

# What Gullies Mean: Georgia's "Little Grand Canyon" and Southern Environmental History

By PAUL S. SUTTER

ON ITS SURFACE—WHAT LITTLE OF IT IS LEFT—PROVIDENCE CANYON State Park could well be the nation's most ironic conservation area. The Georgia State Parks and Historic Sites department describes Providence Canyon—also known as Georgia's "Little Grand Canyon"—as a place where visitors are "amazed" by the breathtaking colors of the canyon walls; "the pink, orange, red and purple hues of the soft canyon soil," the description continues, "make a beautiful natural painting at this unique park." Anyone who has visited would be hard-pressed not to agree; to the eye, it is a spectacular place, reminiscent of the badlands and canyon country of the American West. One might even call it sublime. Indeed, Providence Canyon fits the aesthetic conventions that have guided park making in the United States for the last century and a half. Calling it Georgia's "Little Grand Canyon" is a gesture in that direction. But—and here the irony seeps in, destabilizing things—Providence Canyon is a decidedly human artifact. The park's website admits that its gaping chasms (some would call them gullies), which reach 150 feet deep and several hundred yards wide in places, were "caused by poor farming practices during the 1800s," and the visitor center's introductory video calls the canyon "a spectacular testimony to man and his mistakes."<sup>1</sup> So

<sup>1</sup> Providence Canyon State Park, Georgia State Parks and Historic Sites, <http://www.gastateparks.org/providence/>. I would like to thank the participants of the Porter L. Fortune Jr. History Symposium at the University of Mississippi, where I first presented this paper. Writing this essay required a crash course in the soil sciences, and I appreciate the guidance of Todd Rasmussen, David Leigh, Rhett Jackson, and Daniel Markewitz of the University of Georgia; Frank Magilligan of Dartmouth College; and James Hyatt of Eastern Connecticut State University. Mac Moye, Sam Singer, Bobby Williams, and Joy Joyner shared their local knowledge of Stewart County's landscape and history. I have presented this material to and received important feedback from audiences at the University of Kansas, Macalester College, the "Living with Wilderness" symposium sponsored by the Adirondack Museum, the University of Houston, Clemson University, MIT, the University of North Carolina at Chapel Hill, and Western Carolina University. My graduate students in southern environmental history, past and present, as well as Bill Cronon, Neil Maher, Mart Stewart, and Don Worster, provided important commentary and encouragement. Finally, the

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what does it mean to preserve a place that is the product of what its own custodians suggest were poor land-use practices? What does it mean to celebrate the beauty of an environmental disaster?

It is difficult to get past the irony of Providence Canyon: the incongruity of, even the humor in, the granting of park status to a network of massive erosion gullies. But the more one meditates on this system of gullies and learns about its history, the more one realizes that focusing on irony does the place a disservice. There is something deeper here, and irony is too facile an analytical tool to plumb it. Indeed, the logic behind any assessment of Providence Canyon as ironic presumes a strict policing of the boundaries between nature and culture that does not match the history of the place. What is refreshing about Providence Canyon as an interpretive opportunity is not merely the revelation that this preserved natural area is the product of human agency; Providence Canyon is so obviously *not* a wilderness landscape that using its history to trouble environmentalist assumptions about pristine nature is too easy an exercise. Rather, the interpretive opportunity here flows in the other direction, from culture back to nature. What turns out to be so interesting about Providence Canyon is just how natural it is.

Providence Canyon also seems at first blush to be a particularly southern place, exemplary not only of the region's distinctive and dramatic history of human-induced soil erosion but also of its renowned New South boosterism. Leave it to southerners to turn a scar into a point of pride. But, as with irony, arguments for regional distinctiveness can only go so far. One can fathom a great deal about southern environmental history by staring into Providence Canyon's multihued abyss, and a substantial portion of this essay will be devoted to making that point—and to documenting the history of others who did the same. But Providence Canyon can also impart local and extraregional lessons that challenge the adequacy of arguments for regional distinctiveness. Providence Canyon's meaning cannot be easily contained within the region, and that is an important lesson for environmental historians as they pay more attention to the South.

As quite a few scholars have plaintively pointed out, southern environmental history has been slow to develop.<sup>2</sup> While the South's landscapes,

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anonymous readers for the *Journal of Southern History*, in the wisdom of their comments, forced me to make this a better essay.

<sup>2</sup>See, for example, Otis L. Graham, "Again the Backward Region? Environmental History in and of the American South," *Southern Cultures*, 6 (Summer 2000), 50–72; Mart A. Stewart, "Southern Environmental History," in John B. Boles, ed., *A Companion to the American South*



land-use histories, and traditions of environmental thought are as rich as any region's, southern historians have only reticently embraced the environment as a category of analysis—though there are encouraging signs that that is changing.<sup>3</sup> There are any number of reasons for this reluctance, but one of the most important has been the looming shadow of an older tradition of environmental determinism in southern historiography, along with the consequent fear that to invoke the environment as a causative force is to diminish the role of human agency in shaping the region's history. Indeed, few regional historiographies have made the power of human agency so central to their inquiries and have accomplished so much in doing so. Without detracting from the paramount importance of such a focus, this essay suggests that there are critical aspects of the region's history that cannot be understood fully or fairly without some resort to the interlocking agencies of humans and the environment. Providence Canyon's history suggests that nature and culture rarely act in isolation from one another and that southern historians ought to be suspicious of explanations, and representations, that suggest they do.<sup>4</sup>

This essay also aims to return soils to a foundational place in southern historiography. Soils—their material characteristics and all of the ways that humans have "cultured" them—have been critical to southern history, and southern historians have not been remiss in recognizing their importance. In fact, during the interwar years, scholars such as Avery O. Craven, Lewis Cecil Gray, and Arthur R. Hall offered a soil-centric interpretation of the southern agricultural past, pioneering southern environmental history without quite knowing it.<sup>5</sup>

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(Malden, Mass., 2002), 409–23; and Christopher Morris, "A More Southern Environmental History," *Journal of Southern History*, 75 (August 2009), 581–98.

<sup>3</sup>Jack Temple Kirby's receipt of the Bancroft Prize for *Mockingbird Song: Ecological Landscapes of the South* (Chapel Hill, 2006) is a good indicator of the rise of southern environmental history. See also Paul S. Sutter and Christopher J. Manganiello, eds., *Environmental History and the American South: A Reader* (Athens, Ga., 2009).

<sup>4</sup>Mart A. Stewart makes a similar point in several of his essays. See Stewart, "If John Muir Had Been an Agrarian: American Environmental History West and South," *Environment and History*, 11 (May 2005), 139–62; and Stewart, "'Let Us Begin with the Weather?' Climate, Race, and Cultural Distinctiveness in the American South," in Mikuláš Teich, Roy Porter, and Bo Gustafsson, eds., *Nature and Society in Historical Context* (New York, 1997), 240–56. Ulrich Bonnell Phillips's *Life and Labor in the Old South* (Boston, 1929) is the classic example of determinist logic on this topic. Mart Stewart's *"What Nature Suffers to Groe": Life, Labor, and Landscape on the Georgia Coast, 1680–1920* (Athens, Ga., 1996) is a model for southern environmental history that avoids the determinist trap.

<sup>5</sup>See Lewis C. Gray, *History of Agriculture in the Southern United States to 1860* (2 vols.; Washington, D.C., 1933); Avery O. Craven, *Soil Exhaustion as a Factor in the Agricultural History of Virginia and Maryland, 1606–1860* (Urbana, 1926); Arthur R. Hall, *Early Erosion-Control Practices in Virginia* (Washington, D.C., 1937); Hall, *The Story of Soil Conservation in*

More recently, a number of agricultural and environmental historians have returned our attention to a tradition of agricultural reform that made soil culture central to antebellum southern politics.<sup>6</sup> But, strikingly, neither environmental nor southern historians have yet tackled the history of massive soil erosion in the tobacco and cotton South, a history that coincided with wrenching social and racial transformations in southern society. This essay cannot hope to provide such a history, but it does suggest that Providence Canyon is a fruitful spot to delineate a research agenda.

Beyond contending with southern environmental history and the importance of soils within it, a focus on Providence Canyon also allows an exploration of the power of environmental representation and its place in southern history. This essay both charts and challenges the history of Providence Canyon's visual and literary objectification and the ways in which Americans have pictured one of the central stories of American environmental history—the massive translocation of soils that accompanied the centuries-long spread of staple-crop agriculture across the American South. The history of Providence Canyon suggests just how influential visual representation has been in constructing the South as a coherent region with a distinctively destructive environmental history, but the story of these gullies also stands as a cautionary tale about using a single place to represent a larger problem.

Today, few Americans, few Georgians even, have heard of Providence Canyon or the state park that contains it. But during the 1930s, as Americans became both acutely soil conscious and eager to conserve

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*the South Carolina Piedmont, 1800–1860* (Washington, D.C., 1940); and Hall, "Soil Erosion and Agriculture in the Southern Piedmont: A History" (Ph.D. dissertation, Duke University, 1948). For a discussion of this cohort, see Lynn A. Nelson, *Pharsalia: An Environmental Biography of a Southern Plantation, 1780–1880* (Athens, Ga., 2007), 1–28.

<sup>6</sup> See Steven Stoll, *Larding the Lean Earth: Soil and Society in Nineteenth-Century America* (New York, 2002); Carville Earle, "The Myth of the Southern Soil Miner: Macrohistory, Agricultural Innovation, and Environmental Change," in Donald Worster, ed., *The Ends of the Earth: Perspectives on Modern Environmental History* (New York, 1988), 175–210; Jack Temple Kirby, *Poquosin: A Study of Rural Landscape and Society* (Chapel Hill, 1995); Edmund Ruffin, *Nature's Management: Writings on Landscape and Reform, 1822–1859*, edited by Jack Temple Kirby (Athens, Ga., 2000); Nelson, *Pharsalia*; and Benjamin R. Cohen, *Notes from the Ground: Science, Soil, and Society in the American Countryside* (New Haven, 2009). Several scholars have tackled the subject quickly but more broadly. See Albert E. Cowdrey, *This Land, This South: An Environmental History* (rev. ed.; Lexington, Ky., 1996); Stanley W. Trimble, "Perspectives on the History of Soil Erosion Control in the Eastern United States," *Agricultural History*, 59 (April 1985), 162–80; Douglas Helms, "Soil and Southern History," *ibid.*, 74 (Autumn 2000), 723–58; Ted Steinberg, *Down to Earth: Nature's Role in American History* (New York, 2002); and Martin Melosi, "Environment," in Melosi, ed., *The New Encyclopedia of Southern Culture*. Vol. VIII: *Environment* (Chapel Hill, 2007), 1–20, esp. 5–7, 12–14.



parklands, Providence Canyon enjoyed a modicum of fame. The first part of this article maps the contours of that fame as it developed in a fascinating interpretive contest between, on one hand, local and regional boosters who praised Providence Canyon as a spectacular natural wonder worthy of park status and, on the other, national soil conservationists and reformers who made Providence Canyon stand for the destructiveness of southern agriculture. The second part of the article takes up where these two competing visions left off by entering into and reviving this history of interpretation and by offering a set of lessons—some familiar to southern historians but others novel—that Providence Canyon might teach us today.

