HISTORICAL LANDSCAPE STUDY: TERRAIN OF COLD HARBOR BATTLEFIELD, JUNE 1, 1864

by

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The scope of this study is not intended to be one of the entire Cold Harbor Battlefield. Its primary purpose being to recreate the historical landscape of the two sites contained in Richmond National Battlefield Park's Cold Harbor unit, it focuses on those areas. The report should be read in conjunction with the Terrain Map of Cold Harbor Battlefield, June 1, 1964 (Revised June 8, 1988) prepared by the author. It provides documentation in support of the landscape as shown on the map.

In some instances general calculations have been made which effect vegetation lines. These are based as far as possible on historical maps of the vicinity. Personal examination of modern vegetation, particularly timber growth, supports some preconceived generalizations. Department of the Interior and Department of Agriculture Forest Service reports on local vegetation have also lent their weight to these findings.

Much of the park unit containing the visitor center remains in a state similar to that in which it existed during the American Civil War. This is due in large part to the poor soil which until recent years has primarily supported pine forest. Unfortunately, this is not the case with the Garthright House and national cemetery sites which have been impacted significantly by agriculture and housing development.

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Clifford R. Dickinson
August 8, 1988
Topographically, the terrain of the Cold Harbor unit of Richmond National Battlefield Park begins at the intersection of present-day Virginia State Routes 156 and 633. Route 156 winds southwesterly from this point, passing the Park's Garthright House and Cold Harbor units. To passersby the landscape over which the road runs is as deceptive now as it was in 1860. On the northern and southern sides of the pavement the earth rises and falls alternately in a gentle undulating manner resulting in three low ridges which follow a general northwesterly direction. Three lesser branches of Powhite Creek, a tributary of the Chickahominy River, pierce these elevations. Bloody Run cuts through the Cold Harbor unit 440 yards north of the visitor shelter while a second creek passes through Park property 1400 feet farther north. A third sluggish stream which is not part of the Park flows southwest in rear of the two acre Garthright House unit.

On the easternmost ridge where Routes 156 and 633 meet, the Cold Harbor tavern was situated. Almost 900 yards west of the tavern site, on the ridge dividing the battlefield, the national cemetery is now located. Another four-tenths of a mile in the


\[2\] This elevation line is hereinafter cited as the "tavern ridge."

\[3\] This ridgeline is hereinafter cited "graveyard ridge."
direction of New Cold Harbor, just west of the Park entrance and visitor center, a third ridgeline appears. It is not well-defined. This low elevation marked the Confederate line of defense on June 3, 1864.

During the Civil War these topographic features figured prominently in a pair of separate engagements that occurred two years apart. At Gaines' Mill/First Cold Harbor (June 27, 1862) and at Cold Harbor/Second Cold Harbor (May 31–June 12, 1864) the key to local military geography lay in the comprehension and utilization of these creeks and ridges.4

The tavern at Cold Harbor faced northwest, fronting the road leading to Mechanicsville and Richmond. The lodging and its outbuildings sat at the eastern end of a 500 yard wide level plain extending west along the road running toward New Cold Harbor. Young deciduous and cedar trees of varying height grew at irregular intervals along the roadway to the west.5 A stake and rail fence may have existed along at least a portion of the road.6 Southward an open plain stretched one-half mile.7

Looking west up the Cold Harbor road the ground was open almost to Garthright's.8 East of the house a skirt of woods ran

4For the sake of clarity, Gaines' Mill indicates the battle of June 27, 1862, while Cold Harbor denotes the action of May 31–June 12, 1864.

5M.O.L.L.U.S., v. 86, photograph no. 4310, United States Army Military History Institute, Carlisle, Pennsylvania. This 1886 photo shows cedar and dogwood standing along the roadway. Vegetation identified at roadside and fence row indicates that the same varieties of plant life found there would also have been observed along pastures and at the edge of the forest. DNA, RG 77 G204-21. This map has trees standing on both sides of the road between Old and New Cold Harbor.


