land were retained as woodlands. To try to gain the most out of the entire property, the management of woodlots was a necessity. The clear cutting practices of the early part of the century had ravaged the landscape. Wood was becoming scarce in the developed regions of the east. Woodlot management was promoted to obtain quality saw lumber and cord wood for annual use by the farm. Other wood products such as fence posts and shingles were needed ever so often for repairs. Sometimes the farmer allowed cattle to graze within the woodlots, which was a chief cause of

⁴ According to John Philemon Smith in his unpublished manuscript "Reminiscences of Sharpsburg," written in 1912, Dr. Christopher Cruss occupied the farmstead on the northern portion of the "Addition to Loss & Gain" as early as the 1760s, cited in Paula Reed, "The D.R. Miller Farm," 21.

⁵ From the "Reminiscences of Sharpsburg," it indicates that John Meyers lived fifty years on the property. If this information is correct as stipulated in the "The D.R. Miller Farm" by Paula Reed, Meyers would have acquired the lease in 1786.

⁶ In 1811 when John McPherson and John Brien purchased a portion of the "Resurvey on the Addition to Piles Delight" from Davis McMechan, the deed indicated that the property "may have tenants," W/606.

deterioration of the productivity of the lot. The livestock would eat young seedlings, trample the saplings, and also compact the soil. Grazing within the woodlot was not a recommended practice unless the farmer wanted to maintain an open understory.⁷

Philip Grove modified the landscape of what became the West Woods in 1840 when he subdivided the original "Piles Delight" property into two parcels. Philip gave the western 112 1/2 acres to his son Joseph Grove and the eastern 112 1/2 acres to his daughter Mary Grove Locher.⁸ Joseph Grove resided on his property and improved the existing farmstead buildings. Mary Locher resided in Lancaster County, Pennsylvania and leased her land. On the Locher property, dwellings, barns, and other outbuildings were built. Mary Locher rented her property and the tenant managed the farm.

In 1836, John Meyers died. Within his last will and testament written in 1833, Meyers described his farm complex with two dwellings on the property, spring house, barn, smokehouse, kitchen garden, orchard, fields and pasture.⁹ The executors put the property up for public sale in 1844. They published advertisements for the public sale in local newspapers.

*[T]he farm, late the property of said deceased, containing about 265 Acres of first-rate Limestone Land; about 150 Acres of which are cleared, the balance in thriving timber. [West, North, and East woods] The improvements consist of a two story log dwelling, a swisser barn, an excellent spring of water with a spring house and all other necessary out-houses. Also an orchard of fine Fruit Trees.*¹⁰

David R. Miller purchased the farm and land at the public sale in 1844.¹¹ The Miller property maintained 115 acres of woodlots.

Into the 1850s, woodlots were an integral part of the farm. The farmer kept woodlots in the unfavorable cultivated areas and fenced the area to keep animals out. Managed as a money source

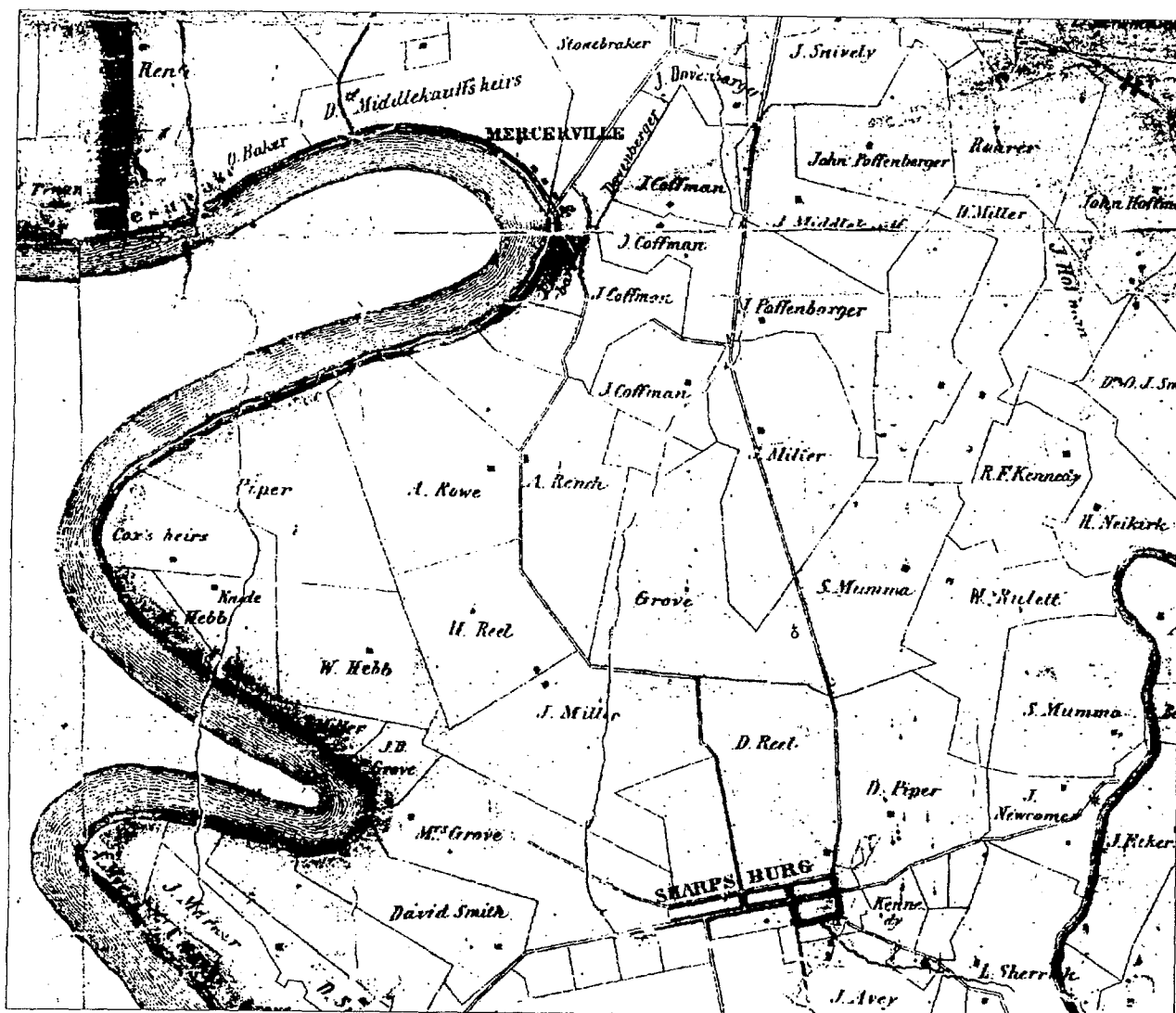
⁷ It is believed that grazing within the woodlots was a common practice within the Sharpsburg area, as indicated by the open understory character of the woodlots as described by soldiers after the battle in the 1860s. This practice was most likely followed in the early 1840s as well. Past and present theory states that grazing within forested areas is detrimental to the roots of trees and can cause severe erosion within the forested area. All the historic resources researched, strongly advise against grazing in wooded areas.

⁸ Last will and testament for Philip Grove, 1840, D/411-417.

⁹ Last will and testament for John Meyers, 1833, D/204-208. For a discussion of the property in further detail read "The D.R. Miller Farm" by Paula Reed, 1991.

¹⁰ *Hagerstown Mail*, 1/28/1842.

¹¹ David Miller purchased the property and then sold the land for one dollar to his father Col. John Miller. David Miller resided on the property until he sold it in 1886.



Miller, Grove and Mumma properties are depicted on the 1859 map of the Sharpsburg Election District which comprise the West Woods. Approximate farm complex locations are indicated for Mumma and Miller as well as a symbol for the Dunkard Church. Courtesy of the Washington County Courthouse, Maryland.

for the farm, products such as saw lumber and cord wood were sold to nearby sawmills.¹² Fences defined the property lines and also crop and pasture areas. Orchards were also a common feature in Sharpsburg, located near the main farm complex.

The woodlots for Miller's property were very large in relation to adjoining properties. North of the farm complex, the turnpike bisected through a woodlot (North Woods). The property line between Joseph Poffenberger and Miller served as the north boundary for this woodlot. Within this

¹² The nearest sawmill to the lands of Mumma, Grove and Miller was northwest of these properties, near the town of Mercerville (approximately one to two miles away). Sawmills were also located along the Antietam Creek. Mill sites are depicted on the 1859 map above.

northern woodlot, Miller constructed a dwelling along the turnpike.¹³ On the southwestern portion of the property a considerable stand of old growth timber remained (West Woods). Miller managed and fenced approximately 45 acres of woodlot in this location. Oaks, hickory, and chestnut were the predominant species located within this woodlot. On the eastern border of this woodlot was the Hagerstown and Sharpsburg Turnpike.

The Mary Grove Locher farm to the southwest of the Miller farm, comprised a small portion of this expanded area of the woodlot. Most of the land was cleared for agricultural use, except on the northern section of the property where a portion of the old growth forest was kept. Outcrops of bedrock and a drainage swell were some of the prominent natural features within this stand of forest. The woodlot was north of the farm complex located along the property line between the Miller and Locher farm. A farm road from the Locher complex ran north along the property line, between Miller and Locher, through the Locher woodlot to the Nicodemus farm. The road then continued along the property line between Jacob Nicodemus and David R. Miller to the turnpike where a toll gate was located. Alfred Poffenberger rented the farm from Mary Locher in the 1860s and likely during the 1850s as well.¹⁴ Through an apparent agreement with David R. Miller, a nondescript lane developed through the southernmost Miller woodlot from the Mary Locher farmstead to the turnpike. It served as a shortcut to the turnpike from the Locher farm and may have been utilized by Miller for harvesting saw timber and other products from his woodlot.

On the Samuel Mumma farm, a different sort of development occurred. In 1851, the Brethren Church of Dunkards accepted land from Samuel Mumma to build a church for their congregation.¹⁵ This property was located along the turnpike at the intersection of a farm road (Smoketown Road) with the turnpike near the property line between Mumma and Miller. Within the woods, the Dunkards constructed a church in 1853. During the construction of the church, part of the woods was cleared along the road to give enough area for the footprint of the new building. Old growth woods were left behind the church, which included approximately 4 1/2 acres of land. This land was rocky and not desirable for cultivation and was the only portion of land not cleared of trees on the Samuel Mumma property. This segment of woods was a continuation of the shallow, rocky soils of the 65-acre Miller woodlot to the north.

¹³ This building is located on three separate maps, Michler (c. 1862), the *Atlas of Washington County* (1877), and J.M. Gould's Antietam sketch map (1899). For some unknown reason this building was not included on the Carman/Cope maps depicting the Sharpsburg Vicinity in 1862. It is surmised that Miller constructed this building between 1844 and 1862.

¹⁴ Within the War Claims submitted by Alfred Poffenberger, it states that he rented the farm from Mary Locher during the war and after. This farm has been noted as Alfred Poffenberger's farm on all historic base maps. It is confusing, since it is implied that he owned the property, RG92 812/M-917.

¹⁵ "Dunkard" is the German spelling whereas "Dunker" is the English spelling.

1861-1865

War of the Rebellion

In the late summer of September 1862, the landscape of the Sharpsburg area would endure its most significant change. The Battle of Antietam on September 17 and 18, 1862 and the occupation of the area by Union troops for months after the conflict, gave national significance to the rural area surrounding Sharpsburg. Within the fields, pastures, woodlots, and around farmsteads, many lives were lost. Landscape features of the rural region were significant in the battle plans of the Union and Confederate armies. Ridge lines, rock outcrops and woodlands acted as cover during the ensuing



Carnage along the Hagerstown Sharpsburg Turnpike near the West Woods, 1862. ANTI photofile.

battle. One of the first significant engagements took place in what is now known as the West Woods.¹⁶ Union forces advanced from the cover of the East and North woods into the open fields on the David R. Miller farm. Confederate troops laid in wait within the West Woods protected by the shadows of the woods and by rock ledges located throughout the woods. Some Confederate troops took cover beside the Dunkard Church and Mary Locher's farmstead (residence of Alfred Poffenberger). In one part of the battle, fighting took place between the West Woods and the Locher farmstead. The 15th Massachusetts infantry secured themselves behind haystacks and a thick orchard near the Locher Farm.¹⁷ In other locations, fences along the Hagerstown Sharpsburg Turnpike were barriers along the advancing lines for the Union as well as Confederate troops, where many men lost their lives. There were few barriers except for the rocky ledges once troops arrived within the West Woods. Troops noted the woods as "[a] noble grove of perfect trees, free from

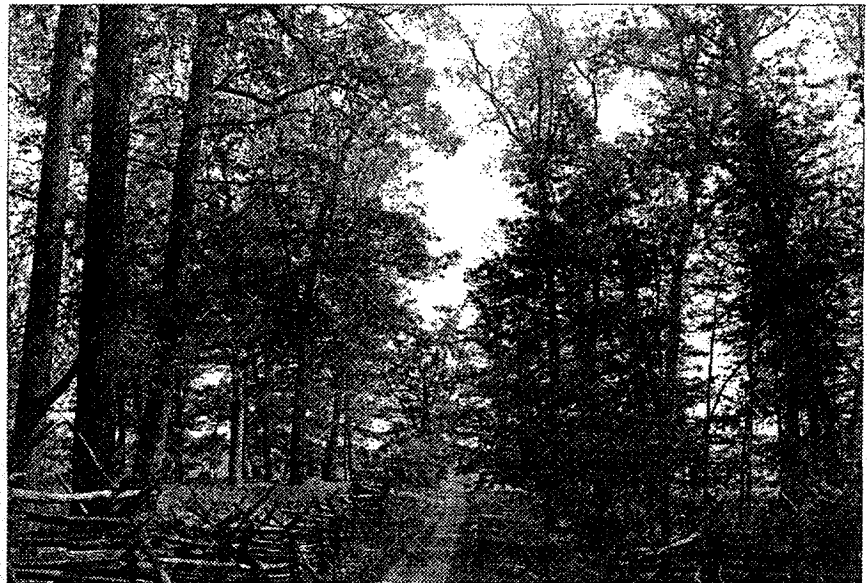
¹⁶ Designation of the West, North, and East woods were first noted during the War of the Rebellion. Prominent landscape features that served as landmarks during the Battle of Antietam were given names which corresponded to the direction the woodlots were located in proximity to the open battlefield (Miller cornfield). Before the battle, there was no indication of names given to these woodlots. Most likely the woodlots were named after the owners of the property.