Providence Canyon State Park sits at the geographical center of the cotton plantation South, on the cusp of several major physiographical regions. Located in Stewart County, in the west-central part of Georgia, the network of canyons that makes up the park—the park actually contains sixteen “canyons”—covers approximately eleven hundred acres, but a large part of the county and parts of several adjoining counties are riddled with similar, if less notable, gullies.<sup>7</sup> In the early 1970s, a graduate student at Florida State University, using satellite photos and the knowledge of local residents, found 159 substantial steep-sided gullies in Stewart County alone.<sup>8</sup> Stewart County abuts the Chattahoochee River on the county's western side, rising through a series of natural terraces to an upland plain almost seven hundred feet above sea level at its highest point. Physiographically, Providence Canyon is a part of the upper coastal plain; it is situated about twenty miles below the coastal plain's border with the southwestern corner of the piedmont plateau, the southern province best known for its history of human-induced soil erosion. More specifically, Providence Canyon lies within a transitional district known as the Fall Line Hills.<sup>9</sup> Just across the Chattahoochee River from Stewart County is Alabama and the beginning of the black belt, a crescent of alkaline and once-fertile prairie soils that sweeps northwestward for several hundred miles. Settlers rapidly converted these black belt prairies to cotton fields in the several decades before

<sup>7</sup> Sigrid Sanders, “Providence Canyon,” online in *The New Georgia Encyclopedia*, <http://www.georgiaencyclopedia.org/nge/Article.jsp?id=h-943>.

<sup>8</sup> Robert W. McVety, “Steep-Sided Gully Erosion in Stewart County, Georgia: Causes and Consequences” (M.S. thesis, Florida State University, 1971), 6–7.

<sup>9</sup> William Z. Clark Jr. and Arnold C. Zisa, *Physiographic Map of Georgia* (Atlanta, 1976), reprinted in Georgia Wildlife Federation, *The Fire Forest: Longleaf Pine–Wiregrass Ecosystem* (Conyers, Ga., 2001), 8–9.

the Civil War, transforming the region into one of the richest sectors of the plantation South.<sup>10</sup>

The gullies of Stewart County were the product of the county's frontier settlement, and they yawned ever wider as cotton took hold of the region. Stewart County was Creek territory until the 1820s, when the Creeks ceded it to the United States. Settlement proceeded quickly thereafter. By 1850, roughly 60 percent of the county was "improved" land.<sup>11</sup> Early settlers tended to focus their energies on the clay hills section of the county, which was in a mixed forest of oak, hickory, and pine before agricultural clearance. They bypassed the level longleaf pine lands in the eastern part of the county on the assumption that the soils that underlay pine forests were less fertile.<sup>12</sup> Those pine-covered lands were also farther from the Chattahoochee River. The steep gullies that became Providence Canyon began to form soon after white settlers and black slaves arrived, and some were well formed by the Civil War. In 1859 a local congregation had to move its house of worship across a road to prevent the structure from sliding into an expanding chasm; several other buildings and those buried in the church graveyard were not so lucky. The gullies of Stewart County continued to expand in the half century after the Civil War, until they covered tens of thousands of acres by the early twentieth century. (See Figure 1 for an image from 1893.) Cotton production peaked in Stewart County around 1890, declined slightly over the next two decades, and then fell fairly precipitously after 1910. The gullies, however, kept growing. By the 1930s, they may have been at the height—or depth—of their development.<sup>13</sup>

What has Providence Canyon meant to those who have observed it develop over its century-and-a-half history? It is hard to know how locals reacted as the gullies deepened during the nineteenth century, though Providence Canyon's name—derived from Providence Methodist Church, which teetered on the rim—suggests what was likely the

<sup>10</sup> Helen Eliza Terrill, *History of Stewart County, Georgia*, Vol. I (Columbus, Ga., 1958), 3–4; David D. Long et al., *Soil Survey of Stewart County, Georgia* (Washington, D.C., 1915), 5–7.

<sup>11</sup> Francis J. Magilligan and Melissa L. Stamp, "Historical Land-Cover Changes and Hydrogeomorphic Adjustment in a Small Georgia Watershed," *Annals of the American Association of Geographers*, 87 (December 1997), 614–35, esp. 615–18; Matthew M. Moye, "Stewart County," in *The New Georgia Encyclopedia*, <http://www.georgiaencyclopedia.org/nge/Article.jsp?id=h-2392&hl=y>.

<sup>12</sup> Long et al., *Soil Survey of Stewart County*, 7, 10.

<sup>13</sup> Magilligan and Stamp, "Historical Land-Cover Changes and Hydrogeomorphic Adjustment," esp. 618; Long et al., *Soil Survey of Stewart County*, 10. See also Terrill, *History of Stewart County*, I, 385–86.



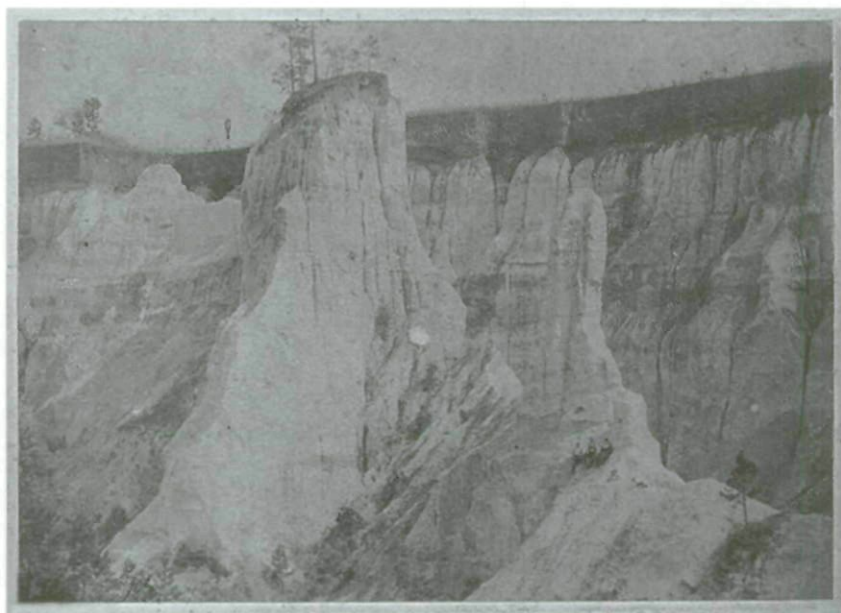


Figure 1. Providence Caves, Stewart County, Georgia, 1893. *Vanishing Georgia*, Georgia Division of Archives and History, Office of Secretary of State.

dominant interpretation of canyon formation: it was an act of God.<sup>14</sup> It may not have seemed a providential one, but there is little evidence that settlers saw poor land management as a cause. Land was abundant and cheap and cultural roots were shallow, so there was likely little impetus for soil conservation as farmland began washing and caving downward toward the Chattahoochee. Geological and soil surveyors did take note of Providence Canyon in the late nineteenth and early twentieth centuries as a curiosity and stratigraphic revelation, but it was not until the 1930s, with cotton in decline, that Providence Canyon began to take on two competing sets of meanings that together defined the irony of its current park status.<sup>15</sup>

Locally, the 1930s saw the first sustained efforts to make the network of gullies into a park. Providence Canyon started seeing a large number

<sup>14</sup>Terrill, *History of Stewart County*, I, 174–75.

<sup>15</sup>Long et al., *Soil Survey of Stewart County*; George Little, *Catalogue of Ores, Rocks and Woods, Selected from the Geological Survey Collection of the State of Georgia, U.S.A. . . .* (Atlanta, 1878), 14; Otto Veatch and Lloyd William Stephenson, *Preliminary Report on the Geology of the Coastal Plain of Georgia* (Atlanta, 1911), 29–30; Ted Steinberg, *Acts of God: The Unnatural History of Natural Disasters* (New York, 2000), xxi.

of visitors during that decade, when the Columbus *Enquirer* began a campaign to have it designated a national park. By the late 1930s, the most extreme of the gullies were already known as "Georgia's Little Grand Canyon" or, alternately, the "Royal Gorge of the Chattahoochee Valley," a disingenuous moniker since the Chattahoochee River had nothing to do with carving them.<sup>16</sup> But accuracy was less important than publicity, and the *Enquirer* did its best to whip some up. The *Enquirer* launched its campaign to make what locals called "Providence Caves"—as in cave-in, not cavern—into a national park in October 1937, and the paper premised its attempt on the conviction that the canyons were *natural* formations. In their opening editorial on the subject, the editors praised the canyons as "one of the true show places in mother nature's garden of the earth," and a few days later they waxed, "When Nature scooped out the acres now missing from the spot and washed them from the location, she had a definite eye for beauty."<sup>17</sup> The Lumpkin Lions Club called the area an "unusual and awesome natural wonder of great scenic beauty" in a resolution of support for the park idea.<sup>18</sup> The editors of the Richland *Stewart-Webster Journal* were no less insistent in their editorializing: "The hand of Nature has been both artisan and artist in going about the creation of this alluring spot," they wrote of what they called a "charming creation of Nature."<sup>19</sup>

A second major theme of the local campaign was the desire to "swell the tourist crop," an impulse shared by the many civic leaders who supported the proposed park. This emphasis on how important a park designation would be to capturing tourist dollars was ubiquitous and unabashed at a time when the county's agricultural fortunes were melting away with its soil and subsoil. Providence Canyon, the *Enquirer* noted in a succinct summary of its editorial position, was "a land that Nature built for tourists."<sup>20</sup> Such sentiment was characteristic of the interwar era, a period of intense park boosterism, when local governments, commercial and civic organizations, and other interests (such as newspapermen) eagerly proposed national parks in their areas so as to attract government and tourist dollars. The automobile increased the market viability of roadside attractions

<sup>16</sup> Terrill, *History of Stewart County*, I, 385.

<sup>17</sup> Columbus (Ga.) *Enquirer*, October 27, 1937, p. 4; *ibid.*, November 2, 1937, p. 6.

<sup>18</sup> "Lumpkin Lions Club Passes Resolutions Urging Park at 'Little Grand Canyon,'" Richland (Ga.) *Stewart-Webster Journal*, November 4, 1937, p. 1.

<sup>19</sup> "Strong Support for Canyon Park," *ibid.*, November 18, 1937, p. 2.

<sup>20</sup> Columbus *Enquirer*, November 2, 1937, p. 6.



and natural curiosities, and entrepreneurs quickly noticed the commercial possibilities of nature tourism. In this particular case, the Providence Canyon park campaign coincided with planning for two improved highways designed to compete with the Dixie Highway for southbound tourist traffic.<sup>21</sup> Moreover, because their region was short on national parks, southern boosters had been insistent on getting equal federal treatment, and they were starting to get results.<sup>22</sup> National park status for Providence Canyon promised to capture tourists while raising the canyon above the crass commercialism reshaping so much of the American roadside.<sup>23</sup> A national park protecting this great "natural" wonder, boosters reasoned, would put Stewart County on the map.

For locals eager to make Providence Canyon a famous tourist site worthy of national park protection, the great parks of the U.S. West were obvious points of reference. The local press frequently compared Providence Canyon to the Grand Canyon proper, hyperbolically insisting that the Georgia attraction was second only in size and natural beauty to its more famous namesake. "It has attracted national attention and is said," the *Atlanta Constitution* passively noted in 1933, "to be second only to the Grand Canyon in size and scenic beauty."<sup>24</sup> Indeed, following a trend begun at the Grand Canyon, self-professed tour guides—mostly local kids—took to naming the various formations in an attempt to signify their grandeur and importance. According to the *Enquirer*, formations within the canyons had majestic names, such as "Cleopatra's Throne," "Hall of Ghosts," "National Cathedral," "Lion of Lucerne," "Venetian Lagoon," "Temple of the Shrines," and the

<sup>21</sup> On the Dixie Highway and similar road-building efforts in the South, see Howard Lawrence Preston, *Dirt Roads to Dixie: Accessibility and Modernization in the South, 1885–1935* (Knoxville, 1991); and Tammy Leigh Ingram, "Dixie Highway: Private Enterprise and State Building in the South, 1900–1930" (Ph.D. dissertation, Yale University, 2007).