8George Grenville Benedict, Vermont in the Civil War: A History of the Part Taken by the Vermont Soldiers and Sailors in the War for the Union, 1861–5 (Burlington, Vt.: Free Press Association, 1886), V. 2, 460, 462.
up a depression to within 200 feet of the roadbed. Today this belt of timber reaches farther north and is much wider than it was at the time of the war. Above the road to the north a sprinkling of pine trees and brush, thick enough to provide some cover for Federal pickets on June 1, 1864, defined the western edge of the tavern ridge.

Proceeding west along the highway the ground falls gradually on both sides of the pavement and also toward New Cold Harbor, descending ten feet over 150 yards southwest in the direction of the Garthright house. Northward the landscape drops less abruptly, ten feet over 250 yards, before plunging sharply down to Bloody Run. To the west just above Route 156 the terrain recedes gently before beginning a slight climb up to the national cemetery. The low ground of the Garthright property south of the highway gives this point deceptive importance. What appears to be a hill scooped out of the plain is in reality the highest elevation on the graveyard ridge.

The eastern face of the ridgeline at the present-day cemetery site was covered with cedar and "low-lying" pine - probably Virginia pine. After the withdrawal from the Cold Harbor cross-

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9 Palmer, 48th New York, 150; DNA, RG 77 G204-21; Alanson Austin Haines, History of the Fifteenth Regiment New Jersey Volunteers (New York: Jenkins & Thomas, 1883), 202.


11 Charles Carleton Coffin, The Boys of '61: or, Four Years of Fighting, Personal Observation With the Army and Navy, From the First Battle of Bull Run to the Fall of Richmond (Boston: Estes and Lauriat, 1883), 355.

12 ORA, 36, 1, 671; Hubbell, Crane and Brown, 21st Conn., 231.
roads on May 31, 1864, Confederate forces cut down the seventy-odd feet of timber there, leaving open the two cart paths that passed to the west. These pathways were about four yards in width, just wide enough for four men to walk abreast through the entanglements.\(^{13}\) It was here that converging Confederate rifle fire checked the assault of 6th Corps elements commanded by Brig. Gen. Emory Upton (1st Div., 2d Brig.) in the late afternoon and evening of June 1.

A thin strip or open pine, 100-125 yards in width, crossed the road to the southwest. The pine belt ran in a semicircular manner along the western face of the ridge around to the dense woods behind the Garthright house. The interval between the Confederate line and the trees rising from the tavern ridge was one of plush green fields; the presence of fences in the vicinity suggests pasture. A thick dark woods grew close behind the Confederate trenches along the western border of this cleared ground.\(^ {14}\)

Midway along the spine of the ridge stood a copse of pines,\(^ {15}\) their tops visible from Garthright's and the higher elevation along the Cold Harbor road.\(^ {16}\) Between the ridge crest and the

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\(^{13}\) Upton describes the paths in his report of the June 1, 1864 engagement and they are shown on DNA, RG 77 G204-21.

\(^{14}\) Coffin, Boys of '61, 355; DNA, RG 77, G134, sketch accompanying private letter of Brig. Gen. J. G. Barnard received at Engineer Department June 13, 1864; Hubbell, Crane and Brown, 21st Conn., 230-231.

\(^{15}\) DNA, RG 77, G134.

\(^{16}\) Sketch of a Pennsylvania soldier from an unidentified regiment drawn June 1864. Fredericksburg National Military Park, Fredericksburg, Virginia.