¹⁷ From Dwight E. Stinson Jr., "Operations of Sedgwick's Division In The West Woods," 3.

underbrush,"¹⁸ which allowed the rapid advancement of troops through the West Woods. Near the Dunkard Church troops proceeded "into the Oak Wood among the Lime Rock Ledges beyond the church."¹⁹ Other descriptions noted "stacks of firewood"²⁰ along the property line between Locher and Miller that were on the western fringe of the West Woods. The ledges, buildings, and even stacks of wood were used for cover during the battle. Descriptions such as these from individuals after the battle provide evidence of the character and species composition of the woods. The open understory and mature hardwoods of oak, hickory, and walnut describe the most predominant species known within the woodlot at the time of the battle²¹.

Dr. William Child provides the most descriptive account of the woods in the vicinity of Sharpsburg. Dr. Child was assigned to the Smoketown Hospital northeast of the West Woods. In his many letters to his wife he described the surrounding landscape in great detail. In a letter dated October 22nd he states;

*The forest trees
here are all large
and hardwood.
There is but little
if any pine. You
might drive a
wagon among the
trees anywhere.*



East Woods along Smoketown Road, near hospital where Dr. Child was assigned, c. 1890. ANTI photofile.

¹⁸ Francise Walker, *History of the Second Corps in the Army of the Potomac*, 1886, 103 cited in Stinson, "Operations of Sedgwick's Division," 3.

¹⁹ Correspondence to Col. J.C. Stearns from Edw. W. Hanks Col. & Brevet Brig. Genl., 5/12/1893

²⁰ Memorandum from Paul Chiles to Charlie Fenwick. "Research Notes on the Condition of the West, North & East Woods at the time of the battle," 1993, description noted from 3rd Virginia Cavalry.

²¹ Other less prominent trees were most likely present within the woodlots also such as tulip poplar, ash, boxelder, and hackberry. Oaks, hickories, and walnuts were easily recognized by the common layman of the 1860s.

In October 4th, 1862 he refers to the "large grove of noble oaks and walnut. Bushels of large English walnuts may be gathered here."²² Acorns were also noted to be prevalent within the woods in 1862.

There was a lack of understory within most of the woodlots. Descriptions of the open character of the woodlots by soldiers seem to indicate that the owners grazed animals in the woodlots. This practice would keep the understory vegetation cleared. A few individuals noted grazing hogs and cows within the woodlots. Probably some of the animals were grazing within the lots because the opposing troops destroyed fences around the woodlots. They tore down fences to remove barriers for advancing of troops. Then after the battle, the troops salvaged fences for firewood in areas where they camped or near hospitals. Some standing timber was cut down for wood, but it took more effort to obtain firewood this way.

The Federal army used the Mary Locher farm after the battle.²³ To the west, the Joseph Grove farm (known as Hausers) was also used by the Federal army from September to December 1862.²⁴ The majority of fences were destroyed as were many orchard trees, noted in the war claims for the Sharpsburg area. The destruction to property, in the Sharpsburg vicinity, is only one aspect of the battle of Antietam. Burying the dead was an immediate requirement. Burial pits for Confederate and Union soldiers were concentrated in and around the West Woods because of the



View of the Dunkard Church after the battle in 1862. The mature woodlot behind the church, West Woods, is photographed for the first time in this photograph by Gardner. ANTI photofile.

high number of casualties in the area. The Dunkard Church was also used as an operating room after the battle. There are accounts of amputating tables within the church and piles of arms and legs buried within the vicinity.²⁵ The Sharpsburg area was devastated by the loss of life and property and would continue to endure the effects of the battle in 1862 for years to come. From an editorial a few days after the battle, the full effect on the region is evident.

²² Letter from Dr. William Child to his wife dated 10/4/1862. The "English" walnuts noted were most likely black walnuts.

²³ War claim Alfred Poffenberger, RG92 812/M-917.

²⁴ War claim Joseph Grove, RG92 812/H-4085.

²⁵ From "Stories of Antietam as Told to Mr. Reilly by Veterans and Eye-witnesses of the Battle," Mr. Snavelly indicates that the Dunkard Church was used as an operating room after the battle, *Views of Historic Antietam*, 1906.

The beautiful district of country over which the great battle of Wednesday raged presents a melancholy picture of devastation. A number of houses and barns were destroyed, fences scattered as if a tornado had swept them away, hundreds of acres of corn trampled down and devoured, and wreck ruin, and desolation met the eye at every turn . . . From Hagerstown to the southern limits of the county wounded and dying soldiers are to be found in every neighborhood and in nearly every house. The whole region of country between Boonsboro and Sharpsburg is one vast hospital. Houses and barns are filled with them, and nearly the whole population is engaged in waiting on and administering to their wants.²⁶



Mumma farm in ruins after the battle, 1862 photo by Gardner. ANTI photofile.

²⁶ *Herald and Torchlight*, Hagerstown, Maryland, 9/24/1862.

1865-1890

Reconstruction

After the Civil War had ended, the Sharpsburg area tried to rebuild. Compensation for the use and destruction of crops, dwellings, and other property by Federal troops, was a long and tedious process. The majority of property owners in the Sharpsburg vicinity, submitted war claims. Alfred Poffenberger submitted claims for the destruction of 15 acres of corn and use of hay, wheat, and corn.²⁷ David R. Miller received compensation for destruction of fences used for firewood that amount to 777 1/4 cords of wood (post and rail, worm, and plank and paling fences), five bushels of corn in crib, 200 bushels of oats cut and stacked in field (taken by U.S. Troops in summer of 1864), 80 bushels of wheat taken from 30 acres of land, and one ton of timothy hay.²⁸ Samuel Mumma suffered the most destruction to his property. Mumma lost one house, barn, spring house, hog pens, fences, and two gardens. He claimed the Federal troops used 15 cords of wood and his land was damaged by traveling and burial, during the battle of Antietam.²⁹

Even before the war had ended, the community tried to return to its state before the battle. "Many farmers were compelled to mortgage their lands to pay for horses and cattle which they had to buy in place of those taken by the soldiers."³⁰ Life returned some what to normal when farmers planted crops again in the fields, returned livestock to pasture, and repaired and rebuilt structures. The woodlots were most likely used for some building material needed for rebuilding structures and for fencing pasture areas and cultivated fields.

Land ownership remained the same as in the 1860s until 1882 when John Miller submitted a lawsuit against his brother David R. Miller. The judge decided to put the Miller property up for public sale. From this decision, the original John Meyers farm was divided into three parcels for the sale in 1883. The main farm complex, which included the North Woods and part of the East Woods, was retained by David R. Miller but sold soon after in 1886. George Poffenberger acquired the southwestern most portion of the property that included most of the West Woods. Henry Mumma purchased the southeastern portion of the property bounded on the west by the turnpike and on the southeast by Smoketown Road. Descriptions of the properties are as follows as they appeared in the local paper announcing the public sale in 1883:

No. 1 - All that Valuable tract of Improved land or farm now occupied by David R. Miller, as tenant, . . . on both sides of the turnpike road leading from Sharpsburg to Hagerstown, about 1 1/4 miles north of Sharpsburg, containing 150 3.8 [3/8] Acres of Land, more or less, about 15 acres in good timber [North and

²⁷ War Claim Alfred Poffenberger, RG92 812/M-917.

²⁸ War Claim David R. Miller, RG92 995/931 and War Claim John Miller, RG92 995/1165.

²⁹ War Claim Samuel Mumma, RG92 812/D-1927-1928.

³⁰ Williams, *A History of Washington County Maryland*, 367.



View of D.R. Miller main farm complex with turnpike bisecting between the house and barn, from The Battlefield of Antietam, 1906.

East woods], mostly oak and hickory. This land is improved by a TWO-STORY ROUGHCAST HOUSE, with back-building, bank barn, corn crib and other necessary out-buildings, including two tenant houses.³¹ There is also an excellent spring of running water and a fine young orchard.

This land is of first quality limestone and in good state of cultivation, and one of the most desirable farms in the district, and adjoins on the south No. 2, hereinafter described; on the north the land of Jos. Poffenberger, on the west the land of Lucker's [Locher] heirs and Hannah Nicodemus, and on the east the road leading from the aforesaid turnpike to Wolf's Church.

No. 2 - Is a Valuable tract of Land and is situate about 1 mile north of Sharpsburg, on both sides of the said turnpike road, . . . and was formerly occupied by David R. Miller as tenant. It adjoins No. 1, above described, on the north, and on the south the land of Margaret Poffenberger and the road leading to Wolf's Church, and on the west the land of Lucker's [Locher] heirs, and on the east the said road. This tract comprises 110 Acres of first quality limestone land, 65 acres of which are under good fencing and in good state of cultivation, and about 45 acres

³¹ The *Atlas for Washington County* (1877) indicates four possible residences on the Miller property. One is the main house (existing dwelling), and the other three are located on the northern part of the property on either side of the turnpike. Evidence suggest that one of these buildings was constructed c.1877 on the west side of the road. Another was constructed on the east side of the road sometime before 1861 (see footnote #13). The last building was on the west side of the road and used as a toll house by the turnpike company c. 1877. All three of these buildings are located within the North Woods. The description of parcel #1 from the advertisement indicates three dwellings on the property; the main house (existing dwelling), and two tenant houses. Further research is needed to determine if the older house (before 1861), was extant at this time. Perhaps, the toll house parcel was sold to the turnpike company by 1883 and is not a part of the Miller property for this sale.

*in timber of oak and hickory. This land is good, level land, and only requires buildings to make it a first class farm and home.*³²

In 1883 David Miller purchased tract No. 1 and George Poffenberger and Henry Mumma subdivided tract No. 2 into two parcels. George Poffenberger acquired 45 acres in timber, the West Woods, and 20 acres of cleared land. Henry Mumma purchased the remaining 45 acres of the cleared cultivated land. There were no structures present on tract No. 2 when George Poffenberger and Henry Mumma purchased their separate properties. In the same year, George Poffenberger sold 11 acres of the southernmost portion of the West Woods to Otho Poffenberger who then sold the 11 acres to Cyrus Munson. Sometime after 1883, the 45-acre woodlot on the previous Miller property was almost entirely cleared for cultivation. Some mature hardwoods were retained along the property line near the Mary Locher farm complex and a stand of timber was retained on the 11 acre property owned by Cyrus Munson. George Poffenberger then constructed a frame dwelling along the turnpike on his property and planted a small orchard by the dwelling.³³

As with the Miller property, the Mumma property also underwent some property transfers during the 1880s.



1880s dwelling constructed by George Poffenberger within the southeastern portion of the West Woods, 1994. NCR photofile.



View of Dunkard Church and Munson right-of-way delineated by board. West Woods has been cleared on Munson and Poffenberger properties by this period, c.1890. ANTI photofile.

³² Chancery Record 24/421, John Miller and others against David R. Miller. Original copy of newspaper announcement of public sale located in Chancery Records. Do not know which newspapers the announcement was featured in.

³³ During the 1880s, fruit culture was very prominent within the region. Apple and peach orchards of considerable size were noted in the Hagerstown Valley as well as on the adjacent hillsides.

The Mumma's sold 4 1/2 acres of wooded property, near the Dunkard Church, to Cyrus Munson in 1880. The property was cleared of woods and cultivated. Munson owned all of the southernmost portion of the previous West Woods. Munson acquired a right-of-way from his property, along the northern property line of the Dunkard Church, to the turnpike. By the 1890s, Munson built several structures near the Dunkard Church. The Dunkard Church property continued to be used, and was considered a significant landmark after the battle. Photographs of the church from the 1880s and 1890s document the change in the landscape, which show the mature trees surrounding the church. These photographs also confirm the removal of the West Woods behind the church by the late 1880s. A plank fence delineated the property line between the Dunkard Church property and George Poffenberger property.

Alfred Poffenberger continued to rent the Locher farm in the ensuing years and the farm maintained its appearance that it had before the battle. The woodlot to the north of the farm complex continued to be managed by Alfred Poffenberger.

1890-1933

War Department

In the 1890, Congress initiated the first attempts to preserve the lines of battle of the Army of the Potomac.³⁴ The State of Maryland continued with this assurance and approved on April 7, 1892 consent:

*...for the purpose of erecting monuments or tablets . . . for opening and constructing roads and avenues in connection with the positions occupied by Federal and Confederate forces . . . for the preservation of the grounds covered by said battlefields for historical or other purposes . . .*³⁵

The Committee on Military Affairs in 1891 also recognized the importance of the battle with the Antietam Act.

*The field on which the battle took place is practically unchanged from what it was on the day of the action, save the cutting down of some trees . . . It is proposed to maintain the field in the same condition as to roads, fields, forests, and houses.*³⁶

However, in 1892 the Antietam Board visited the battlefield and recognized the major differences between the wartime appearance and that of thirty years later. The most noticeable change was the "disappearance of bodies of wood, now cultivated fields or orchards."³⁷ The War Department noted that these natural features were very important points of the battle. Major General George B. Davis, President of the Antietam Board stated in October 1894 that:

...marking the lines at Antietam will be very much more difficult than at Gettysburg or Chickamanga. At both these places there were strong natural positions, which were defended by the Union forces against Confederate assaults. These defensive positions formed the key points of the battles, and now furnish a basis for accurate and intelligent marking of the lines of the opposing forces. At Antietam there were no such positions. The battle was . . . for the most part hand to hand contest between the forces engaged. The woods, cleared land, fences, wheat and corn fields, which constituted point of reference, at the time of battle, have been

³⁴ From H.R. 10830, 51st Congress 1st session, 6/7/1890 cited in Sharon A. Brown and Charles W. Snell, *Administrative History: Antietam National Battlefield*, 69.

³⁵ State of Maryland act approved 4/7/1892, *Ibid*, 71.

³⁶ Antietam Board Official Records of the Rebellion. Series 1, Vol XIX, *Ibid*, 72.

³⁷ Antietam Board progress report, 6/10/1892, *Ibid*, 76.