<sup>22</sup> Most of the major southern national parks—Shenandoah, Great Smoky Mountains, and the Everglades—were created, or at least had their enabling legislation passed, in the 1930s. See Margaret Lynn Brown, *The Wild East: A Biography of the Great Smoky Mountains* (Gainesville, 2000); Daniel S. Pierce, *The Great Smokies: From Natural Habitat to National Park* (Knoxville, 2000); Darwin Lambert, *The Undying Past of Shenandoah National Park* (Boulder, Colo., 1989); Jack E. Davis, *An Everglades Providence: Marjory Stoneman Douglas and the American Environmental Century* (Athens, Ga., 2009); and Alfred Runte, *National Parks: The American Experience* (2nd ed.; Lincoln, Neb., 1987).

<sup>23</sup> I highlight these interwar developments in *Driven Wild: How the Fight against Automobiles Launched the Modern Wilderness Movement* (Seattle, 2002).

<sup>24</sup> "Georgia Wonders to Be Described on Constitution News Broadcast," *Atlanta Constitution*, June 25, 1933, p. 13A; "The Grand Canyon of Georgia—No. 11 of the Know Your Georgia Contest Series," *ibid.*, June 25, 1933, unpaginated gravure pictorial section (quotation).

“Taj Mahal.”<sup>25</sup> Comparisons to other western wonders also were frequent, with Colorado Springs’s Garden of the Gods and Utah’s Bryce Canyon appearing most frequently. Indeed, the incongruity of this seemingly western landscape in the heart of the Deep South only heightened its scenic value, or so boosters thought.

The New Deal context gave local boosters hope for achieving their goals. There was already a Civilian Conservation Corps (CCC) camp in Stewart County charged with soil conservation work.<sup>26</sup> Local leaders surmised that putting these young men to work developing park facilities on the rim of Providence Canyon would be an excellent way to create a locally useful product with federal relief labor. The CCC did a lot of park making during the 1930s, so such a suggestion was in keeping with common practice.<sup>27</sup> Moreover, President Franklin Delano Roosevelt was a frequent visitor to the region—his “Little White House” in Warm Springs, Georgia, also a popular tourist destination, was about eighty miles to the north—and there was optimism that he would take an interest in the proposal. “The President has discussed the phenomenon,” *Enquirer* editors wrote of the gullies, “with one of the government’s soil experts, and is believed to be deeply interested in it from more than one standpoint.”<sup>28</sup> This final phrase was an oblique recognition that there were several ways of interpreting this landscape, a point the paper had made with unusual frankness in its initial editorial on the park proposal:

The opportunity seems to be a tremendous one to turn what some have regarded as a liability into a large asset. The Caves are securing considerable publicity over the nation already, as a natural wonder and curiosity. Manifestly, it would be an excellent thing to take advantage of this wide publicity—“cash in” on it, so to speak—and turn the trend of public notice into one of tourist-bidding. Henceforth, the publicity would be guided into majoring upon the natural wonder and beauty of Georgia’s Little Grand Canyon, instead of having it principally a discussion of erosion and how many acres of agricultural land and their wealth have been swept away and lost to production.<sup>29</sup>

The *Enquirer* followed its own advice over the next few months, pushing the “natural” beauty and the tourist potential of the spectacle without

<sup>25</sup> Nelson M. Shipp, “Fifteen Hundred People See Providence Canyons Sunday,” *Columbus Enquirer*, November 15, 1937, p. 5. On such naming practices at the Grand Canyon, see Stephen J. Pyne, *How the Canyon Became Grand: A Short History* (New York, 1998).

<sup>26</sup> Leon Sisk, *The Changed Look of the Countryside* ([Franklin Springs, Ga.], 1975), 12.

<sup>27</sup> On the CCC, see Neil M. Maher, *Nature’s New Deal: The Civilian Conservation Corps and the Roots of the American Environmental Movement* (New York, 2008).

<sup>28</sup> *Columbus Enquirer*, November 5, 1937, p. 6.

<sup>29</sup> *Ibid.*, October 27, 1937, p. 4.



mentioning the human role in producing it. The only chance local boosters had at achieving national park status for Providence Canyon was to sell it as a distinctive and nationally important *natural* wonder. Unfortunately, they were not successful at convincing Roosevelt, the National Park Service, or Congress on this point. As it turns out, they lost the larger interpretive battle as well.

It was another set of actors who more successfully made Providence Canyon meaningful in the 1930s. This group had national standing, and what its members saw in the gullies of Stewart County was quite different from the vision conjured by local boosters. For soil conservationists, environmental writers, and liberal reformers, Providence Canyon was the poster child of southern soil abuse, a visual exemplar in a New Deal discourse on the connections between southern poverty and environmental degradation.

To illustrate their concerns, reform-minded conservationists often turned to documentary photography. Beginning in 1935, under the leadership of Roy Stryker, the photographic unit of the Resettlement Administration (which became the Farm Security Administration [FSA] in 1937) employed a gaggle of the nation's best photographers to fan out across rural America and document the social and environmental conditions they encountered. Providence Canyon did not escape their scrutiny. Under FSA auspices, Arthur Rothstein, most famous today for his Dust Bowl photographs, traveled to Stewart County in February 1937 and took a series of photographs of Providence Canyon and others of the county's gullies. Many were titled simply "Erosion, Stewart County, Georgia." (See Figure 2.) Given his charge, one must assume that Rothstein meant his images to illustrate a set of human land-use pathologies. His images were decidedly not the stuff of national park promotion.<sup>30</sup>

Rothstein, it turns out, was not the only one who appropriated the gullies of Stewart County to visually express a set of troubling land-use trends. Russell Lord wrote extensively about the American landscape in the 1930s, and Providence Canyon made a prominent appearance in his 1938 book, *Behold Our Land*. There was a photograph of "Providence Cave" in the first glossy insert, and Lord devoted several pages to a

<sup>30</sup> See "America from the Great Depression to World War II: Black-and-White Photographs from the FSA-OWI, 1934-1945," American Memory, Library of Congress, <http://memory.loc.gov/ammem/fsahtml/fahome.html>. A search for "Stewart County, Georgia" will retrieve some of the photos, and clicking on "Display Images with Neighboring Call Numbers" will retrieve them all. On the documentary impulse, see William Stott, *Documentary Expression and Thirties America* (New York, 1973).

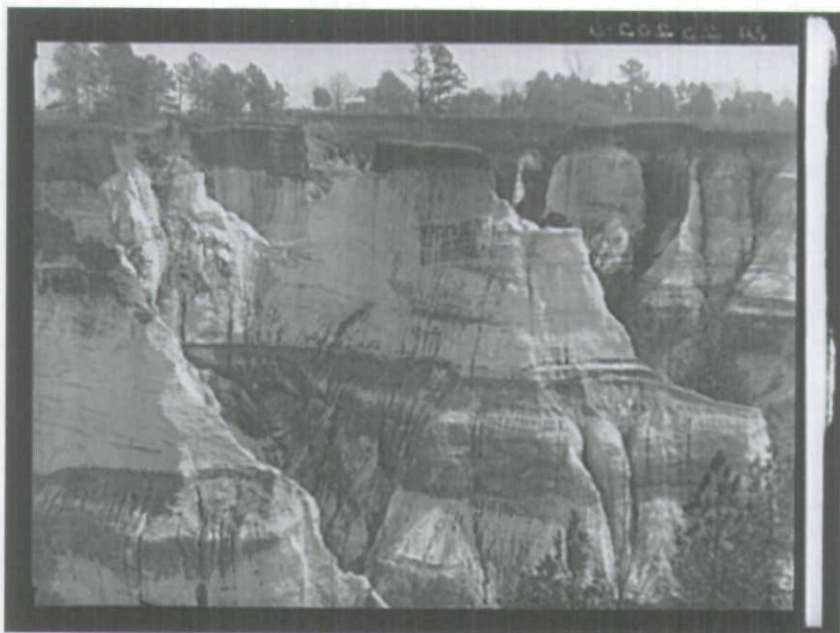


Figure 2. Erosion, Stewart County, Georgia. Arthur Rothstein photograph of Providence Canyon, 1937. *Library of Congress*, <http://hdl.loc.gov/loc.pnp/fsa.8b35823>.

discussion of the county's gullies. He began with a sturdy piece of canyon lore: that Providence Canyon started as a result of a dripping barn roof. This creation story raises some interesting questions about the relationship between human land use and gully formation, but Lord, who was more intent on describing the voraciousness with which the gullies had been swallowing the county's farmland, largely dismissed it. Instead, he quoted from 1935 congressional testimony of Hugh Hammond Bennett, head of the Soil Conservation Service (SCS), in which Bennett noted that "70,000 acres formerly cultivated" in Stewart County had been "reduced to largely worthless gullied land." "Some of the gullies," Bennett continued, "are the deepest I have ever seen. The largest of them, locally known as Providence Cave, is eight miles west of Lumpkin, Georgia."<sup>31</sup> Providence Canyon was an agricultural cancer, Lord insisted, metastasizing unopposed.

<sup>31</sup> Russell Lord, *Behold Our Land* (Boston, 1938), 169 (quotations), photograph in insert after p. 48. Providence Canyon also made an appearance in Lord's *To Hold This Soil* (Washington, D.C., 1938), 49–50.



Although soil and politics had mixed before in U.S. history, soil erosion became perhaps the chief environmental concern of Americans in the 1930s, evidenced in the many "soil jeremiads" of the era.<sup>32</sup> And the towering figure in making soil matter to Americans during the inter-war years was Bennett, a North Carolina native who wrote prolifically about the problem and was the key federal institution builder for soil conservation. He rose through the ranks of the Bureau of Soils in the U.S. Department of Agriculture (USDA) to become the first director of the SCS, a signature New Deal conservation agency. Bennett's magnum opus is titled simply *Soil Conservation* (1939), and at almost a thousand pages, it is an exhaustive treatment of the topic. But one only has to make it to page four before the gullies of Stewart County make their first appearance. The book's first figure is a photo of "virgin forests," with the aboriginal soil anchored and intact. The caption for the subsequent, contrasting photo of Providence Canyon—a striking aerial shot of cultivated land giving way to steep badlands—reads, "This maze of gullies, which crosses an entire county in the Southern Coastal Plain and cuts through portions of two adjoining counties, has permanently destroyed more than a hundred thousand acres of some of the best land in the locality."<sup>33</sup> (See Figure 3.) Like Lord and Rothstein, Bennett saw the gullies of Stewart County as illustrative of the problem he was doggedly trying to get Americans to take seriously. What better way to shock them into action than to show the most extreme case. For Bennett, that was Providence Canyon.<sup>34</sup>

One of Bennett's main goals in publicizing soil erosion was to get Americans to recognize the problem not as just a series of isolated natural disasters but as a persistent and widespread scourge of traditional agricultural land use. Soil erosion, he wrote, "is understood now not as a freak of nature which occasionally turns up on isolated farms and ranches but as an almost continually active process which attacks countless fields, whole watersheds, and broad farming

<sup>32</sup>I borrow the phrase "soil jeremiads" from Randall S. Beeman and James A. Pritchard, *A Green and Permanent Land: Ecology and Agriculture in the Twentieth Century* (Lawrence, Kans., 2001), 11.

<sup>33</sup>Hugh Hammond Bennett, *Soil Conservation* (New York, 1939), 2 (first quotation), 4 (second quotation).