This corroborates closely with Barnard's map and shows the copse at about the same general point. He made a personal reconnaissance of this part of the field on June 13.
skirt of woods east of Garthright's, a distance of almost 1,200 feet, lay an open stubble field.17

The Garthright house, an old frame and brick structure predating the Revolution,18 stands 457 feet south of the national cemetery. Between there and the Cold Harbor road the terrain sloped downward to the south, serving as a runoff for water below Route 156. South of the house in the wooded bottom, another creek, this too a branch of Powhite Creek, collects excess rainfall. A narrow cartpath followed the wood's edge east of the dwelling, passing a short post and rail fence before turning in behind the house. Southwest of the structure a pair of frame outbuildings had been erected. Behind the rearmost shed a fence stretched eastward, passing within 60-75 feet of the house and separating the yard area from the small field and heavy woods beyond. A small family cemetery, enclosed by a brick wall, lay a short distance to the west.19

Almost 120 yards south of the Garthright house a branch of Powhite Creek passes through a sharp depression. The landscape tumbles twenty odd feet over that distance. Deciduous timber much of it young,20 covered the slope in the 1860s. Standing

17 Ibid; Haines, 15th New Jersey, 202-203.

18 See file on Garthright House in RNBP files. "According to National Park Service archaeologists, the east end (brick section) of the building gives evidence of structures built in the early 1700s; the conclusion being arrived at from brick, wood mouldings, etc."

19 Sketch of Pennsylvania soldier, FNMP. Thick brush and trees cover the outbuildings site at this time. The borders of this vegetation give the area a rough rectangular shape, suggesting that these structures may have been standing in recent times.

   The family cemetery covers an area of 2142 square feet.

20 ORA, 11, 2, 554. Maj. Gen. T.J. Jackson specifically mentions the young timber growing about the house. His observation would have been firsthand, possibly from the site of the present-day national cemetery, as he rode to a point in this vicinity on the afternoon of June 27, 1862, to ascertain the progress of events on his right. See: Bradley T. Johnson, "Memoir of the First Maryland Regiment," Southern Historical Society Papers, v. 10, no. 4 (April 1882), 151.
water had converted the soft sand-loam soil in the 200 foot wide creek bottom into a swamp. In places the waist deep mud made the ground virtually impassable. At the battle of Gaines' Mill Confederate officers, unable to negotiate their horses through the muck and undergrowth, were forced to send them to the rear and continue the assault on foot.21

The density of the different vegetation types distinguished the marshy terrain22 from the adjacent dry forest. Swamp azalea, sweet bay, cat brier and withe-rod created a dense tangled brush, the vines covering saplings and bushes. Unlike the Cold Harbor unit area north of Route 156, there was more ground vegetation here.23

More trees and undergrowth grew southward up the incline leading away from the saturated lowland. About fifty yards from the hill's crest a high new fence rose, beyond which was an old sunken road. The fence was dismantled in the late afternoon of June 27, 1862, and was not reconstructed at the time of


22 At Gaines' Mill and Cold Harbor water lay in the bottomland areas throughout the present-day park sites, a consequence of heavy precipitation. During the first week of June, 1862, the road leading to Grapevine bridge had been under five feet of water. Again in 1864 prior to the engagement at Cold Harbor heavy downpours were experienced; six days consecutively from May 14-19, again May 25-26, and heavy rains June 2-3. See: Stephen Minot Weld, War Diary and Letters of Stephen Minot Weld 1861-1865, 2d ed. (Boston: Massachusetts Historical Society, 1979), 110-111, and, John R. Thompson, Journal, 1864, Bryan Family Papers, University of Virginia, Charlottesville, Virginia.

brigade occupied the line north of the stream.\(^{30}\)

The pines may not have been thick along the upper end of the creek but the undergrowth along the bottom was. Federal infantry managed to get within fifty yards of the 8th North Carolina's front. To secure his left flank Clingman tried to refuse it, drawing it back 100-150 yards. The higher elevation north of the run allowed the Federals to pass undetected beyond Clingman's left and down the continuous ravine there. Confederate infantry did not observe the low ground in front and the creek gully on the left; their position behind earthworks obscured the view.\(^{31}\)

The saturated stream bottom separating Clingman and Wofford was thought to be impenetrable - consequently it had not been covered by either brigade. This created a dangerous 75 yard gap in the line.\(^{32}\) Northwest of the graveyard ridge the landscape plummeted thirty feet over 70 yards. Clingman gave way and turned north to face the open interval, reforming in an open field.\(^{33}\)