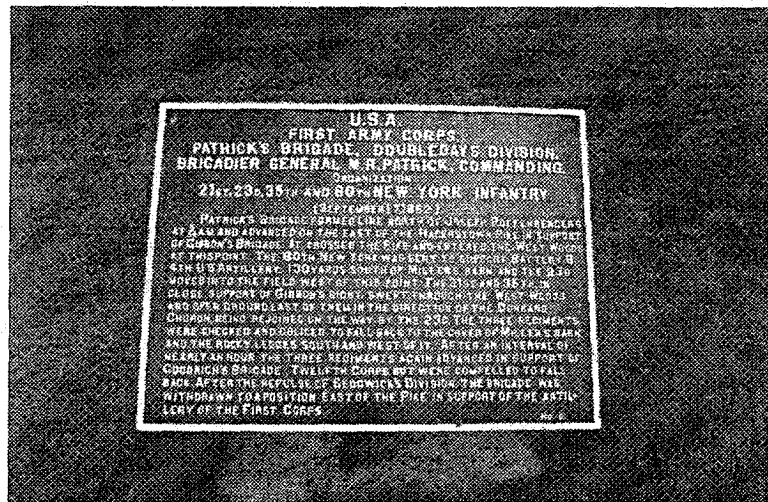
*modified and changed in the intervening years so as to make it a matter of extreme difficulty to identify them in any case . . .*³⁸

For the War Department, General Carman took on the challenge of understanding the landscape conditions at the time of the battle. His effort in contacting war veterans was the most comprehensive research conducted related to the Battle of Antietam. Correspondence with an Antietam battle veteran, Major J.M. Gould, provided Carman with extensive information on the East and North woods. Unfortunately, Gould could only provide minor details regarding the West Woods, mostly concerning fence lines and field crops. The compilation of Carman's research was the development of the "Carman/Cope" maps of 1898, published in 1904 and revised in 1908.

Congress debated the preservation philosophy of Secretary of War Lamont on whether the United States should acquire the lands to preserve the battlefield or leave it in private ownership. Lamont said that

*Congress has charged the Department with the duty of "preserving and marking" certain lines of battle of Antietam, in order to preserve the field, in all its physical aspects, as nearly as possible in the condition in which it was in September 1862. The duty can best be performed by leaving the land in the hands of its original owners or their successors, who by continuing to use it for farming, will preserve its topographical features as they existed in 1862.*³⁹

Congress and the War Department made a decision to just acquire land where the most severe fighting occurred and construct lanes or avenues. Tablets and markers would then be erected along these roads that would clearly describe and explain the positions and operations of armies of the Potomac and Northern Virginia.⁴⁰ The War Department then initiated an existing conditions survey of the Sharpsburg area to

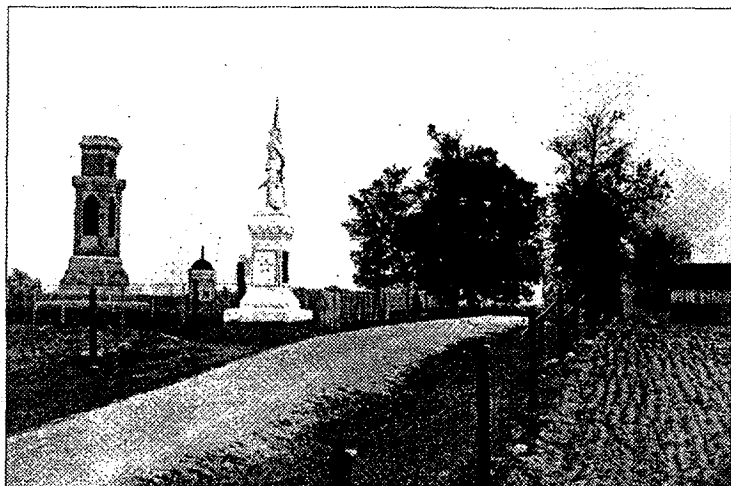


Iron tablet installed along Starke Avenue, depicting one aspect of the battle within the West Woods, 1994. NCR photofile.

³⁸ Maj. Gen. George B. Davis, president of the Antietam Board, October 1894, Brown and Snell, *Administrative History*, 87.

³⁹ Secretary of War Lamont opinion on the issue of acquiring land to preserve the battlefield, Serial No. 3295, 29, *Ibid*, 88.

⁴⁰ Brown and Snell, *Administrative History*, 89.



*Monument parcel along Confederate Avenue, from *The Battlefield of Antietam*, 1906.*



Second dwelling built by George Poffenberger by the turn of the century, 1994. NCR photofile.

determine the best location for tour roads. A map from 1898 depicts the proposed road and monument locations overlaid on existing conditions of 1898.⁴¹ Large orchards dominate the scene on the Piper, Roulette, and Mumma properties. One segment of the West Woods remained on the Locher farm. Smaller portions of the West Woods were still present on the properties of George Poffenberger and Cyrus Munson. The proposed Confederate Avenue followed the property lines from the turnpike across from Smoketown Road, along the Dunkard Church line with George Poffenberger, west continuing along George Poffenberger's property with Cyrus Munson then north along the property line between Poffenberger and Locher, which used to be the western fringe of the West Woods. The proposed road then followed the historic lane from Mary Locher's property (Alfred Poffenberger farm) through the historic woodlot (northernmost section of the West Woods) along the boundary between the historic David R. Miller property and Nicodemus property to the turnpike. Another avenue, Starke, separated the northern property line of George Poffenberger with the David R.

Miller property connecting Confederate Avenue to the Hagerstown and Sharpsburg Turnpike. During the construction of Confederate Avenue, a road contractor found six Confederate bodies near George Poffenberger's farm buildings.⁴² After the completion of the tour roads, fences delineated the right-of-ways granted to the War Department. The Jones' locked wire fence was used for this purpose. The fences also provided a barrier to keep grazing animals off the tour roads. The War Department then installed monuments to the various units and tablets depicting the significant events

⁴¹ Cope & Mattern Map, Antietam Battlefield Board, 1898.

⁴² "Stories of Antietam as told to Mr. Reilly," In *Views of Historic Antietam*.



Tree lined entrance road to central obelisk for the Philadelphia Brigade Park, 1938. ANTI photofile.

of the battle along the road corridor. For the placement of larger monuments, the War Department acquired small parcels of land from the adjacent land owners. Along Confederate Avenue a small portion of land was designated for the 34th New York Infantry, 125th Pennsylvania Infantry, and Maryland monuments. The Jones' locked wire fence surrounded the parcel. Only a few other monuments were placed along Confederate Avenue. The most impressive monument was the 15th Massachusetts Infantry monument, described as a reclining wounded lion.⁴³ Across the road from the old Locher farm complex, another soldier's body was found when the Massachusetts monument was erected.

The other most substantial change to occur to the West Woods vicinity was the establishment of the Philadelphia Brigade Park in 1895. The park was established to memorialize the 545 men from the Philadelphia Brigade who died during the Battle of Antietam. To be near where most of the casualties occurred, the Philadelphia Brigade Association purchased from George Poffenberger

⁴³ Description from photographic survey of monuments by NPS in the 1930s.

10 acres along the turnpike. The determination of boundaries for the park is still unknown.⁴⁴ It appears the Association implemented a landscape plan for the park with shade trees planted around the boundary and along the entrance road from the turnpike to the central obelisk. Other substantial changes occurred when the Mary Locher's heirs sold her farm in 1898 to George Poffenberger. Soon after the turn of the century, George Poffenberger constructed a dwelling along the new Confederate Avenue. Poffenberger built his house within part of the West Woods, east of Confederate Avenue near the historic Alfred Poffenberger farm.

At the turn of the century, the United States Forest Service and other groups promoted woodlot management. They produced many publications to guide the small tract land owner to obtain economic gain from the woodlot. In 1906, the Maryland Geological Survey reported on the state of the forests within Maryland. Within the Piedmont Plateau Region of which the Hagerstown Valley is a part, the survey stated:

There are no large timber tracts in this region and the forest area is almost exclusively made up of farmer's wood-lots, or small tracts, for the most part under 100 acres in area. The forest is second-growth hardwoods with oak, chestnut, hickory, tulip poplar, and maple the prevailing trees. It mostly of sprout origin under 100 years in age . . . These wood-lot forests are in fairly good condition as compared with the heavily-culled . . . forest of the Appalachian Region. However, all the wood-lots now produce much less timber than they are capable of producing if properly managed. The forest is usually under-stocked, due to frequent random culling out of timber as needed instead of systematic cutting.

*The wood-lot is an indispensable adjunct to a well-equipped farm, to furnish the necessary supply of cordwood consumed, fence posts, and rails . . . all requiring that there be a wood-lot convenient. The farmer's wood-lot furnishes one of the best possible opportunities for economical forest management . . . The more valuable the land occupied by the wood-lot is for agriculture, the more intensive should be the forest management . . . Timber brings a good price in this section because of its scarcity, especially such species as chestnut, oak, walnut, and hickory.*⁴⁵

Given the state of woodlots in 1906, small tract owners neglected to manage their woodlots to their full potential. Woodlots were not recognized as an economic source to the majority of farmers. During this era, farmers removed their woodlots to gain additional land for cultivation, as was the case for the historic West Woods. George Poffenberger and Cyrus Munson continued to clear the West Woods in the early 1900s and intensely cultivated and grazed the previous woodlot.

In May of 1921 a storm swept through the area destroying the Dunkard Church, one of last remaining structural symbols of the Battle of Antietam. Local residents salvaged some materials left

⁴⁴ To find additional information about the Philadelphia Brigade Park check the records from two repositories: the Union League of Philadelphia and the Loyal Legion also located in Philadelphia.

⁴⁵ Wm. Bullock Clark and Edward B. Mathews, *Report on the Physical Features of Maryland*, (Baltimore: John Hopkins Press, 1968), 248-249.

within the ruins. A few mature trees around the church were the only witnesses of the battle left on this symbolic ground.

The War Department continued to manage the tour roads and the monument plots. In 1928, they replaced the majority of the Jones' locked wire fences with concrete post and wire fences.⁴⁶ They retained sections of the old locust and chestnut posts that were in good condition. The Philadelphia Brigade Park was also managed by the War Department. The Quartermasters office produced an existing conditions map of the park in 1933. This drawing is the only known plan of the park.

⁴⁶ Betty Otto and Jerry Smith, "Tour Roads - Fences and Gates", Chapter IV, 1978.

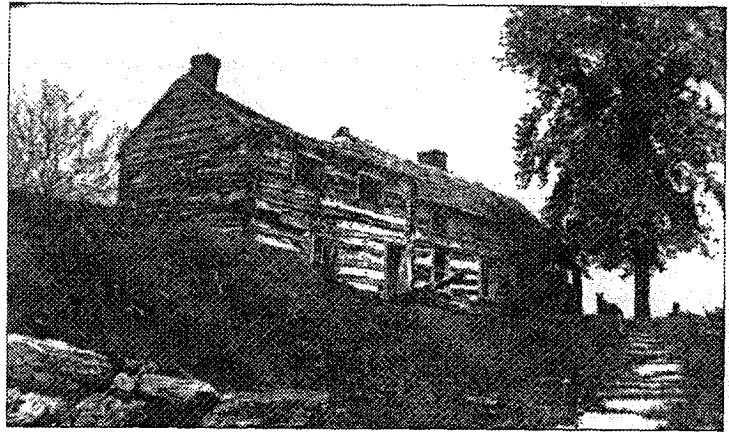
1933-1994

National Park Service

In 1933, the National Park Service took over the management of Antietam Battlefield and the National Cemetery. In that same year, a Historical Survey Team, determined a

*survey should discover the nature of the terrain of Antietam Battlefield in 1862: cultivated land, wood lands, swamp lands, etc. . . . Newspaper accounts, old pictures, county records, etc. should yield considerable material while accounts of citizens now living who remember the field, if carefully questioned, will provide abundant information.*⁴⁷

A second thrust for information concerning the battle occurred in the 1930s that would complement the work completed by Carman for the War Department. The survey team conducted photographic surveys of the roads, landscape, structures, and monuments in the 1930s. One of the products from the team was a preliminary building survey. Although there are some inaccuracies in the report, this was the first attempt to determine which buildings are significant to the battle. The survey team indicated the original Locher farm



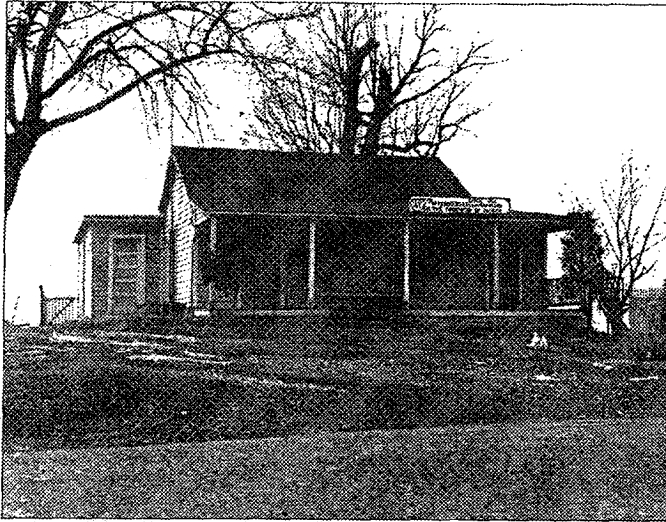
Locher dwelling in ruinous state in the 1930s. ANTI photofile.

was unoccupied at this time. In 1940 the management of Antietam would change forever the makeup of the landscape. Congress authorized that the Secretary of the Interior could "acquire. . . through donations or by purchase at prices deemed by him reasonable or by condemnation"⁴⁸ land to be preserved and protected within Antietam National Battlefield Site. This significant change in management of the battlefield was quite a different approach than the War Department's preservation philosophy of leaving the land in private ownership.

Under the new leadership of the National Park Service, the West Woods underwent some minor improvements. Under the Federal Emergency Relief Act of 1934, the park obtained permits from adjacent land owners to clean up areas within the West and East woods. Briars, poison ivy, wild grape vines and dead timber were removed from the woodlots, but mostly the

⁴⁷ Brown and Snell, *Administrative History*, 153.

⁴⁸ *Resource Management Plan*, "Legislative History," 1981, Appendix D.



Poffenberger Restaurant built on top of old Dunkard Church foundation, c. 1940. ANTI photofile.