<sup>34</sup>Bennett had been writing and testifying about the gullies of Stewart County for more than a decade. See, for instance, Bennett and W. R. Chapline, *Soil Erosion a National Menace* (Washington, D.C., 1928); and Bennett, "Soil Loss Through Erosion Threatens 'Our Basic Asset,'" *New York Times*, June 17, 1934, p. 3. And Providence Canyon continued to appear in his later writings. See Bennett and William Clayton Pryor, *The Land We Defend* (New York, 1942), 46, 76; and Bennett, *Elements of Soil Conservation* (New York, 1947), 10, 33.



Figure 3. *Hugh Hammond Bennett, Soil Conservation (New York, 1939), 4.*

communities.”<sup>35</sup> Bennett admitted the extremity of the Stewart County case later in his book, providing another photograph of the gullies as well. “What has happened in Stewart County, Georgia,” he wrote:

is a striking example of the extremes to which erosion can sometimes progress when land is farmed without proper precautions. Approximately 70,000 acres—one-fourth of the land in this small county—had been essentially ruined by gullying and deep sheet erosion twenty-five years ago. Furthermore, some of the gullies are without counterpart on the North American continent—huge, yawning chasms 100 feet or more in depth . . . One of the worst is Providence Cave, which is said to have started with the drip from a barn roof some fifty years ago. Already this enormous earth scar is said to have engulfed a schoolhouse, two farm buildings, and much good farm land.<sup>36</sup>

Though extreme, Providence Canyon nonetheless stood as a striking cautionary tale of what can happen when the soil is taken for granted.

Providence Canyon appeared in numerous other publications from this era. There is a photograph of it in William R. Van Dersal’s 1943 book, *The American Land*, which noted, “This chasm is almost 200 feet deep. It was caused by man and was started by unwise farming methods.”<sup>37</sup> In *Soil Erosion Control* (1936), Austin Earle Burges

<sup>35</sup> Bennett, *Soil Conservation*, 56.

<sup>36</sup> *Ibid.*, 67. Another image of “Providence Cave” appears *ibid.*, 66.

<sup>37</sup> William R. Van Dersal, *The American Land: Its History and Uses* (New York, 1943), Plate 59 in insert opposite p. 192.



explained that "Providence Gully" was "known to all students of soil erosion for its immensity" and was "probably the deepest man-made gully on the Western Hemisphere."<sup>38</sup> In 1936 the British geographer F. Grave Morris toured the Southeast in the company of the legendary U.S. geographer Carl O. Sauer and a group of SCS officials to examine the erosion problems of the region. Morris recalled seeing a number of large gullies, but he focused in particular on Providence Canyon. A "remarkable gully," he wrote, "occurs in the soils of the coastal plain near Americus, Georgia, known locally as the 'Grand Canyon.' This must now be more than half a mile in length and . . . it must be 150 to 200 feet in depth and perhaps 300 feet wide." "It is impossible to do justice to the appalling results of soil erosion in the south-eastern states," Morris continued. "An exploitive and wasteful system of agriculture has ruined the soil and this, in its turn, is reflected in the terrible conditions under which the majority of the farmers, both white and negro, are living."<sup>39</sup> Providence Canyon also made a showing in the second issue of *Soil Conservation*, the journal of the SCS, in September 1935. Leon J. Sisk's article also attributed the canyon to a dripping barn roof, but Sisk quickly moved into an imaginative realm, invoking the farmer's barn as a symbol of the richness that had marked the county's agricultural life prior to the disastrous erosion. Sisk assumed that the barn (a symbol of both careful animal husbandry and soil stewardship) must have been full of stored grain and hay for the farmer's livestock, and it surely echoed with the laughter of children. But then the rains came, and the farmer neglected the rills and gullies that developed, letting his prosperity and security wash away. As a narrative starting point, this vision of settled abundance allowed Sisk to hammer home the soil conservation gospel and its chief lesson: that we were turning good land to bad through our inattention. "[T]he largest gully in Georgia," he concluded, "which has caused thousands of dollars damage, which would cost thousands more to stabilize, could have been prevented."<sup>40</sup>

<sup>38</sup> Austin Earle Burges, *Soil Erosion Control: A Practical Exposition of the New Science of Soil Conservation for Students, Farmers, and the General Public* (Atlanta, 1936), 6-8 (quotations on 6).

<sup>39</sup> F. Grave Morris, "Soil Erosion in South-Eastern United States," *Geographical Journal*, 90 (October 1937), 363-70 (quotations on 368).

<sup>40</sup> Leon J. Sisk, "All This Started from the Trickle from a Roof," *Soil Conservation*, 1 (September 1935), 12-13. For another example of this sort of moral lesson, see *Saving Georgia Soils* (Atlanta, 1938), within which Providence Canyon had a prominent place. See *ibid.*, esp. 20. On barns and their symbolism, see Stoll, *Larding the Lean Earth*, 79-81.

Not all of the era's outside observers saw in Providence Canyon such a simple moral lesson. One of the most honest and ambivalent confrontations with Providence Canyon came from Jonathan W. Daniels, the editor of the *Raleigh News and Observer* and scion of a famous North Carolina family.<sup>41</sup> During the summer of 1937, Daniels embarked on a sweeping tour of the South in preparation for his book *A Southerner Discovers the South* (1938). Notable as a watershed in Daniels's evolution as a racial progressive, the book also devoted attention to the southern landscape. In a chapter titled "Graveyard and Gully," Daniels recalled rising one Sunday morning before daybreak so that he would have time for a side trip, recommended to him by his friend Hugh Hammond Bennett, during the drive from Atlanta to Tallahassee, Florida. "You should by all means see the famous Providence Cave in Stewart County, Georgia, near the town of Lumpkin," Daniels remembered Bennett imploring him: "This is a celebrated gully probably more than 150 feet deep at the head, yet formed in soil within the past half century. It is but one of numerous similar gullies which have ruined a large area of good land in Stewart and two adjacent counties."<sup>42</sup> Daniels pulled into Lumpkin, the county seat, later that morning, and, getting directions there for the "caves," he headed west to see them. "They are, of course, not caves at all," he reported: "They are ditches. But ditches of the same genus as the grand canyon of the Colorado. Down through the red soil to almost pure white clays the chasms run in the midst of cultivated Georgia farms. They come perilously close to the highway and seem ready to engulf road and farm-house and church. They run beside the road for what seems to be miles." Lying on the edge of one of the "ditches," Daniels wondered at the "points of earth ris[ing] like clay towers of stalagmites." They seemed to him, in an evocative summary of both the contest over the meaning of the place and his own ambivalence, "fine phallic symbols in the midst of an advancing sterility."<sup>43</sup>

Daniels's thoughts turned to the land-use practices that had produced "what we ordinary folk in these times call erosion" and to the lessons that flowed therefrom. He noted that the decline of cheap western lands finally had forced southerners to take erosion seriously, and, citing Howard W. Odum's sociological work, Daniels admitted that

<sup>41</sup> On Daniels see Charles W. Eagles, *Jonathan Daniels and Race Relations: The Evolution of a Southern Liberal* (Knoxville, 1982); and Patricia Sullivan, *Days of Hope: Race and Democracy in the New Deal Era* (Chapel Hill, 1996), 66-67.

<sup>42</sup> Jonathan Daniels, *A Southerner Discovers the South* (New York, 1938), 299.

<sup>43</sup> *Ibid.*, 302.



erosion and exhaustion were disproportionately southern problems—a major lesson to be gleaned by any open-minded southerner touring the region in the 1930s. But he also made an observation that Bennett's description of the gullies had not prepared him for: "They left me not so much shocked at land destroyed as puzzled by the character of the destroying ditches." "The Stewart County ditches grew from careless man and washing water," Daniels admitted: "But the land about them did not seem to an unpracticed eye badly worn soils about to collapse in dramatic canyoning. Instead the big ditches lay deep and open in the midst of apparently rich and fertile fields. Corn, cotton and pecan trees grow near them. And near them, too, I came upon a big barn smelling pleasantly of animal husbandry. There were houses, too, surrounded by such flowers as are generally grown in the country only by such folk as love the earth as well as hope to profit from it." The gullies, in other words, were dramatic, and it was hard not to see in them the region's broader history of debilitating erosion. But there was also something dissonant about the juxtaposition of apparently fine working lands and deep gullies. As Daniels watched a crowd gather at Providence Canyon, some coming by car and many more on foot, he concluded that "on that Sunday afternoon that rived land did not look tragic; the people upon it seemed not at all wasting survivors or wasted remnants of a human order that had departed from depleted and eroded soil. Far otherwise, land and people—white folk and Negroes—seemed to me that day vigorous and arrayed for pleasuring."<sup>44</sup> As we will see, Daniels was on to something when he wondered whether the gullies of Stewart County were accurate representations of local land-use practices and attitudes and whether they ought to stand for the environmental dimensions of the benighted South.

Providence Canyon's most prominent appearance in the era's conservation literature came in Stuart Chase's 1936 classic, *Rich Land, Poor Land: A Study of Waste in the Natural Resources of America*. Chase was a popular writer and economic theorist who contended with the social and environmental costs of waste, and he was one of many interwar intellectuals enamored of planning as a means to achieve social efficiency.<sup>45</sup> After focusing mostly on industrial and labor issues

<sup>44</sup> *Ibid.*, 302–5 (first quotation on 304–5; second, third, and fourth quotations on 302; fifth quotation on 305). See also Howard W. Odum, *Southern Regions of the United States* (Chapel Hill, 1936).

<sup>45</sup> See Robert B. Westbrook, "Tribune of the Technostructure: The Popular Economics of Stuart Chase," *American Quarterly*, 32 (Fall 1980), 387–408; and Stuart Chase, *Rich Land, Poor Land: A Study of Waste in the Natural Resources of America* (New York, 1936).

through the 1920s and early 1930s, Chase turned his attention to natural resources and the costs of their profligate use. *Rich Land, Poor Land* was the most prominent product of this interest, and to illustrate natural resource waste Chase chose as the book's feature image a photograph of an erosion gully, which he placed opposite the title page as his frontispiece. The photograph was captioned simply "Gulley in Stewart County, Georgia."<sup>46</sup>

Later in *Rich Land, Poor Land*—and in an excerpt from the book published in *Harper's Magazine* under the title "When the Crop Lands Go"—Chase took his readers to Stewart County for an extended tour.<sup>47</sup> "When one becomes erosion conscious," Chase instructed, "a motor trip through the country, especially west of the Alleghenies and south of Washington, D.C., becomes an endless game of finding gullies. One spots them as a beggar spots a coin." "In pursuit of this grim game," he continued, "I once followed gullies to their supreme exhibit in this country—Stewart County, Georgia." Chase and his traveling companions came into the county from the east. After seeing a few of the county's smaller specimens, they arrived at Providence Canyon, and Chase was moved by what he saw:

[T]he road approached a kind of isthmus, perhaps 100 yards wide. A plowed field was on the left and beyond it a sickening void. A battered church stood on the right, a few pines about it, then another void. "Yes sir," said our guide, "Here's the old he one, the one on the left. He started the whole system. And do you know what started him? A trickle of water running off a farmer's barn about forty years ago. Just one damn little trickle, and now a third of the county's gone—forty thousand acres. Don't get too close to the edge. Sometimes she goes in, an acre at a time."<sup>48</sup>

Although Chase's guide seemed to see the wasting away of the county as a stroke of ill fortune, Chase was sickened by what he saw as a profound example of wasted resources. Here was a supreme exhibit indeed.