Wofford was driven through the dense pines into and over a second clearing.\(^{34}\) The open area, actually a plateau between the two creeks, was covered with a scattering of sassafras bushes.\(^{35}\)

\(^{30}\) From the Cold Harbor road to the Bloody Run Creek Clingman placed his regiments from right to left: 61st N.C., 31st N.C., 51st N.C., 8th N.C. The left flank of the 8th N.C. rested above the creek near the 170 foot elevation line. In front of the 61st N.C., Federal infantry could approach no closer than 90 yards; in front of the 31st N.C. where the brush was quite thick, Union troops got closer. On the left the 51st N.C. could view troop movement in the trees on the high ground north of the creek bottom and opened fire at 100 yards. The 8th N.C. in the secondgrowth on the south bank of the stream could not cover its left. See: Clark, *North Carolina Regiments*, v. 5, 197-205.

\(^{31}\) Ibid, 200-201.


\(^{34}\) Porter, "Battle of Cold Harbor," *NHSM*, v. 4, 329.

North to south the level ground was about 700 feet wide. Today oak trees cover much of the area instead of the scattered pine found there in the 1860s. The vegetation line has also crept in significantly, making the current open ground much smaller.

South toward Bloody Run and east to the graveyard ridge the pine woods was so dense that artillery could not be employed. Federal forces used the thickest pines to mass their lines prior to rushing Wofford's men at close range. This would indicate that the forest here was not mature; few trees had yet died out from competition. The trenches at the Union turn-out were at the edge of these woods, whereas the Confederate rifle trenches were constructed in the open across the level ground stretching between the two creeks there. West of and to the rear of Wofford's position the terrain fell away, becoming lower and offering no command of the Federal line.

To stem the penetration of their defense, several guns of Cabell's Artillery Battalion were placed on the edge of a peach orchard where the earth sloped down to the gap in the Confederate infantry line. This slight elevation can be seen from the visitor shelter parking lot; it is the only visible rise in the landscape today. A residence is now being constructed on that site.

A lesser watercourse drains the northernmost portion of the Park's Cold Harbor unit. At its head the pine forest continued, offering protection to the Federal 18th Corps on June 1, 1864. The steep slopes of this runoff were thickly covered with brush. The trees were not numerous along the north bank and did not block

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36 ORA, 36, 1, 1049.
37 Stiles, Marse Robert, 278.
38 Ibid, 275; DNA, RG 77, G204-21.
Confederate field of fire toward the head of the creek on their right. Outside of Park property to the east, the forest caught fire sometime during the evening of June 1, burning through the night and destroying a portion of the woods at that point. There is no information available regarding the extent of the burnover.40

North of the depression and scorched timber, the terrain opened into a larger field with pine standing to the east and northeast. The fields here, which probably had not been cultivated for some time, were covered with sassafras. Holly, cedar and dogwood were prominent along the woodland's edge while Virginia pine separated it from the white pine timber stands.41

40 Ibid, 279, 282-283.
41 DNA, RG 77, G204-21.
Historical Base Maps


Jeremy Francis Gilmer Papers. Southern Historical Collection, University of North Carolina Library, Chapel Hill, North Carolina. Map 533 (sheet 1) and Map 534 (sheet 2), Battlefields of Hanover County.


United States Department of the Interior, National Park Service, Troop Movement Map NBP: RIC 3014, sheet 4, Cold Harbor, June 1, 1864, 10:30 A.M. to midnight.

United States Department of the Interior, National Park Service, Troop Movement Map NBP: RIC 3014, sheet 5, Cold Harbor, June 2, 1864, Movements up to 1:00 P.M.

United States Department of the Interior, National Park Service, Troop Movement Map NBP: RIC 3014, sheet 8, Cold Harbor, June 3, 1864, from noon until midnight.


The Official Military Atlas of the Civil War, Plate XLII, Sketch of that Part of the Field at Cold Harbor where Ewell's Division operated, particularly where Trimble's Brigade fought June 27, 1862.
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