Reconstructed Dunkard Church as it appeared in 1994. NCR photofile.

woodlots were left in a natural state⁴⁹. In 1940 "nine enormous oak trees in the West Woods [were] cut and hauled away for lumber . . . The largest of these near 66" in diameter and rings indicate it about 300 years old."⁵⁰

As for the Dunkard Church property, several changes occurred during this period. By the late 1930s, the Dunkard Church foundation had a new frame building constructed on top of it. A gas station, restaurant, and finally a dwelling were the many diverse uses for the site. In 1951 the Washington County Historical Society purchased the Dunkard Church parcel. The historical society gave the site to the National Park Service in 1952. Through the efforts to commemorate the 100th anniversary of the battle, the National Park Service reconstructed the Dunkard Church in 1962. Southeast of the Dunkard Church, the National Park Service constructed a visitor center also in 1962. Still other influences affected the historic scene adjacent to church property. Constructed near the church, from the 1880s to the 1950s, were barns, dwellings, and other outbuildings. Most of these non-historic structures were eventually torn down during the 1960s and 1970s, when the National Park Service purchased the land surrounding

the church. Around the Dunkard Church, only a few mature trees remain that may have been saplings during the battle. The landscape character of the site has changed considerably through the years, without the canopy of mature trees framing the church.

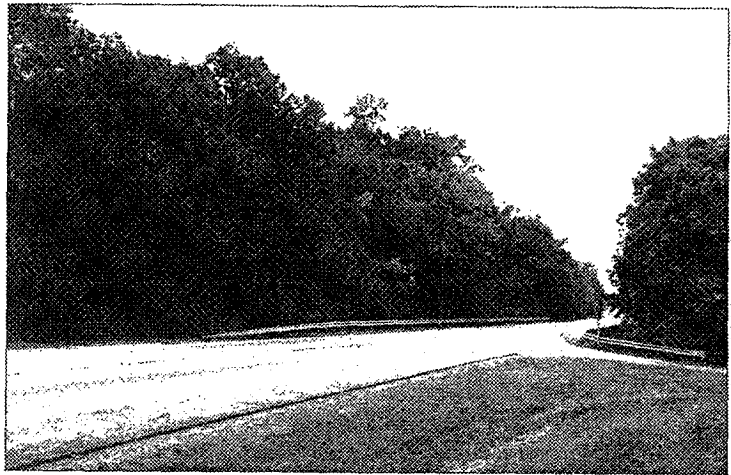
Monuments continued to be erected along the tour roads and within the fields. The makeup of the West Woods remained the same as in the 1890s until 1966 when the Hagerstown and Sharpsburg Turnpike rerouted around and through the West Woods. State route 65 bypass,

⁴⁹ From Annual Report, 6/30/1934 and 1/29/1935, project no. 22-B15-35, Brown and Snell, *Administrative History*, 157.

⁵⁰ Superintendent Beckenbaugh informed the NPS director of these changes to the battlefield's historic scene. RG79, Box 2605, File 660-0.4.1. Jan. 19, 1940, *Ibid*.

(Hagerstown and Sharpsburg Turnpike) primarily followed the right-of-way of Confederate Avenue. The new alignment though did not adhere as closely to following the property lines as the previous road had done. The state highway department created a wide right-of-way through the remaining northern parcel of the historic West Woods. By having a wide corridor, the relationship between the western and eastern part of the historic woodlot property is not as evident.

Since 1966, along Route 65, exotic trees and shrubs have invaded the road corridor. Some portions of the cleared historic woodlot have returned to forest. Along the northeastern boundary of the historic West Woods, a stand of native hardwoods and some exotics, have reappeared. There are even mature hardwoods present around the abandoned non-historic dwellings that are within the boundaries of the historic West Woods. Ornamental trees and shrubs planted by the tenants are also present around both George Poffenberger dwellings. The National Park Service continues to maintain the Philadelphia Brigade Park as a manicured lawn area with formal rows of shade trees. In 1991, the Conservation Fund acquired the original George Poffenberger farm and in turn donated the land to the National Park Service. Since this time, the National Park Service manages the property under an agricultural lease program. On the east and west fence lines, strips of woods line the boundary, with most of the historic West Woods under cultivation. To initiate the reforestation program for the West Woods, the park canceled the agricultural lease for this property.



Route 65 by-pass through northernmost portion of the West Woods, 1994. NCR photofile.



Exotic trees, like Tree of Heaven, have encroached upon the route 65 right-of-way into the boundaries of the West Woods, 1994. NCR photofile.

WEST WOODS OWNERSHIP CHRONOLOGY

Property #1 portion of "Re-survey on the addition to Pile's Delight" 112 1/2 acres [northern most part of West Woods which is also still intact]

- 1750 grant called "Resurvey of the addition to Pile's Delight" to Col. Edward Sprigg 2617 acres
- 1811 Davis McMechan to John McPherson and John Brien deed of sale W/606
- 1814 John McPherson and John Brien to Philip Grove and heirs deed of sale AA/80
- 1898 Philip Grove heirs (Mary Locher) to George H. Poffenberger deed of sale 108/162
- 1991 George H. Poffenberger heirs to Conservation Fund

Property #2 portion of "Millers Farm" also called "Addition to Loss and Gain" [major portion of West Woods]

- 1773 grant called "Addition to Loss and Gain" to Joseph Chapline 1484 acres
- 1796 James Chapline to Jonas Hogmire deed of sale I/519
- 1797 James Chapline to Jonas Hogmire deed of sale 40 acres K/575
- 1799 Jonas Hogmire to John Meyers deed of sale 81 3/8 acres L/678
- 1812 John Buchanan trustee for James Chapline to John Meyers deed of sale 150 acres Y/462
- 1836 John Meyers to executors of will John and John Miller last will and testament D/204
- 1844 Public sale to David R. Miller deed of sale OHW2/280
- 1844 David R. Miller to John Miller deed of sale OHW2/282
- Dispute between David R. Miller and John Miller - Louis McComas executor Chancery Record 24/421
- 1883 Louis McComas trustee to George H. Poffenberger deed of sale 65 1/2 acres 6 perches 85/6
- 1991 George H. Poffenberger heirs to Conservation Fund

Property #2a portion of "Millers Farm" and also "Addition to Loss and Gain" [southern most portion of West Woods not owned by NPS]

- 1883 George H. Poffenberger to Otho Poffenberger deed of sale 85/142
- 1883 Otho Poffenberger to Cyrus Munson deed of sale 85/143
- 1919 Cyrus Munson to Stottlemeyer deed of sale 154/429
- 1920 Stottlemeyer to Flook deed of sale 158/581
- 1921 Flook to Remsburg deed of sale 161/267
- 1926 Remsburg to Charles Turner deed of sale 175/258
- 1968 Turner to Hershey deed of sale 480/560

Property #2b portion of "Millers Farm" now known as Philadelphia Brigade Park

- 1895 George Poffenberger to Philadelphia Brigade Association deed of sale 10 acres 104/246
- 1903 John L. Bowers trustee to City of Philadelphia 119/40
- 1933 City of Philadelphia to United States of America [original deed in park files]

Property #3 Dunker [Dunkard] Church part of "Anderson's Delight" 100 perches
-1851 Samuel Mumma to Deacons of Church of Brethren deed of sale or use IN5/685
-1924 Omar T. Kaylor trustee for Mumma heirs to G. Boyer deed of sale 176/321
-1926 G. Boyer to Charles Turner deed of sale 176/169
-1951 Charles Turner to Maryland Historical Society deed of sale 264/1
-1952 Maryland Historical Society to United States of America deed of sale 272/593

Property #4 portion of "Anderson's Delight" 4 1/2 acres [southeastern most portion of West Woods south of Dunkard Church]
-1880 Henry and Samuel Mumma Jr. executors [last will and testament of Samuel Mumma Sr.] to Cyrus Munson 79/471
-1919 Cyrus Munson to Stottlemeyer 154/429
-1920 Stottlemeyer to Flook 158/581
-1921 Flook to John Remsburg 161/267
-1926 John Remsburg to Charles Turner 175/258
-1968 Charles Turner to Hershey 480/560

Property #4a portion of "Anderson's Delight" [south of Dunkard Church along turnpike]
-1951 Charles Turner to Albert Turner deed of sale .9 acres 267/195
-19 Albert Turner to United States of America deed of sale 389/261

Adjacent Properties

Property #5 portion of "Re-survey on the Addition of Pile's Delight" - 112 1/2 acres [see also property #1 above]
-1750 grant called "Resurvey of the Addition to Pile's Delight" to Col. Edward Sprigg 2617 acres
-1814 John McPherson and John Brien to Philip Grove and heirs deed of sale AA/80
-1840 Philip Grove to Joseph Grove last will testament D/411
-1868 Francis Grove (wife of Joseph Grove) to George Burgan deed of sale LBN2/658
-1879 George Burgan to William Roulette deed of sale 77/662
-1880 William Roulette to Valley Railroad Company R/W easement 1.6 acres 79/71
-1970 Roulette to Leon Price deed of sale 110.9 acres 502/281

Property #6 main farm complex of "Miller Farm" also called "Addition to Loss and Gain" [see also property #2, #2a and #2b above]
-1773 grant called "Addition to Loss and Gain" to Joseph Chapline 1484 acres
-1796 James Chapline to Jonas Hogmire deed of sale I/519
-1797 James Chapline to Jonas Hogmire deed of sale 40 acres K/575
-1799 John Buchanan to John Meyers deed of sale
-1836 John Meyers to executors of will John and John Miller last will and testament D/204
-1844 Public sale to David R. Miller deed of sale OHW2/280
-1844 David R. Miller to John Miller OHW2/282

- Dispute between David R. Miller and John Miller - Louis McComas trustee Chancery Record 24/421
- 1883 Louis McComas trustee to David R. Miller deed of sale at public sale 150 acres 100 perches 85/91
- 1886 David R. Miller to Euromus Hoffman deed of sale 88/697
- 1933 Urilla Rohrer and Ima Scheller to John and Emma Poffenberger 150 acres 60 perches 193/471
- 1950 Emma Poffenberger to William Barr 259/457
- 1952 William Barr to Paul Culler 271/303
- 1989 Paul Culler to Conservation Fund 920/473
- 1990 Conservation Fund to United States of America 960/716

Property #6a portion of "Miller Farm" also called "Addition to Loss and Gain" [Wilson property]

- 1882 Louis McComas trustee to Henry Mumma deed of sale 44 1/4 acres 36 perches 84/698
- 1887 Henry Mumma to Hannah Nicodemus 90/698
- 1905 Hannah Nicodemus to Milliard Nicodemus 121/241
- 1911 dispute between S. Howell Gardner against Milliard Nicodemus [chancery docket #7267] Albert J. Long appointed trustee
- 1911 Albert J. Long trustee to Cyrus Remsburg 135/523
- 1949 W. Howard Remsburg [heir] to Allen R. and C. Leona Wilson 253/373
- 1990 C. Leona Wilson to Philip Wilson 946/835
- 1990 Philip Wilson to Philip and Lilli Wilson 973/633

Property #7 Mumma Farm portion of "Anderson's Delight," "Part of John's Chance," and "Abstone's [Alstone's or Absence] Forest"

- 1784 John Reynolds, Sr. to Francis Reynolds 182 1/2 acres last will and testament A/92
- 1785 Francis Reynolds to Christopher Orendorff deed of sale D/246
- 1791 Christopher Orendorff (son) to Christian Orendorff II (father) deed of sale G/473
- 1796 Christopher Orendorff to Jacob Mumma deed of sale I/764
- 1801 Joseph Chapline to Jacob Mumma deed of sale O/75
- 1805 Elizabeth Orendorff (widow of Christian Orendorff) to Jacob Mumma deed of sale S/37
- 1810 Christopher Orendorff to Jacob Mumma deed of sale N/377
- 1809 Land Patents ---"Mummas Lot", Addition to Potomac River, and "Mummas Fancy" 2/334
- 1831 Jacob Mumma to Samuel Mumma "part of the tract called Anderson's Delight", "part of the tract called part of the resurvey on Ellwick Dwellings and part of Alston's Forest" MM/114
- 1876 Samuel Mumma to Barbara Mumma deed of sale 74/253
- 1883 Barbara Mumma to Rezin D. Fisher deed of sale 93/144
- 1923 Rezin D. Fisher to Walter H. Snyder deed of sale 165/610
- 1924 Walter H. Snyder to Hugh G. Spielman deed of sale 169/670
- 1961 Hugh G. Spielman to United States of America deed of sale 375/392

Property #7A portion of "Anderson's Delight," "Part of John's Chance," and "Abstone's [Alstone's or Absence] Forest" [south of Dunkard Church]

- 1869 Samuel Mumma to George Burgan deed of sale McKK1/416
- 1881 George Burgan to Margaret Poffenberger deed of sale 80/538
- 1883 Margaret Poffenberger to Benjamin Hoffmaster deed of sale 84/616
- 1893 Hoffmaster Trustees to Rezin Fisher deed of sale 100/118
- 1896 Rezin Fisher to Emma Fisher deed of sale 105/377
- 1921 Albert J. Long Trustee to Joseph & Bertha Poffenberger deed of sale 161/379
- 1945 Joseph & Bertha Poffenberger to Thomas Poffenberger deed of sale 230/110
- 1971 Thomas Poffenberger to Eleanora Poffenberger deed of sale 519/385

Property #7B portion of "Anderson's Delight," "Part of John's Chance," and "Abstone's [Alstone's or Absence] Forest" [southeast of Dunkard Church and north of Bloody Lane see #7 above]

- 1880 Henry and Samuel Mumma Jr. to Elizabeth Mumma deed of sale 31.75 acres 79/576
- 1883 Elizabeth Mumma to Benjamin Hoffmaster deed of sale 31.75 acres 85/13
- 1895 Trustee to Rezin Fisher deed of sale 100/118
- 1896 Rezin Fisher to Emma Fisher deed of sale 105/377
- 1923 Rezin Fisher to Walter Snyder deed of sale 165/610
- 1924 Walter Snyder to Hugh Spielman deed of sale 169/670
- 1961 Hugh Spielman to United States of America deed of sale 375/392

#7C portion of "Anderson's Delight," "Part of John's Chance," and "Abstone's [Alstone's or Absence] Forest" [New York Monument Plot]

- 1908 Rezin Fisher to New York Monument Commission deed of sale 7 acres 93/144

#7D portion of "Anderson's Delight," "Part of John's Chance," and "Abstone's [Alstone's or Absence] Forest" [Turnpike Toll House Property south of NY plot]

- 1885 Benjamin Hoffmaster to Hagerstown and Sharpsburg Turnpike Company deed of sale 87/1
- 1920 Hagerstown and Sharpsburg Turnpike Company to Frank Barr deed of sale 159/15
- 1920 Frank Barr to Hubert Stottlemeyer deed of sale 159/16
- 1925 Hubert Stottlemeyer to Marion & Lulu Ausherman deed of sale 170/337
- 1939 Marion & Lulu Ausherman to Harry Churchey deed of sale 211/111
- 1942 Harry Churchey to Harry Lohman deed of sale 220/478
- 1945 Harry Lohman to Raleigh Griffith deed of sale 229/76
- 1945 Raleigh Griffith to Walter Hammond deed of sale 231/627
- 1946 Walter Hammond to Ernest Williams deed of sale 234/218
- 1947 Ernest Williams to Raymond Knode deed of sale 244/233
- 1951 Raymond Knode to State Roads Commission deed of sale 263/97

#7E portion of "Anderson's Delight," "Part of John's Chance," and "Abstone's [Alstone's or Absence] Forest" [5 parcels from property 7A]

- 1) 1966 Thomas Poffenberger to James Poffenberger deed of sale 445/2
- 2) 1966 Thomas Poffenberger to United States of America deed of sale 446/478 [triangular piece of land between realigned route 65 and old turnpike]
- 3) 1967 Thomas Poffenberger to James Poffenberger deed of sale 450/16
- 4) 1967 Thomas Poffenberger to Wilfred Grayson deed of sale 5.6 acres 453/292 [west side of realigned route 65]
- 5) 1968 Thomas Poffenberger to Grafton Smith deed of sale 1.1 acres 468/218

RECOMMENDATIONS

Historic documentation for the West Woods vicinity recognizes the significance of certain features and also the non-contributing nature of others. Property ownership patterns, soil constraints, and economics, are all factors that assisted in the formation of the historic woodlot, known as the West Woods. From the landscape history and accompanying historic base maps of the West Woods in the significant periods, an appreciation of the complexities and relationships of landscape features is presented. This report provides a better understanding of the cultural resources to make sound management decisions for the West Woods restoration.