Chase was an agent of the New Deal—in fact, it was Chase from whom Roosevelt cribbed the term—and Chase made it clear that his visit to Stewart County was meant to advance the cause of New Deal conservation.<sup>49</sup> "Tens of millions of acres of American crop lands are taking the same precipitous path," he warned, "and no virgin

<sup>46</sup> Chase, *Rich Land, Poor Land*.

<sup>47</sup> Stuart Chase, "When the Crop Lands Go," *Harper's Magazine*, 173 (August 1936), 225–33.

<sup>48</sup> Chase, *Rich Land, Poor Land*, 92–94 (first and second quotations on 92; third and fourth quotations on 93; fifth quotation on 94).

<sup>49</sup> Stuart Chase, *A New Deal* (New York, 1932).



west remains." Here was the New Deal environmental critique in a nutshell. "But all over the country groups of men like the conservation worker who drove us to Stewart County—lean, tanned men with clever hands and keen eyes—have set to work to check the landslide. Many farmers are aiding them. But they cannot do it alone. There must be more of them, and they must feel the force of public opinion behind them."<sup>50</sup>

Yet, despite toeing the New Deal party line, Chase was also taken aback by Providence Canyon's beauty: "Only once before have I seen a comparable phenomenon—the canyon of the Yellowstone in Wyoming. That was geological erosion, and even grander; this was manmade, but sufficiently superb." "The chasm," Chase admitted, "was awful and beautiful." More to the point, though, Chase wondered whether the chasm's development might be stopped or even healed, to which his guide responded that it might be, if the runoff were diverted and those areas that could be were planted in kudzu and black locust, the era's favored botanical remedies for severe erosion. But it would be an expensive effort, he suggested. "What ought to be done with them?" Chase asked, searching for some local wisdom. "'Well, sir,'" his guide responded, "'I'd have the government buy up the whole county and turn it into a national park—with plenty of railings. You might even charge admission. You don't see a sight like this often.'" Chase responded to this suggestion with a muted expression of irony: "I looked into the vivid, slipping horror. 'No,' I said. 'You don't.'"<sup>51</sup>

In this encounter between local guide and national reformer, the two interwar visions of what Providence Canyon meant collided. Like most of his cohort, Chase had made the canyon stand for a particularly southern variant on land abuse, though he was aware that its analogues could be found in other regions—in the airborne topsoil of the Great Plains, for instance, or the deepening arroyos of the Southwest. That Providence Canyon was a horrible monument to human carelessness and waste there was no doubt, and Chase hoped to use its exemplary power to further the soil conservation cause. Nonetheless, Chase conceded that there was something impressive there too, a beauty worth seeing. But the problem with making it into a national park—the irony, even—was precisely in the distinction Chase had made between geological and "manmade" erosion. National parks preserved the supreme

<sup>50</sup>Chase, *Rich Land, Poor Land*, 98–99 (quotations on 99).

<sup>51</sup>*Ibid.*, 94–96 (first quotation on 94; second and third quotations on 95; fourth through seventh quotations on 96).

examples of wondrous natural phenomena, and they kept the works of humanity at bay, preserving a few remnant parts of the American landscape where natural processes would not be disrupted by human hands. Despite its visual appeal, then, Providence Canyon could not pass as a national park because it was not natural. Or so Chase thought.

Providence Canyon's interwar fame was fleeting. After World War II, the gullies of Stewart County faded from view, as did public concern with soil erosion. The postwar exodus from the rural South and the coming of machines, chemicals, and the other trappings of modern agriculture diminished the importance of soil culture and severed the ties that had connected the region's social and environmental problems in the minds of interwar reformers. Meanwhile World War II and the cold war rendered the New Deal agricultural critique increasingly untenable in an age of coerced consensus.<sup>52</sup> Over the next several decades, as the tenant system collapsed and the civil rights movement transformed southern race relations, places such as Stewart County that were, or had become, marginal for agriculture quietly reverted to forest, often with government encouragement and subsidy. In 1971, after decades of local pleas to state legislators, Providence Canyon became a state park—a scenic spot that, while it does not shrink from its human past, does not dwell on it either.<sup>53</sup> As the conditions that produced the gullies of Stewart County retreated from the southern landscape, Providence Canyon again became a local curiosity. When a travel writer for the *Christian Science Monitor* stumbled on Providence Canyon in 1954, she was amazed how little known and undeveloped it was as a tourist site.<sup>54</sup>

Providence Canyon deserves to be famous again. But for what? How might we craft a new interpretation of the place that highlights critical themes in southern environmental history? What should these gullies mean? As a visual symbol for soil conservationists during the 1930s, Providence Canyon represented a particular environmental narrative about southern agriculture, and it might still perform that function today if visitors could look beyond their expectations that a

<sup>52</sup> On these developments, see Pete Daniel, *Lost Revolutions: The South in the 1950s* (Chapel Hill, 2000); and Daniel, *Toxic Drift: Pesticides and Health in the Post-World War II South* (Baton Rouge, 2005).

<sup>53</sup> Jacquelyn Cook, "Providence Canyon—Exciting Hole in the Ground," *Georgia Magazine*, 15 (November 1971), 26–27.

<sup>54</sup> Bernice McCullar, "Tour Guides Ignore Amazing Gully," *Christian Science Monitor*, November 12, 1954, p. 10.



park is a place of pristine nature.<sup>55</sup> Indeed, Providence Canyon presents an ideal opportunity to define a new sort of park, one that honestly contends with the legacies, sometimes spectacular, of human land use on this continent. Why not make Providence Canyon the interpretive centerpiece of a park devoted to the place of soils and soil erosion in southern environmental history? Instead of playing with the irony of Providence Canyon's park status, why not redefine what a park is in a way that defuses the irony? Such a postironic interpretation would use the New Deal narrative as a jumping-off point. But in accepting that Providence Canyon can stand for a broader regional history of land degradation, one also must offer a subtler rendering of the environmental dimensions of southern plantation agriculture. More than that, one must contend with a contradiction at the heart of how Providence Canyon functioned within the New Deal critique, one between its representativeness and its extremity. For Providence Canyon is at once a stunning visual example of the widespread erosion that came with southern plantation agriculture and a freak of nature with few peers. To side with the soil conservationists and their view of Providence Canyon as a representative place, then, a new interpretation must make sense of why Providence Canyon is so extreme.

First to Providence Canyon's representative attributes: As an example of severe gully erosion, Providence Canyon can stand for the ubiquity of such land scars and for the extensive history of erosive land use throughout the plantation crescent.<sup>56</sup> While the Dust Bowl has garnered more historical attention, soil loss in the South was arguably a more substantial, if less spectacularly punctuated, ecological disaster.<sup>57</sup> Beginning in the late 1700s, as the Virginia piedmont became densely settled, and proceeding south and west with the expansion of tobacco and then cotton throughout the 1800s, vastly accelerated soil erosion corresponded with and was the product of tobacco and cotton culture. In a study of the southern piedmont, geographer Stanley Wayne Trimble

<sup>55</sup> William Cronon, "The Trouble with Wilderness; or, Getting Back to the Wrong Nature," in Cronon, ed., *Uncommon Ground: Toward Reinventing Nature* (New York, 1995), 69–90; Cronon, "The Riddle of Apostle Islands: How Do You Manage a Wilderness Full of Human Stories?" *Orion*, May–June 2003, pp. 36–42.

<sup>56</sup> I borrow the phrase "plantation crescent" from Charles S. Aiken to indicate the plantation areas of the tobacco and cotton South, excluding the Mississippi Delta and Texas. See Aiken, *The Cotton Plantation South since the Civil War* (Baltimore, 1998), 10.

<sup>57</sup> On the Dust Bowl, see Donald Worster, *Dust Bowl: The Southern Plains in the 1930s* (New York, 1979); and Geoff Cunfer, *On the Great Plains: Agriculture and Environment* (College Station, Tex., 2005).

argued that settler agriculture had an erosive intensity up to five hundred times as great as had existed when the piedmont was under forest cover, and that row-crop agriculture caused an average soil loss of about seven inches across the entire piedmont.<sup>58</sup> Farming on the piedmont's slopes resulted not only in soil washing but also in extensive gullying that ruined parts of the region for agriculture. Hugh Hammond Bennett estimated that, by the 1930s, ten million acres of the piedmont, about 25 percent of the region, were "essentially ruined by erosion," while Howard W. Odum noted that more than three-fifths of the nation's badly eroded acres occurred within the South. Gullies were the most obvious and dramatic exemplars of this story; sociologist Arthur Raper described them as "physical facts with social backgrounds and consequences."<sup>59</sup>

All of this erosion not only wasted soil and undermined regional agriculture but also had other ecological and economic consequences. Erosion resulted in massive sediment transport that made what had been, by most early accounts, clear-running streams and rivers silt-laden and turbid. Heavy sedimentation raised riverbeds, buried milldams, transformed river and stream ecosystems, and swamped rich alluvial lands, rendering them not only less valuable for agriculture but perhaps more malarial as well.<sup>60</sup> And the piedmont was not the only southern agricultural region to experience such extensive soil loss and deep gullying. From the foothills of Appalachia, across the black belt of Alabama and Mississippi, to the loess plains that skirt the eastern edge of the Mississippi Delta, similar signs of soil improvidence were a consistent part of the southern staple crop landscape. The story of southern soil erosion is one of the most important in U.S. environmental history, and Providence Canyon ought to be an interpretive centerpiece.

<sup>58</sup> Stanley Wayne Trimble, *Man-Induced Soil Erosion on the Southern Piedmont, 1700-1970* ([Ankeny, Iowa], 1974), 1, 8.

<sup>59</sup> Bennett, *Soil Conservation*, 645 (first quotation); Arthur Raper, "Gullies and What They Mean," *Social Forces*, 16 (December 1937), 201-7 (second quotation on 201). Odum's estimate is mentioned by Raper, *ibid.*, 201.

<sup>60</sup> Trimble, *Man-Induced Soil Erosion*, 75-76. Bennett noted this problem in several places in *Soil Conservation*; see, for example, page 277. See also Stanley Trimble, "The Alcovy River Swamps: The Result of Culturally Accelerated Sedimentation," *Bulletin of the Georgia Academy of Science*, 28 (September 1970), 131-41; and R. Harold Brown, *The Greening of Georgia: The Improvement of the Environment in the Twentieth Century* (Macon, Ga., 2002), 71. A recent scientific study of a single piedmont watershed confirmed the accuracy of Trimble's soil loss estimates. See C. R. Jackson et al., "A Southeastern Piedmont Watershed Sediment Budget: Evidence for a Multi-millennial Agricultural Legacy," *Journal of Soil and Water Conservation*, 60 (November-December 2005), 298-310. On the malarial connection, see Hall, *Story of Soil Conservation*, 11.



What lessons might we draw about human culpability for this profound and rapid loss of soil from the southern landscape? At its most basic, southern soil erosion resulted from the removal of the vegetation that had anchored soils in place. Agricultural clearance began the process. Once exposed to the erosive effects of rainfall, soils began their migrations downhill and into the region's streams and rivers. The dominance in the South of clean-tilled monocrops (crops grown in rows with substantial uncovered soil in between) such as tobacco, cotton, and corn exacerbated these effects by leaving soil exposed to the elements. Many early farmers plowed up and down slopes, rather than on the contour, which often magnified the erosivity of runoff by concentrating it in furrows, and they used shallow one-horse plows, which loosened the surface layer but did little to encourage subsoil water infiltration, thus creating conditions ripe for erosion. Arthur R. Hall, a careful student of these practices, concluded that the "combination of shallow plowing and straight rows extending up and down slopes was especially harmful on the sloping lands of the Piedmont." And the farmers who attempted to use contour plowing, hillside ditches, or terraces to counter erosion sometimes did as much harm as good. Some farmers noticed that contour plowing was not sufficient to contain heavy rains and could produce substantial erosion. Moreover, improperly constructed hillside ditches often became gullies, while poorly built and maintained terraces became major erosion problems when breached by runoff. Southern farmers were not blind to the need for conservation practices; today's casual observer can still detect a substantial legacy of terracing and other conservation practices throughout the southern landscape, and in many places these measures worked. But southern farmers often lacked the resources, the technology, the agricultural networks, and even the motivation to improve their practices. Southern crop regimes and poor conservation practices, then, were a big part of the soil erosion story in the region.<sup>61</sup>

Southern agriculture was also extensive; rather than sticking in one place and nurturing soil fertility, southern planters and farmers tended to exhaust soils and move on. Such behavior was not uncommon in other regions; indeed, it was a hallmark of American settler agriculture. But southerners made extensiveness a high art. And because soil absent its organic matter tends to become structurally unstable, exhaustion

<sup>61</sup> Trimble, *Man-Induced Soil Erosion*, Appendix B, 148-52; Hall, *Story of Soil Conservation*, 21 (quotation). See also Hall, *Early Erosion-Control Practices*; and Hall, "Soil Erosion and Agriculture in the Southern Piedmont."

and erosion were partners in crime. Thus, not only were southern farm fields particularly susceptible to erosion because of cropping practices, but also, from the late eighteenth through the early twentieth centuries, a substantial portion of the tobacco and cotton South was in a state of recent abandonment, and abandoned land, absent any sort of stewardship, can be particularly susceptible to erosion. Trimble concluded that "[a]bandonment of fields with little or no vegetative cover was one of the most erosive practices of the European settlers," and contemporary observers of land abandonment concurred.<sup>62</sup> It is not surprising, then, that Providence Canyon caught the nation's attention at the end of this process of agricultural expansion and abandonment, when the scars left by centuries of extensive agriculture were at their worst.

To these lessons about the historical destructiveness of extensive row-crop agriculture must be added further lessons about the environmental implications of southern labor systems and political economy. One cannot stare for long into Providence Canyon without wondering what roles slavery, tenancy, and international staple crop markets played in producing such a spectacle. Before the Civil War, a reliance on slave labor may have encouraged, and it certainly facilitated, an extensive and soil-negligent agriculture. Investments in slaves encouraged southern planters to focus on cash crops and to channel as much labor as possible into staple production. As Gavin Wright has argued, antebellum planters' interest in slave property trumped their interest in landownership and stewardship. "Slavery," Wright concluded, "generated a weaker and looser connection between property holders and the land they occupied."<sup>63</sup> Then there is the question of whether slave practices and the condition of slavery worked against soil conservation. Certainly there was little incentive for slaves to act as stewards of the soil. Pushing that line of reasoning, Eugene D. Genovese has posited that slavery encouraged slaves to be careless, as a form of subtle resistance. For Genovese, slavery was antithetical to the careful stewardship of soil; the structures of the institution stifled all efforts at reform.<sup>64</sup> However one causally connects slavery with soil erosion—and there is considerable work to be done in this area—there was a

<sup>62</sup> Trimble, "Perspectives on the History of Soil Erosion Control"; Trimble, *Man-Induced Soil Erosion*, 41 (quotation), 153–56.

<sup>63</sup> Gavin Wright, *Old South, New South: Revolutions in the Southern Economy since the Civil War* (New York, 1986), 17. See also Steinberg, *Down to Earth*, 86.

<sup>64</sup> Eugene D. Genovese, *The Political Economy of Slavery: Studies in the Economy and Society of the Slave South* (2nd ed.; Middletown, Conn., 1989), 41–153.



clear correlation. As Trimble has noted of the piedmont, "the distribution of [erosive land use] in 1860 is remarkably similar to the distribution of cotton and tobacco production and to the distribution of rural slaves."<sup>65</sup>

One consequence of their reliance on and investment in slave labor was that southern planters were less amenable to the sorts of agricultural reforms being proffered during the early nineteenth century and to a vision of a settled and permanent agriculture in general. Most southern planters and farmers devoted little labor to conserving and building soil—to manuring, for instance, and producing the sorts of forage crops that would have produced high-quality manure. Their commitment to slavery encouraged them to exhaust land and move on, or to develop extensive forest-fallow rotations if they had the land resources, using slaves to clear new land and using the poor forage of the forest commons, some of it abandoned old fields, to sustain what livestock they had. While the commercially driven and slave-based plantation system did not preclude a model of improvement that devoted more labor and land to soil building, most southern planters seemed uninterested in such agricultural reforms or unable to achieve them in practice. Slaves working new land brought better returns, and as long as there was new land this cycle continued. Not even Edmund Ruffin's gospel of marl or the guano boom of the 1840 and 1850s could stem the tide of exhaustion and emigration.<sup>66</sup>

This correlation between erosive land use and exploitative labor regimes did not end with slavery. The systems of tenancy that emerged in the late nineteenth and early twentieth centuries in the South continued to encourage maximization of profit and scant attention to soil fertility or stability. Indeed, the logic of a system that drove tenants into debt and yeomen into tenancy almost necessarily precluded adequate attention to soil improvement. Tenancy discouraged soil stewardship, while soil erosion and the lower crop yields that resulted contributed to the indebtedness that drove people into tenancy.<sup>67</sup> Soil erosion in the cotton South peaked in the half century after the Civil War, as did cotton production, and again erosive land use correlated highly with tenancy.

<sup>65</sup> Trimble, *Man-Induced Soil Erosion*, 58.

<sup>66</sup> Stoll, *Larding the Lean Earth*; Earle, "Myth of the Southern Soil Miner"; Trimble, "Perspectives on the History of Soil Erosion Control," 174–75; Steinberg, *Down to Earth*, 86. On Ruffin see Stoll, *Larding the Lean Earth*, 150–60; Kirby, *Poquosin*; and Ruffin, *Nature's Management*.

<sup>67</sup> Charles S. Aiken makes the intriguing argument that much of this environmental degradation came about as a result of management failure in the plantation region. See Aiken, *Cotton Plantation South*, 68–84.

When New Dealers used images of Providence Canyon to illustrate the broader problems of southern soil erosion, they did so with a strong critique of the political economy of tenancy in mind. As the authors of the *New Deal Report on Economic Conditions of the South* succinctly put it, "Half of the South's farmers are tenants, many of whom have little interest in preserving soil they do not own."<sup>68</sup> Or, as Arthur Raper eloquently wrote, "In the long run it may be that the plantation system causes gullies by what it does to the man even more than by what it does to land."<sup>69</sup>

Finally, it is worth adding to Providence Canyon's interpretive message a lesson Hugh Hammond Bennett offered in the 1930s: "The mills of Manchester and New England must share with the farmers of the South the responsibility for erosion caused by continuous cotton production."<sup>70</sup> Bennett ought to have included the mills of the southern piedmont as well: as Sven Beckert has recently pointed out, "even the most local manifestations of this cash crop's cultivation and manufacturing were ensnared in a global system and could not be made sense of without it."<sup>71</sup> Providence Canyon can stand as a monument not only to the land-use decisions made by planters—the South's "arch gully-makers," according to Raper—and, to a lesser extent, to the limited agency of yeoman farmers, tenants, and slaves, but also to the market forces that made cotton production the profitable centerpiece of a new global economy.<sup>72</sup> In this sense, human culpability for the degradation of southern soils, though centered in the region, extended well beyond its confines.

Stewart County's historical experience was largely representative of these broader regional patterns. The county was, almost from the beginning of frontier settlement, a cotton county, and cotton farming peaked there in the years after the Civil War. Moreover, as a bridge between the piedmont and the black belt, Stewart County was a pivot point for the restless mobility that characterized southern agriculture during

<sup>68</sup> National Emergency Council, *Report on Economic Conditions of the South* ([Washington, D.C.], 1938), 10, quoted in David L. Carlton and Peter A. Coclanis, eds., *Confronting Southern Poverty in the Great Depression: The Report on Economic Conditions of the South with Related Documents* (Boston, 1996), 48.

<sup>69</sup> Raper, "Gullies and What They Mean," 205. Raper examines similar themes in his classic New Deal-era studies, *Preface to Peasantry: A Tale of Two Black Belt Counties* (Chapel Hill, 1936) and *Tenants of the Almighty* (New York, 1943).

<sup>70</sup> Bennett, *Soil Conservation*, 899.

<sup>71</sup> Sven Beckert, "Emancipation and Empire: Reconstructing the Worldwide Web of Cotton Production in the Age of the American Civil War," *American Historical Review*, 109 (December 2004), 1405–38 (quotation on 1407).

<sup>72</sup> Raper, "Gullies and What They Mean," 203.



its frontier stage. Slavery came to the county quite quickly. By 1840, only a decade after its creation, Stewart County had 4,741 slaves out of a total population of 12,933; by 1860, the slave population had surpassed the free population. In 1850, just a quarter century after settler agriculture first came to the region, Stewart County produced 19,165 bales of cotton, which ranked second among all Georgia counties.<sup>73</sup> The county and region continued to be driven by cotton production after the Civil War, and the poorer residents of Stewart County experienced the same drift into tenancy that others in much of the rest of the region did. In 1880, 64 percent of the county's farms were owner operated, but by 1890 that rate had dropped to 29 percent and by 1913 it was only 19 percent.<sup>74</sup> In 1911, Georgia farmers produced 2.8 million bales of cotton, the most in the state's history, with production centered in the western piedmont and upper coastal plain.<sup>75</sup> But several years later, about when the first boll weevils crossed the Chattahoochee, cotton production began a precipitous decline—although the exact role that the boll weevil played in that decline is still up for debate.<sup>76</sup> From the 1920s on, the county's population dropped dramatically, as did its improved acreage. In the century after its initial frontier settlement, Stewart County witnessed an environmental transformation as profound as any in the cotton South, and by the 1930s Providence Canyon spoke eloquently, if in exaggerated tones, of the environmental consequences of this history.

That southerners, their agricultural practices, and the political economy of the plantation produced catastrophic soil erosion is not news to southern historians, though it is worth emphasizing how little detailed historical work has been done to document this regional history of erosion. But as important as human land use was to the creation of Providence Canyon and to the problems of southern soil erosion more broadly, there were also environmental processes at work that influenced and constrained human actions in the region—and that complicate the easy and morally satisfying connections between political economy and erosive land use. As a historical force, the environment did not *determine* the course of the South's agricultural history, and environmental

<sup>73</sup> William W. Winn, "The View from Dowdell's Knob," in *The New Georgia Guide* (Athens, Ga., 1996), 366–67; Terrill, *History of Stewart County*, I, 72–73.

<sup>74</sup> Long et al., *Soil Survey of Stewart County*, 18.

<sup>75</sup> Winn, "View from Dowdell's Knob," 376–78.

<sup>76</sup> James Conrad Giesen, "The South's Greatest Enemy? The Cotton Boll Weevil and Its Lost Revolution, 1892–1930" (Ph.D. dissertation, University of Georgia, 2004); Aiken, *Cotton Plantation South*, 76–84.

factors alone cannot explain (away) the region's erosion.<sup>77</sup> But recognizing the role of environmental factors in shaping the history of the plantation South is vital if we are to reach for more subtle conclusions about the region's history.