The first development in the definition of significant features is the restoration of the West Woods. Defining edges and massing of trees for the woodlot will identify the key historic relationships for the interpretation of the battle. The first part of this chapter expands discussions about the **historical analysis** and **general management plan**, focusing on the historic scene. The second part of the chapter describes **species composition**, **reforestation guidelines**, **woodlot management**, and the proposed **phasing plan** for the restoration of the West Woods. Once the reforestation program for the West Woods commences in the spring of 1995, the general woodlot character at the time of the battle will not be actualized for another 50 to 80 years. Although the mature form of a woodlot will take many years to discern, the transition from a plowed field back to woodland will be a significant step toward the reestablishment of the historic scene.

HISTORICAL ANALYSIS

The first component to emphasize is the relationship of significant features to the West Woods. Historic property boundaries, circulation patterns, and farmstead locations as they relate to the historic woodlot, are all important factors to address. Three properties influenced the form of the West Woods in 1862; the Miller farm, the Mary Locher farm (Alfred Poffenberger tenant), and the Dunkard Church. The National Park Service obtained ownership of the Dunkard Church property in 1952. Just recently, the National Park Service acquired the David R. Miller farm (1990) and the Mary Locher farm (1991). From these adjoining properties, circulation systems developed for managing the woodlot. Fence lines defined the boundaries and use of the adjacent lands which influenced the overall form of the West Woods. Modern intrusions such as the Route 65 bypass bisecting the site, affect the comprehension of the relationship of the Mary Locher farm to the West Woods. The War Department's tour roads and non-historic structures affected the historic scene near and within the West Woods. Next to the Dunkard Church, trailers, barns, dwellings, and other outbuildings cluttered this sacred ground, once framed by towering old growth trees. In the 1970s, the National Park Service removed these structures. On the historic Miller property, previous owners constructed two buildings in the west woods and two other building complexes within significant view zones toward the woodlot. Most of these structures were built between 1885 and 1900. Historic views are important for emphasizing the relationship of the Miller, Locher and Dunkard Church properties to the West Woods.

Views are even more significant when interpreting the battle movements on September 17, 1862. To capture the historic scene and character of the area, the key is to emphasize the delineation of fence lines, tree massing, road systems, and spatial arrangement of building complexes. Several

photographers captured the scene of the landscape soon after the Battle of Antietam. Near the West Woods, the Dunkard Church symbolized the death and destruction of the battle. Many photos depict the scene in front of the church, framed by the mature woods from behind. Through the years, the front of the Dunkard Church continued to be photographed. The woodlot that surrounded the church was very apparent in the early photos from the 1860 to the 1880s. By the 1890s the entire character changed once the backdrop of large canopy trees was no longer present. Another significant battle view point of the West Woods is along the Hagerstown and Sharpsburg Turnpike. There are no historic photographs of the West Woods from this vantage, but there are photos along the road corridor. A number of soldiers were killed along the turnpike fence line. For this area, field delineation and the presence of the West Woods along the turnpike will contribute to the historic scene. The definition of features helps the park relate the movements of the various units and the barriers the soldiers encountered.

GENERAL MANAGEMENT PLAN

The General Management Plan (GMP) for Antietam National Battlefield proposes further development changes for the West Woods area. The proposal as outlined in preferred "Alternative B" of the GMP, will impact the historic scene of the West Woods vicinity. The GMP team proposes to locate a new tour road through the West Woods. When the War Department constructed the tour roads in the West Woods vicinity, they either built them on existing farm roads or property lines of the 1860s. By doing this, the roads emphasized the battle lines. The two exceptions, Starke Avenue and Cornfield Avenue, were constructed on property lines established in the 1880s. The proposed road in Alternative B will bisect the woodlot rather than go around it as other roads have done. When the new road is constructed, it is recommended that it follow the State Route 65 corridor as closely as possible. The designers should recognize the significance of the historic woodlot form and character, in order to de-emphasize the road within the woodlot. The proposed development may adversely affect the cultural resources if these elements are not considered.

Although reforestation of the West Woods is the primary focus of this report, other historic relationships should be recognized which enhance the historic scene. Interpretation of these associated features will help the visitor understand these important relationships and the evolution of the landscape. Specific recommendations are summarized below. Some recommendations deal with significant cultural resources, while others deal with non-contributing resources.

1. Document the Mary Locher farm complex using HABS standards for structures. Ornamental plant placement, fence lines, structural relationships, are characteristics that should be documented. Stabilize existing structural features according to NPS standards.
2. Reestablish fence lines at the time of the battle around the West Woods, except for the area within the Philadelphia Brigade Park.
3. Document and remove non-historic structures and features within West Woods property. Document ornamental plant placement, fence lines, structural relationships and circulation.

4. Construct a new tour road (Alternative B) on the fringe of the western edge of the woodlot rather than through the lot. Maintain a closed tree canopy over the road to blend the corridor within the woodlot. Reinstall War Department interpretive tablets for old Confederate Avenue along this road. Presently, these tablets are located along the rear edge of the Philadelphia Brigade Park and were placed there in 1966 when Route 65 was realigned.
5. Establish an agreement with the State Highway Department for maintaining and controlling invasive and exotic vegetation within the Route 65 corridor through the boundaries of Antietam National Battlefield and specifically through the historic West Woods.
6. Retain formal planting for the Philadelphia Brigade Park. Further research is needed to investigate if there is a planting plan from the turn of the century. All non-contributing (not specified on the original plan) planting should be removed from the formal planting area of the Philadelphia Brigade Park.

SPECIES COMPOSITION

From the historic documentation and existing woodlot survey of part of the West Woods, the species composition is apparent. The percentages of species is not. This is the second attempt to determine the composition of the historic West Woods. In 1973, Antietam park ranger Charles Anibal produced a report that included recommendations for the composition. The recommendations were based on a survey of another woodlot that had the same soil type as the West Woods. The Lewis Wingert Farm, about 5 miles north of the battlefield, served as the prototype for his report. This woodlot was documented as a climax forest over 220 years old. Unfortunately, the lot was logged in 1972. Information gathered in Anibal's report is integrated into this report.

From the historic record, marker trees serve as the first indication of plant types. The surveyors designated these trees as survey points for land grants. Surveyors sometimes had favorite species that they designated as marker trees. From the original land grant surveys, these trees continued to be used to describe the boundaries of the property from the 1700s well into the 1900s. In one instance, a black oak, designated as a marker tree from the original grant, is noted in deed transactions from 1812, 1844, and 1882. In 1882, this tree is called out as an old black oak stump. This continued use of the same marker trees is evident for all land surveys for the West Woods vicinity. Because this information only designates significant trees along the border of the property, it is impossible to determine the species percentage from this data. The land records indicate hickory, white oak, locust, black oak, and walnut as marker trees from early 1800s land surveys of two land grants, "Addition to Loss and Gain" and "Resurvey on the Addition to Pile's Delight" that included all of the West Woods.

Even the historic information accumulated from letters, diaries, and reminiscences from the battle of Antietam are tainted with the limited knowledge of the variety of plants recognized within the woodlots. Most likely the species named are the dominant species within the woodlot. Other

less conspicuous trees and shrubs that exist today within the woodlot were probably present during the 1860s as well. Since the battle occurred in the late summer with the continued presence of troops within the fall and winter months, the abundance of fruit (nuts, and acorns) noted on the ground was evident during this period of the year. If the battle occurred during the spring or summer, perhaps an expanded palette of plant species would have been documented (flowering shrubs and trees, fruit etc.). The soldiers also noted the old growth forest within the area. The grove of trees probably impressed most of the men from the New England states, because there were few mature old growth forests left where they lived. Soldiers also described the character and type of vegetation in their letters, diaries, and reminiscences during and after the war. Dr. William Child provided the most descriptive information from his letters to his wife. He described the surrounding woodlot around the Smoketown hospital as a "large grove of noble oaks and walnuts. Bushels of large English walnuts" could be gathered from the ground. He also wrote that "[t]he forest trees here are all large and hardwood. There is but little if any pine." Further description of the surrounding woodlots by Dr. Child expressed the seasonal change. "The leaves are yellowing and the woods around the ground is covered with walnuts and acorns." From these letters, an excellent description of the large tree canopy of an oak-hickory woodlot is obtained.

The descriptions of the woodlots from the 1860s period and forest from the early 1800s are very similar. The current woodlots represent a second or third growth forest, compared to the old growth forest of the 1860s. Today the primary species within the remaining portion of the West Woods are tulip popular and ash. The mature canopy still consists of oaks, black walnut and hickory, but these species are not as abundant as they were in the past. Regeneration of oak and hickory in the understory is not prevalent. It is not known why this is the case, but this occurrence of oaks and hickories not regenerating is not limited to the woodlots of the Sharpsburg area alone. Exotics are taking up the space where oaks and hickories would have grown. Tree of Heaven, barberry, and multiflora rose are just a few of the exotics identified within the West Woods in 1994. To restore the character of the West Woods to its appearance in the 1860s, elimination of exotics from the West Woods vicinity will be the greatest challenge. Another element that has changed the character of the only portion left of the West Woods is the presence of understory vegetation. In the descriptions from the 1860s, it was noted several times that the woodlots were open enough that a wagon could be driven through the trees. With the understory vegetation engulfing the existing woodlot, an open character is no longer evident.

From a 1994 preliminary survey of the remaining portion of the West Woods the following species were noted:

Canopy

oak (red, black, chinkapin, Spanish, white)
hickory (shagbark, mockernut, butternut)
tulip poplar
white ash
black walnut
black locust
boxelder
America elm
black cherry
hackberry

Understory

boxelder
hackberry
pawpaw
redbud
black cherry

Edge

flowering dogwood
eastern red cedar
sweet cherry

Exotics

Japanese barberry
multiflora rose
Norway maple
privet
tree-of-heaven

From the existing conditions survey and the evidence from the historic record, a shift occurred in the species composition of the remaining portion of the West Woods. Whether it was lack of management of the woodlot, or environmental factors that limited oak and hickory regeneration, or a combination of the two, the species composition that is represented today does not resemble the woodlot of the 1860s. Unfortunately, the best suggestion of what the species composition was in the 1860s will still be an educated guess.

Wildlife habitat is another resource to consider while conducting the reforestation. The park should assess the prospect to promote wildlife habitat within the woodlot. There is an opportunity to integrate natural resource values within the restoration of the West Woods utilizing habitat zones to promote wildlife.⁵¹ A modified edge treatment on the northern part of the West Woods and around rock outcrops within the interior will promote wildlife habitat. These habitats should be connected with an overall system of fence rows, other woodlots, and pasture areas on adjacent lands, away from human contact. For instance, the fruit from dogwoods is utilized by over 35 species of birds. The existing conditions survey located dogwoods along the northern edge of the West Woods. They typically grow within the edge area of the woods. The edge is the most diverse part of the natural forest, where most of the animals congregate. Oaks and hickories also promote wildlife. Small mammals, deer, and upland songbirds use the acorns and nuts. Since the woodlot was historically an oak-hickory forest, the reforested area will be dominated by these species. Dead trees

⁵¹ For more information regarding natural resource management of wildlife see NPS-77.

or snags can also encourage nesting for certain birds. Although, the appearance of dead trees is unsightly to some, these trees serve a great need. By promoting wildlife habitats, sites may provide shelter for the Appalachian Bewick's wren, a threaten bird last seen within northern Virginia and West Virginia. The weighing of natural resources with the historic character of the woodlot will be a difficult one if conflicts arise between the two.

The recommendations below are based on present species composition patterns, historic species composition noted from the historic record, and natural resource management needs for wildlife habitat. Primarily the makeup of the historic woodlot consisted of an oak-hickory associated forest. The following species composition is recommended:

Dominant Species 50%

oak
(chinkapin, white, red, black) 30%

hickory
(butternut, mockernut, shagbark) 20%

Subdominant Species 50%

black walnut 10%
tulip poplar 10%
black locust 5 %
white ash 5%
boxelder 5%
American elm 5%
hackberry 5%
dogwood 3%
sweet cherry 2%

Archeological investigations may reveal more information about species composition for the West Woods vicinity. They are scheduled to start in the fall of 1994. The study team will test for pollen in selected units, to obtain a comprehensive analysis of the evolution of the plant community. The analysis will cover the evolution from earliest period of old growth forest to cleared agricultural land and lastly to second and third growth forest. Other vegetative species may appear using this testing method. Once the pollen analysis tests are complete, minor changes may be recommended for the species composition.

REFORESTATION GUIDELINES

The historic West Woods was composed of approximately 75 acres in 1862. 35 acres of the historic West Woods has been designated to be reforested. The southernmost part of the historic woodlot, 11.4 acres, is the only portion of the West Woods in private ownership, which is not included in the reforestation. The remaining 30 acres of the West Woods have existing tree cover and will be managed as a woodland.