Let us begin with the soils of the South.<sup>78</sup> From antebellum observers to New Deal critics, it was a standard trope to invoke a region of once fertile soils ruined by careless husbandry. But such an edenic narrative uncritically assumes fertile "virgin" soils at the expense of a careful assessment of their historical qualities. There are several gross generalizations that one can make about southern soils. First of all, they are old and weathered. Weathering is the fundamental process by which soils form from bedrock, so it is a productive process, at least in its early stages. But advanced weathering-stage soils, like those covering much of the Southeast, are sufficiently old that many of the chemical products of the breakdown of parent rock have leached away. As a result, southeastern soils (most of which are ultisols, one of twelve soil orders) tend to be acidic and mineral deficient, and they have a fairly low native fertility. Such soils have developed on older, more stable landscapes that have not experienced major geological changes or translocations; they are usually found in hot, humid areas, as heat and humidity accelerate the weathering process; and their developmental trajectory is toward acidification and nutrient depletion.<sup>79</sup> It is particularly worth noting that the South missed out on a key source of mineral inputs from North America's recent geological past, glaciation, which bestowed its riches on the soils of more northerly regions. In fact, many of the Southeast's soils bear a strong resemblance to tropical soils, which tend to be deeply weathered and prone to exhaustion and erosion if not handled with care.

The soils of the Southeast are not necessarily hostile to agriculture—many possess ideal mechanical properties, like good water retention and tilth, and there are pockets of fertile and alkaline soils, like those of the black belt and areas where translocation has produced soils of great fertility, such as the loess plains—but most require substantial fertilizer

<sup>77</sup> Stewart, "Let Us Begin with the Weather?"

<sup>78</sup> Albert Cowdrey did just that in his pioneering environmental history, and many of the points that follow are echoes of his analysis. See Cowdrey, *This Land, This South*, 2–4.

<sup>79</sup> See Daniel D. Richter Jr. and Daniel Markewitz, *Understanding Soil Change: Soil Sustainability over Millennia, Centuries, and Decades* (New York, 2001), 67. On ultisols and North American soil orders more generally, see Natural Resources Conservation Service, U.S. Department of Agriculture, *Soil Taxonomy: A Basic System of Soil Classification for Making and Interpreting Soil Surveys* (2nd ed.; Washington, D.C., 1999), available online at <http://soils.usda.gov/technical/classification/taxonomy/>.



inputs as well as lime to offset acidity. Daniel D. Richter Jr. and Daniel Markewitz, who have studied piedmont soils extensively, suggest that, at the time of settler clearance, the subregion's soils not only were acidic but also had low levels of organic carbon and nitrogen as well as phosphorus, calcium, magnesium, and potassium. Settlers initially capitalized on the accumulated organic matter in the region's topsoil, which in many places had never before been used for agriculture. Moreover, settlers usually cleared land with the help of fire, which gave soils an additional shot of nutrients. But sustained cropping in tobacco, cotton, and corn revealed the presettlement deficiencies fairly quickly. Thus, to characterize the soils of the South as fertile in their "virgin" condition, while not entirely inaccurate, is to miss a set of deficiencies that shaped southern agricultural practices by, for instance, favoring extensive agriculture and the erosion that often came with it.<sup>80</sup> The dominance of deeply weathered, acidic, and relatively poor soils and the absence of glaciation are factors worth noting in attempting what historian Julius Rubin has referred to as a "physical regionalization of the South."<sup>81</sup>

Climate and other environmental factors also shaped the region's history of soil loss by working against systems of soil improvement reliant on intensive livestock husbandry and the production of animal manure. The acidity of southern soils and the region's climate were hostile to the fodder crops favored by improvers, such as timothy, alfalfa, and clover, which might have provided livestock with high-quality feed while fixing nitrogen and providing better land cover.<sup>82</sup> Some southern farmers tried other grasses, but the options best suited to the region's environmental conditions—such as Johnsongrass and Bermuda grass—proved to be aggressive colonizers of croplands and became troublesome weeds. "Cotton and corn culture, agriculture without grass," Rupert B. Vance concluded decades ago, "have in the South met hardy grasses that persist in spreading and resist uprooting. The result is that southern farmers must wage war on grass."<sup>83</sup> The South's livestock industry,

<sup>80</sup> Richter and Markewitz, *Understanding Soil Change*, 40–42. Melosi makes the same point in Melosi, "Environment," 6–7. For a recent and provocative essay on this topic, see John Majewski and Viken Tchakerian, "The Environmental Origins of Shifting Cultivation: Climate, Soils, and Disease in the Nineteenth-Century US South," *Agricultural History*, 81 (Fall 2007), 522–49.

<sup>81</sup> Julius Rubin, "The Limits of Agricultural Progress in the Nineteenth-Century South," *Agricultural History*, 49 (April 1975), 362–73 (quotation on 362).

<sup>82</sup> For one example, among many, of this argument, see Stoll, *Larding the Lean Earth*, 150–51.

<sup>83</sup> Rupert B. Vance, *Human Geography of the South: A Study in Regional Resources and Human Adequacy* (Chapel Hill, 1932), 155–59 (quotation on 158). On the trouble caused by grasses, see Nelson, *Pharsalia*; and Mark Hersey, "'My Work Is That of Conservation':

which from its origins relied on free-range husbandry for reasons that were environmental as well as cultural, was also hobbled by a series of diseases and parasites, such as Texas fever and hog cholera.<sup>84</sup> Both made intensive livestock husbandry difficult to practice and discouraged the importation of new livestock breeds to the region. In the case of Texas fever, its range of infection bore a striking resemblance to the boundaries of the plantation South.<sup>85</sup> These and other environmental factors limited the ease and effectiveness with which southerners could adopt the sorts of agricultural reforms—particularly crop diversification and a livestock-crop mix—that some in the North were adopting during the nineteenth and early twentieth centuries. While the South's environment treated cotton well, it also inhibited the ability to adopt alternatives.

Southern soils are also more prone to erosion than those of other regions. Rainfall erosivity—which measures not only total rainfall but also the energy and intensity of rainfall when it hits the ground—is much higher in the Southeast than in any other region of the United States. Rainfall in the South not only is heavy but also falls with more intensity than in other regions of the United States and often is concentrated in spring and early summer when cropped fields lack vegetation to protect against soil erosion.<sup>86</sup> Moreover, because southern soils freeze only for brief periods, if at all, and are rarely covered by winter snow, they are exposed to the forces of erosion for longer annual periods.<sup>87</sup> Climate, it turns out, has influenced the magnitude of southern soil erosion.

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The Environmental Vision of George Washington Carver” (Ph.D. dissertation, University of Kansas, 2006).

<sup>84</sup> Virginia DeJohn Anderson, *Creatures of Empire: How Domestic Animals Transformed Early America* (New York, 2004).

<sup>85</sup> Tamara Miner Haygood, “Cows, Ticks, and Disease: A Medical Interpretation of the Southern Cattle Industry,” *Journal of Southern History*, 52 (November 1986), 551–64; Claire Strom, “Texas Fever and the Dispossession of the Southern Yeoman Farmer,” *ibid.*, 66 (February 2000), 49–74; Strom, *Making Catfish Bait Out of Government Boys: The Fight against Cattle Ticks and the Transformation of the Yeoman South* (Athens, Ga., 2009).

<sup>86</sup> Stoll, *Larding the Lean Earth*, 135–36. Magilligan and Stamp note of the Providence Canyon area, “The occurrence of this early spring precipitation maximum is quite significant in the erosional history of the region as the precipitation peak is out-of-phase with the vegetation cover and in-phase with the period of maximum land clearing and bare soils typical of spring plowing.” Magilligan and Stamp, “Historical Land-Cover Changes and Hydrogeomorphic Adjustment,” 619.

<sup>87</sup> All other variables being equal, a cultivated field in Stewart County would experience roughly three times the rainfall erosivity (measured by the R factor) of a similar field in New England. On most rainfall erosivity maps, Stewart County falls within a band in which the R factor is 300, while for most of New England it is only 100. See, for instance, [http://www.crrw.utexas.edu/gis/gishydro99/class/niedermeier/term\\_files/Rainfall\\_Index.gif](http://www.crrw.utexas.edu/gis/gishydro99/class/niedermeier/term_files/Rainfall_Index.gif). This comparative point is adapted from one that Stanley Trimble makes in *Man-Induced Soil Erosion*, 12. Trimble notes



Southern soils also often have a high erodibility factor, which measures the cohesiveness of soil types and their resistance to being dislodged and transported by the elements. Piedmont soils, for instance, tend to have a top layer of coarse material that is easily washed, and because they sit atop a less permeable horizon of clay they are also more susceptible to destabilization from below, which can produce sloughing, piping, and caving. Moreover, once the topsoil is gone, the high clay content of the subsoil allows for less infiltration and thus intensifies surface flow, which in turn increases erosion. Finally, the piedmont's clay horizon is often underlain by a layer of saprolite, or weathered and rotten rock, which makes pockets of the piedmont particularly prone to deep gullying. Similar points might be made about the soils of the black belt and loess plains, which also have proved highly susceptible to erosion. There is considerable local variation, and there are important differences between these plantation areas and other parts of the South, but one can nonetheless make fairly accurate regional generalizations that suggest southern soils are often less stable than those in other agricultural regions.<sup>88</sup>

Together, then, climate, the qualities of southern soils, uneven topography across much of the plantation crescent, livestock diseases, aggressive grasses, and other environmental factors must share the stage with human land-use and labor practices in explaining the extent of historical soil loss in the plantation South. Humans triggered these erosional processes, and little of this soil erosion would have occurred if the landscape had not been cleared, plowed, planted in row crops, and made to serve the exploitative political economy of the plantation. Moreover, soil loss might have been mitigated if settlers had better adapted their practices and economic goals to these specific environmental factors—and there is some evidence that a few groups did.<sup>89</sup> But the comparative *magnitude* of soil erosion in the South was not entirely a product of human actions. If one wants to explain why soil loss was worse in the South than in other regions—if one is interested in making comparative regional generalizations of the sort that observers of southern agriculture have long been making—then environmental factors may well have been as important as social, economic, and cultural ones in producing

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that even across the piedmont, erosivity varies greatly. See also Stoll, *Larding the Lean Earth*, 139–40.

<sup>88</sup> Trimble, *Man-Induced Soil Erosion*; Stoll, *Larding the Lean Earth*, 136; Steinberg, *Down to Earth*, 72; Cowdrey, *This Land, This South*, 2–4.

<sup>89</sup> Albert Cowdrey cites the Moravian settlers near what became Winston-Salem, North Carolina, as an example. See Cowdrey, *This Land, This South*, 35.

regional patterns of soil erosion. Transplant the cultivation practices of nineteenth-century northern and midwestern farmers to the southern plantation belt, and their legacy likely would have been substantial soil erosion as well.

All of this reasoning has been directed at answering important questions about soil erosion and regional distinctiveness, but my analysis thus far has been operating on a level of regional generalization that treads too close to older determinist models for comfort. For that and other reasons, we need to descend to another level and ask, why, given the representative "southernness" of Stewart County's land-use history, were the gullies there *so much worse* than those in the rest of the South? To answer this question requires moving beyond the physical regionalization of the South to understand local environmental conditions. In fact, it was the particular subsoil characteristics of the local site that made Providence Canyon so extreme, and thus famous, in the 1930s. And local conditions may be critical to explaining other deeply gullied sites in the South as well. As Stanley Trimble has noted of the piedmont, "Small, isolated areas of caving gullies may be as much the result of these loosely structured or structureless soils as of [erosive land use]."<sup>90</sup> In assessing the representational history of Providence Canyon, and in filling out its interpretive lessons, it thus seems necessary to give full voice to the geological conditions that made Providence Canyon so unusual, spectacular, and even worthy of being a park.