In the 1880s the woodlot was cleared for cultivation. Since the 1880s, strips of woody vegetation have grown up along rock ledges on the northeastern boundary of the West Woods and along fence lines installed in the 1890s by the War Department. The remaining portion of the historic woodlot has remained in cultivation since the 1880s. When the National Park Service

acquired the land in 1991, they issued an agricultural lease for the property. The park will modify the agricultural lease for this property, to initiate the phased reforestation plan for the historic woodlot.

There are two methods for restoration of the West Woods, natural succession or reforestation. Natural succession promotes natural systems to find their equilibrium from the existing ecology. This method is a slow process, frequently requiring centuries to obtain the mature, climax forest. However, by choosing this method, there are fewer expenses for buying plants but possibly further cost for future exotic species management. The rate of succession will vary depending on natural factors influenced by soil types, available seed sources, and climatic trends.⁵² Antietam may want to try this option in a less prominent area within the park. The other method, reforestation, is the recommended option. By planting species associated with a climax mixed woodland forest, this "eliminates several time-consuming, pre-forest stages."⁵³ The whole purpose of this project is to restore the 1862 historic scene of the Sharpsburg area. Reforestation will achieve the massing and delineation of the West Woods in less time than natural succession. Analysis of the two options for future reforestation projects will assist other parks in deciding which option is preferable.

Rob Defeo, Regional Horticulturist, developed reforestation guidelines for road construction projects for the National Capital Region.⁵⁴ This information along with historic reforestation principles, should be consulted when initiating the reestablishment of the West Woods. Antietam's natural resource specialist should supervise the planting and management of the reforestation. Specific criteria for sizing, spacing allowances, and planting recommendations for the West Woods project are as follows:

Size

Sizes needed for the reforestation should be based on survival rate, area of reforestation, and funds available. The park decided to use 10% balled and burlapped (B&B), and saplings, and 90% seedlings as the planting ratios. One year old hardwood seedlings are recommended for reforestation projects, because of a higher survival rate. Also, seedlings, require less preparation in comparison to B&B plants and broadcast seeding. Seeds will also be sown and placed in randomly prepared spots across the reforested area. The seeds will be collected from the existing woodlots within Antietam National Battlefield. In some locations, the area should be plowed before seeding.⁵⁵ For walnuts, oaks and hickories a better success rate may be obtained by planting seedlings rather than seeds. Regeneration is difficult for these large seed species. If there is still a desire to plant the oaks, walnuts and hickories from seed, plant in furrows or in holes without preparing the soil.

⁵² Hiroshi Daifuku, *The Historic Forest: a Resource for Historic Preservation* (Washington, D.C.: US/ICOMOS, 1991), 8.

⁵³ Ibid.

⁵⁴ Reforestation recommendations prepared by Rob Defeo incorporates the principles of horticulture, silviculture and natural succession to reestablish native dominance on a site.

⁵⁵ The regional archeologist should be notified if plowing is used to prepare the ground before planting.

Spacing

The following guidelines were recommended in 1916 by the United States Forest Service in *Farmers Bulletin #1177* for determining proper spacing for reforestation plans, which is still used today.

The proper spacing to give in planting trees depends largely on the habit of the species and the character of the site. In general, the more tolerant the trees are of shade and the more unfavorable the site, the closer should be the spacing . . . Species which are tolerant . . . can be spaced more thickly than those that are intolerant . . . The best results will ordinarily be secured by sowing or planting a mixture of species.

The U.S. Forest Service also presented spacing requirements for specific trees in the 1916 bulletin. In the table below, tolerant and intolerant species are depicted, with tolerant species spaced closer together and intolerant species spaced further apart.

Spacing in feet					
12 by 12	8 by 8	7 by 7	6 by 6	5 by 5	4 by 5
Number of trees required per acre					
303	680	889	1,210	1,743	2,178
Cottonwood	Tulip poplar Red Gum	Chestnut Black locust	Red oak Black oak Black walnut White ash	Hickory White oak Chestnut oak Bur oak Post oak	Hard maple Beech

There is conflicting information about black walnuts. The 1916 bulletin suggests that black walnut is tolerant to shade but another publication from 1969 states that walnut is intolerant.⁵⁶ A silviculturist should be consulted when deciding which of the two sources is correct.⁵⁷

⁵⁶ Ontario Reforestation Section, *The Farm Woodlot*, Bulletin No. c.14, revised 1969, 17.

⁵⁷ A silviculturist deals with the development and care of forests.

Planting Recommendations

Specific recommendations for the West Woods reforestation plan include soil constraints, density of planting, and other miscellaneous specifications.

1. The selection of individual species should be based on what was growing on the site (significant period) before the disturbance and on habitat specifications for wildlife (see **Species Composition** section).
2. Amend the soil if necessary to obtain the historic soil condition for the plants specified. This philosophy differs with the regional guidelines for reforestation. The character and restoration of the historic scene take precedence for this project because of the historic significance of the site.
3. A density of approximately 1700 total plants per acre (40 per 1000 sq. ft.) should be used for reforestation. Plant 1 large tree for every 10 small trees. Thinning will achieve the historic open character of the woodlot.
4. Areas to be reforested/restored shall be clearly indicated on the site plans and include: the total area in square feet or acres; the treatment(s) each area will receive prior to planting; and the genus, species, quantities, and sizes of the plants for each area.
5. Planting locations shall be staked in roughly the same patterns found in adjacent natural areas. Planting locations should be staked in a random pattern a minimum of 3 feet and a maximum of 8 feet on-center, grouped by species and size in quantities of 5, 7, 9, 11, etc. Do not space plants in equal distances from each other or mix large and small plants of the same species together.

Other guidelines for planting:

1. Preserve and protect existing native vegetation and wildlife habitats on adjacent sites.
2. Exotic vegetation should be removed in the reforestation area before planting seedlings.
3. The park staff shall take all necessary measures to prevent soil erosion, air and water pollution by any material and/or equipment used during planting operation.
4. The entire planting area shall be protected from pedestrian and vehicular traffic during planting and for approximately five years after.
5. Tree protection shall be installed around seedlings and saplings to prevent destruction of plants by deer.

6. Stake all B&B trees to provide support.
7. B&B stock trees will be the only plantings mulched using surplus compost from the park.

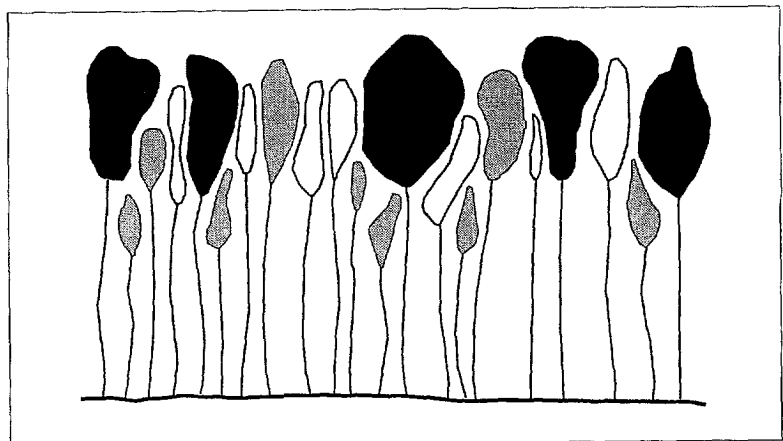
WOODLOT MANAGEMENT

Future management of the West Woods after the reforestation process has been completed should recognize the open character of the woodlot. To maintain the open character and uneven age stand required for a woodlot, the park should conduct subsequent thinnings. Diversity of species in a woodlot is another feature to strive for. To obtain a healthy woodlot, look for a diverse, uneven stand of trees, protected from fire and grazing. Different management principles comply for newly planted areas and for existing neglected woodlots.

Management of Newly Planted Areas

Pruning - Prune trees to improve the form and to concentrate the growth to a single leader.

Thinnings - Thin trees again once they are between six to ten years old. Competition between trees is so great that they may cease to grow. Rapidly growing trees such as tulip poplar should have their canopy opened to a much greater extent than slower-growing trees such as ash, oak and walnut.



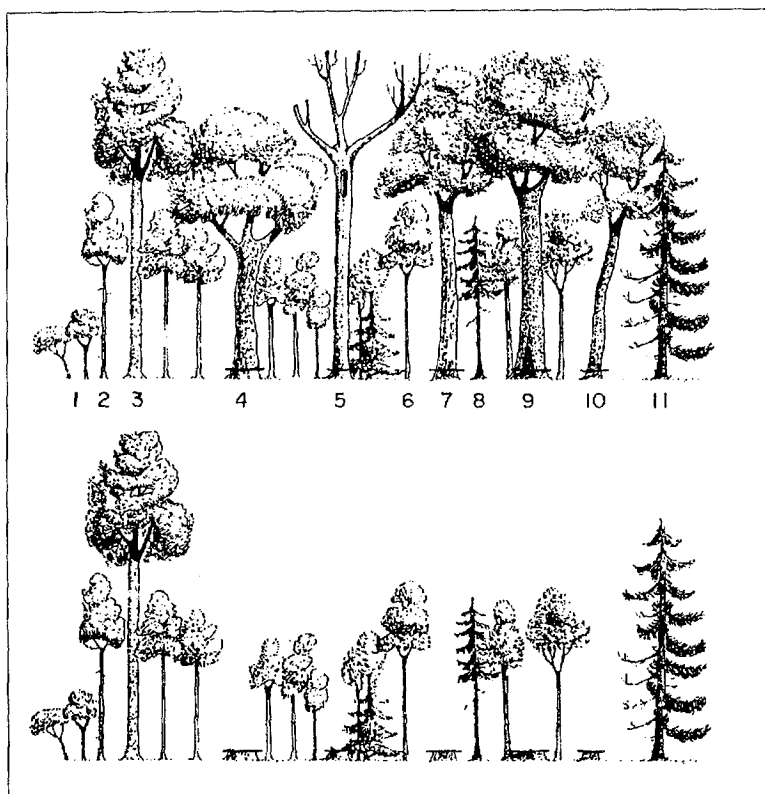
*This sketch shows that only those trees (as shown in white) that hinder growth of the selected crop trees (as shown in black) are removed. The filler trees (shown in gray) which remain, are needed to force the crop trees to grow erect and restrict development of side branches. From *The Farm Woodlot: Bulletin No. c.14*, 1969.*

Subsequent Thinnings - Every ten years subsequent thinnings should be conducted throughout the life of the growing stand. When the crowns touch, competition between trees begins all over.

To improve the character of an existing neglected woodlot, a different set of techniques is followed.

Existing Woodlot Management

Thinnings - Woodlots that have not received proper care will have many defective and weed trees present. While conducting an improvement thinning, proper care must be taken not to remove too many trees from the woodlot. The improvement should be gradual.



*A cross-section of an uneven-aged woodlot before and after an improvement cutting. In the upper sketch the trees to be cut are marked with a dash near the base. 1 and 11 are a shrub and tree on the border of the woodlot which should be left to protect the interior. 2, 3, 6 and 8 are sound straight trees of desirable species that should be left to grow larger before cutting. 7 is a sound mature tree that may be harvested. 4 is a tree with a wide spreading crown (wolf tree) that is injuring and retarding the growth of good trees beneath it. 5 is a dead and hollow tree which may be cut for fuelwood or left as a den tree. 9 is defective and 10 is crooked. From **The Farm Woodlot: Bulletin No. c.14**, 1969.*

Weed Trees - The West Woods has many species of trees that are of little value for use on the farm, such as hackberry and boxelder. These weed trees should be removed.

Dead Trees - Dead trees and limbs should be used for cord wood. These trees are taking up space where a healthy tree can take its place. Some dead trees or snags should be preserved to promote wildlife habitat. If possible the snags should be located in a less apparent area of the woodlot.

Diseased and Insect-infested Trees - Trees weakened from disease and insects should be removed to prevent disease from spreading and maintain a healthy appearance to the woodlot.

Stagheaded and/or Defective Trees - Trees with dead tops due to several causes should be removed to allow younger more vigorous trees to take their place. Decay may enter the defective area.

Remaining Trees - No tree should be removed unless there is a good reason for cutting it. If a tree is cut, there should always be smaller trees beneath the removed tree to occupy its place. Trees should be planted where there is a wide opening in the canopy.

PHASING PLAN

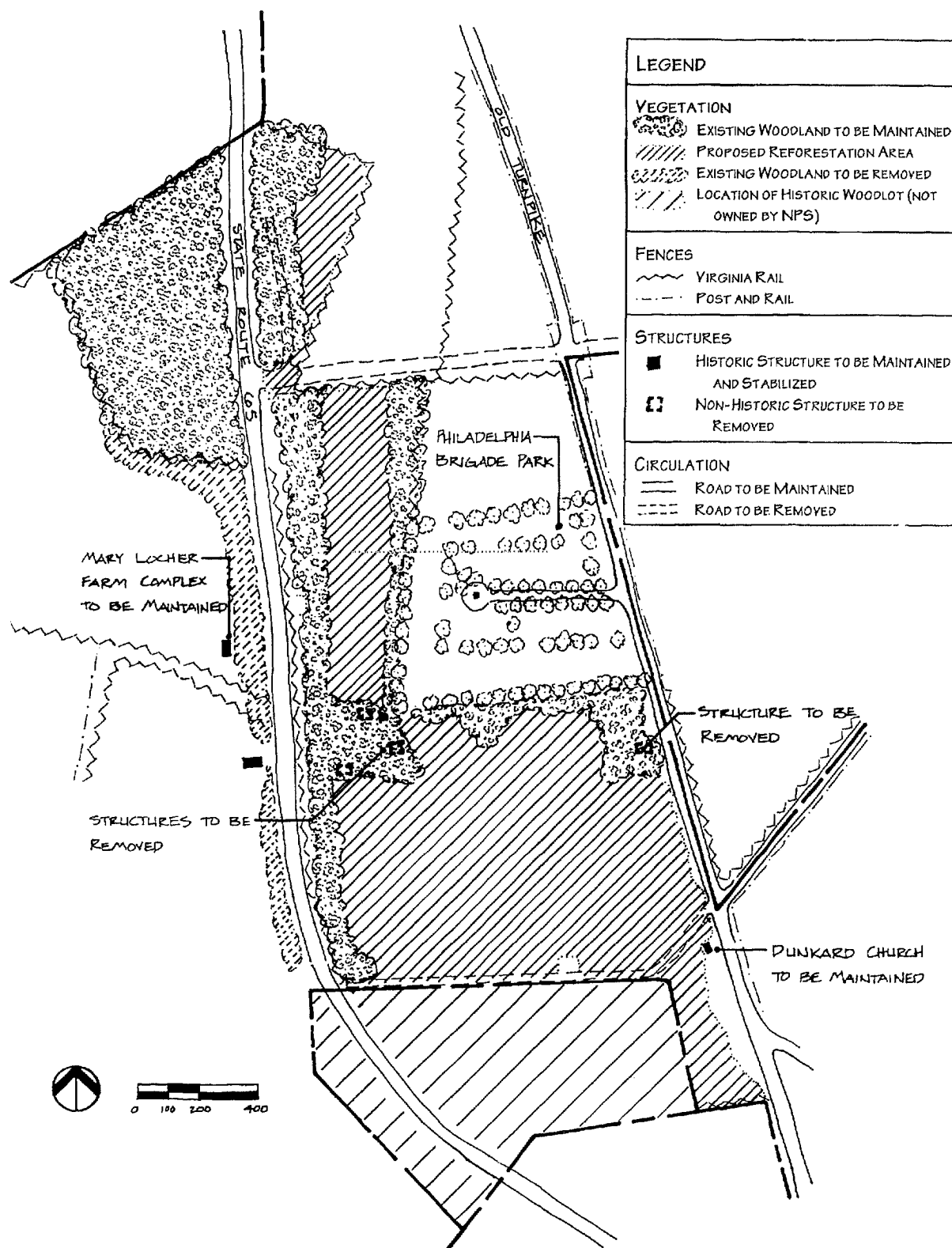
Once the boundaries are known and other relationships are recognized, the reforestation plan can be initiated. The preliminary phasing plan established by the park designates five phases of planting for reforestation. Some of these phases can occur concurrently. For instance the removal and control of exotics along fence rows can be managed at the same time as the reforestation. Within the cleared areas, plant six to ten acre plots annually. By designating smaller plots, the maintenance staff can analyze the planting techniques more thoroughly. This initial analysis will assist the resulting phases for the reforestation of the West Woods. For future management of woodlots, some factors to consider are survival rate, visual appearance, and productivity. Other management strategies that should be considered when setting priorities for the phasing plan for reestablishment of the West Woods are as follows:

1. For the first phase of reforestation, select an area that will be noticed right away by the visitor, such as land next to the Dunkard Church. The visibility of the area can be used to educate and promote the reestablishment of historic woodlots.
2. For each phase, the reforested area should be designated in blocks of land not strips. This will help prevent wind-throw. Have at least a fifty-foot wide block of land, preferably more if the block is not by existing woodlands.
3. Management of undesirable plant species, exotics and weed trees, should be initiated concurrently during the reforestation phasing plan. By conducting this work before and during the planting this will decrease the dispersion of exotics and weed trees within the historic woodlot boundaries. Once these areas are controlled, (state route 65 corridor) where the predominant species is exotic or weed trees, reforestation or in-fill planting in open areas can commence.
4. Ornamental plantings around the two non-significant farm complexes should be removed before the reforestation plan is initiated in this vicinity to reestablish the woodlot character. (*Please note graphic and photographic documentation of the farm complexes are required before removal of any structures or plants*). Fruit trees have been identified within the vicinity of the farm complexes that potentially could be over one-hundred years old. Grafted cuttings from these old fruit trees could be used for the reestablishment of the Piper

orchard or any other historic orchard. Consult the regional horticulturist for information on fruit culture and before removal of any ornamental trees or shrubs.

SUMMARY

The historic West Woods is a complex set of relationships. The influences on the woodlot ranged from ownership patterns to soil conditions. Each effect is interrelated. Soil conditions determined the part of land left in forest, which in turn determined the circulation system. Hydrology determined the location of farm complexes that in turn determined property boundaries. The web of relationships is infinite. This report tries to bridge the gap between natural and cultural systems. One cannot continue without affecting the other. The West Woods reforestation project exemplifies this concept. Development strategies for future reforestation projects along with management requirements for existing woodlots are presented. The findings recognize the significance of natural and cultural resources and how these resources influence the historic scene.



West Woods Reforestation Plan

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Harpers Weekly

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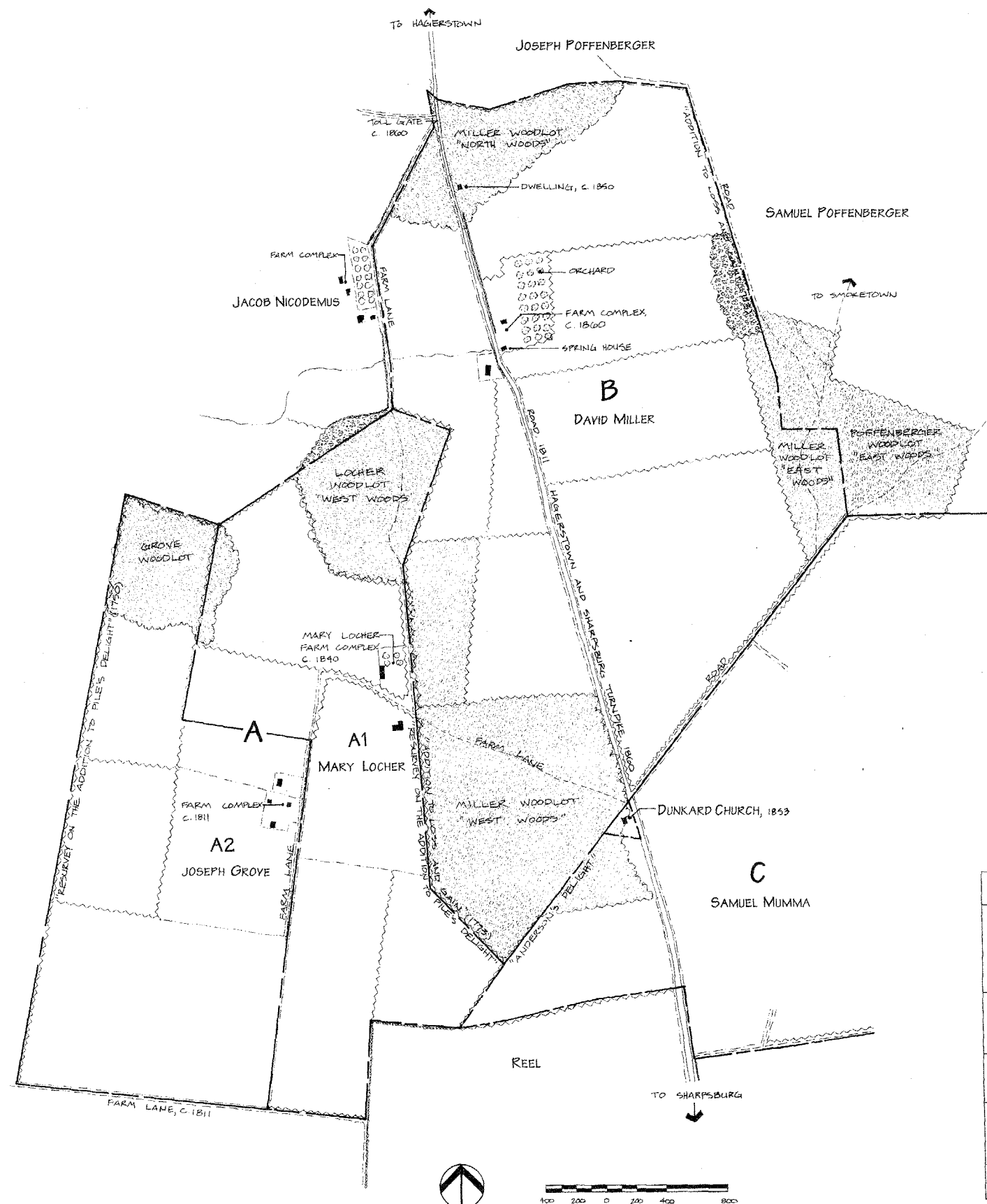
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NOTES

- THIS MAP REPRESENTS A CONTINUUM OF LANDSCAPE HISTORY FROM 1750 TO 1861. THE MOST PROMINENT FEATURES ARE DEPICTED ON THE MAP AND WERE PRESENT AT THE END OF THIS PERIOD (1861).

- PROPERTY OWNERS ARE INDICATED FOR THE LARGER PARCELS AND REPRESENT THE OWNER AT THE END OF THIS PERIOD. SEE THE WEST WOODS OWNERSHIP CHRONOLOGY FOR FURTHER INFORMATION FOR ALL LAND TRANSACTIONS.

SOURCES

- GARMAN, E.A.; COPE, E.B. MAP OF THE BATTLEFIELD OF ANTIETAM. 1904 & 1908.
 - COHEN, DEBBIE. ANTIETAM NATIONAL BATTLEFIELD WEST WOODS REFORESTATION PROPOSAL. 1994.
 - GOULD, J.M. ANTIETAM COPIED AND CORRECTED FROM THE MAP OF GEN. MICHLER. 1859.
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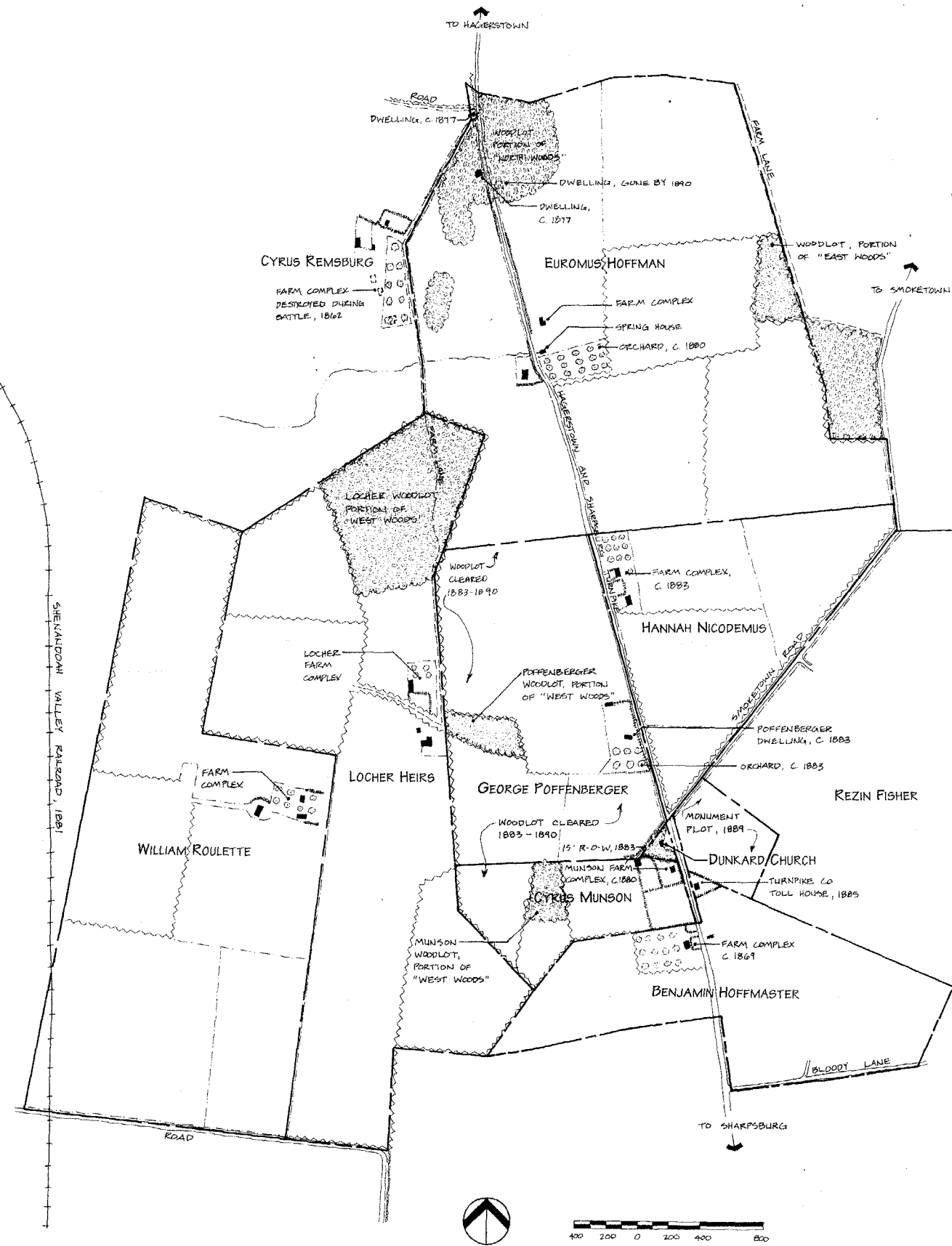
LAND GRANTS

- A** "RESURVEY ON THE ADDITION TO PILE'S DELIGHT"
 - PHILIP GROVE TO
 A1 MARY GROVE LOCHER
 A2 JOSEPH GROVE
- B** "ADDITION TO LOSS AND GAIN"
 - JOSEPH CHAPLINE & JAMES CHAPLINE TO
 - JONAS HOGMIRE
 TO JOHN MEYERS
 - JOHN MEYERS
 - JOHN MEYERS' TRUSTEE TO
 - DAVID R. MILLER
- C** "ANDERSON'S DELIGHT" & PART OF "JOHN'S CHANCE" & "ABSTONE'S FOREST"
 - JOHN REYNOLDS TO
 - CHRISTOPHER ORENDORFF HEIRS
 TO JACOB MUMMA
 - JOSEPH CHAPLINE
 TO JACOB MUMMA
 - JACOB MUMMA TO
 - SAMUEL MUMMA

LEGEND

FENCES	
	VIRGINIA RAIL
	POST AND RAIL
	STONE FENCE
	FALING FENCE
	WIRE FENCE
VEGETATION / NATURAL RESOURCES	
	WOODS
	ORCHARD
	STREAM
STRUCTURES	
	BUILDING EXTANT
	BUILDING REMOVED OR DESTROYED
CIRCULATION	
	FARM LANE
	PUBLIC ROAD
	RAILROAD
PROPERTY BOUNDARIES	
	PRIMARY BOUNDARY

DESIGNED: M. JOSEPH	SUB SHEET NO.	TITLE OF SHEET HISTORIC BASE MAP 1750 - 1861 WEST WOODS RESTORATION ANTIETAM NATIONAL BATTLEFIELD	DRAWING NO. 302 2005
DRAWN: M. JOSEPH			PKG. NO.
TECH. REVIEW: G. CALBAPPO			SHEET 1
DATE: 10/94			OF 1