Providence Canyon's sedimentary profile is the product of deposition of marine sediments that occurred between eighty-five and sixty-five million years ago, when the area was alternately underwater and exposed. The canyon walls reveal two distinctive sediment layers. The top layer is known as the Clayton Formation and is composed of reddish sandy clay washed down from the piedmont. Beneath the Clayton Formation is a deeper sediment layer, extending well over one hundred feet in places, known as the Providence Formation, which is made up of unconsolidated sand with silt and clay deposits. When the first white settlers and black slaves arrived in Stewart County, they found a thin layer of topsoil atop the Clayton Formation. Clearing and plowing exposed and stripped topsoil from the hilly western part of the county where agricultural development first focused, and then cropping and the elements began wearing away at the Clayton clays—a fairly typical

<sup>90</sup>Trimble, *Man-Induced Soil Erosion*, 20.



southern story thus far. Once those clays were breached, however, water encountered a deep layer of unconsolidated sediment, and gullyng ensued at a dramatic pace.<sup>91</sup>

There were two erosional processes at work in Stewart County. The first was surface flow, by which rain flowing across the land dislodged and transported soils. This is the process most people envision when they think of erosion, and its accelerated impacts were directly related to clearing, plowing, and the exposure of soil to the elements. Concentrated surface flow can be a major cause of gullyng. The second process was beneath the surface. Once water breached the Clayton clay layer, it percolated downward through the Providence sands until it hit an impermeable layer. Frequent lenses of kaolin (mined throughout Georgia for a number of purposes, among them to give magazine paper its glossy sheen) exist in the Providence Formation, and when water hit those lenses, it moved downhill sideways in a process known as pipe flow. Pipe flow ate away at and destabilized the sands above it, resulting in a phenomenon known as mass wasting, whereby large amounts of sediment collapsed and caved into developing canyons. This caving process explains why locals called the area "Providence Caves."<sup>92</sup>

In terms of its environmental profile, then, several factors are distinctive about Providence Canyon's site. First, the erosion potential of the locale is striking, even compared with other soil and subsoil profiles in the region, because of the unconsolidated Providence Formation. Topography is also important, for at nearly seven hundred feet above sea level on its rim, the Providence Canyon area is unusually high for the coastal plain, and it gives way dramatically to the Chattahoochee bottoms hundreds of feet below. As the authors of the USDA's 1913 *Soil Survey of Stewart County, Georgia* noted, "The eroding forces have been especially active on account of the great differences in elevation between that part of the county that represents the original upland and the Chattahoochee River bottoms."<sup>93</sup> Moreover, there are few places in the South that combine such significant topographic relief with the high rainfall erosivity scores of the southeastern coastal plain. Providence Canyon would not have developed into such a supreme specimen of gully formation had not those factors been unusually strong.

<sup>91</sup> Lisa G. Joyce, *Geologic Guide to Providence Canyon State Park* (Atlanta, 1985), 1-12.

<sup>92</sup> *Ibid.* On the history and politics of kaolin mining, see Charles Seabrook and Marcy Louza, *Red Clay, Pink Cadillacs, and White Gold: The Kaolin Chalk Wars* (Marietta, Ga., 1995).

<sup>93</sup> Long et al., *Soil Survey of Stewart County*, 19.

Land use and land management certainly played a formative role in producing Providence Canyon, but, compared with the rest of the plantation South, there was nothing uniquely egregious about agricultural land use in Stewart County that corresponds with the extremity of its gullies. Indeed, there is substantial evidence to suggest that some of the gullies may have formed for reasons having little to do with cotton culture. While there is no direct evidence to support the dripping barn roof thesis, Figure 4 does suggest that road drainage was a culprit in the creation of at least one arm of Providence Canyon. That Providence Canyon was human-induced there can be no doubt, but its stature as a representative monument to the destructiveness of the plantation South's agricultural practices must be opened to further interrogation. On this count, the New Dealers overplayed their hand.

What final lessons emerge from this close look at Providence Canyon State Park? The simplest might be that the irony with which this article began turns out to be the legacy of twin efforts, by local boosters and New Deal reformers, to instrumentally objectify and simplify a site whose history is more particular and complex. In the case of the local boosters, this indictment is fairly obvious—they attempted to sweep under the rug the role that human land use played in the history of gully formation and to insist that Providence Canyon, like the nation's other great parks, was a product of nature. Local boosters clearly knew better than that. But the New Dealers also were a bit too quick to see Providence Canyon as a symptom only of a regional political economy in disorder. In such a rendering, the environment appears as little more than a passive victim, when in fact environmental forces contributed to making the place so photogenic. To move toward a deeper set of meanings for Providence Canyon, we need to do for it something akin to what Walker Evans and James Agee did for the sharecroppers of Hale County, Alabama, in the landmark New Deal-era study *Let Us Now Praise Famous Men*: reject the facile moralism of the documentary impulse by simultaneously descending to a local level of detail and critically assessing the subjective assumptions viewers bring to the site.<sup>94</sup> However necessary it might be to make a spectacle like Providence Canyon stand for soil abuse throughout the South, such a representational strategy also should make clear that it does not do justice to local environmental realities. Providence Canyon, then,

<sup>94</sup> James Agee and Walker Evans, *Let Us Now Praise Famous Men* (Boston, 1941).





Figure 4. Gully that, this photograph suggests, was the product of road drainage.  
*Courtesy of Sam Singer.*

should also be a monument to the interpretive simplification that comes with regional generalization, and a call to pay greater attention to the diverse local environmental histories within the larger region. Not only must southern environmental historians escape the crude environmental determinism of an earlier historiography, then, but they must also carefully interrogate a New Deal narrative, usually well illustrated, that continues to cast a long shadow over the region and its environmental historiography.

Ultimately, my interpretation of what Providence Canyon means exists somewhere between the Grand Canyon and a sickening void, and it eschews the irony that flows from pairing these two simplistic historical visions. To see environmental forces implicated in the creation of Providence Canyon is not to excuse or glide over human agency. But it is to insist that human agency almost never exists outside of or divorced from its environmental context. Human agency is not absolute, and the environment is not a mere instrument. If nothing else, Providence Canyon can teach us a fundamental lesson of modern American environmental history: that environmental disasters (which are often also social disasters) have tended to occur when people bring simple but

powerful ideas and modes of production into complex new environments without humility, restraint, or a willingness to pay attention and adapt.

As a public park, Providence Canyon also suggests several lessons about the history of conservation, in both the South and the rest of the nation. First, it instructs us to devote more attention to the history of soil conservation as part of the nation's larger conservation legacy and to recognize the formative role that the South has played in nurturing soil science and some of its seminal figures, from Edmund Ruffin and John Taylor to E. W. Hilgard and Hugh Hammond Bennett. Moreover, Providence Canyon compels us to recognize that the South's most important and distinctive conservation tradition—soil conservation in the broadest sense of that term—was the product of grappling with agricultural land use rather than with the public lands and their resources, a contrast that helps set off the southern conservation experience from the western one.<sup>95</sup> The environmental challenges particular to southern agriculture helped spawn a distinctive conservation bureaucracy on the federal level and made the region dependent on such federal programs and networks of expertise.<sup>96</sup>

Providence Canyon might also function as a monument to the processes of landscape reversion and restoration—what Thomas D. Clark called “the greening of the South”—that have transformed the southern environment since World War II. Providence Canyon's “preservation” speaks to the coming of conservation to the South and how tightly that process was tied up in contending with marginal landscapes.<sup>97</sup> One need only look at the suite of southern national forests to appreciate this point. Most of these forests are second or third generation, and many of them—particularly those in the piedmont, black belt, and other former plantation areas—cover landscapes that were among the most abused by staple crop agriculture. From South Carolina's Sumter National Forest and Georgia's Oconee National Forest to Alabama's Tuskegee National Forest and Mississippi's Holly Springs and Tombigbee National Forests, all of these areas have hidden beneath their growing (and sometimes recently harvested) mantle of trees fascinating

<sup>95</sup> Stoll, *Larding the Lean Earth*; Sarah T. Phillips, *This Land, This Nation: Conservation, Rural America, and the New Deal* (New York, 2007); Stewart, “If John Muir Had Been an Agrarian.”

<sup>96</sup> Rubin, “Limits of Agricultural Progress in the Nineteenth-Century South,” 372–73.

<sup>97</sup> Thomas D. Clark, *The Greening of the South: The Recovery of Land and Forest* (Lexington, Ky., 1984). I use the term *restoration* here in a loose sense, to refer to the landscape becoming more natural again and not to the restoration of a pre-agricultural landscape or set of ecological processes.



histories of land degradation and regeneration that need to be appreciated. Indeed, many of these areas became public land as a result of soil conservation, not forestry, interventions. The Tuskegee and Oconee National Forests, for instance, were cobbled together from submarginal crop lands purchased under the auspices of the Bankhead-Jones Farm Tenant Act of 1937, and they were the sites of New Deal land utilization projects, intensive efforts to reform and modernize agricultural practices and household economies among some of the region's poorest residents and most degraded soils.<sup>98</sup> In other words, it has not been unusual in the South for an area with a legacy of extreme degradation to become a landscape of conservation; one might argue that such a transformation has been closer to the rule than the exception. We can see Providence Canyon as ironic, then, only when we shade ourselves from this broader history of conservation in the South. And from this understanding of southern conservation history we can appreciate a larger national lesson often lost sight of: federal conservation efforts emerged in the half century between 1890 and 1940 not just to save the last best places or provide expert resource stewardship but also to figure out what to do with those parts of the American landscape that would never be suitable to traditional agriculture or that had been made marginal by it. Look at the history of state parks, and this theme emerges even more powerfully, for many of the South's—and the nation's—state parks have been, in one form or another, restored or salvaged. As a conservation area, then, Providence Canyon State Park is not a southern anomaly filled with irony. To a large extent, it is a representative place.

There is one final chapter in the history of Providence Canyon, a coda of sorts, that needs to be added to this story if we are to appreciate fully what the canyon has meant to Americans. In recent years, another group of meaning seekers—scientific creationists—has set upon Providence Canyon. What they see in the gullies of Stewart County is an example

<sup>98</sup>On the history of the national forests in the South, see Gerald W. Williams, "Private Property to Public Property: The Beginnings of the National Forests in the South," paper presented at the American Society for Environmental History meeting, Providence, Rhode Island, March 2003, copy in author's possession. On the history of what became the Oconee National Forest, see Raper, *Tenants of the Almighty*; and Mary Summers, "The New Deal Farm Programs: Looking for Reconstruction in American Agriculture," *Agricultural History*, 74 (Spring 2000), 241–57. On the Sumter National Forest's history, see Stoll, *Larding the Lean Earth*, 139. On the Tuskegee National Forest, see Sarah T. Warren and Robert E. Zabawa, "The Origins of the Tuskegee National Forest: Nineteenth- and Twentieth-Century Resettlement and Land Development Programs in the Black Belt Region of Alabama," *Agricultural History*, 72 (Spring 1998), 487–508.

of rapid historical erosion that supports their case that larger erosional landscapes, such as the Grand Canyon proper, could have been created in only several thousand years. As Rebecca Gibson insists in her article "Canyon Creation," which appeared in *Creation ex Nihilo* magazine in 2000, "Providence Canyon beautifully illustrates how the geology of the earth is consistent with the short timescale of the Bible."<sup>99</sup> All of this suggests that the boosters need only be patient; Georgia's "Little Grand Canyon" may yet be the stuff of a national park.

<sup>99</sup>Rebecca Gibson, "Canyon Creation," *Creation ex Nihilo*, 22 (September–November 2000), 46–48. See also Emmett L. Williams, "Providence Canyon, Stewart County, Georgia—Evidence of Recent Rapid Erosion," *Creation Research Society Quarterly*, 32 (June 1995), 29–43.