LEGEND	
FENCES	
	VIRGINIA RAIL
	POST AND RAIL
	STONE FENCE
	PALING FENCE
	WIRE FENCE
VEGETATION / NATURAL RESOURCES	
	WOODS
	ORCHARD
	STREAM
STRUCTURES	
	BUILDING EXTANT
	BUILDING REMOVED OR DESTROYED
CIRCULATION	
	FARM LANE
	PUBLIC ROAD
	RAILROAD
PROPERTY BOUNDARIES	
	PRIMARY BOUNDARY

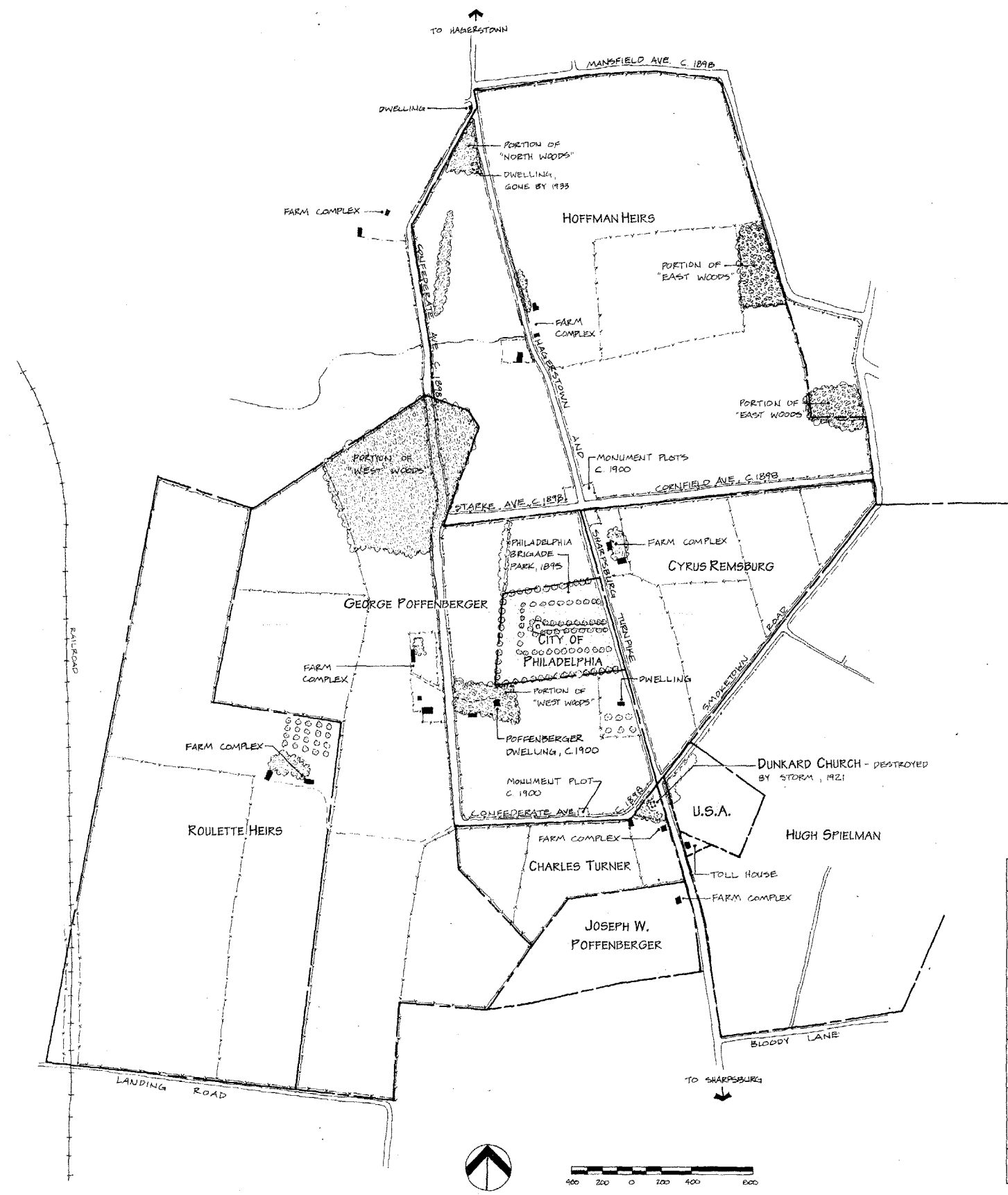
NOTES

- THIS MAP REPRESENTS A CONTINUUM OF LANDSCAPE HISTORY FROM 1861 TO 1890. THE MOST PROMINENT FEATURES ARE DEPICTED ON THE MAP AND WERE PRESENT AT THE END OF THIS PERIOD (1890).
- A SEPARATE MAP WAS NOT PRODUCED FOR THE CIVIL WAR YEARS BECAUSE THE PREVIOUS MAP DEPICTS THE CONDITION OF THE LANDSCAPE BEFORE THE BATTLE.
- PROPERTY OWNERS ARE INDICATED FOR THE LARGER PARCELS AND REPRESENT THE OWNER AT THE END OF THIS PERIOD. SEE THE WEST WOODS OWNERSHIP CHRONOLOGY FOR FURTHER INFORMATION FOR ALL LAND TRANSACTIONS.

SOURCES

- ATLAS OF WASHINGTON COUNTY, MARYLAND, SHARPSBURG ELECTION DISTRICT, 1877.
- CARMAN, E.A.; COPE, E.B. MAP OF THE BATTLEFIELD OF ANTIETAM, 1904 & 1908.
- COHEN, DEBBIE. ANTIETAM NATIONAL BATTLEFIELD WEST WOODS REFORESTATION PROPOSAL, 1994.
- COPE, E.B.; MATTERN, H.W. ANTIETAM BATTLEFIELD BOARD, 1898.
- LAND RECORDS - WASHINGTON COUNTY, MARYLAND.
- LAND PROTECTION PLAN, ANTIETAM NATIONAL BATTLEFIELD, 1983.
- PHOTO COLLECTION - ANTIETAM NATIONAL BATTLEFIELD.

DESIGNED: M. JOSEPH	SUB SHEET NO.	TITLE OF SHEET HISTORIC BASE MAP 1861-1890 WEST WOODS RESTORATION ANTIETAM NATIONAL BATTLEFIELD	DRAWING NO. 302 200100
DRAWN: M. JOSEPH			PKG. NO. SHEET 1
TECH. REVIEW: G. CALDARO			OF 1
DATE: 10/94			



LEGEND	
FENCES	
	VIRGINIA RAIL
	POST AND RAIL
	STONE FENCE
	PALISADE
	WIRE FENCE
VEGETATION / NATURAL RESOURCES	
	WOODS
	ORCHARD
	STREAM
STRUCTURES	
	BUILDING EXTANT
	BUILDING REMOVED OR DESTROYED
CIRCULATION	
	FARM LANE
	PUBLIC ROAD
	RAILROAD
PROPERTY BOUNDARIES	
	PRIMARY BOUNDARY

NOTES

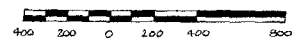
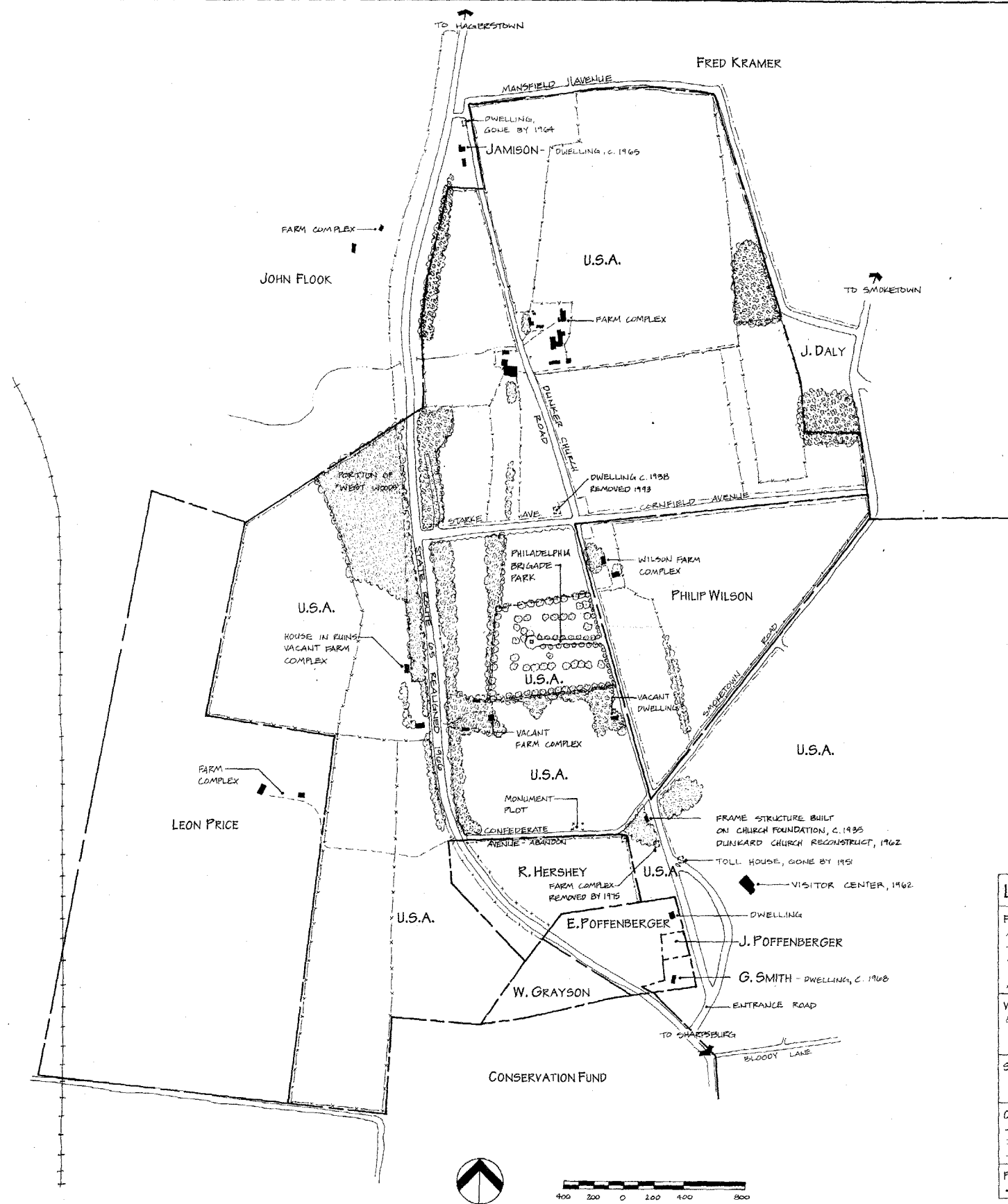
- THIS MAP REPRESENTS A CONTINUUM OF LANDSCAPE HISTORY FROM 1890 TO 1933. THE MOST PROMINENT FEATURES ARE DEPICTED ON THE MAP AND WERE PRESENT AT THE END OF THIS PERIOD (1933).

- PROPERTY OWNERS ARE INDICATED FOR THE LARGER PARCELS AND REPRESENT THE OWNER AT THE END OF THIS PERIOD. SEE THE WEST WOODS OWNERSHIP CHRONOLOGY FOR FURTHER INFORMATION FOR ALL LAND TRANSACTIONS.

SOURCES

- CARMAN, E.A.; COPE, E.B. MAP OF THE BATTLEFIELD OF ANTIETAM. 1904 & 1908.
- COPE, E.B.; MATTERN, H.W. ANTIETAM BATTLEFIELD BOARD. 1998.
- LAND PROTECTION PLAN, ANTIETAM NATIONAL BATTLEFIELD. 1983.
- COHEN, DEBBIE. ANTIETAM NATIONAL BATTLEFIELD WEST WOODS REFORESTATION PROPOSAL. 1994.
- LAND RECORDS - WASHINGTON COUNTY, MARYLAND.
- PHOTO COLLECTION - ANTIETAM NATIONAL BATTLEFIELD.
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DESIGNED: M. JOSEPH	SUB SHEET NO.	TITLE OF SHEET HISTORIC BASE MAP 1890 - 1933 WEST WOODS RESTORATION ANTIETAM NATIONAL BATTLEFIELD	DRAWING NO. 302 20017
DRAWN: M. JOSEPH			PKG. NO.
TECH. REVIEW: G. CALDARO			SHEET 1 OF 1
DATE: 10/94			



LEGEND	
FENCES	
	VIRGINIA RAIL
	POST AND RAIL
	STONE FENCE
	PALING FENCE
	WIRE FENCE
VEGETATION / NATURAL RESOURCES	
	WOODS
	ORCHARD
	STREAM
STRUCTURES	
	BUILDING EXTANT
	BUILDING REMOVED OR DESTROYED
CIRCULATION	
	FARM LANE
	PUBLIC ROAD
	RAILROAD
PROPERTY BOUNDARIES	
	PRIMARY BOUNDARY

NOTES	
- THIS MAP REPRESENTS A CONTINUUM OF LANDSCAPE HISTORY FROM 1933 TO 1994. THE MOST PROMINENT FEATURES ARE DEPICTED ON THE MAP AND WERE PRESENT AT THE END OF THIS PERIOD (1994).	
- PROPERTY OWNERS ARE INDICATED FOR THE LARGER PARCELS AND REPRESENT THE OWNER AT THE END OF THIS PERIOD. SEE WEST WOODS OWNERSHIP CHRONOLOGY FOR FURTHER INFORMATION FOR ALL LAND TRANSACTIONS.	
SOURCES	
- COHEN, DEBBIE. ANTIETAM NATIONAL BATTLEFIELD WEST WOODS REFORESTATION PROPOSAL. 1994.	
- D.R. MILLER FARMSTEAD SITE PLAN. 1993.	
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DESIGNED: M. JOSEPH	SUB SHEET NO.	TITLE OF SHEET HISTORIC BASE MAP 1933 - 1994 WEST WOODS RESTORATION ANTIETAM NATIONAL BATTLEFIELD	DRAWING NO. 302 2001B
DRAWN: M. JOSEPH			PKG. NO. 1
TECH. REVIEW: G. CALDARO			SHEET 1
DATE: 10/94			OF 1

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U.S. Department of the Interior Mission Statement

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally—owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. Administration.

Document no. D55 / Dec. 1994



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